

Aluminium reference materials 2015/2016



Optical emission spectroscopy • X-ray fluorescence • Calibration • Daily monitoring • Glow discharge • Standardization • Slope correction



Reference chart for atomic and mass spectrometry



LGC manufactures and supplies:

- Aqueous inorganic calibration standards
- Metallo-organic and petrochemical standards
- Solid metals Certified Reference Materials
- Plastics, coal and paint Certified Reference Materials
- User-specified custom calibration standards
- Over 40 unique Proficiency Testing schemes
- Expert technical support and customer service
- Other matrix materials including blood, soils and water

LGC Quality - ISO Guide 34 • ISO 9001 • ISO/IEC 17025 • ISO/IEC 17043

1 H hydrogen (1.007, 1.009)	2 He helium 4.003
3 Li lithium (6.938, 6.997)	4 Be beryllium 9.012
5 B boron 10.81	6 C carbon (12.00, 12.02)
7 N nitrogen (14.00, 14.01)	8 O oxygen (15.99, 16.00)
9 F fluorine 18.998	10 Ne neon 20.18
11 Na sodium 22.99	12 Mg magnesium (24.30, 24.31)
13 Al aluminum 26.98	14 Si silicon (28.08, 28.09)
15 P phosphorus 30.97	16 S sulfur (32.06, 32.08)
17 Cl chlorine 35.45	18 Ar argon 39.95
19 K potassium 39.10	20 Ca calcium 40.08
21 Sc scandium 44.96	22 Ti titanium 47.87
23 V vanadium 50.94	24 Cr chromium 52.00
25 Mn manganese 54.94	26 Fe iron 55.85
27 Co cobalt 58.93	28 Ni nickel 58.69
29 Cu copper 63.55	30 Zn zinc 65.38
31 Ga gallium 69.72	32 Ge germanium 72.63
33 As arsenic 74.92	34 Se selenium 78.96
35 Br bromine (79.90, 79.91)	36 Kr krypton 83.80
37 Rb rubidium 85.47	38 Sr strontium 87.62
39 Y yttrium 88.91	40 Zr zirconium 91.22
41 Nb niobium 92.91	42 Mo molybdenum 95.96
43 Tc technetium 98.91	44 Ru ruthenium 101.1
45 Rh rhodium 102.9	46 Pd palladium 106.4
47 Ag silver 107.9	48 Cd cadmium 112.4
49 In indium 114.8	50 Sn tin 118.7
51 Sb antimony 121.8	52 Te tellurium 127.6
53 I iodine 126.9	54 Xe xenon 131.3
55 Cs cesium 132.9	56 Ba barium 137.3
57-71 Lanthanides	72 Hf hafnium 178.5
73 Ta tantalum 180.9	74 W tungsten 183.8
75 Re rhenium 186.2	76 Os osmium 190.2
77 Ir iridium 192.2	78 Pt platinum 195.1
79 Au gold 197.0	80 Hg mercury 200.6
81 Tl thallium 204.4	82 Pb lead 207.2
83 Bi bismuth 209.0	84 Po polonium 209
85 At astatine	86 Rn radon
87-103 Actinides	104 Rf rutherfordium
105 Db dubnium	106 Sg seaborgium
107 Bh bohrium	108 Hs hassium
109 Mt meitnerium	110 Ds darmstadtium
111 Rg roentgenium	112 Cn copernicium
113 Nh nihonium	114 Fl flerovium
115 Mc moscovium	116 Lv livermorium
117 Ts tennessine	118 Og oganesson
119 Uu unbinilium	120 Uub unbinilium
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Introduction

LGC Standards provides the widest range of reference materials available from any single supplier. We work closely with leading manufacturers to provide improved access to reference materials, with an increasingly large range of parameters, for laboratories worldwide. LGC Standards has both extensive reference material sales experience and technical expertise that allows us to work in successful partnership with our customers. Furthermore, our network of offices in Europe, US, UAE, China and India provides fast product delivery supported by strong knowledge of complex import and export regulations.

About LGC and LGC Standards

LGC Standards is part of LGC, an established leader in laboratory services, measurement standards, reference materials and proficiency testing. LGC's Science and Technology Division acts as the designated UK National Measurement Institute (NMI) for chemical and bioanalytical measurement, and has a long history in the development and validation of analytical methods and in reference material production.

LGC's Science and Technology Division is accredited to ISO Guide 34 (General requirements for the competence of reference materials producers) for the production of reference materials.

Breitländer GmbH has been a reference material specialty company since 1972. LGC Standards acquired Breitländer in 2007, and together they offer the most extensive range of certified reference materials and standards for the metals industry. Breitländer also added high-quality sample preparation equipment to the LGC portfolio.

Industrial Analytical (Pty) Ltd was formed in 1988 to specifically meet ever-increasing industry demand for Reference Materials, for verification of both analytical results and quality of characterization. Industrial Analytical is now not only the largest Certified Reference Material supplier in the Republic of South Africa, but is also the largest in the African continent as a whole. Industrial Analytical was acquired by LGC Standards in 2012.

Analytical Reference Materials International (ARMI) was founded in 1984, and is a market leader in the chemical characterization and certification of metal alloy Certified Reference Materials. ARMI produces and distributes a diverse line of reference materials from Manchester, NH, USA into markets worldwide. ARMI developed and manages the Inter-laboratory Analysis Program (ILAP), whose member labs provide CRM certification data on an entirely voluntary basis. ARMI also provides a metal alloy PT program unique in the metals industry. ARMI became part of LGC Standards in 2012.

VHG Labs is an ISO Guide 34 accredited manufacturer and supplier of single-element, multi-element and custom blended petroleum, aqueous and solid analytical reference materials and calibration standards. Additionally, they provide consumables and supplies for ICP, ICP-MS, AA, GFAA and XRF instruments. VHG Labs calibration standards and reference materials are certified in their ISO 17025 accredited testing lab. VHG Labs became a part of LGC Standards in 2012.



This catalogue

This catalogue features certified reference materials and setting-up samples for the aluminium industry. It provides an updated and relevant listing of the available materials on the market. The products are listed in groups according to type and/or manufacturer. An index of all products is included in the back of the catalogue, listed by name and catalogue number.

Analytical values are presented in mass percentage, and should be considered to be typical or pilot values. Certificates that are supplied with purchased materials will present actual values. Values in brackets () are not certified and are listed for information only. A reference material lot will only include a limited number of standards, as it is difficult to maintain homogeneity when trying to produce larger lots. Follow-up lots of like material will differ slightly in composition and dimensions. Should you need an exact value, or more information on manufacture, material properties, methods or uncertainties prior to purchase, please do not hesitate to ask for more information.

Producers of reference materials

This catalogue brings together products from a wide variety of sources. These include certified reference materials from National Measurement Institutes, and also reference materials and setting-up samples from many different producers. Most products are supplied with certificates of analysis, although the layout and format of the certificates will vary according to the producer. Setting-up samples come with information sheets only.

The use of reference materials

Use of quality reference materials helps produce reliable analytical measurements and quality data, which ensures proper decision making going forward.

When choosing a matrix reference material for a particular application, the analyst should consider the following factors before selecting the material:

- Matrix match and potential interferences
- Analytes
- Quantitation range
- Measurement uncertainties
- Producer certification procedures
- Material documentation (e.g. certificate or report)



Certified Reference Material (CRM)

A CRM is accompanied by a certificate with one or more property values certified by a procedure which establishes its traceability to an accurate realization of the unit in which the property values are expressed. Each certified value is also accompanied by an uncertainty at a stated level of confidence. CRMs are certified by a recognized certifying organization using approved certification procedures as outlined in ISO Guide 35:2006, "Reference Materials-General and Statistical Principles for Certification." A CRM is an analytical reference material that is elevated to the highest order possible due to its traceability to SI units, and to the attributed confidence in the producing company or organization.

Reference Material (RM)

An RM is a material or substance with one or more property values sufficiently homogeneous and well established to be used to calibrate an apparatus, for the assessment of a measurement method, or for assigning material values. Interlaboratory testing is applied to RMs using many analysts, and RMs are then supplied with certificates of analysis. Testing does not usually follow all ISO Guide 35 certification guidelines. RM certificates often state that measurement data is traceable to primary CRMs.

Setting-Up Samples (SUS)

SUS materials should have minimal inhomogeneity, and are used to monitor or adjust lab instrument analytical signals. Instrument calibration is conducted using CRMs, RMs and SUS samples, at which time values are assigned to the SUS materials. As a result, SUS materials do not have certified analyses, but are assigned approximate values only. SUS standards are also referred to as "recalibration samples", "drift control samples" and "monitor samples."

General ordering information

Prices and delivery procedures are available from your local LGC Standards sales office.

Orders are accepted only in accordance with LGC Standards standard terms and conditions of sale, unless otherwise agreed to in advance and in writing.

LGC Standards technical staff are available to help customers requiring assistance with the use, application or suitability of a particular material. Customers should contact their local LGC Standards office for advice; contact details are provided on the back of this catalogue.

For any additional information please visit www.lgcstandards.com.

More catalogues

LGC Standards will release additional product catalogues in 2015 that cover the rest of our extensive range of reference materials and standards, for the following families:

- Copper base
- Non-ferrous base
- Precious metals
- Steel and iron
- XRF Glass
- Mechanical testing
- Combustion and wet chemistry analysis

Additional materials

This catalogue presents a wide selection of materials for aluminium analysis available at time of print. New materials are constantly added to our range, so we can often source products not listed in the catalog. Please contact us for assistance for help with a specific application, or if you cannot find the materials you need.

We also have many other associated materials for aluminium testing, available through other catalogs and listings, which include soils, waters, industrial materials, metals, ores, petroleum and many others.



Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-142/03	0.471	0.481	0.049	0.055	0.047	0.05	0.048	0.078	0.03	-	-	(0.0008)	0.0009	-
VAW-2001	0.52	0.13	0.0055	0.024	0.41	0.0015	-	0.0062	0.0055	-	-	-	-	-
ALCAN-8112AA	0.52	0.66	0.26	0.11	0.014	0.024	0.02	0.035	0.028	-	-	-	0.0011	0.011
VAW-1409-1	0.56	0.68	0.09	0.047	0.05	0.048	0.049	0.052	0.033	-	-	-	-	-
ALPEC-6012	0.575	0.79	0.142	0.1290	0.121	0.011	0.0097	0.197	0.0485	-	-	-	-	-
ALCOA-WA6000	0.60	0.30	0.10x	0.03x	0.45	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
VAW-2010-1	0.72	0.22	0.10	0.098	0.47	0.055	0.013	0.079	0.085	<0.0001	0.0021	<0.0003	0.0008	<0.0001
ALSUI-632/03	0.735	0.213	0.0327	0.423	0.476	0.0222	0.0082	0.0534	(0.0283)	-	-	0.0001	0.0021	0.0051
ALCAN-8018AB	0.76	0.77	0.46	0.069	0.0075i	0.017	0.015	0.015	0.043	-	-	-	0.001	0.0076
ALSUI-145/01	0.81	0.86	0.15	0.050	0.059	0.01	0.01	0.033	0.012	-	-	-	-	-
VAW-1408	0.82	0.75	0.035	0.056	0.048	0.026	0.0022	0.048	0.0049	-	-	0.001	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr
ALSUI-142/03	0.0008	0.0009	0.0019	-	-	0.0001	0.001x	-	0.0047	0.0061	0.0047	-	0.0077	0.01
VAW-2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-8112AA	0.0025i	0.0035	-	0.028	-	0.0012i	0.0026i	0.0056	0.008	0.0051	0.018	0.0044i	0.028	0.015
VAW-1409-1	-	-	-	0.05	-	-	-	-	0.045	-	0.049	-	0.031	0.0029
ALPEC-6012	-	-	-	0.0226	-	-	-	-	0-0.0002	0.0022	0.0003	-	-	-
ALCOA-WA6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-2010-1	0.0042	0.0021	<0.0005	0.02	0.00	0.0008	0.0016	0.0007	0.0084	0.0009	0.0071	0.0011	0.014	0.039
ALSUI-632/03	0.0005	-	-	-	-	0.00025	0.0004	-	0.0058	-	0.0059	-	0.0048	-
ALCAN-8018AB	0.0016i	0.0016	-	0.015	-	0.0015i	0.0017i	0.0026	0.0094	0.0036	0.015	0.0031i	0.016	0.003
ALSUI-145/01	-	-	-	-	-	-	-	-	0.003	-	0.0023	-	0.024	0.003
VAW-1408	-	-	-	0.011	-	-	-	-	0.0014	-	-	-	0.023	0.002

Product Code
ALSUI-142/03
VAW-2001
ALCAN-8112AA
VAW-1409-1
ALPEC-6012
ALCOA-WA6000
VAW-2010-1
ALSUI-632/03
ALCAN-8018AB
ALSUI-145/01
VAW-1408

Size	Grade	Type	Form
Ø 60X25mm	8111	CRM	CCC
Ø 60X20mm		RM	CCC
Ø 57X25mm	8112	CRM	W
Ø 60X20mm	8011	RM	CCC
Ø 55X30mm		CRM	CCC
Ø 64X25mm	6000	CRM	CCC
Ø 60X20mm	6005	CRM	W
Ø 60X25mm	6351	CRM	CCC
Ø 57X25mm	8018	CRM	W
Ø 60X25mm		CRM	CCC
Ø 60X20mm	8011	RM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
SEI-NK8000-NDC1	0.831	1.93	0.105	0.469	0.045	0.053	0.053	0.047	0.055	-	-	(0.0005)	0.0027	0.03
VAW-2110-1	0.98	0.24	0.042	0.58	0.65	0.011	0.011	0.012	0.019	-	-	0.0011	0.001	0.0048
ALPEC-2008	0.98	0.722	0.0322	0.0402	0.0056	0.1868	0.0175	0.0235	0.0199	-	-	-	-	-
ALSUI-633/01	0.98	0.34	0.039	0.275	0.73	-	-	0.13	0.056	-	-	-	-	-
ALCOA-SS6351	1.0x	0.30	0.05x	0.70	0.65	0.03x	0.02x	0.03x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS6151	1.0x	0.45	0.25	0.06x	0.65	0.22x	0.04x	0.08x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS6010	1.0x	0.25	0.32	0.32	0.80	0.04x	0.03x	0.12x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-634/02	1.05	0.425	0.085	0.759	0.84	0.031	0.033	0.032	0.071	-	-	-	-	0.0028
VAW-2206	1.05	0.21	0.19	0.76	0.39	0.032	-	0.12	0.054	-	-	<0.0005	-	-
SEI-NK51S-NDC2	1.06	0.286	0.052	0.549	0.69	0.02	0.012	0.018	0.089	-	-	-	-	-
ALCAN-6082AA	1.06	0.42	0.076	0.77	0.67	0.124	0.03	0.052	0.031	-	-	-	0.001	0.0055i
ALCAN-6151-AB	1.08	0.53	0.14	0.14	0.65	0.31	0.028	0.015i	0.036	-	-	-	0.0013	0.0079i

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
SEI-NK8000-NDC1	(0.0012)	-	-	0.058	-	(0.00009)	(0.0006)	(0.0027)	0.03	-	-	0.028	(0.002)	0.058
VAW-2110-1	0.0027	0.0014	0.0014	0.0094	-	0.0016	0.0022	0.0029	0.0049	0.0048	-	0.005	0.0019	0.0085
ALPEC-2008	-	-	-	-	-	-	-	-	0.0131	-	-	0.0124	-	-
ALSUI-633/01	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0095
ALCOA-SS6351	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS6151	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS6010	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALSUI-634/02	-	-	-	-	-	-	0.001x	0.0008	0.0021	0.0004	-	0.0009	-	0.0152
VAW-2206	-	-	-	-	-	-	-	<0.001	1.64	-	-	0.053	-	-
SEI-NK51S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-6082AA	0.0032i	0.0012	-	0.02	-	0.0023i	0.0021i	0.003	0.0075	0.0018	-	0.014	0.0029i	0.025
ALCAN-6151-AB	0.0030i	0.0012	-	0.022	-	0.0020i	0.0016i	0.0024	0.0077	0.0017	-	0.014	0.0020i	0.02

Product Code	Zr
SEI-NK8000-NDC1	0.049
VAW-2110-1	0.0019
ALPEC-2008	-
ALSUI-633/01	-
ALCOA-SS6351	<0.0030
ALCOA-SS6151	<0.0030
ALCOA-SS6010	<0.0030
ALSUI-634/02	0.0013
VAW-2206	0.001
SEI-NK51S-NDC2	-
ALCAN-6082AA	0.0026
ALCAN-6151-AB	0.016

Size	Grade	Type	Form
Ø 55X25mm		CRM	C
Ø 60X20mm	6082	CRM	CCC
Ø 55X30mm	4006	CRM	CCC
Ø 60X25mm		CRM	CCC
Ø 64X25mm	6351	CRM	W
Ø 64X25mm	6151	CRM	W
Ø 64X25mm	6010	CRM	W
Ø 60X25mm	6082	CRM	CCC
Ø 60X20mm		RM	CCC
Ø 55X25mm		CRM	C
Ø 57X25mm	6082	CRM	W
Ø 57X25mm	6151	CRM	W

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-6351CAL	(1.13)	(0.32)	<0.0001	(0.63)	(0.59)	<0.0001	<0.0001	0.0001	<0.0001	-	-	0.0001	<0.0001	<0.0001
ALCAN-6016AA	1.17	0.27	0.17	0.12	0.44i	0.049	0.20	0.04	0.026	-	-	-	0.0011i	0.0072i
ALCAN-6070AC	1.25	0.26	0.33	0.74	0.75	0.019	0.019	0.021	0.021	-	-	-	0.0012	0.0063
ALPEC-813	1.26	0.397	0.008	0.0044	0.0002	0.1249	0.0023	0.0052	0.0055	-	-	-	-	-
ALCOA-WP6000	1.3x	0.3	0.10x	0.03x	0.9	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-SS6070	1.3x	0.25	0.30	0.70	0.80	0.06x	0.02x	0.15x	0.05x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-6070CAB	1.35	(0.28)	(0.32)	(0.72)	(0.77)	<0.0001	<0.0001	0.001	<0.0001	-	-	0.0001	<0.0001	<0.0001
VAW-2103-1	1.37	0.49	0.13	0.71	0.8	0.11	0.0029	0.11	0.052	-	-	0.0005	0.0051	0.0006
MBH-55X G900J4 F	1.39	0.306	0.249	0.75	0.459	0.343	0.351	0.149	0.171	-	-	-	-	0.285
VAW-2101	1.44	0.36	0.053	0.60	0.82	0.10	-	0.066	0.023	-	-	-	0.0009	-
ALPEC-356	1.95	0.34	0.099	0.405	0.62	0.058	0.096	0.052	0.06	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALCAN-6351CAL	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	0.0001
ALCAN-6016AA	0.0030i	0.0012	-	0.02	-	-	0.0017i	0.0022i	0.0027	0.0079	0.0027	-	0.019	0.0028i
ALCAN-6070AC	0.0029	0.001	-	0.02	-	-	0.0029i	0.0033i	0.0036	0.008	0.0027	-	0.0069	0.0036
ALPEC-813	-	-	-	-	-	-	-	-	-	0.0005	-	-	0.0005	-
ALCOA-WP6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS6070	<0.0005	<0.0010	<0.0010	0.015	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-6070CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	0.0002	0.0002	0.0004	-	<0.0001	<0.0001
VAW-2103-1	0.0006	<0.0002	<0.0004	0.011	-	<0.0002	<0.0002	<0.0002	-	0.0042	-	-	-	<0.0002
MBH-55X G900J4 F	-	-	-	-	-	-	-	-	-	0.088	-	-	0.153	-
VAW-2101	0.0009	-	-	-	-	-	0.0005	0.0008	-	0.0043	-	-	-	-
ALPEC-356	-	-	-	-	-	-	-	-	-	0.022	0.000x	-	0.098	-

Product Code	V	Zr
ALCAN-6351CAL	<0.0001	<0.0001
ALCAN-6016AA	0.02	0.0028
ALCAN-6070AC	0.016	0.003
ALPEC-813	-	-
ALCOA-WP6000	-	-
ALCOA-SS6070	0.01x	<0.0030
ALCAN-6070CAB	<0.0001	<0.0001
VAW-2103-1	0.0031	0.0015
MBH-55X G900J4 F	-	-
VAW-2101	-	-
ALPEC-356	-	-

Size	Grade	Type	Form
Ø 57X25mm	6351	CRM	W
Ø 57X25mm	6016	CRM	W
Ø 57X25mm	6070	CRM	W
Ø 55X30mm		CRM	CCC
Ø 64X25mm	6000	CRM	W
Ø 64X25mm	6070	CRM	W
Ø 57X25mm	6070	CRM	W
Ø 60X20mm	6082	CRM	CCC
Ø 40X15mm		CRM	CCC
Ø 60X20mm		RM	CCC
Ø 55X30mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALSUI-621/01	2.02	0.08	0.01	0.05	0.29	0.0065	0-0.001	0.024	0.056	-	0.018	-	0.005	-
ALPEC-1005	2.14	0.351	0.1011	0.402	0.573	0.0609	0.0914	0.051	0.07	-	-	-	-	0.004
ALSUI-622/01	2.90	0.16	0.03	0.15	0.41	0.01	-	0.04	0.07	-	-	-	0.007	-
MBH-54X G25D1 L	3.37	0.721	0.01	0.815	0.67	0.14	0.262	0.359	0.099	-	0.0011	0.112	-	-
ALCAN-4643CAC	(3.78)	(0.18)	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-4643AD	3.81	0.16	0.036	0.042	0.10	0.027	0.035	0.03	0.053	-	0.004	0.02	0.0054i	-
ALCAN-X4002CAB	(3.90)	(0.3)	(0.10)	0.0001	(0.11)	0.0001	0.0002	<0.0001	<0.0001	-	<0.0001	(1.0)	<0.0001	-
ALPEC-9906	3.92	0.423	0.0132	0.034	0.928	0.0114	0.0378	0.0033	0.0259	-	-	-	-	0.0043
MBH-54X G25D2 K	3.93	0.576	0.13	0.479	0.59	0.15	0.139	0.169	0.152	-	0.049	0.22	-	0.011
ALSUI-623/01	3.96	0.22	0.047	0.23	0.50	0.019	0-0.001	0.06	0.10	-	-	-	0.008	-
ALCAN-4002CAC	(4.0)	(0.3)	0.003	<0.001	0.003	<0.001	<0.001	<0.001	0.002	-	<0.0001	(0.0030	-	(1.10)
ALCAN-X4002AA	4.10	0.29	0.13	0.037	0.13	0.028	0.038	0.045	0.019	-	-	1.06i	0.0065i	0.041

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALSUI-621/01	-	-	-	-	-	-	-	-	-	0.0045	-			
ALPEC-1005	-	-	-	-	-	0.021	0.0026	0.091	-	-	-			
ALSUI-622/01	-	-	-	-	-	-	-	-	-	0.0066	-			
MBH-54X G25D1 L	-	-	(0.0003)	-	-	(0.0033)	-	<0.005	-	0.016	(0.004)			
ALCAN-4643CAC	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001			
ALCAN-4643AD	-	0.029	0.0027i	0.0047i	0.004	0.02	-	0.023	0.0021i	0.012	0.0006			
ALCAN-X4002CAB	-	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001			
ALPEC-9906	-	-	-	-	-	0.0023	-	0.0003	-	-	-			
MBH-54X G25D2 K	0.105	-	-	-	-	0.073	-	0.042	-	0.006	-			
ALSUI-623/01	-	-	-	-	-	-	-	-	-	0.0115	-			
ALCAN-4002CAC	-	<0.001	<0.0001	0.0003	0.0009	<0.001	-	0.0004	-	<0.001	-			
ALCAN-X4002AA	-	0.031	0.0022i	0.0016	0.006	0.034	-	0.029	0.008	0.027	0.014			

Product Code
ALSUI-621/01
ALPEC-1005
ALSUI-622/01
MBH-54X G25D1 L
ALCAN-4643CAC
ALCAN-4643AD
ALCAN-X4002CAB
ALPEC-9906
MBH-54X G25D2 K
ALSUI-623/01
ALCAN-4002CAC
ALCAN-X4002AA

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 57x25mm	1200	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 40x15mm		CRM	CCC
Ø 57x25mm	4643	CRM	W
Ø 57x25mm	4643	CRM	W
Ø 57x25mm		CRM	W
Ø 57x25mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 60x25mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 57x25mm	4013	CRM	W

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-3106-1	4.19	0.32	0.12	0.056	0.096	0.0028	-	0.064	0.033	-	-	-	-	-
ALCAN-4002AD	4.38	0.39	0.15	0.032	0.14	0.019	0.0027	0.028	0.019	-	-	-	-	0.018
ALCOA-KA443	4.5x	0.65	0.05x	0.15x	0.08x	0.05x	0.08x	0.15x	0.04x	-	-	-	-	-
ALSUI-624/01	4.95	0.25	0.078	0.34	0.61	0.029	0-0.001	0.105	0.16	-	-	-	-	-
ALPEC-1043	5.03	0.012	0.0061	0.217	0.84	-	0.0193	0.0315	0.0425	-	-	-	-	-
VAW-3001-3	5.10	0.25	0.07	0.22	0.20	0.0015	0.17	0.078	0.15	-	-	<0.0002	<0.0001	<0.0002
ALCOA-KC443	5.1x	1.1x	0.15x	0.10x	0.05x	<0.0050	0.10x	0.15x	0.10x	-	-	-	-	-
ALCAN-443.2AC	5.31	0.35	0.048	0.046	0.0022i	0.027	0.028	0.041	0.155	-	-	-	0.001	0.0085i
ALCAN-443.2CAB	(5.46)	(0.35)	0.0002	<0.0001	0.0003	<0.0001	<0.0001	0.0002	<0.0001	-	-	<0.0001	<0.0001	<0.0001
ALCOA-SS443	5.5x	0.50	0.08x	0.10x	0.05x	<0.0050	0.05x	0.10x	0.11x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-456/01	5.89	0.53	0.104	0.202	0.25	0.053	0.024	0.154	0.115	-	-	-	-	-
BAS-IMI25WM1	5.92	0.59	<0.005	0.24	0.87	<0.005	0.19	0.20	0.19	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-3106-1	0.001	-	-	-	-	-	<0.0003	<0.001	-	-	-	-	<0.0002	0.0024
ALCAN-4002AD	-	1.28	-	0.016	-	-	-	-	0.022	-	-	0.028	-	0.007
ALCOA-KA443	-	-	-	-	-	-	-	-	0.02x	-	-	0.02x	0.02x	-
ALSUI-624/01	0.0104	-	-	-	-	-	-	-	-	-	-	-	-	0.016
ALPEC-1043	-	-	-	-	-	-	-	-	0.0195	0.01	-	0.048	-	-
VAW-3001-3	0.0035	<0.0002	<0.0002	0.011	-	<0.0001	<0.0001	<0.0005	0.057	<0.0004	-	0.042	0.041	0.0093
ALCOA-KC443	-	-	-	-	-	-	-	-	0.20x	-	-	0.15x	0.02x	-
ALCAN-443.2AC	0.0024i	0.001	-	0.021	-	0.0017i	-	0.0032	0.0073	0.0033	-	0.012	0.0038i	0.024
ALCAN-443.2CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	0.001	-	<0.0001	<0.0001	<0.0001
ALCOA-SS443	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	0.02x	0.01x
ALSUI-456/01	-	-	-	-	-	-	-	0.0028	0.006	0.0028	-	0.0103	0.046	0.0112
BAS-IMI25WM1	-	-	-	-	-	-	-	-	<0.005	-	-	0.12	-	-

Product Code	Zr
VAW-3106-1	0.0015
ALCAN-4002AD	-
ALCOA-KA443	-
ALSUI-624/01	-
ALPEC-1043	-
VAW-3001-3	0.0014
ALCOA-KC443	-
ALCAN-443.2AC	0.0026
ALCAN-443.2CAB	<0.0001
ALCOA-SS443	<0.0030
ALSUI-456/01	0.0053
BAS-IMI25WM1	-

Size	Grade	Type	Form
Ø 60x20mm		CRM	CCC
Ø 57x25mm	4002	CRM	W
Ø 64x25mm	443	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm	4043	CRM	CCC
Ø 64x25mm	443	CRM	CCC
Ø 57x25mm	443.2	CRM	CCC
Ø 57x25mm	443.2	CRM	CCC
Ø 64x25mm	443	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 58x7mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-54X G25D6 A	5.97	0.08	0.0021	0.0096	0.715	0.0009	0.0044	0.005	0.0071	-	0.022	-	-	-
ALCOA-KB443	6.0x	0.30	0.15x	0.05x	0.03x	<0.0050	0.03x	0.05x	0.15x	-	-	-	-	-
VAW-3002-3	6.08	0.31	0.26	0.28	0.21	0.0045	0.079	0.15	0.057	<0.0002	<0.0001	<0.0002	0.0035	<0.0002
MBH-54X G25D3 S	6.25	0.37	0.12	0.25	0.38	0.041	0.035	0.105	0.07	-	0.002	-	-	-
ALSUI-453/01	6.48	0.179	0.022	0.0522	0.345	0.0123	0.0118	0.0184	0.068	-	-	-	0.007	-
ALCOA-KA356	6.5x	0.50	0.20x	0.03x	0.22x	<0.0050	<0.0050	0.18x	0.05x	-	-	-	-	-
VAW-3104-2	6.79	0.11	0.47	0.029	0.44	0.0008	0.0054	0.05	0.0036	0.0004	<0.0002	0.0019	0.0008	<0.0002
VAW-3107-1	6.85	0.35	0.026	0.083	0.28	0.024	-	0.15	0.085	-	-	-	0.0018	-
ALPEC-1014	6.86	0.196	0.0062	0.3011	0.593	-	0.0027	0.1504	0.1015	-	-	-	-	-
ALPEC-1015	6.86	0.20	0.0062	0.2988	0.598	-	0.0017	0.1516	0.1015	-	-	-	-	-
SEI-NKAC4C-NDC12	6.91	0.178	0.08	0.183	0.368	0.0096	0.052	0.051	0.032	-	0.0009	0.0018	0.0043	0.0019
ALSUI-424/03	6.92	0.142	0.0027	0.0056	0.334	0.0023	0.0029	0.01	0.102	-	-	-	0.0012	0.0043

Product Code	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
MBH-54X G25D6 A	-	0.0027	-	-	-	-	(0.003)	-	(0.002)	-	0.0133	-		
ALCOA-KB443	-	-	-	-	-	-	0.05x	-	0.05x	0.02x	-	-		
VAW-3002-3	<0.0002	0.011	-	<0.0001	<0.0002	<0.0005	0.071	<0.0002	0.041	0.068	0.0034	0.0011		
MBH-54X G25D3 S	0.008	-	-	-	-	-	0.045	-	0.045	-	0.005	-		
ALSUI-453/01	-	-	-	-	-	-	0.0039	0.0023	0.0029	(0.072)	0.011	0.0099		
ALCOA-KA356	-	0.02x	-	-	-	0.003x	-	0.001x	-	0.05x	0.01x	-		
VAW-3104-2	0.0009	0.015	-	-	-	0.0009	0.018	0.08	0.017	0.003	0.0095	0.0019		
VAW-3107-1	-	-	-	-	<0.0002	<0.001	-	<0.0002	-	<0.0003	0.0026	0.0014		
ALPEC-1014	-	-	-	-	-	-	0.0045	0.255	0.0206	-	-	-		
ALPEC-1015	-	-	-	-	-	-	0.0043	0.23	0.0206	-	-	-		
SEI-NKAC4C-NDC12	0.002	0.01	-	-	0.0005	0.0055	0.0032	0.088	0.0048	-	0.0039	0.011		
ALSUI-424/03	0.0098	-	0.0019	-	0.0018	0.0013	(0.0002)	0.068	-	-	0.0002	0.0021		

Product Code
MBH-54X G25D6 A
ALCOA-KB443
VAW-3002-3
MBH-54X G25D3 S
ALSUI-453/01
ALCOA-KA356
VAW-3104-2
VAW-3107-1
ALPEC-1014
ALPEC-1015
SEI-NKAC4C-NDC12
ALSUI-424/03

Size	Grade	Type	Form
Ø 50X15mm		CRM	C
Ø 64X25mm	443	CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 50X17mm		CRM	C
Ø 60X25mm	4543	CRM	CCC
Ø 64X25mm	356	CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 55X25mm		CRM	C
Ø 60X25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALSUI-452/02	6.96	0.121	0.0039	0.0121	0.63	0.0015	0.0026	0.0014	0.097	-	-	-	-	0.0004
ALSUI-452/01	6.98	0.133	0.005	0.0108	0.67	0.0016	0.0024	0.0052	0.099	-	-	-	-	0.0002
ALCOA-KC356	7.0x	0.08x	0.04x	0.02x	0.35	<0.0050	0.01x	0.03x	0.12x	-	-	-	-	-
ALCOA-SSA444	7.1x	0.15x	0.12x	0.05x	<0.0050	<0.0050	0.03x	<0.0050	0.12x	<0.0010	<0.0010	<0.0010	-	<0.0005
ALCOA-SSA357	7.1x	0.10x	0.05x	0.02x	0.6	0.02x	0.02x	0.03x	0.12x	<0.0010	<0.0010	<0.0010	-	0.06x
ALCOA-SS356	7.1x	0.35	0.12x	0.05x	0.35	<0.0050	0.03x	0.10x	0.12x	<0.0010	<0.0010	<0.0010	-	<0.0005
ALCAN-356.2CAR	(7.14)	(0.17)	0.0001	<0.0001	(0.41)	<0.0001	<0.0001	<0.0001	(0.11)	-	-	<0.0001	-	<0.0001
MBH-54X G25DX A	(7.15)	(0.08)	(0.02)	-	(0.029)	(0.006)	-	(0.007)	(0.008)	-	-	-	-	-
ALCAN-356.2-AV	7.26	0.201	0.08	0.037	0.39	0.027	0.031	0.081	0.18	-	-	-	-	0.0011i
ALCAN-356.2-AW	7.27	0.21	0.081	0.033	0.39	0.027	0.031	0.082	0.18	-	-	-	-	0.001
NIST-1255b	7.298	0.117	0.1161	0.0527	0.3822	0.015	0.0179	0.0842	0.1535	-	-	-	-	-
BAS-IMI25WM4	7.35	0.025	0.16	<0.005	0.31	0.02	0.14	0.045	0.16	-	-	-	-	-
ALCAN-356.2DAO	(7.358)	(0.164)	(0.068)	(0.0035)	(0.422)	(0.0031)	(0.0011)	(0.0045)	(0.011)	(0.113)	-	-	-	-

Product Code	Bi	Ca	Cd	Co	Ga	Ge	Hg	In	Li	Mo	Na	Nb	P	Pb
ALSUI-452/02	-	0.0017	-	-	0.0073	-	-	-	-	-	0.0009	-	0.0019	0.0013
ALSUI-452/01	-	0.0017	-	-	0.0082	-	-	-	-	-	0.0009	-	0.0015	0.001
ALCOA-KC356	-	-	-	-	0.02x	-	-	-	-	-	-	-	-	-
ALCOA-SSA444	<0.0010	<0.0030	<0.0010	<0.0010	0.02x	-	<0.0010	-	<0.0010	-	<0.0010	-	<0.0010	<0.0030
ALCOA-SSA357	<0.0010	<0.0030	<0.0010	<0.0010	0.02x	-	<0.0010	-	<0.0010	-	<0.0010	-	<0.0010	<0.0030
ALCOA-SS356	<0.0010	<0.0030	<0.0010	<0.0010	0.02x	-	<0.0010	-	<0.0010	-	<0.0010	-	<0.0010	<0.0030
ALCAN-356.2CAR	<0.0001	0.0001	<0.0001	-	<0.0001	-	-	-	<0.0001	-	<0.0001	-	0.0001	<0.0001
MBH-54X G25DX A	-	-	-	-	(0.02)	-	-	(0.4)	-	-	-	(0.008)	(0.004)	-
ALCAN-356.2-AV	0.0076	0.0037i	0.0011i	-	0.019	-	-	-	0.0020i	-	0.0026i	-	0.0019	0.008
ALCAN-356.2-AW	0.0086	0.0037i	0.0011	-	0.02	-	-	-	0.0024i	-	0.0028i	-	0.002	0.0082
NIST-1255b	-	-	-	-	0.0175	-	-	-	-	-	-	-	-	0.0182
BAS-IMI25WM4	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
ALCAN-356.2DAO	-	(0.0042)	(0.0008)	-	(0.0002)	(0.0142)	-	-	-	-	-	-	-	(0.0014)

Product Code	Sb	Sc	Sn	Sr	Te	V	W	Zr
ALSUI-452/02	-	-	0.0013	0.0002	-	0.0051	-	0.0008
ALSUI-452/01	-	-	0.0014	0.0002	-	0.0055	-	0.0011
ALCOA-KC356	-	-	-	0.02x	-	0.01x	-	-
ALCOA-SSA444	<0.0010	<0.0010	<0.0030	0.02x	-	0.01x	-	<0.0030
ALCOA-SSA357	<0.0010	<0.0010	<0.0030	0.02x	-	0.01x	-	<0.0030
ALCOA-SS356	<0.0010	<0.0010	<0.0030	0.02x	-	0.01x	-	<0.0030
ALCAN-356.2CAR	<0.0001	-	<0.0001	<0.0001	-	<0.0001	-	<0.0001
MBH-54X G25DX A	-	-	(0.001)	-	(0.158)	-	(0.035)	-
ALCAN-356.2-AV	0.0029	-	0.014	0.0151i	-	0.02	-	0.0021
ALCAN-356.2-AW	0.0029	-	0.015	0.031i	-	0.02	-	0.0021
NIST-1255b	-	-	0.1334	0.014	-	0.0324	-	-
BAS-IMI25WM4	-	-	0.06	-	-	-	-	-
ALCAN-356.2DAO	(0.001)	-	(0.0004)	(0.0004)	-	(0.0122)	-	(0.0014)

Size	Grade	Type	Form
Ø 60X25mm	357	CRM	CCC
Ø 60X25mm	357	CRM	CCC
Ø 64X25mm	356	CRM	CCC
Ø 64X25mm	A444	CRM	CCC
Ø 64X25mm	A357	CRM	CCC
Ø 64X25mm	356	CRM	CCC
Ø 57X25mm	356.2	CRM	CCC
Ø 65X30mm		CRM	CC
Ø 57X25mm	356.2	CRM	CCC
Ø 57X25mm	356.2	CRM	CCC
Ø 63X19mm	356	CRM	CCC
Ø 58X7mm	4010	CRM	C
Ø 57X25mm	356.2	CRM	CCC

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-54X G25D4 N	7.41	(0.115)	0.161	0.091	0.074	0.021	0.095	0.107	(0.131)	-	0.0191	0.092	-	0.0176
VAW-3109-2	7.53	0.285	0.0161	0.153	0.344	0.0538	0.00526	0.0116	0.0248	<0.001	0.00124	0.00088	0.00204	0.00196
ALCOA-KB356	7.5x	0.15x	0.05x	0.12x	0.45	<0.0050	<0.0050	0.04x	0.16x	-	-	-	-	-
ALCAN-4343AE	7.56	0.48	0.056	0.049	0.025	0.02	0.032	0.49	0.05	-	0.0035i	0.02	0.0033i	-
VAW-3109-1	7.76	0.28	0.014	0.15	0.34	0.053	0.0022	0.011	0.027	<0.0005	0.0012	<0.001	0.0023	-
VAW-3003-4	7.80	0.34	0.14	0.24	0.25	0.0021	0.051	0.12	0.038	<0.0002	-	0.0028	0.0018	0.005
ALCAN-4343CAG	(7.83)	(0.50)	<0.0001	<0.0001	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-4343AF	7.84	0.50	0.05	0.052	0.031	0.032	0.029	0.05	0.031	-	0.0013	0.037	0.0028i	0.001
VAW-3003-3	7.89	0.35	0.14	0.24	0.25	0.0022	0.05	0.11	0.034	-	-	-	0.0025	-
ALPEC-6009	7.95	0.592	0.035	0.152	0.434	0.0117	0.049	0.033	0.0845	-	-	-	-	-
ALCOA-KA358	8.0x	0.20x	0.08x	0.05x	0.65	0.02x	0.02x	0.06x	0.12x	-	0.22	-	-	-
ALPEC-1045	8.02	0.287	0.061	0.0057	0.112	-	0.05	0.087	0.255	-	-	-	-	-
ALSUI-455/01	8.06	0.33	0.053	0.103	0.54	0.0326	0.055	0.053	0.0419	-	-	0.0044	-	-
MBH-54X G25D5 L	8.14	0.191	0.273	(0.0046)	(0.0011)	0.0097	0.0082	0.02	0.0068	-	0.022	-	-	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
MBH-54X G25D4 N	0.049	-	-	-	-	0.16	-	0.091	-	(0.0021)	-			
VAW-3109-2	0.00114	0.01072	<0.0002	0.00019	0.00094	0.0009	<0.0005	0.0013	0.1001	0.0093	0.00319			
ALCOA-KB356	-	0.02x	-	-	-	0.06x	-	0.06x	0.02x	0.01x	-			
ALCAN-4343AE	-	0.029	0.0029i	0.0072i	0.003	0.019	-	0.023	0.014i	0.009	0.015			
VAW-3109-1	<0.001	0.01	-	<0.0002	0.0016	0.001	<0.0005	<0.001	0.099	0.0037	0.0023			
VAW-3003-4	<0.0003	0.011	<0.0002	<0.0002	0.0008	0.032	<0.0005	0.02	0.037	0.0048	0.0011			
ALCAN-4343CAG	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.002	<0.0001	<0.0001	<0.0001	<0.0001			
ALCAN-4343AF	-	0.023	0.0022i	0.0027i	0.0042i	0.021	0.0042	0.018	0.011i	0.026	0.0029			
VAW-3003-3	-	0.011	-	-	0.0006	0.036	-	0.021	0.037	0.0036	0.0011			
ALPEC-6009	-	-	-	-	-	0.0064	0.046	0.0293	-	-	-			
ALCOA-KA358	-	0.02x	-	-	-	-	-	-	0.02x	0.01x	-			
ALPEC-1045	-	-	-	-	-	0.10	0.451	-	-	-	-			
ALSUI-455/01	-	-	-	0.0031	0.0022	0.0104	-	0.0052	-	0.021	0.01			
MBH-54X G25D5 L	0.0024	-	-	-	-	0.273	-	0.13	-	(0.0025)	-			

Product Code
MBH-54X G25D4 N
VAW-3109-2
ALCOA-KB356
ALCAN-4343AE
VAW-3109-1
VAW-3003-4
ALCAN-4343CAG
ALCAN-4343AF
VAW-3003-3
ALPEC-6009
ALCOA-KA358
ALPEC-1045
ALSUI-455/01
MBH-54X G25D5 L

Size	Grade	Type	Form
Ø 40X15mm		CRM	C
Ø 60X20mm		CRM	CCC
Ø 64X25mm	356	CRM	CCC
Ø 57X25mm	4343	CRM	W
Ø 60X20mm		CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 57X25mm	4343	CRM	W
Ø 57X25mm	4343	CRM	W
Ø 60X20mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 64X25mm	358	CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 60X25mm		CRM	CCC
Ø 40X15mm		CRM	C

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
BAS-IMI2WM3	8.33	1.19	0.41	0.35	0.19	0.09	0.21	0.70	0.11	-	-	-	-	-
BAS-IMI25WM5	8.36	0.42	0.075	0.15	0.19	0.10	<0.005	0.015	<0.005	-	-	-	-	-
ALPEC-9615	8.39	0.999	0.0934	0.539	0.0142	0.0996	0.0938	0.1336	0.0872	-	-	-	0.00026	-
ALSUI-421/01	8.60	0.10	0.032	0.145	0.41	0.033	0.03	0.114	0.07	-	-	-	-	-
ALCOA-SS364	8.8x	0.90	0.15x	0.06x	0.35	0.40	0.05x	0.05x	<0.0050	<0.0010	<0.0010	<0.0010	0.03x	<0.0010
ALSUI-427/01	8.93	0.32	0.004	0.146	0.013	(0.001)	0.002	0.014	0.0132	-	-	-	-	-
ALCOA-KB360	9.0x	1.0x	0.10x	0.25	0.65	<0.0050	0.10x	0.10x	0.10x	-	-	-	-	-
ALSUI-465/01	9.18	0.566	0.095	0.404	0.332	0.027	0.051	0.104	0.172	-	-	-	0.00095	-
ALSUI-422/03	9.41	0.19	0.02	0.107	0.346	0.019	0.022	0.052	0.049	-	-	0-0.0002	-	-
ALSUI-411/04	9.60	0.134	0.0102	0.0243	0.0105	0.0106	0.0129	0.0156	0.0154	-	-	-	-	-
ALCOA-KC360	9.6x	1.1x	0.30	0.15x	0.58	<0.0050	0.20x	0.25	0.02x	-	-	-	-	-
ALCOA-SS360	9.6x	0.60	0.25	0.15x	0.55	<0.0050	0.17x	0.17x	0.06x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
BAS-IMI2WM3	-	-	-	-	-	-	-	-	0.10	-	-	0.10	-	-
BAS-IMI25WM5	-	-	-	-	-	-	-	-	0.07	-	-	<0.005	-	-
ALPEC-9615	-	-	-	-	-	-	-	-	0.0024	0-0.0001	-	0.0181	0.0105	-
ALSUI-421/01	0.009	-	0.57	-	-	-	0.002	-	-	-	-	-	-	-
ALCOA-SS364	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	0.05x	0.02x	0.01x
ALSUI-427/01	-	-	-	-	-	-	-	-	-	0.37	-	-	-	0.0044
ALCOA-KB360	-	-	-	-	-	-	-	-	0.10x	-	-	0.10x	0.02x	-
ALSUI-465/01	0.0065	-	-	0.0078	-	-	0.0013	(0.004)	0.05	-	-	0.05	-	0.01
ALSUI-422/03	0.0088	-	0.401	0.01	-	-	0.004	0.0015	0.0047	0.0047	-	0.003	-	0.0083
ALSUI-411/04	0.000x	-	-	-	-	-	0.004x	(0.0009)	0.005	-	-	0.0051	-	0.0056
ALCOA-KC360	-	-	-	-	-	-	-	-	-	-	-	0.12x	0.02x	-
ALCOA-SS360	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	0.05x	<0.0010	<0.0010	0.07x	0.02x	0.01x

Product Code	Zr
BAS-IMI2WM3	-
BAS-IMI25WM5	-
ALPEC-9615	-
ALSUI-421/01	-
ALCOA-SS364	<0.0030
ALSUI-427/01	-
ALCOA-KB360	-
ALSUI-465/01	0.009
ALSUI-422/03	0.0098
ALSUI-411/04	0.0051
ALCOA-KC360	-
ALCOA-SS360	<0.0030

Size	Grade	Type	Form
Ø 58x7mm		CRM	C
Ø 58x7mm		CRM	C
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm	364	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm	360	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm	4046	CRM	CCC
Ø 60x25mm	4045	CRM	CCC
Ø 64x25mm	360	CRM	CCC
Ø 64x25mm	360	CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALPEC-9331	9.68	0.129	0.0021	0.925	0.6082	0.0007	0.0013	0.0048	0.0122	-	-	-	-	-
SEI-NKAC4A-NDC4	9.74	0.568	0.198	0.523	0.512	0.05	0.06	0.102	0.111	-	-	0.011	(0.006)	-
ALCAN-X4045CAB	(9.75)	(0.33)	(0.002)	(0.003)	<0.001	<0.001	(0.001)	(1.0)	(0.003)	-	<0.0001	<0.001	(0.003)	-
VAW-3110-1	9.84	0.18	0.002	0.053	0.15	0.021	0.0024	0.021	0.053	<0.0003	0.0037	<0.0005	0.0039	<0.0002
MBH-54X G06H3 P	9.94	0.51	0.322	0.345	0.202	0.053	0.214	0.027	0.079	-	-	0.0067	-	0.0048
ALCOA-KA360	10.0	0.35	0.40	0.10x	0.45	<0.0050	0.25	0.25	0.02x	-	-	-	-	-
ALSUI-412/07	10.03	0.355	0.03	0.15	0.26	0.029	0.019	0.066	0.097	0.0002	0.0004	-	0.0097	-
ALSUI-412/08	10.26	0.375	0.037	0.156	0.25	0.031	0.024	0.051	0.111	-	-	0.0046	0.0089	-
VAW-3103-2	10.40	0.38	0.098	0.16	0.22	0.002	0.0043	0.22	0.016	-	-	-	0.003	-
VAW-3166-3	10.81	0.061	0.0428	0.00353	0.138	0.00098	0.00299	0.0331	0.0908	<0.0002	<0.0005	<0.0005	0.0018	0.00042
ALCOA-KA413	11.0	0.75	0.08x	0.15x	0.02x	<0.0050	0.03x	0.03x	0.03x	-	-	-	-	-
ALSUI-417/03	11.02	0.134	0.0055	0.0169	0.22	0.0015	0.0029	0.0196	0.0477	-	-	-	0.0005	0.0037
ALSUI-413/04	11.05	0.178	0.024	0.025	0.098	0.0048	0.0039	0.0095	0.046	-	-	-	0.001	-
VAW-3167-1	11.05	0.26	0.008	0.076	0.068	0.0005	0.0027	0.01	0.032	<0.0002	-	<0.0002	0.001	<0.0002

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALPEC-9331	-	-	-	-	-	0.0194	0.0942	0.0186	-	-	-			
SEI-NKAC4A-NDC4	-	-	-	-	(0.004)	0.051	(0.0086)	0.05	-	0.018	-			
ALCAN-X4045CAB	-	<0.001	<0.0001	<0.0001	0.0008	<0.001	-	<0.001	<0.0001	<0.001	<0.0001			
VAW-3110-1	<0.0004	0.01	<0.0002	<0.0002	0.0015	0.0009	0.091	<0.0004	0.0003	0.0057	0.0014			
MBH-54X G06H3 P	0.0208	-	0.0008	-	-	0.0203	-	0.0488	-	0.0278	-			
ALCOA-KA360	-	-	-	-	-	0.20x	-	0.03x	0.02x	-	-			
ALSUI-412/07	-	-	-	0.005x	0.0023	0.0095	-	-	0.0252	-	-			
ALSUI-412/08	-	-	-	0.0015	0.0068	0.0114	-	-	0.0215	-	-			
VAW-3103-2	-	0.008	-	-	0.0005	0.0009	-	<0.001	0.068	0.0044	0.0022			
VAW-3166-3	<0.0005	0.01142	<0.0002	<0.0002	0.0013	0.00104	0.001	0.0077	0.0494	0.0081	0.00161			
ALCOA-KA413	-	-	-	-	-	0.04x	-	0.04x	0.02x	-	-			
ALSUI-417/03	-	0.0098	-	0.001x	-	0.003	-	0.0002	0.04x	-	-			
ALSUI-413/04	-	0.0037	-	0.001	0.0015	0.003	0.0058	0.002	0.06x	0.0063	0.005			
VAW-3167-1	<0.0003	0.0066	-	-	0.0006	0.001	<0.0003	<0.0001	0.0059	0.0004	0.0014			

Product Code
ALPEC-9331
SEI-NKAC4A-NDC4
ALCAN-X4045CAB
VAW-3110-1
MBH-54X G06H3 P
ALCOA-KA360
ALSUI-412/07
ALSUI-412/08
VAW-3103-2
VAW-3166-3
ALCOA-KA413
ALSUI-417/03
ALSUI-413/04
VAW-3167-1

Size	Grade	Type	Form
Ø 55X30mm		CRM	CCC
Ø 55X25mm		CRM	C
Ø 57X25mm	4045 Mod.	CRM	W
Ø 60X20mm	4047	CRM	CCC
Ø 50X15mm		CRM	C
Ø 64X25mm	360	CRM	CCC
Ø 60X25mm	4046	CRM	CCC
Ø 60X25mm	4046	CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 64X25mm	413	CRM	CCC
Ø 60X25mm	4046	CRM	CCC
Ø 60X25mm	4046	CRM	CCC
Ø 60X20mm	4047	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	B	Ba	Be
VAW-3166-2	11.08	0.061	0.036	0.027	0.14	0.0008	0.0034	0.034	0.097	-	-	<0.0002	-	<0.0001
VAW-3108-2	11.15	0.648	0.0609	0.208	0.23	0.0169	0.00205	0.0858	0.0442	-	(87.4)	<0.0003	-	0.00039
ALSUI-423/03	11.20	0.21	0.0094	0.062	0.246	0.01	0.011	0.021	0.028	-	-	-	-	-
ALPEC-9620	11.32	0.47	0.0256	0.331	0.05	0.039	0.0572	0.0926	0.1575	-	-	-	-	0.00095
ALPEC-9626	11.33	0.471	0.0249	0.327	0.0507	0.0382	0.0579	0.0931	0.151	-	-	-	-	0.00096
ALPEC-9621	11.35	0.464	0.026	0.327	0.0521	0.0377	0.0572	0.0919	0.1623	-	-	-	-	0.00096
ALCAN-4147AA	11.37	0.32	0.071	0.066	0.17	0.071	0.031	0.031	0.12	-	-	-	-	0.0011
VAW-3004-3	11.50	0.37	0.095	0.35	0.57	0.011	0.26	0.20	0.076	-	-	-	-	-
MBH-55X G02D6 K	11.55	0.528	0.51	0.30	0.376	0.366	0.0511	0.577	0.055	-	-	-	-	0.0026
ALCAN-160DP	11.77	0.30	0.053	0.033	0.024	0.027	0.03	0.043	0.048	-	-	-	-	-
ALCAN-A413.2CAE	(11.74)	(0.34)	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	-	-	0.001	-
ALCOA-KC413	11.80	1.2x	0.20x	0.10x	0.05x	<0.0050	0.15x	0.15x	0.05x	-	-	-	-	-

Product Code	Bi	Ca	Cd	Co	Ga	Ge	Hg	Li	Mo	Na	P	Pb	Sb	Sn
VAW-3166-2	<0.0002	0.0034	<0.0002	<0.0002	0.011	-	-	<0.0001	-	<0.0001	0.0011	0.0012	0.0008	0.0012
VAW-3108-2	0.0037	0.00364	0.00171	0.00098	0.00946	-	0.00244	0.00041	0.076	0.00039	0.0014	0.00207	<0.001	0.00228
ALSUI-423/03	-	0.0009	0.0035	0.22	0.0037	-	0.0011	0.0002	-	0.0007	0.0011	0.0013	0.0097	0.006
ALPEC-9620	-	-	-	-	-	-	-	-	-	-	-	0.018	0.0095	0.0948
ALPEC-9626	-	-	-	-	-	-	-	-	-	-	-	0.0178	0.0074	0.0936
ALPEC-9621	-	-	-	-	-	-	-	-	-	-	-	0.0177	0.0076	0.0944
ALCAN-4147AA	0.0071	0.0036i	0.0011	-	0.021	-	-	0.0031i	-	0.0036i	0.0036	0.0076	0.0033	0.027
VAW-3004-3	-	0.0095	-	-	-	-	-	-	-	-	0.002	0.17	0.0011	0.051
MBH-55X G02D6 K	-	-	0.0115	0.0195	-	-	-	-	-	-	-	0.058	0.015	0.0355
ALCAN-160DP	0.018	-	-	-	0.014	-	-	-	-	0.004	-	0.026	-	0.025
ALCAN-A413.2CAE	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001
ALCOA-KC413	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08x

Product Code	Sr	V	Zr
VAW-3166-2	0.045	0.0088	0.002
VAW-3108-2	0.0626	0.0073	0.00456
ALSUI-423/03	0.0005	0.0117	0.0067
ALPEC-9620	0.1625	-	-
ALPEC-9626	0.1118	-	-
ALPEC-9621	0.1127	-	-
ALCAN-4147AA	0.0025i	0.02	0.003
VAW-3004-3	-	-	-
MBH-55X G02D6 K	-	0.0182	-
ALCAN-160DP	-	0.014	-
ALCAN-A413.2CAE	<0.0001	<0.0001	<0.0001
ALCOA-KC413	0.02x	-	-

Size	Grade	Type	Form
Ø 60X20mm	4047	CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 60X25mm	4147	CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 57X25mm	4147	CRM	W
Ø 60X20mm		RM	CCC
Ø 50X15mm		CRM	C
Ø 57X25mm	413.2	CRM	CCC
Ø 57X25mm	413.2	CRM	CCC
Ø 64X25mm	413	CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Be
VAW-3007-2	11.82	0.367	0.0642	0.792	0.29	0.0172	0.0199	0.0029	0.191	-	(86.4)	-	<0.0002	0.00508
VAW-3006-2	11.82	1.01	0.11	0.294	0.038	0.0039	0.024	0.062	0.036	-	-	-	<0.0002	-
VAW-3164-4	11.89	0.068	0.023	0.067	0.043	0.0052	0.0023	0.046	0.022	-	-	-	<0.0002	<0.0001
ERM-EB316	11.98	0.1054	0.297	0.204	0.045	0.00593	0.0235	0.0611	0.079	(0.0183)	-	-	(<0.00015)	0.0003
ALCOA-SS413	12.0	0.60	0.12x	0.08x	0.05x	<0.0050	0.10x	0.15x	0.05x	<0.0010	-	<0.0010	<0.0010	<0.0005
VAW-3165-1	12.0	0.20	0.0046	0.14	0.20	0.0008	0.0035	0.06	0.16	-	-	-	<0.0003	<0.0001
ALCAN-161CAH	(12.00)	(0.14)	0.0001	0.0001	(0.34)	<0.0001	<0.0001	<0.0001	<0.0001	-	-	-	0.0001	<0.0001
ALPEC-1775	12.05	0.306	0.057	0.371	0.0265	0.0127	0.0975	0.1285	0.048	-	-	-	-	-
ALCAN-A413.2AD	12.06	0.40	0.033	0.039	0.26	0.016	0.031	0.03	0.031	-	-	-	-	0.0009
ALCAN-160DS	12.12	0.37	0.042	0.042	0.024	0.02	0.025	0.024	0.02	-	-	-	-	0.0013
ALCAN-160DQ	12.12	0.32	0.053	0.034	0.031	0.03	0.028	0.045	0.03	-	-	-	-	-
ALCAN-160DF	12.23	0.52	0.047	0.036	0.034	0.045	0.038	0.047	0.04	-	-	-	-	-

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn
VAW-3007-2	0.0008	0.00056	0.00137	<0.0002	0.0036	-	0.00053	0.037	0.00064	0.0017	0.002	0.003	-	0.0022
VAW-3006-2	0.0008	0.0011	<0.0002	-	0.012	-	<0.0001	-	0.012	0.001	0.03	0.017	-	0.031
VAW-3164-4	<0.0002	0.0067	<0.0002	<0.0002	0.01	-	<0.0001	-	0.0005	<0.0004	0.0008	<0.0004	-	<0.0003
ERM-EB316	0.014	(0.00113)	0.00208	(<0.00015)	0.0105	(0.0035)	(0.0001)	-	-	-	0.0087	(0.0056)	-	(0.0106)
ALCOA-SS413	<0.0010	<0.0030	<0.0010	<0.0010	0.012	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030
VAW-3165-1	<0.0004	0.01	<0.0001	0.0002	0.0069	-	<0.0001	-	<0.0002	0.0006	0.0011	0.0081	-	0.0009
ALCAN-161CAH	<0.0001	-	0.0001	<0.0001	<0.0001	-	-	-	0.0002	0.0004	<0.0001	<0.0001	-	<0.0001
ALPEC-1775	-	-	-	-	-	-	-	-	-	-	0.0307	0.192	-	0-0.0015
ALCAN-A413.2AD	0.0069	0.0025i	0.0014	-	0.029	-	0.0029i	-	0.0040i	0.0026	0.008	0.0039	-	0.014
ALCAN-160DS	0.029	0.0020i	-	-	0.025	-	0.0005i	-	0.0006i	-	0.025	-	-	0.026
ALCAN-160DQ	0.031	0.002	-	-	0.012	-	0.0003	-	0.0001	-	0.028	-	-	0.029
ALCAN-160DF	0.044	0.003	-	-	-	-	-	-	0.002	-	0.038	-	-	0.039

Product Code	Sr	V	Zr
VAW-3007-2	0.00119	0.0087	0.00057
VAW-3006-2	0.011	0.005	0.0032
VAW-3164-4	0.054	0.0045	0.0049
ERM-EB316	0.0206	0.0098	0.00328
ALCOA-SS413	0.02x	0.01x	<0.0030
VAW-3165-1	0.14	0.01	0.0019
ALCAN-161CAH	<0.0001	<0.0001	<0.0001
ALPEC-1775	-	-	-
ALCAN-A413.2AD	0.064i	0.019	0.0034
ALCAN-160DS	0.010i	0.013	-
ALCAN-160DQ	-	0.011	-
ALCAN-160DF	-	-	-

Size	Grade	Type	Form
Ø 60X20mm		CRM	CCC
Ø 60X20mm	4047	CRM	CCC
Ø 60X20mm	4047	CRM	CCC
Ø 50X30mm	4047	CRM	C
Ø 64X25mm	413	CRM	CCC
Ø 60X20mm	4047	CRM	CCC
Ø 57X25mm		CRM	CCC
Ø 55X30mm		CRM	CCC
Ø 57X25mm	413.2	CRM	CCC
Ø 57X25mm	413.2	CRM	CCC
Ø 57X25mm	413.2	CRM	CCC
Ø 57X25mm	413.2	CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	B	Be	Bi	Ca
ALSUI-461/01	12.28	0.454	0.345	0.489	0.131	0.0532	0.248	0.152	0.104	0-0.0001	0-0.0005	0.0051	0.0092	0.0023
ALCAN-160DD	12.40	0.52	0.044	0.037	0.04	0.042	0.037	0.048	0.04	-	-	-	0.04	<0.001
ALCOA-KB413	12.60	0.30	0.05x	0.05x	0.03x	<0.0050	0.05x	0.08x	0.10x	-	-	-	-	-
BAS-IMI231P2	12.64	0.46	0.41	0.48	0.22	0.14	0.10	0.16	0.16	-	-	-	-	-
ALPEC-9624	12.80	0.057	0.0019	0.021	0.0902	0.0018	0.018	0.0492	0.0552	-	-	0.000002	-	-
ALSUI-415/03	12.80	0.18	0.054	0.096	0.50	0.03	0.05	0.036	0.055	-	-	-	0.0084	0.018
BAS-IMI620WM5	12.85	0.15	<0.005	0.84	0.005	0.14	<0.005	0.005	0.005	-	-	-	-	-
MBH-54X G06H4 Q	13.21	0.138	0.237	0.691	0.134	0.12	0.139	0.131	0.124	-	-	-	-	-
MBH-54X G231H3 C	13.17	0.393	0.42	0.477	0.039	0.063	0.0932	0.13	0.128	-	-	0.0003	-	-
MBH-54X G13H5 L	13.26	0.715	0.216	0.119	0.092	0.044	0.115	0.07	0.032	-	-	0.0049	-	-
ALSUI-416/04	13.43	0.69	0.19	0.386	0.287	0.049	0.096	0.048	0.028	-	-	0.001	-	0.002x
VAW-3005-3	13.60	0.43	0.11	0.38	0.33	0.0059	0.12	0.13	0.09	-	-	-	-	0.0086

Product Code	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
ALSUI-461/01	0-0.00002	-	0.0076	-	0.0019	-	0.019	0.003	0.0201	-	0.0141	0.0193		
ALCAN-160DD	-	-	-	-	(0.001)	-	0.042	-	0.042	-	-	-		
ALCOA-KB413	-	-	-	-	-	-	0.12x	-	0.12x	0.02x	-	-		
BAS-IMI231P2	-	-	-	-	-	-	0.055	-	0.055	-	-	-		
ALPEC-9624	-	-	-	-	-	-	0.0547	0.0054	0-0.0004	0.0004	-	-		
ALSUI-415/03	-	0.05	0.0088	-	0.007	0.002	0.051	0.017	0.048	0.0006	0.02	-		
BAS-IMI620WM5	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-		
MBH-54X G06H4 Q	-	0.207	-	<0.001	-	0.004	(0.04)	-	(0.007)	(0.005)	0.011	-		
MBH-54X G231H3 C	-	-	-	-	-	-	0.008	-	0.0139	-	-	-		
MBH-54X G13H5 L	-	0.0016	-	-	-	-	0.013	-	0.009	(0.033)	-	-		
ALSUI-416/04	-	0.02	0.008	0.0004	0.01x	0.002x	0.019	0.0042	0.016	0.010x	0.0098	0.0201		
VAW-3005-3	-	-	0.012	-	-	0.0006	0.079	<0.0002	0.043	0.0007	0.0045	0.002		

Product Code
ALSUI-461/01
ALCAN-160DD
ALCOA-KB413
BAS-IMI231P2
ALPEC-9624
ALSUI-415/03
BAS-IMI620WM5
MBH-54X G06H4 Q
MBH-54X G231H3 C
MBH-54X G13H5 L
ALSUI-416/04
VAW-3005-3

Size	Grade	Type	Form
Ø 60X25mm		CRM	CCC
Ø 57X25mm	413.2	CRM	CCC
Ø 64X25mm	413	CRM	CCC
Ø 58X7mm		CRM	C
Ø 55X30mm	413	CRM	CCC
Ø 60X25mm	360	CRM	CCC
Ø 58X7mm		CRM	C
Ø 40X13mm		CRM	C
Ø 50X20mm	413	CRM	C
Ø 50X17mm		CRM	C
Ø 60X25mm	360	CRM	CCC
Ø 60X20mm	4047	CRM	CCC

Values listed in mass %; () Uncertified Value

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Si/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Bi	Ca	Cd	Co
ALPEC-9619	13.70	0.29	0.1529	0.145	0.193	0.0099	0.0043	0.0037	0.0136	0.00252	-	-	-	-
MBH-54X G06H5 L	13.76	0.21	0.0229	0.85	(0.0022)	0.026	0.0067	0.225	0.0106	-	-	-	(0.0002)	-
ALPEC-219	14.30	0.101	0.0008	0.58	0.117	-	0.025	0.009	0.015	0.004	-	-	-	-
MBH-54X GS20J2 E	18.70	0.565	0.168	0.059	0.177	0.066	0.091	0.304	0.082	<0.0001	-	(<0.001)	-	-
MBH-54X GS20J1 E	18.80	0.79	0.308	0.097	0.186	0.115	0.159	0.43	0.129	0.00012	-	(<0.001)	-	-
ALCAN-5500CAU	(19.0)	(0.52)	(0.00)	(0.00)	(0.00)	<0.001	<0.001	0.002	0.01	-	0.002	0.0048	-	-
MBH-55X G28J4 T	20.40	0.52	0.82	0.45	0.60	0.04	0.84	0.32	0.28	-	-	-	-	0.079
MBH-54X GS20J3 D	23.90	0.328	0.079	0.302	0.118	0.0017	0.003	0.03	0.0055	<0.0001	-	(<0.001)	-	-
MBH-54X GS20J4 D	25.50	0.227	(0.0037)	0.146	0.005	0.194	0.265	0.224	0.107	0.0017	-	(<0.001)	-	-
MBH-55X G28J6 A	27.15	(0.26)	(0.035)	(0.12)	(0.032)	(0.006)	(<0.01)	(0.052)	(0.024)	-	-	(0.007)	-	-

Product Code	Ga	Li	P	Pb	Sb	Sn	Sr	V
ALPEC-9619	-	-	-	0.0906	0.016	0.0587	0.045	-
MBH-54X G06H5 L	-	(0.0001)	-	(0.002)	-	0.022	-	0.008
ALPEC-219	-	-	-	0.0215	-	0.065	0.115	-
MBH-54X GS20J2 E	-	-	-	0.066	-	0.075	<0.0001	-
MBH-54X GS20J1 E	-	-	-	0.12	-	0.13	<0.0001	-
ALCAN-5500CAU	0.002	-	-	0.006	-	0.001	-	0.002
MBH-55X G28J4 T	-	-	0.002	0.094	-	0.041	-	0.01
MBH-54X GS20J3 D	-	-	-	0.077	-	0.012	<0.0001	-
MBH-54X GS20J4 D	-	-	-	0.0014	-	(0.0021)	(0.0022)	-
MBH-55X G28J6 A	-	-	-	(0.008)	-	(<0.002)	(0.038)	-

Size	Grade	Type	Form
Ø 55X30mm	5500	CRM	CCC
Ø 40X13mm		CRM	CCC
Ø 55X4mm		CRM	CCC
Ø 40X13mm		CRM	CC
Ø 40X13mm		CRM	CC
Ø 57X25mm		CRM	W
Ø 40X13mm		CRM	CC
Ø 40X13mm		CRM	CC
Ø 40X13mm		CRM	CC
Ø 65X30mm		CRM	CC

Values listed in mass %; () Uncertified Value

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Si/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb	Sn	Sr		
NCS HS49709-1	10.89	0.504	0.624	0.251	1.35	-	1.33	0.208	0.079	0.016	0.022	-		
NCS HS49709-2	11.34	0.216	0.932	0.614	0.843	-	0.827	0.165	0.115	0.136	0.12	-		
NCS HS49709-3	7.08	0.55	1.13	0.82	1.14	-	1.0	0.098	0.056	0.039	0.0085	-		
NCS HS49709-4	12.47	0.31	1.27	0.788	0.801	-	0.623	0.133	0.139	0.031	0.012	-		
NCS HS49709-5	8.69	0.082	0.41	0.092	1.55	-	1.58	0.252	0.021	0.0025	0.019	-		
NCS HS49709-6	12.56	0.40	1.46	0.41	0.513	0.0063	0.353	0.049	0.179	0.043	0.013	-		
NCS HS49739-1	8.90	0.655	0.041	0.348	0.043	-	-	0.021	0.032	-	-	-		
NCS HS49739-2	10.32	0.49	0.543	0.456	0.079	-	-	0.129	0.078	-	-	-		
NCS HS49739-3	10.71	0.417	0.233	0.541	0.093	-	-	0.067	0.092	-	-	-		
NCS HS49739-4	12.33	0.342	0.314	0.237	0.13	-	-	0.092	0.196	-	-	-		
NCS HS49739-5	14.28	0.247	0.468	0.15	0.163	-	-	0.157	0.195	-	-	-		
NCS HS49701C-1	10.38	1.02	0.413	0.309	0.178	-	0.137	0.387	0.055	0.226	0.096	0.129		
NCS HS49701C-2	6.91	0.84	1.41	0.452	0.888	-	0.099	0.711	0.078	0.098	0.047	0.086		
NCS HS49701C-3	12.64	0.212	2.07	0.54	0.753	-	0.066	0.216	0.042	0.074	0.021	0.062		
NCS HS49701C-4	3.49	0.324	3.55	0.97	1.21	-	0.054	0.977	0.112	0.033	0.0079	0.039		
NCS HS49701C-5	7.90	0.486	0.076	0.80	0.041	-	0.174	0.049	0.022	0.014	0.0027	0.023		
NCS HS49701C-6	0.894	1.37	5.08	0.078	1.53	-	0.025	1.33	0.182	0.174	0.107	0.0057		

Product Code
NCS HS49709-1
NCS HS49709-2
NCS HS49709-3
NCS HS49709-4
NCS HS49709-5
NCS HS49709-6
NCS HS49739-1
NCS HS49739-2
NCS HS49739-3
NCS HS49739-4
NCS HS49739-5
NCS HS49701C-1
NCS HS49701C-2
NCS HS49701C-3
NCS HS49701C-4
NCS HS49701C-5
NCS HS49701C-6

	Size	Grade	Type	Unit
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Sr	Pb	Sn	Sr	Zr	
NCS HS49716B-1	7.61	0.699	0.498	0.698	0.448	0.143	0.019	0.019	0.0002	0.014	0.073	0.0002	-	
NCS HS49716B-2	9.68	1.43	3.16	0.561	0.126	0.248	0.011	0.011	0.012	0.055	0.156	0.012	-	
NCS HS49716B-3	10.69	1.01	2.63	0.397	0.195	0.278	0.059	0.059	0.096	0.048	0.202	0.096	-	
NCS HS49716B-4	12.29	1.06	2.02	0.261	0.265	0.427	0.018	0.018	0.106	0.122	0.275	0.106	-	
NCS HS49716B-5	13.98	0.359	1.24	0.101	0.369	0.594	0.101	0.101	0.157	0.165	0.332	0.157	-	
NCS HS49716B-6	6.06	1.90	4.06	0.051	0.049	0.081	0.0071	0.0071	0.051	0.0056	0.043	0.051	-	
NCS HS49744-1	6.78	0.166	4.64	0.531	0.063	0.024	-	-	-	-	-	-	-	
NCS HS49744-2	7.55	0.443	4.0	0.451	0.124	0.024	-	-	-	0.0059	0.0043	-	-	
NCS HS49744-3	8.54	0.706	3.31	0.326	0.172	0.244	-	-	-	0.019	0.072	-	-	
NCS HS49744-4	9.10	0.998	2.92	0.204	0.239	0.0414	-	-	-	0.065	0.113	-	-	
NCS HS49744-5	9.99	1.32	2.49	0.099	0.292	0.515	-	-	-	0.112	0.146	-	-	
NCS HS49740-1	6.92	0.09	0.017	0.101	0.538	-	0.295	0.027	-	0.01	0.0096	-	0.028	
NCS HS49740-2	8.24	0.165	0.049	0.395	0.371	-	0.136	0.069	-	0.105	0.018	-	0.207	
NCS HS49740-3	9.21	0.435	0.079	0.608	0.303	-	0.234	0.475	-	0.046	0.0068	-	0.111	
NCS HS49740-4	10.02	0.392	0.081	0.24	0.183	-	0.215	0.135	-	0.085	0.013	-	0.078	
NCS HS49740-5	11.30	0.269	0.132	0.512	0.089	-	0.079	0.275	-	0.129	0.018	-	0.15	

Product Code
NCS HS49716B-1
NCS HS49716B-2
NCS HS49716B-3
NCS HS49716B-4
NCS HS49716B-5
NCS HS49716B-6
NCS HS49744-1
NCS HS49744-2
NCS HS49744-3
NCS HS49744-4
NCS HS49744-5
NCS HS49740-1
NCS HS49740-2
NCS HS49740-3
NCS HS49740-4
NCS HS49740-5

	Size	Grade	Type	Unit
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Ca	Pb	Sn	Sr
NCS HS49745-1	5.45	0.064	0.063	0.01	0.617	0.012	0.0014	0.146	0.0083	-	0.065	0.012	0.097	0.016
NCS HS49745-2	5.94	0.214	0.0074	0.056	0.50	0.07	0.0053	0.069	0.049	-	0.036	0.073	0.014	0.144
NCS HS49745-3	7.63	0.049	0.098	0.16	0.426	0.0081	0.016	0.0091	0.018	-	0.0083	0.006	0.0058	0.031
NCS HS49745-4	6.93	0.108	0.015	0.075	0.096	0.051	0.0065	0.098	0.148	-	0.017	0.10	0.088	0.101
NCS HS49745-5	6.62	0.22	0.042	0.117	0.198	0.03	0.029	0.039	0.179	-	0.0077	0.027	0.046	0.067
NCS HS49745-6	8.62	0.278	0.027	0.109	0.313	0.04	0.02	0.034	0.105	-	0.0021	0.045	0.033	0.0033
NCS HS49718-1	6.03	0.194	0.303	0.411	0.095	-	-	0.375	0.228	0.0086	-	0.02	0.011	0.0083
NCS HS49718-2	6.36	0.413	0.254	0.317	0.207	-	-	0.257	0.188	0.013	-	0.031	0.021	0.0106
NCS HS49718-3	7.15	0.654	0.412	0.248	0.301	-	-	0.225	0.132	0.017	-	0.063	0.031	0.009
NCS HS49718-4	7.55	0.911	0.158	0.165	0.401	-	-	0.061	0.088	0.024	-	0.088	0.048	0.008
NCS HS49718-5	8.19	1.12	0.065	0.07	0.501	-	-	0.0068	0.043	0.055	-	0.123	0.061	0.015
NCS HS49742-1	6.03	0.076	0.08	0.04	0.14	-	-	0.038	0.083	-	-	-	-	-
NCS HS49742-2	6.53	0.238	0.131	0.13	0.211	-	-	0.121	0.127	-	-	-	-	-
NCS HS49742-3	7.17	0.396	0.179	0.211	0.29	-	-	0.206	0.136	-	-	-	-	-
NCS HS49742-4	7.79	0.571	0.243	0.313	0.381	-	-	0.304	0.219	-	-	-	-	-
NCS HS49742-5	8.0	0.758	0.295	0.404	0.494	-	-	0.422	0.223	-	-	-	-	-
NCS HS49742-6	5.57	0.076	0.065	0.011	0.584	-	-	0.013	0.007	-	-	-	-	-

Product Code	Zr
NCS HS49745-1	-
NCS HS49745-2	-
NCS HS49745-3	-
NCS HS49745-4	-
NCS HS49745-5	-
NCS HS49745-6	-
NCS HS49718-1	0.047
NCS HS49718-2	0.085
NCS HS49718-3	0.162
NCS HS49718-4	0.208
NCS HS49718-5	0.26
NCS HS49742-1	-
NCS HS49742-2	-
NCS HS49742-3	-
NCS HS49742-4	-
NCS HS49742-5	-
NCS HS49742-6	-

	Size	Grade	Type	Unit
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Pb	Sn	Zr	
NCS HS49741-1	4.36	0.475	2.52	0.0187	0.163	-	-	0.01	0.041	0.0047	0.009	0.0063	0.181	
NCS HS49741-2	3.69	0.364	2.01	0.134	0.317	-	-	0.067	0.118	0.021	0.029	0.017	0.172	
NCS HS49741-3	4.89	0.294	1.45	0.245	0.421	-	-	0.151	0.154	0.011	0.051	0.019	0.107	
NCS HS49741-4	5.05	0.186	1.02	0.347	0.60	-	-	0.201	0.175	0.014	0.088	0.014	0.137	
NCS HS49741-5	5.67	0.11	0.514	0.497	0.686	-	-	0.305	0.234	0.014	0.142	0.022	0.04	
NCS HS49703B-1	0.526	0.212	0.035	0.864	1.16	0.085	0.059	0.294	0.108	-	-	-	-	
NCS HS49703B-2	1.0	0.344	0.237	0.507	0.658	0.144	0.042	0.217	0.049	-	-	-	-	
NCS HS49703B-3	1.28	0.432	0.522	0.234	0.911	0.34	0.03	0.091	0.028	-	-	-	-	
NCS HS49703B-4	0.224	0.652	0.73	1.17	0.442	0.232-0.311	0.094	0.162	0.072	-	-	-	-	
NCS HS49703B-5	1.59	0.822	0.011	1.48	0.081	0.043	0.12	0.04	0.0094	-	-	-	-	
NCS HS49703B-6	0.048	0.099	0.99	0.043	1.50	-	0.016	0.367	0.16	-	-	-	-	

Product Code
NCS HS49741-1
NCS HS49741-2
NCS HS49741-3
NCS HS49741-4
NCS HS49741-5
NCS HS49703B-1
NCS HS49703B-2
NCS HS49703B-3
NCS HS49703B-4
NCS HS49703B-5
NCS HS49703B-6

	Size	Grade	Type	Unit
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Al Sets Only

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Pb	Sn				
NCS HS50707-1	14.06	0.17	0.34	0.078	0.64	0.62	0.12	0.11	0.037	0.044				
NCS HS50707-2	12.35	0.24	0.57	0.43	0.83	0.86	0.43	0.14	0.089	0.0064				
NCS HS50707-3	11.61	0.39	0.82	0.21	1.19	1.0	0.19	0.19	0.058	0.016				
NCS HS50707-4	10.64	0.58	1.18	0.28	1.28	1.58	0.37	0.26	0.14	0.0074				
NCS HS50707-5	9.25	0.91	1.91	0.12	1.95	2.04	0.05	0.049	0.21	0.031				
NCS HS50709A-1	11.93	0.29	0.086	0.091	0.09	-	0.14	-	-	-				
NCS HS50709A-2	9.01	0.78	0.18	0.44	0.17	-	0.17	-	-	0.0075				
NCS HS50709A-3	9.99	0.17	0.48	-	0.074	-	0.30	-	-	0.012				
NCS HS50709A-4	6.28	1.12	0.29	0.24	0.31	-	0.10	-	-	0.0041				
NCS HS50709A-5	5.32	0.42	0.82	0.70	0.48	-	0.50	-	-	0.019				

Product Code
NCS HS50707-1
NCS HS50707-2
NCS HS50707-3
NCS HS50707-4
NCS HS50707-5
NCS HS50709A-1
NCS HS50709A-2
NCS HS50709A-3
NCS HS50709A-4
NCS HS50709A-5

	Size	Grade	Type	Unit
Set of 5 Only	30x35x50mm		CRM	Disc
Set of 5 Only	30x35x50mm		CRM	Disc
Set of 5 Only	30x35x50mm		CRM	Disc
Set of 5 Only	30x35x50mm		CRM	Disc
Set of 5 Only	30x35x50mm		CRM	Disc
Set of 5 Only	35x35x40mm		CRM	Disc
Set of 5 Only	35x35x40mm		CRM	Disc
Set of 5 Only	35x35x40mm		CRM	Disc
Set of 5 Only	35x35x40mm		CRM	Disc
Set of 5 Only	35x35x40mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALPEC-266	0.516	0.524	4.88	0.395	0.185	0.003	0.0032	0.0585	0.0275	-	-	-	-	-
MBH-57X G12H5 G	0.55	0.19	12.20	0.073	0.028	0.016	0.11	0.072	0.036	-	-	-	0.003	-
SEI-NK17S-NDC2	0.597	0.567	4.05	0.703	0.374	0.022	-	0.057	0.014	-	-	-	-	-
MBH-56X G2014 A	0.611	0.243	4.41	0.572	0.453	0.0766	0.007	0.195	0.0244	-	-	-	-	-
VAW-2416-2	0.66	0.70	0.56	1.54	0.093	0.058	0.054	0.12	0.16	-	0.0014	<0.0005	0.001	0.0091
ALCAN-6111AA	0.73	0.18	0.96	0.17	0.46	0.014	0.02	0.015	0.032	-	-	-	-	0.0036
VAW-3362-2	0.75	0.30	5.49	0.20	0.068	0.0022	0.0016	0.84	0.005	-	-	-	-	-
ALCOA-SS2025	0.80	0.55	4.6x	0.80	0.05x	0.04x	0.04x	0.10x	0.03x	<0.0010	<0.0010	<0.0010	-	<0.0005
ALCAN-225AH	0.85	0.39	4.48	0.057	0.02	0.031	0.032	0.032	0.17	-	-	-	-	-
ALCAN-2014AD	0.88	0.46	4.58	0.81	0.45	0.018	0.028	0.029	0.03	-	-	-	-	0.0014
ALCOA-SS295	0.90	0.70	4.5x	0.12x	0.05x	<0.0050	0.05x	0.10x	0.12x	<0.0010	<0.0010	<0.0010	-	<0.0005

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn
ALPEC-266	-	-	-	-	-	-	-	-	-	-	0.055	-	-	0.027
MBH-57X G12H5 G	-	-	0.023	0.054	0.017	-	-	-	-	-	0.068	0.066	-	0.067
SEI-NK17S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-56X G2014 A	0.0013	-	-	-	-	-	-	-	-	-	0.011	-	-	(0.0047)
VAW-2416-2	0.0091	0.0009	0.0046	0.0015	0.013	0.002	0.0011	-	<0.0002	0.0022	0.008	0.0066	-	0.0059
ALCAN-6111AA	0.015	0.0049i	-	-	0.028	-	0.0034i	-	0.0034i	0.007	0.016	0.004	-	0.016
VAW-3362-2	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
ALCOA-SS2025	<0.0010	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010
ALCAN-225AH	0.033	-	-	-	0.02	-	-	-	-	-	0.03	-	-	0.033
ALCAN-2014AD	0.025	0.0025i	0.0014	-	0.026	-	0.0018i	-	0.0020i	0.0038i	0.023	0.004	-	0.037
ALCOA-SS295	<0.0010	<0.0030	<0.0010	<0.0010	0.015	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	0.003x

Product Code	Sr	Tl	V	Zr
ALPEC-266	-	-	-	0.123
MBH-57X G12H5 G	-	-	0.033	0.045
SEI-NK17S-NDC2	-	-	-	-
MBH-56X G2014 A	-	-	-	0.135
VAW-2416-2	<0.0002	0.0022	0.018	0.0061
ALCAN-6111AA	0.0030i	-	0.028	0.017
VAW-3362-2	-	-	-	-
ALCOA-SS2025	<0.0010	-	0.01x	<0.0030
ALCAN-225AH	-	-	0.015	-
ALCAN-2014AD	0.0024i	-	0.031	0.0035
ALCOA-SS295	<0.0010	-	0.01x	<0.0030

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 40x15mm		RM	C
Ø 55x25mm		CRM	C
Ø 50x20mm	2014	CRM	C
Ø 60x20mm	3003	CRM	CCC
Ø 57x25mm	6111	CRM	W
Ø 60x20mm		RM	CCC
Ø 64x25mm	2025	CRM	W
Ø 57x25mm	295.5	CRM	CCC
Ø 57x25mm	2014	CRM	W
Ø 64x25mm	295	CRM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-2014CAC	(0.90)	(0.48)	(4.56)	(0.90)	(0.43)	<0.0001	0.0001	<0.0001	<0.0001	-	-	0.0001	<0.0001	<0.0001
SEI-NK14S-NDC2	0.96	0.451	4.38	0.798	0.477	0.052	-	0.105	0.082	-	-	-	-	-
MBH-57X G12H7 A	1.20	0.37	4.75	0.034	0.018	0.022	0.037	0.38	0.054	-	-	-	-	-
ALCOA-KB295	1.3x	0.35	4.9x	0.03x	0.01x	<0.0050	0.08x	0.05x	0.17x	-	-	-	-	-
ALCAN-8280CAC	(1.40)	(0.40)	(1.0)	<0.001	(0.002)	<0.001	(0.45)	<0.005	(0.002)	-	-	-	-	(0.002)
VAW-3031-2	1.97	0.39	1.31	0.22	0.26	0.051	0.13	0.07	0.056	-	-	<0.0002	<0.0001	<0.0005
ALCAN-224CAB	(2.28)	(0.45)	(3.95)	(0.002)	(0.002)	<0.001	(0.001)	(<0.001)	(0.001)	-	-	-	-	<0.001
ALCAN-224AC	2.64	0.53	4.26	0.042	0.022	0.027	0.03	0.039	0.15	-	-	-	-	0.019
ALCOA-SS296	2.8x	0.60	4.5x	0.20x	0.06x	<0.0050	0.15x	0.25	0.10x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
VAW-3330	2.95	0.04	2.0	0.40	0.01	-	-	0.03	0.23	-	-	-	-	-
ALCOA-SS208	3.0x	0.60	4.0x	0.15x	0.05x	<0.0050	0.08x	0.15x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-2014CAC	<0.0001	<0.0001	<0.0001	0.0001	-	<0.0001	<0.0001	0.0003	0.0002	0.0002	-	<0.0001	<0.0001	<0.0001
SEI-NK14S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-57X G12H7 A	-	<0.001	0.048	-	-	-	-	-	0.033	-	-	0.032	-	0.012
ALCOA-KB295	-	-	-	-	-	-	-	-	0.05x	-	-	0.01x	-	-
ALCAN-8280CAC	(0.002)	-	-	-	-	<0.0001	(0.0003)	0.0002	(0.05)	-	-	(6.9)	<0.0001	-
VAW-3031-2	0.0023	<0.0002	0.0002	0.0095	-	<0.0001	<0.0002	<0.001	0.067	<0.0005	-	0.063	0.0002	0.003
ALCAN-224CAB	-	-	-	(0.001)	-	-	-	-	-	-	-	-	-	(0.002)
ALCAN-224AC	-	-	-	0.016	-	-	-	-	0.021	-	-	0.024	-	0.014
ALCOA-SS296	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	0.01x	<0.0010	0.01x
VAW-3330	-	-	-	-	-	-	-	0.0007	-	-	-	-	-	-
ALCOA-SS208	<0.0030	<0.0010	<0.0010	0.012	<0.0010	<0.0010	<0.0010	<0.0010	0.10x	<0.0010	<0.0010	0.10x	<0.0010	0.01x

Product Code	Zr
ALCAN-2014CAC	<0.0001
SEI-NK14S-NDC2	-
MBH-57X G12H7 A	0.033
ALCOA-KB295	-
ALCAN-8280CAC	-
VAW-3031-2	0.0016
ALCAN-224CAB	-
ALCAN-224AC	-
ALCOA-SS296	<0.0030
VAW-3330	-
ALCOA-SS208	0.04x

Size	Grade	Type	Form
Ø 57x25mm	2014	CRM	W
Ø 55x25mm		CRM	CCC
Ø 50x20mm		CRM	C
Ø 64x25mm	295	CRM	CCC
Ø 57x25mm	8280	CRM	W
Ø 60x20mm		CRM	CCC
Ø 57x25mm	208.2	CRM	CCC
Ø 57x25mm	208.2	CRM	CCC
Ø 64x25mm	296	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	208	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-55X G046H6 E	3.30	0.83	5.56	0.028	0.151	0.126	0.77	0.199	0.126	-	-	0.029	-	0.0039
VAW-3032-3	3.87	0.53	1.91	0.35	0.38	0.02	0.20	0.10	0.082	-	-	-	0.0029	-
VAW-3332	3.90	0.16	1.55	0.03	0.01	-	-	0.033	0.01	-	-	-	-	-
ALCAN-117CAG	(4.30)	0.025	(3.0)	(0.60)	<0.001	<0.001	<0.001	<0.001	0.002	-	<0.0001	<0.001	-	-
SEI-NKAC2A-NDC1	4.41	0.511	3.82	0.464	0.198	0.06	0.19	0.203	(0.10)	-	-	-	0.0012	-
ALCAN-S250CAC	(4.50)	(1.0)	(10.0)	0.005	(0.002)	(0.001)	(0.001)	(0.001)	0.003	-	-	(0.001)	-	-
BAS-IMI4P4	4.55	0.84	3.69	0.30	0.045	0.15	0.11	0.46	0.05	-	-	-	-	-
ALCAN-127AB	4.59	0.39	4.85	0.027	0.03	0.022	0.027	0.035	0.033	-	-	(0.024)	0.006	-
VAW-3333-2	4.76	0.29	2.87	0.29	0.031	0.0028	0.0054	0.039	0.11	<0.0002	-	0.016	0.0006	<0.0002
VAW-3335-2	4.84	0.12	3.37	0.11	0.15	0.013	0.075	0.10	0.056	<0.0002	-	<0.0002	0.0011	<0.0002
MBH-55X G04H8 J	4.96	0.529	2.86	0.255	0.126	0.0301	0.197	0.998	0.179	-	-	0.007	-	0.0055

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
MBH-55X G046H6 E	0.0024	-	0.019	-	-	0.221	-	0.181	-	0.014	-			
VAW-3032-3	-	-	-	-	<0.0006	0.10	<0.001	0.086	0.022	-	-			
VAW-3332	-	-	-	-	0.0005	-	-	-	-	-	-			
ALCAN-117CAG	-	<0.001	<0.0001	-	-	<0.001	-	<0.001	-	<0.001	-			
SEI-NKAC2A-NDC1	-	-	-	0.0004	0.0003	-	0.0001	0.054	-	-	-			
ALCAN-S250CAC	-	(0.002)	-	-	-	(0.001)	-	(0.001)	-	(0.002)	-			
BAS-IMI4P4	-	-	-	-	-	0.05	-	0.055	-	-	-			
ALCAN-127AB	-	0.016	0.0004	-	-	0.031	-	0.03	-	0.013	0.02			
VAW-3333-2	<0.0002	0.012	<0.0001	<0.0002	0.0004	0.0054	<0.0002	<0.002	0.0003	0.0037	0.0061			
VAW-3335-2	<0.0002	0.0087	0.0002	0.0032	0.0018	0.04	<0.0002	0.029	<0.0002	0.0039	0.0013			
MBH-55X G04H8 J	0.016	-	0.0033	-	-	0.128	-	0.0809	-	0.0214	-			

Product Code
MBH-55X G046H6 E
VAW-3032-3
VAW-3332
ALCAN-117CAG
SEI-NKAC2A-NDC1
ALCAN-S250CAC
BAS-IMI4P4
ALCAN-127AB
VAW-3333-2
VAW-3335-2
MBH-55X G04H8 J

Size	Grade	Type	Form
Ø 40x13mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 58x7mm		CRM	C
Ø 55x25mm		CRM	C
Ø 57x25mm		CRM	CCC
Ø 58x7mm		CRM	C
Ø 57x25mm	308	CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 50x20mm	320	CRM	C

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Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-KC355	5.0x	0.15x	1.3x	0.08x	0.03x	0.03x	0.05x	0.03x	0.12x	-	-	-	-	-
BAS-IMI4P3	5.10	0.61	3.04	0.45	0.09	0.09	0.22	0.31	0.10	-	-	-	-	-
VAW-3050-1	5.20	0.46	3.29	0.22	0.20	0.048	0.11	0.32	0.12	-	-	<0.0002	-	-
MBH-55X G04H2 D	5.22	0.349	3.21	0.203	0.36	0.0108	0.0104	0.185	0.0553	-	-	-	-	-
VAW-3334-2	5.39	0.40	3.43	0.205	0.015	0.0014	0.0024	0.055	0.047	-	-	-	-	-
VAW-3336-3	5.39	0.15	2.98	0.19	0.26	0.035	0.11	0.051	0.11	-	-	<0.0002	-	<0.0002
ALCAN-125AQ	5.50	0.24	1.22	0.038	0.037	0.027	0.032	0.033	0.15	-	-	-	-	0.021
BAS-IMI4P2	5.50	0.40	2.35	0.54	0.19	0.05	0.31	0.16	0.15	-	-	-	-	-
ALCOA-KB355	5.5x	0.15x	1.5x	0.15x	0.40	0.02x	0.01x	0.15x	0.08x	-	-	-	-	-
ALCOA-SS308	5.5x	0.65	4.5x	0.10x	0.08x	<0.0050	0.10x	0.25	0.06x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
VAW-3337-3	5.72	0.58	3.22	0.31	0.25	0.023	0.10	0.21	0.034	-	-	<0.0002	-	<0.0002
MBH-55X G04HX A	5.78	0.28	3.40	0.196	0.063	0.0165	0.302	0.492	0.176	0.003	-	-	0.0006	0.0058

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCOA-KC355	-	-	-	-	-	-	-	-	-	-	-	-	0.02x	-
BAS-IMI4P3	-	-	-	-	-	-	-	-	0.10	-	-	0.10	-	-
VAW-3050-1	0.005	-	-	-	-	-	<0.0003	<0.0005	0.062	-	-	0.038	0.014	-
MBH-55X G04H2 D	0.001	-	-	-	-	-	(0.0009)	(0.002)	0.0159	-	-	0.0049	0.0025	-
VAW-3334-2	-	-	-	-	-	-	-	-	0.0017	<0.0005	-	0.0004	-	-
VAW-3336-3	0.0092	0.001	0.0002	0.01	-	<0.0001	0.0026	0.0025	0.062	<0.0002	-	0.04	<0.0002	0.0068
ALCAN-125AQ	-	-	-	0.011	-	-	-	-	0.018	-	-	0.025	-	0.016
BAS-IMI4P2	-	-	-	-	-	-	-	-	0.14	-	-	0.15	-	-
ALCOA-KB355	-	-	-	-	-	-	-	-	-	-	-	-	0.02x	-
ALCOA-SS308	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	0.02x	0.01x
VAW-3337-3	0.0048	0.0018	0.0046	0.012	-	<0.0002	0.0081	0.0034	0.13	<0.0005	-	0.011	0.0005	0.0083
MBH-55X G04HX A	0.0011	0.0048	0.006	-	-	-	-	0.0023	0.0125	0.0053	-	0.0112	-	0.0183

Product Code	Zr
ALCOA-KC355	-
BAS-IMI4P3	-
VAW-3050-1	-
MBH-55X G04H2 D	-
VAW-3334-2	-
VAW-3336-3	0.0021
ALCAN-125AQ	-
BAS-IMI4P2	-
ALCOA-KB355	-
ALCOA-SS308	<0.0030
VAW-3337-3	0.005
MBH-55X G04HX A	0.0278

Size	Grade	Type	Form
Ø 64x25mm	305	CRM	CCC
Ø 58x7mm		CRM	CCC
Ø 60x20mm	320	CRM CCC	Disc
Ø 45x20mm		CRM C	Disc
Ø 60x20mm		RM CCC	Disc
Ø 60x20mm		CRM CCC	Disc
Ø 57x25mm	305	CRM CCC	Disc
Ø 58x7mm	320	CRM C	Disc
Ø 64x25mm	355	CRM CCC	Disc
Ø 64x25mm	308	CRM CCC	Disc
Ø 60x20mm	319	CRM CCC	Disc
Ø 65x30mm		CRM HIP	Disc

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Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALPEC-9533	5.88	0.151	4.92	0.693	0.037	0.15	0.024	0.683	0.189	-	-	-	-	-
VAW-3033-2	5.89	0.61	1.99	0.37	0.44	0.0031	0.19	0.12	0.091	-	-	-	-	-
BAS-IMI4P1	5.92	0.25	1.80	0.63	0.25	<0.005	0.40	0.01	0.21	-	-	-	-	-
ALCOA-SS319	6.2x	0.85	3.8x	0.40	0.10x	0.01x	0.20x	0.35	0.15x	<0.0010	<0.0010	<0.0010	<0.0005	0.05x
ALPEC-907	6.54	0.198	1.0	0.356	0.018	-	0.0303	0.498	0.03	-	-	-	-	-
VAW-3051-1	6.57	0.47	1.63	0.084	0.054	0.0031	0.052	0.28	0.045	-	-	-	-	-
ALCOA-ST1-300	7.5x	0.60	0.80	0.15x	0.30	0.01x	0.10x	0.10x	0.10x	0.001x	-	-	0.0005	0.001x
BAS-IMI27WM1	7.77	0.17	0.94	0.66	0.005	0.14	0.39	0.40	0.21	-	-	-	-	-
ALCAN-6285CAB	(8.90)	(0.002)	(1.90)	<0.001	(0.48)	<0.001	<0.001	<0.001	(0.001)	-	-	-	-	(0.001)
ALCOA-SS380	8.9x	0.90	3.6x	0.40	0.20x	<0.0050	0.30	0.35	0.08x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
VAW-3056-2	9.07	0.28	1.59	0.30	0.48	0.056	0.28	0.47	0.099	-	-	<0.0005	<0.0001	0.004

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALPEC-9533	-	-	-	-	-	-	-	-	0.013	0.023	-	0.347	-	-
VAW-3033-2	0.0073	-	-	-	-	-	-	0.0009	0.11	-	-	0.096	<0.0005	-
BAS-IMI4P1	-	-	-	-	-	-	-	-	0.19	-	-	0.19	-	-
ALCOA-SS319	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	0.20x	<0.0010	<0.0010	0.20x	0.02x	0.02x
ALPEC-907	-	-	-	-	-	-	-	-	0.0017	0.069	-	0.03	-	-
VAW-3051-1	<0.0002	0.0006	-	-	-	0.0003	<0.001	<0.001	0.041	0.012	-	0.03	0.0008	-
ALCOA-ST1-300	-	0.001x	0.001x	0.02x	-	-	-	-	0.003x	0.001x	-	0.001x	0.02x	0.01x
BAS-IMI27WM1	-	-	-	-	-	-	-	-	0.17	-	-	<0.005	-	-
ALCAN-6285CAB	-	-	-	<0.001	-	-	-	-	<0.001	-	-	<0.001	-	(0.003)
ALCOA-SS380	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	0.02x	0.01x
VAW-3056-2	0.0031	0.0019	0.0006	0.01	-	0.0005	0.0023	0.0011	0.11	0.0021	-	0.095	0.014	0.0056

Product Code	Zr
ALPEC-9533	-
VAW-3033-2	-
BAS-IMI4P1	-
ALCOA-SS319	<0.0030
ALPEC-907	-
VAW-3051-1	-
ALCOA-ST1-300	0.001x
BAS-IMI27WM1	-
ALCAN-6285CAB	-
ALCOA-SS380	<0.0030
VAW-3056-2	0.0012

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 58x7mm		CRM	C
Ø 64x25mm	319	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 64x25mm	3204	CRM	CCC
Ø 58x7mm		CRM	C
Ø 57x25mm		CRM	W
Ø 64x25mm	380	CRM	CCC
Ø 60x20mm		CRM	CCC

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Si/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALCAN-A380.2CAC	(9.45)	(0.39)	(3.64)	0.0008	0.0005	0.0003	0.0006	0.0002	<0.0001	0.0011	-	-	0.0002	-
ALCAN-A380.2-AD	9.80	0.39	3.63	0.027	0.026i	0.033	0.03	0.031	-	-	-	-	0.0009i	0.0078
MBH-54X G06H2 S	10.19	0.64	0.54	0.234	0.40	0.13	0.55	0.47	0.179	-	-	-	-	-
BAS-IMI231P4	10.23	0.88	1.08	0.29	0.39	0.05	0.22	0.46	0.055	-	-	-	-	-
ALCAN-4145AB	10.66	0.54	4.12	0.05	0.05	0.05	0.054	0.058	0.046	-	-	-	-	0.0012
VAW-3016-2	11.0	0.608	0.666	0.333	0.198	0.0251	0.0188	0.235	0.0398	-	-	<0.0002	-	-
MBH-55X G02DY A	11.31	0.591	3.67	0.107	0.309	0.063	0.109	0.153	0.0687	0.0102	-	-	-	0.0012
MBH-54X G231H2 C	11.60	0.131	0.868	0.191	0.159	0.0469	0.171	0.397	0.085	-	-	-	-	0.0146
ALPEC-9524	11.69	0.086	0.50	0.257	0.49	-	0.53	0.148	0.019	-	-	-	-	-
SEI-NKADC12-NDC1	11.85	0.247	3.02	0.041	0.04	0.033	0.033	0.037	0.042	-	-	-	-	-
VAW-3310-1	11.95	0.42	3.91	0.11	0.045	0.051	1.08	0.19	0.10	-	-	<0.0004	-	0.0035
ALCOA-KAA332	12.40	0.50	1.0x	0.06x	<0.0050	<0.0050	2.7x	<0.0050	0.06x	-	-	-	-	-
VAW-3310-2	12.0	0.43	4.0	0.11	0.048	0.051	1.10	0.22	0.11	-	0.0045	<0.0004	-	0.0028
VAW-3015-6	12.80	0.78	0.68	0.50	0.32	0.08	0.12	0.35	0.15	-	-	<0.0005	-	-

Product Code	Bi	Ca	Cd	Co	Ga	Hg	In	Li	Mo	Na	P	Pb	Sb	Sc
ALCAN-A380.2CAC	<0.0001	<0.0001	0.0001	0.0002	<0.0001	-	-	-	<0.0001	-	0.0001	0.0003	0.0001	<0.0001
ALCAN-A380.2-AD	0.0027i	0.0009i	-	0.02	-	-	0.0025i	-	0.0025i	0.0021	0.008	(0.003)	0.02	-
MBH-54X G06H2 S	0.027	-	(0.0004)	0.0086	-	-	-	(0.0044)	-	-	-	0.213	-	-
BAS-IMI231P4	-	-	-	-	-	-	-	-	-	-	-	0.15	-	-
ALCAN-4145AB	0.032	0.0023	0.0012	-	0.019	-	-	0.0016i	-	0.0018i	0.0033i	0.031	0.0038	-
VAW-3016-2	0.00052	0.0085	-	-	0.0123	0.0044	-	-	-	-	0.002	0.0058	0.026	-
MBH-55X G02DY A	0.01	(0.0011)	0.0032	0.0195	-	-	-	-	-	-	0.01	0.062	0.0199	-
MBH-54X G231H2 C	-	-	-	-	-	-	-	-	-	-	-	0.082	-	-
ALPEC-9524	-	-	-	-	-	-	-	-	-	-	-	(0.098)	0.0331	-
SEI-NKADC12-NDC1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-3310-1	0.12	-	0.0047	0.018	0.018	0.0013	-	0.0005	-	0.0009	0.0024	0.12	0.017	-
ALCOA-KAA332	-	-	-	-	-	-	-	-	-	-	0.005x	-	0.003x	-
VAW-3310-2	0.11	0.0026	0.0046	0.019	0.023	0.0023	-	0.0004	-	0.0004	0.0021	0.12	0.017	-
VAW-3015-6	<0.001	0.032	0.0048	0.0051	0.026	0.0035	-	0.0009	-	0.0009	0.0011	0.16	<0.001	-

Product Code	Sn	Sr	V	Zr
ALCAN-A380.2CAC	<0.0001	0.0001	0.0002	0.0001
ALCAN-A380.2-AD	0.0031i	0.03	0.022	0.003
MBH-54X G06H2 S	0.116	-	0.018	-
BAS-IMI231P4	0.16	-	-	-
ALCAN-4145AB	0.03	0.0031	0.02	0.0028
VAW-3016-2	0.0019	0.042	0.0116	0.00587
MBH-55X G02DY A	0.0747	-	0.025	0.0218
MBH-54X G231H2 C	0.127	(0.0006)	-	-
ALPEC-9524	(0.0984)	-	-	-
SEI-NKADC12-NDC1	-	-	-	-
VAW-3310-1	0.049	0.0006	0.056	0.089
ALCOA-KAA332	-	0.02x	-	-
VAW-3310-2	0.051	0.0011	0.062	0.088
VAW-3015-6	0.16	<0.0002	0.0098	0.01

Size	Grade	Type	Form
Ø 57x25mm	380	CRM	CCC
Ø 57x25mm	380	CRM	CCC
Ø 40x13mm		CRM	C
Ø 58x7mm		CRM	C
Ø 57x25mm	4145	CRM	W
Ø 60x20mm		CRM	CCC
Ø 65x30mm		CRM	HIP
Ø 50x17mm		CRM	C
Ø 55x30mm		CRM	CCC
Ø 55x25mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 64x25mm	A332	CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Al Sets Only

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Pb	Sn				
NCS HS50705-1	3.25	1.16	8.48	0.12	0.13	0.068	0.124	-	0.099	0.008				
NCS HS50705-2	4.13	0.81	7.19	0.15	0.25	0.48	0.18	-	0.018	0.0052				
NCS HS50705-3	5.13	0.30	5.89	0.73	0.39	0.176	0.69	-	0.071	0.017				
NCS HS50705-4	6.21	0.50	4.81	0.46	0.58	0.30	0.44	-	0.042	0.011				
NCS HS50705-5	7.84	0.21	3.97	0.26	0.89	0.125	0.26	-	0.028	0.028				
NCS HS50708-1	14.18	0.28	0.70	0.24	0.315	0.099	0.064	0.045	0.022	0.0056				
NCS HS50708-2	12.61	0.324	1.015	0.36	1.17	0.19	0.235	0.056	0.034	0.0173				
NCS HS50708-3	11.49	0.406	1.42	0.48	0.86	0.317	0.106	0.18	0.052	0.011				
NCS HS50708-4	9.97	0.90	1.77	0.644	0.655	0.42	0.133	0.18	0.071	0.021				
NCS HS50708-5	8.88	0.62	2.40	0.98	0.43	0.607	0.487	0.105	0.12	0.038				

Product Code
NCS HS50705-1
NCS HS50705-2
NCS HS50705-3
NCS HS50705-4
NCS HS50705-5
NCS HS50708-1
NCS HS50708-2
NCS HS50708-3
NCS HS50708-4
NCS HS50708-5

	Size	Grade	Type	Unit
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc
Set of 5 Only	Ø 30x35x50mm		CRM	Disc

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn
NCS HS50713-1	6.50	0.12	5.42	0.14	0.30	0.088	0.18
NCS HS50713-2	5.31	0.22	7.30	0.09	0.52	0.42	0.12
NCS HS50713-3	4.27	0.26	9.01	0.23	0.19	0.61	0.59
NCS HS50713-4	8.27	0.44	4.30	0.68	-	0.052	0.90
NCS HS50713-5	6.4	0.68	6.18	0.42	0.67	-	0.37
NCS HS57701-1	4.71	0.41	5.28	0.57	0.19	-	0.59
NCS HS57701-2	8.61	0.63	1.45	0.40	0.18	-	0.79
NCS HS57701-3	5.63	0.50	3.54	0.79	0.40	-	1.25
NCS HS57701-4	6.17	0.56	3.98	0.46	0.21	-	0.30
NCS HS57701-5	9.49	1.01	0.99	0.21	0.23	-	0.77

	Size	Grade	Type	Unit
Set of 5 Only	Ø 30x35x40mm		CRM	Disc
Set of 5 Only	Ø 30x35x40mm		CRM	Disc
Set of 5 Only	Ø 30x35x40mm		CRM	Disc
Set of 5 Only	Ø 30x35x40mm		CRM	Disc
Set of 5 Only	Ø 30x35x40mm		CRM	Disc
Set of 5 Only	Ø 45x33x28mm		CRM	Disc
Set of 5 Only	Ø 45x33x28mm		CRM	Disc
Set of 5 Only	Ø 45x33x28mm		CRM	Disc
Set of 5 Only	Ø 45x33x28mm		CRM	Disc
Set of 5 Only	Ø 45x33x28mm		CRM	Disc

Values listed in mass %; () Uncertified Value

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Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-2018AB	0.48	0.34	4.14	0.015	0.62	0.028	2.15	0.03	0.027	-	-	-	0.0011	0.021
ALPEC-4025	(0.50)	(0.60)	(1.0)	(0.003)	(0.95)	(0.001)	(0.001)	(0.10)	(0.50)	-	-	-	-	-
MBH-56X G14H4 C	0.504	0.251	3.82	0.122	1.72	0.0309	2.37	0.091	0.069	-	-	-	-	-
ALCOA-SS242	0.50x	0.55	4.0x	0.08x	1.5x	0.03x	2.0x	0.10x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-2017CAB	(0.51)	(0.41)	(4.21)	(0.72)	(0.78)	0.0001	<0.0001	0.0001	0.0001	-	-	0.0001	<0.0001	<0.0001
VAW-4203	0.54	0.15	3.43	0.42	1.24	0.001	0.002	0.11	0.029	-	-	-	-	0.3
ALCAN-17SBE	0.54	0.40	4.33	0.66	0.69	0.032	0.041	0.046	0.039	-	-	-	-	0.021
ALCAN-2017AC	0.57	0.41	4.24	0.63	0.75	0.017	0.034	0.015	0.018	-	-	-	0.0012	0.019
ALSUI-226/01	0.57	0.20	5.31	0.69	0.81	0.12	0.03	0.026	0.152	-	-	-	0.002	0.0085
ALPEC-960	0.586	0.32	3.76	0.506	0.80	0.063	0.031	0.0892	0.0374	-	-	-	0.0022	-
MBH-59X G77J4 E	0.59	1.04	0.81	0.224	1.47	0.071	0.0037	5.30	0.119	-	-	-	-	-
ALCOA-SS2017	0.60	0.45	4.0x	0.60	0.60	0.05x	0.03x	0.07x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-6111AE	0.60	0.24	0.75	0.20	0.77	0.072	0.028	0.027	0.065	-	-	-	0.0013	0.025
ALPEC-849	0.613	0.613	0.753	0.0504	0.629	0.1308	0.006	0.2497	0.0043	-	-	-	0.0001	-
ALCAN-6111CAF	(0.64)	(0.15)	(0.69)	(0.17)	(0.69)	(0.068)	0.0001	(<0.0001)	0.066	-	-	<0.0001	<0.0001	<0.0001
Product Code	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn	Sr
ALCAN-2018AB	0.0025	0.0012	0.0017	0.02	-	0.0017i	-	0.0009i	0.003	0.017	0.0025	-	0.015	0.0026
ALPEC-4025	-	-	-	-	-	-	-	-	-	(0.001)	-	-	-	-
MBH-56X G14H4 C	-	-	0.0288	-	-	-	-	-	-	0.05	-	-	0.037	-
ALCOA-SS242	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-2017CAB	0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	0.0001	0.0001	<0.0001	-	<0.0001	<0.0001
VAW-4203	-	-	-	-	-	-	-	-	-	1.54	-	-	0.046	-
ALCAN-17SBE	-	-	-	0.02	-	-	-	-	-	0.03	-	-	0.032	-
ALCAN-2017AC	0.0025i	0.0013	-	0.02	-	0.0025i	-	0.0019i	0.0031i	0.015	0.0032i	-	0.015	0.0028i
ALSUI-226/01	-	0.01	-	-	-	-	-	-	-	0.01	-	-	-	-
ALPEC-960	-	-	-	-	-	-	-	-	-	0.0286	-	-	0.0248	-
MBH-59X G77J4 E	0.00054	-	-	-	-	-	0.073	-	-	0.219	-	0.0067	0.08	-
ALCOA-SS2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-6111AE	0.0023i	0.0014	-	0.019	-	0.0025i	-	0.0019i	0.003	0.016	0.0031	-	0.018	0.0026i
ALPEC-849	-	-	-	0.0258	-	-	-	-	-	0.0015	-	-	0.0203	-
ALCAN-6111CAF	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001
Product Code	V	Zr									Size	Grade	Type	Form
ALCAN-2018AB	0.016	0.0018									Ø 57x25mm	2018	CRM	W
ALPEC-4025	-	-									Ø 55x30mm		CRM	CCC
MBH-56X G14H4 C	0.0252	-									Ø 50x20mm	242	CRM	C
ALCOA-SS242	0.01x	<0.0030									Ø 64x25mm	242	CRM	CCC
ALCAN-2017CAB	<0.0001	0.0001									Ø 64x25mm	2017	CRM	W
VAW-4203	-	0.002									Ø 60x20mm		RM	CCC
ALCAN-17SBE	0.01	-									Ø 57x25mm	2017	CRM	W
ALCAN-2017AC	0.022	0.0026									Ø 57x25mm	2017	CRM	W
ALSUI-226/01	-	0.08									Ø 60x25mm		CRM	CCC
ALPEC-960	-	0.0312									Ø 55x31mm	2017	CRM	CCC
MBH-59X G77J4 E	-	-									Ø 40x15mm		CRM	C
ALCOA-SS2017	-	<0.0030									Ø 64x25mm	2017	CRM	W
ALCAN-6111AE	0.023	0.0031									Ø 57x25mm	6111	CRM	W
ALPEC-849	0.0122	0.1164									Ø 55x30mm	6011	CRM	CCC
ALCAN-6111CAF	<0.0001	0.0002									Ø 57x25mm	6111	CRM	W

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For more information on our products, visit www.lgcstandards.com

2015 Edition

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALSUI-223/02	0.68	0.50	3.58	0.796	1.09	0.0599	0.0522	0.0993	0.0626	-	-	0-0.0002	-	-
ALCOA-SS2018	0.70	0.40	4.2x	0.05x	0.65	0.05x	2.1x	0.12x	0.04x	<0.0010	<0.0010	<0.0010	-	<0.0005
ALCOA-WA2017	0.75	0.65	3.5x	0.40	0.75	0.02x	0.06x	0.03x	0.05x	-	-	-	-	-
ALSUI-224/01	0.76	0.25	4.6	0.9	0.57	0.08	0.011	0.055	0.052	-	-	-	-	0.005
MBH-56X G2000J3 C	0.773	0.38	4.78	0.589	1.018	0.0573	0.091	0.114	0.196	0.0105	-	-	-	0.0039
ALCOA-SS6111	0.786	0.25	0.703	0.24	0.60	0.0303	-	0.099	0.0414	-	-	-	-	-
ALSUI-252C/01	0.882	0.2817	3.75	0.78	0.529	0.0316	0.0692	0.1254	0.0099	-	-	-	-	-
ALCAN-2014AE	0.9	0.56	4.67	0.92	0.69	0.065	0.029	0.11	0.12	-	-	-	-	0.001
ALSUI-564/01	0.91	0.13	0.575	0.445	5.53	0.01	0.016	0.104	0.111	-	-	-	-	0.0023
ALCAN-6066AF	0.97	0.6	0.96	0.71	0.97	0.018	0.032	0.28	0.032	-	-	-	-	0.0013
ALPEC-234	1	0.0545	3.36	0.30	1.93	0.0317	0.047	0.153	0.014	-	-	-	-	0.0045
ALCOA-SS2014	1.0x	0.5	4.5x	0.8	0.55	0.04x	0.04x	0.12x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-6066CAG	(1.05)	(0.61)	(0.96)	(0.67)	(1.0)	0.0002	0.0001	0.0001	0.0001	-	-	0.0004	-	<0.0001

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALSUI-223/02	-	0.00	0.0011	-	-	-	0.00019	0.0008	-	0.0055	-	-	0.004	-
ALCOA-SS2018	0.05x	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.05x	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-WA2017	-	-	-	-	0.02x	-	-	-	-	-	-	-	-	-
ALSUI-224/01	0.016	-	0.018	-	-	-	-	-	-	0.02	-	-	-	-
MBH-56X G2000J3 C	0.152	-	-	0.108	-	-	0.0019	-	-	0.375	-	-	0.0157	-
ALCOA-SS6111	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-
ALSUI-252C/01	-	-	-	-	-	-	-	0-0.0001	-	0.0078	-	-	0.0489	-
ALCAN-2014AE	0.007	0.0027	0.0012i	-	0.018	-	0.0022i	0.0026i	0.003	0.0074	0.0028	-	0.019	0.0026
ALSUI-564/01	-	-	-	-	-	-	-	0.0018	-	0.011	-	-	-	-
ALCAN-6066AF	0.007	0.0028	0.0011	-	0.02	-	0.0034i	0.0039i	0.0032	0.0075	0.0026	-	0.014	0.0029
ALPEC-234	-	-	-	-	-	-	-	-	-	0.0003	-	-	0.047	-
ALCOA-SS2014	<0.0010	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-6066CAG	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	-	<0.0001	<0.0001

Product Code	V	Zr
ALSUI-223/02	0.01	0.00
ALCOA-SS2018	0.01x	<0.0030
ALCOA-WA2017	0.01x	-
ALSUI-224/01	-	0.15
MBH-56X G2000J3 C	0.010	0.03
ALCOA-SS6111	0.0105	-
ALSUI-252C/01	-	0.0283
ALCAN-2014AE	0.022	0.003
ALSUI-564/01	-	-
ALCAN-6066AF	0.021	0.0032
ALPEC-234	-	0.083
ALCOA-SS2014	0.01x	<0.0030
ALCAN-6066CAG	<0.0001	<0.0001

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 64x25mm	2018	CRM	W
Ø 64x25mm	2017	CRM	W
Ø 60x25mm	2214	CRM	CCC
Ø 40x15mm		CRM	C
Ø 64x25mm	6111	CRM	W
Ø 60x26mm		CRM	CCC
Ø 57x25mm	2014	CRM	W
Ø 60x25mm		CRM	CCC
Ø 57x25mm	6066	CRM	W
Ø 55x30mm		CRM	CCC
Ø 64x25mm	2014	CRM	W
Ø 57x25mm	6066	CRM	W

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Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-225/01	1.10	0.58	4.78	1.0	0.82	0.10	0.04	0.15	0.115	-	-	-	-	-
MBH-56X G2000J4 C	1.33	0.705	5.02	0.271	0.505	0.053	0.089	0.0131	0.135	0.0122	-	-	-	0.0049
ALSUI-666/01	1.41	0.52	1.47	0.60	0.80	0.17	-	0.10	0.051	-	-	-	-	-
VAW-2551-2	1.50	0.15	0.63	0.03	5.10	0.0033	0.008	0.026	0.06	-	-	<0.0002	0.0061	-
ALCOA-SS6066	1.5x	0.35	1.0x	0.90	1.2x	0.03x	0.03x	0.10x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-665/01	1.72	0.72	1.0	0.41	1.20	0.11	-	0.20	0.15	-	-	-	-	-
VAW-3041-2	2.14	0.79	2.99	0.55	0.58	0.002	0.41	0.49	0.15	-	-	-	-	-
ALPEC-1206	3.0	0.795	4.29	0.037	0.57	-	0.301	0.154	0.093	-	-	-	-	-
VAW-3042-4	3.62	0.932	3.0	0.529	0.742	0.142	0.40	1.099	0.153	-	-	<0.0003	-	0.004
ALCAN-A355.0CAA	(4.0)	(0.21)	(0.95)	-	(0.60)	<0.0001	<0.0001	<0.0001	<0.0001	-	-	0.0002	<0.0001	<0.0001
ALCOA-KA355	4.5x	0.65	1.0x	0.05x	0.63	0.01x	0.03x	0.05x	0.18x	-	-	-	-	-
ALCAN-125AT	4.83	0.63	1.17	0.22	1.08	0.023	0.032	0.16	0.068	-	-	-	0.0011	0.031
ALCAN-125AS	4.88	0.25	1.28	0.039	0.61	0.18	0.028	0.037	0.12	-	-	-	0.0009	0.027
ALCOA-SS355	5.1x	0.35	1.3x	0.08x	0.54	0.04x	0.05x	0.10x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-225/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-56X G2000J4 C	-	-	0.0247	-	-	0.0025	-	-	0.879	-	-	0.0049	-	0.0247
ALSUI-666/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-2551-2	0.001	0.0007	0.0019	0.019	-	-	-	-	0.0097	-	-	0.019	-	0.013
ALCOA-SS6066	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALSUI-665/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-3041-2	0.005	-	-	-	-	-	-	-	0.16	-	-	0.18	-	-
ALPEC-1206	-	-	-	-	-	-	-	-	0.1	0.025	-	0.196	-	-
VAW-3042-4	0.0054	0.00049	<0.0004	0.0164	0.00212	<0.0002	<0.0002	-	0.169	<0.001	-	0.177	0.0567	0.0195
ALCAN-A355.0CAA	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	0.0003	-	0.0001	<0.0001	<0.0001
ALCOA-KA355	-	-	-	-	-	-	-	-	-	-	-	-	0.02x	-
ALCAN-125AT	0.022	-	-	0.009	-	0.0006	0.0014	-	0.036	-	-	0.032	-	0.015
ALCAN-125AS	-	-	-	0.013	-	0.0005	-	-	0.035	-	-	0.029	-	0.015
ALCOA-SS355	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	0.02x	0.01x

Product Code	Zr
ALSUI-225/01	-
MBH-56X G2000J4 C	-
ALSUI-666/01	-
VAW-2551-2	0.005
ALCOA-SS6066	<0.0030
ALSUI-665/01	-
VAW-3041-2	-
ALPEC-1206	-
VAW-3042-4	0.00538
ALCAN-A355.0CAA	<0.0001
ALCOA-KA355	-
ALCAN-125AT	0.018
ALCAN-125AS	-
ALCOA-SS355	<0.0030

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm	6066	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 55x30mm		CRM	CCC
Ø 57x25, 60x20mm		CRM	CCC
Ø 57x25mm	355	CRM	CCC
Ø 64x25mm	355	CRM	CCC
Ø 57x25mm	355.2	CRM	CCC
Ø 57x25mm	355.2	CRM	CCC
Ø 64x25mm	355	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
SEI-NKAC4D-NDC2	5.63	0.149	1.50	0.103	0.539	0.053	0.05	0.102	0.107	-	-	-	-	-
VAW-3044-2	6.95	0.79	2.71	0.54	0.68	0.0044	0.38	0.49	0.16	-	-	-	-	-
SEI-NKAC2C-NDC1	7.13	0.296	3.98	0.382	0.528	0.053	0.051	0.104	(0.204)	-	-	-	-	0.0092
ALSUI-431/02	7.91	0.091	0.69	0.053	0.55	0.011	0.51	0.025	0.018	-	-	-	-	-
VAW-3013-3	8.45	0.59	0.70	0.65	0.85	0.08	0.10	0.39	0.11	-	-	<0.0005	-	-
VAW-3034-4	8.82	0.68	2.11	0.47	0.57	0.0065	0.22	0.14	0.10	-	-	<0.0002	0.0005	<0.001
ALCOA-KD360	9.0x	0.10x	0.75	0.05x	0.52	0.01x	0.02x	0.03x	0.12x	-	-	-	-	-
ALCOA-SS354	9.0x	0.15x	1.8x	0.05x	0.55	0.01x	0.01x	0.05x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS332	9.2x	0.70	3.2x	0.25	1.0x	<0.0050	0.50	0.25	0.14x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALPEC-9528	9.22	0.556	1.99	0.055	1.75	-	1.50	0.022	0.197	-	-	-	-	-
ALPEC-9527	9.24	0.557	2.01	0.056	1.75	-	1.52	0.023	0.195	-	-	-	-	-
ALSUI-432/02	9.33	0.18	0.90	0.105	0.80	0.021	0.75	0.054	0.039	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
SEI-NKAC4D-NDC2	0.0029	-	-	-	-	-	0.0028	0.0007	-	-	-	-	-	-
VAW-3044-2	0.013	-	-	-	-	-	-	0.0011	0.17	-	-	0.18	0.0006	-
SEI-NKAC2C-NDC1	0.009	-	-	-	-	-	0.0007	0.0012	0.048	-	-	0.048	-	-
ALSUI-431/02	0.0069	-	-	-	-	-	0.0014	-	-	-	-	-	0.13	0.017
VAW-3013-3	0.0056	<0.0002	-	-	-	<0.0002	0.0004	0.0007	0.36	<0.002	-	0.30	0.091	-
VAW-3034-4	0.021	0.001	0.0052	0.01	<0.0002	<0.0001	0.0002	0.0012	0.12	<0.0002	-	0.096	0.0005	0.0036
ALCOA-KD360	-	-	-	-	-	-	-	0.003x	-	0.10x	-	-	<0.0050	-
ALCOA-SS354	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	0.02x	0.02x	0.01x
ALCOA-SS332	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	0.10x	<0.0010	<0.0010	0.10x	0.02x	0.02x
ALPEC-9528	-	-	-	-	-	-	-	-	0.0204	0.0092	-	0.02	-	-
ALPEC-9527	-	-	-	-	-	-	-	-	0.0208	0.009	-	0.021	-	-
ALSUI-432/02	0.0042	-	-	-	-	-	0.004	0.0006	-	-	-	-	0.055	0.0037

Product Code	Zr
SEI-NKAC4D-NDC2	-
VAW-3044-2	-
SEI-NKAC2C-NDC1	-
ALSUI-431/02	-
VAW-3013-3	-
VAW-3034-4	0.0029
ALCOA-KD360	-
ALCOA-SS354	<0.0030
ALCOA-SS332	<0.0030
ALPEC-9528	-
ALPEC-9527	-
ALSUI-432/02	-

Size	Grade	Type	Form
Ø 55x25mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 55x25mm		CRM	C
Ø 60x25mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 64x25mm	360	CRM	CCC
Ø 64x25mm	354	CRM	CCC
Ø 64x25mm	332	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-55X G26H2 F	9.36	0.71	4.14	0.52	1.49	0.083	0.41	0.64	0.12	-	-	0.035	-	(0.0024)
ALCAN-A143CAX	(10.0)	(0.48)	(3.04)	(0.30)	(0.90)	0.0004	(0.97)	0.0004	(0.14)	0.0001	<0.0001	0.0001	0.0001	<0.0001
ALCAN-A143AW	10.02	0.73	3.03	0.30	0.91	0.04	0.89	0.035	0.11	-	0.0018	0.032	0.006	-
MBH-54X G13H3 M	10.20	0.79	0.83	0.434	0.90	0.06	0.96	0.42	0.153	-	0.0076	-	-	-
MBH-54X G13H2 M	10.42	0.767	1.29	0.248	1.37	0.103	1.15	0.53	0.166	-	-	-	-	-
VAW-3035-3	10.62	0.65	1.98	0.44	0.60	0.17	0.20	0.20	0.077	<0.0002	<0.0001	<0.0002	0.032	<0.0001
ALCAN-6195AE	10.70	0.70	3.45	0.43	1.05	0.027	0.028	0.93	0.017	-	(0.001)	0.02	(0.01)	-
ALPEC-9526	10.73	0.347	1.43	0.14	1.27	-	0.81	0.061	0.105	-	-	-	-	-
VAW-3203-2	10.80	0.098	1.30	0.189	1.08	0.009	1.09	0.084	0.058	<0.0004	-	-	0.005	-
VAW-3045-3	10.80	0.80	3.10	0.58	0.89	0.011	0.39	0.49	0.25	0.0005	0.0002	0.002	0.0051	0.0009
ALPEC-01002	10.94	0.076	4.33	0.305	1.66	0.062	0.203	0.2999	0.2301	0-0.0002	-	-	-	-
ALSUI-436/02	11.05	0.575	1.11	0.24	1.07	0.0113	0.779	0.484	0.079	-	-	-	0.002x	0.0016
ALSUI-433/03	11.27	0.296	1.52	0.146	1.30	0.048	1.06	0.199	0.044	-	-	-	0.0057	-

Product Code	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
MBH-55X G26H2 F	0.052	(0.011)	-	-	-	-	0.111	-	0.11	-	0.011	-		
ALCAN-A143CAX	0.0007	0.0008	-	<0.0001	<0.0001	0.0002	0.0001	0.002	0.0001	<0.0001	0.007	0.0005		
ALCAN-A143AW	-	0.013	-	0.0005	0.0004	-	0.036	-	0.031	-	0.015	-		
MBH-54X G13H3 M	0.009	-	-	-	-	-	0.051	-	0.092	-	-	(0.004)		
MBH-54X G13H2 M	0.004	-	-	-	-	-	0.083	-	0.145	-	-	-		
VAW-3035-3	0.0004	0.0094	-	<0.0001	<0.0002	0.0006	0.13	<0.0003	0.087	0.035	0.0063	0.0012		
ALCAN-6195AE	-	0.015	-	-	-	-	0.033	-	0.028	-	0.012	-		
ALPEC-9526	-	-	-	-	-	-	0.0578	0.0171	0.0579	-	-	-		
VAW-3203-2	-	-	-	-	-	0.0006	0.0025	<0.0004	0.001	-	-	-		
VAW-3045-3	0.0031	0.013	0.0006	0.0002	0.0002	0.0004	0.16	0.0001	0.2	0.048	0.015	0.0014		
ALPEC-01002	-	-	-	-	-	-	0.0517	0.0403	0.0242	-	0.125	0.239		
ALSUI-436/02	0.0015	-	0.0027	-	0.0003	-	0.101	0.0022	0.0077	0.002x	0.0155	0.0301		
ALSUI-433/03	-	-	-	-	0.005x	0.0009	0.02	0.0037	0.0099	0.05	0.0143	0.0197		

Product Code
MBH-55X G26H2 F
ALCAN-A143CAX
ALCAN-A143AW
MBH-54X G13H3 M
MBH-54X G13H2 M
VAW-3035-3
ALCAN-6195AE
ALPEC-9526
VAW-3203-2
VAW-3045-3
ALPEC-01002
ALSUI-436/02
ALSUI-433/03

Size	Grade	Type	Form
Ø 40x15mm		CRM	C
Ø 57x25mm	332.1	CRM	CCC
Ø 57x25mm	332.1	CRM	CCC
Ø 40x13mm		CRM	C
Ø 40x13mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 57x25mm	332.1	CRM	W
Ø 55x30mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm	339	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-3200-2	11.32	0.52	1.06	0.087	0.81	0.003	1.18	0.069	0.037	-	-	<0.0004	-	-
ALCAN-X332.0AC	11.33	0.20	3.28	0.032	1.29	0.03	0.031	0.067	0.25	-	-	-	0.0011	0.005
VAW-3204-2	11.35	0.465	1.50	0.098	1.19	0.005	0.92	0.12	0.014	-	-	<0.0004	-	-
MBH-55X G26H5 E	11.38	0.199	1.40	0.495	1.41	0.0394	1.13	0.008	0.018	-	-	-	-	0.0201
VAW-3208-2	11.53	0.64	1.30	0.14	1.14	0.0063	1.21	0.16	0.15	-	-	<0.0002	-	0.0039
ALCOA-SS4032	11.70	0.25	0.90	0.02	1.10	0.05	0.90	0.10	0.02	-	-	-	-	-
ALCOA-SS336	12.0	0.65	1.0x	0.06x	1.2x	<0.0050	2.5x	0.05x	0.04x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-B162AG	12.04	0.40	2.56	0.08	1.07	0.033	0.68	0.044	0.054	-	-	-	-	0.03
ALCAN-462A1AA	12.12	0.15	3.86	0.025	1.05	0.028	1.07	0.03	0.17	-	-	-	0.0011	0.009
VAW-3202-3	12.15	0.61	0.96	0.072	0.94	0.0045	0.97	0.12	0.022	-	-	<0.0005	-	-
VAW-3205-2	12.17	0.35	1.13	0.23	1.35	0.0056	1.14	-	0.02	0.0013	-	-	-	-
MBH-54X G13H4 P	12.40	0.53	0.68	0.23	0.64	0.028	0.79	0.44	0.11	-	-	-	0.0017	-
ALCAN-339.0CAB	(12.50)	(0.50)	(1.40)	(0.27)	(1.17)	0.0004	(1.10)	0.0005	0.0007	-	-	-	<0.0001	0.0001

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-3200-2	0.0028	-	-	-	-	-	-	0.0007	0.0044	<0.0003	-	<0.002	-	-
ALCAN-X332.0AC	0.0039	0.0013	0.0021	0.021	-	0.0032	0.0062	0.0031	0.028	0.003	-	0.02	0.003	0.019
VAW-3204-2	0.0023	-	-	-	-	-	-	0.0006	0.0031	<0.0002	-	0.0009	-	-
MBH-55X G26H5 E	-	-	0.015	-	-	-	-	-	0.0108	-	-	0.035	-	0.0169
VAW-3208-2	0.021	-	-	-	-	-	-	0.0036	0.11	0.016	-	0.044	-	-
ALCOA-SS4032	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-
ALCOA-SS336	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	0.003x	<0.0030	0.001x	<0.0010	<0.0030	0.02x	0.01x
ALCAN-B162AG	-	-	-	0.016	-	-	-	-	0.031	-	-	0.027	-	0.012
ALCAN-462A1AA	0.0049	0.0012	-	0.018	-	0.0029	0.0053	0.0042	0.0091	0.0023	-	0.013	0.0027	0.02
VAW-3202-3	0.0024	0.001	0.0004	0.028	0.0062	0.0005	0.0002	0.0014	0.0023	<0.0005	-	0.0007	0.0018	0.0056
VAW-3205-2	0.0055	<0.0002	-	-	-	-	-	0.0006	0.0028	<0.0002	-	0.0014	0.0019	-
MBH-54X G13H4 P	-	-	0.005	-	-	-	-	-	0.062	-	-	0.061	0.05	-
ALCAN-339.0CAB	0.0004	-	0.0014	0.001	-	<0.0001	0.0011	0.0003	0.0001	0.0003	-	0.0001	0.0001	0.0008

Product Code	Zr
VAW-3200-2	-
ALCAN-X332.0AC	0.003
VAW-3204-2	-
MBH-55X G26H5 E	-
VAW-3208-2	-
ALCOA-SS4032	-
ALCOA-SS336	<0.0030
ALCAN-B162AG	-
ALCAN-462A1AA	0.0035
VAW-3202-3	0.0044
VAW-3205-2	-
MBH-54X G13H4 P	0.017
ALCAN-339.0CAB	0.0009

Size	Grade	Type	Form
Ø 60x20mm		CRM	CCC
Ø 57x25mm	332M	CRM	CCC
Ø 60x20mm	339	CRM	CCC
Ø 50x20mm	339	CRM	C
Ø 60x20mm		CRM	CCC
Ø 64x25mm	4032	CRM	W
Ø 64x25mm	336	CRM	CCC
Ø 57x25mm	339.1	CRM	CCC
Ø 57x25mm	4621	CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 50x17mm		CRM	C
Ø 57x25mm	339	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-339.0AD	12.73	0.48	1.40	0.37	1.23	0.051	1.12	0.099	0.048	-	0.0013	0.04	0.002	-
ALSUI-434/03	12.90	0.33	1.74	0.20	1.45	0.103	1.49	0.129	0.114	-	-	-	0.015	-
SEI-NKAC8A-NDC4	12.92	0.302	1.24	0.104	1.55	0.117	2.32	0.10	0.098	-	0.0011	0.0045	0.018	0.0048
VAW-3201-2	12.93	0.33	0.83	0.033	1.30	0.01	0.78	0.23	0.014	<0.0004	-	-	0.0021	-
ALPEC-9530	13.31	0.724	0.98	0.006	0.86	-	1.04	0.24	0.007	-	-	-	-	-
VAW-3380-2	13.62	0.81	1.08	0.23	1.22	0.0031	1.24	0.092	0.091	<0.0002	-	<0.0002	0.0065	-
ALPEC-9531	13.63	0.722	0.97	0.006	0.84	-	1.01	0.238	0.007	-	-	-	-	-
MBH-55X G28J1 Z	14.33	0.678	1.82	0.024	1.26	0.319	2.47	0.258	0.104	-	-	-	-	-
MBH-55X G28J2 T	15.04	0.516	1.44	0.231	0.902	0.088	1.63	0.292	0.065	-	(0.0002)	-	-	0.0023
ALSUI-471/02	15.80	0.84	4.90	0.113	0.637	0.052	0.102	0.115	0.178	-	-	-	-	-
VAW-3381-3	15.80	0.50	1.22	0.22	0.98	0.01	1.11	0.17	0.16	<0.0002	-	-	0.0092	<0.0002
MBH-55X A30J4 G	16.40	0.511	3.21	0.35	0.508	0.0752	0.164	0.067	0.0231	-	(<0.0001)	-	-	-
VAW-3386-1	16.60	0.53	1.26	0.23	1.02	0.0037	1.11	0.12	0.087	<0.0003	-	0.0004	0.0044	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALCAN-339.0AD	-	0.031	0.0009	0.0025	0.0061	0.046	0.001	0.046	0.0021	0.032	0.0029			
ALSUI-434/03	-	-	-	0.0079	(0.0012)	0.0074	-	0.0054	0.027	0.0143	0.0112			
SEI-NKAC8A-NDC4	0.0029	0.01	-	0.004	0.0044	0.0057	0.0009	0.0055	0.0099	0.018	0.012			
VAW-3201-2	-	-	-	-	0.0006	0.0094	<0.0003	0.0045	-	-	-			
ALPEC-9530	-	-	-	-	-	0.008	0.003	0.0079	-	-	-			
VAW-3380-2	-	0.01	<0.0002	0.0005	0.0019	0.0029	<0.0002	0.0013	0.0001	0.0077	0.0018			
ALPEC-9531	-	-	-	-	-	0.008	0.0029	0.0077	-	-	-			
MBH-55X G28J1 Z	0.119	-	-	-	(0.0048)	0.0038	-	0.182	-	0.0095	-			
MBH-55X G28J2 T	0.0029	-	-	-	-	0.058	0.03	0.136	-	0.0221	-			
ALSUI-471/02	-	0.0098	-	-	0.0019	0.054	-	0.053	-	0.077	0.058			
VAW-3381-3	0.0019	0.0092	-	-	-	0.01	-	0.0048	0.0033	0.0044	0.0039			
MBH-55X A30J4 G	-	-	-	-	(0.003)	0.0257	-	0.019	-	0.02	-			
VAW-3386-1	-	0.01	<0.0001	<0.0001	0.0033	0.0031	<0.0002	0.0015	0.0012	0.0082	0.0024			

Product Code
ALCAN-339.0AD
ALSUI-434/03
SEI-NKAC8A-NDC4
VAW-3201-2
ALPEC-9530
VAW-3380-2
ALPEC-9531
MBH-55X G28J1 Z
MBH-55X G28J2 T
ALSUI-471/02
VAW-3381-3
MBH-55X A30J4 G
VAW-3386-1

Size	Grade	Type	Form
Ø 57x25mm	339	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 55x25mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 40x13mm		CRM	C
Ø 50x20mm		CRM	C
Ø 60x25mm	390	CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 40x13mm		CRM	C
Ø 60x20mm		CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
VAW-3383-2	16.70	0.22	1.76	0.34	1.65	0.001	1.58	0.016	0.012	<0.0003	-	<0.0002	0.0023	-
ALCAN-392.0AB	(17.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	-	-	-	-	-	-
VAW-3382-2	17.10	0.39	0.92	0.21	0.825	0.0015	0.92	0.086	0.065	<0.0002	-	<0.0003	0.0025	-
ALCAN-A390.1AA	17.70	0.38	4.84	0.052	0.62	0.05	0.051	0.047	0.13	-	0.0011	0.0029	0.0016	0.0014
MBH-55X G28J3 U	21.60	0.43	1.45	0.33	1.30	0.09	1.47	0.30	0.07	-	-	-	-	-
ALCAN-6166CAB	(24.5)	0.11	(1.35)	-	(1.0)	(0.40)	(1.0)	-	0.013	-	-	-	0.004	-
MBH-55X G28J5 Y	27.60	0.26	0.69	0.67	0.73	0.009	0.43	0.015	0.24	-	-	-	-	-
MBH-518X 429 A	28.90	0.201	1.023	0.0165	1.25	0.0034	0.014	0.0042	0.0163	(0.002)	-	-	0.02	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
VAW-3383-2	-	0.0081	<0.0001	<0.0002	0.0052	0.0008	<0.0002	<0.0005	<0.0002	0.0042	0.0016			
ALCAN-392.0AB	-	-	-	-	-	-	-	-	-	-	-			
VAW-3382-2	-	0.011	<0.0001	<0.0003	0.0019	0.0013	<0.0002	<0.001	<0.0002	0.0076	0.0017			
ALCAN-A390.1AA	0.0016	0.016	-	-	0.0037	0.0035	0.0028	0.046	-	0.018	0.0032			
MBH-55X G28J3 U	-	-	-	-	-	0.07	-	0.11	-	-	-			
ALCAN-6166CAB	-	-	-	-	-	-	-	-	-	-	-			
MBH-55X G28J5 Y	-	-	-	-	<0.005	0.18	-	0.03	-	-	-			
MBH-518X 429 A	2.22	-	-	-	(0.004)	0.002	-	-	0.0006	0.009	-			

Product Code
VAW-3383-2
ALCAN-392.0AB
VAW-3382-2
ALCAN-A390.1AA
MBH-55X G28J3 U
ALCAN-6166CAB
MBH-55X G28J5 Y
MBH-518X 429 A

Size	Grade	Type	Form
Ø 60x20mm	390	CRM	CCC
Ø 57X25mm		CRM	CCC
Ø 60X20mm		CRM	CCC
Ø 57X25mm		CRM	CCC
Ø 40x13mm		RM	C
Ø 57x25mm		CRM	W
Ø 40X13mm		RM	C
Ø 65x25mm		CRM	HIP

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-X75SAA	0.49	0.17	4.25	0.033	0.032	0.034	0.03	6.71	0.029	-	-	0.037	-	-
VAW-3361	0.56	0.47	6.37	0.35	0.09	<0.001	0.002	0.65	0.003	-	-	-	0.0002	-
VAW-3433-2	0.65	0.47	3.02	0.51	0.24	0.0032	0.47	6.40	0.01	<0.0002	-	-	0.0005	-
VAW-3362-1	0.79	0.31	5.40	0.20	0.08	<0.001	0.001	0.83	0.003	-	-	-	0.0002	-
VAW-3430-2	1.10	1.20	4.69	0.10	0.094	0.0078	0.055	0.98	0.038	<0.0002	-	-	0.0005	-
MBH-57X G12H3 C	1.48	0.35	8.69	0.117	0.296	0.086	0.479	0.554	0.196	-	0.0016	-	-	0.0055
VAW-3431-2	1.63	0.98	4.21	0.32	0.21	0.0061	0.11	3.08	0.0502	<0.0002	-	-	0.0007	-
MBH-57X G12H6 A	1.63	0.85	8.28	0.223	0.292	0.054	0.387	6.74	0.108	-	0.0003	-	-	0.0028
VAW-3432-2	2.00	0.80	4.16	0.41	0.26	0.006	0.31	4.94	0.057	<0.0004	-	-	0.00067	-
ALCAN-6205AA	2.45	1.25	20.40	1.05	-	0.05	0.051	5.55	-	-	-	0.036	0.02	-
MBH-57X G12H1 C	2.52	0.88	5.54	0.032	0.40	0.07	0.31	1.03	0.114	-	0.0019	-	-	0.012
VAW-3434-2	2.80	0.32	1.86	0.059	0.38	0.002	0.20	7.82	0.027	<0.0005	-	-	0.0006	-
ALCOA-KB213	3.5x	1.0x	7.0x	0.35	0.15x	<0.0050	0.30x	1.2x	0.10x	-	-	-	-	-
ALPEC-10780	3.90	1.13	9.0	0.034	0.30	-	0.003	3.88	0.03	-	-	-	-	-

Product Code	Co	Li	P	Pb	Sn	V	Zr
ALCAN-X75SAA	-	-	-	0.045	0.032	-	-
VAW-3361	-	-	0.002	-	-	-	-
VAW-3433-2	-	-	<0.001	0.27	0.049	-	-
VAW-3362-1	-	-	0.001	-	-	-	-
VAW-3430-2	-	-	0.0005	0.11	0.18	-	-
MBH-57X G12H3 C	0.039	-	-	0.092	0.132	0.0126	0.0006
VAW-3431-2	-	-	<0.0007	0.062	0.15	-	-
MBH-57X G12H6 A	0.0247	-	-	0.11	0.108	0.0143	0.0262
VAW-3432-2	-	-	<0.0004	0.20	0.096	-	-
ALCAN-6205AA	-	-	-	0.04	0.052	-	-
MBH-57X G12H1 C	0.113	0.008	-	0.016	0.095	0.15	0.07
VAW-3434-2	-	-	0.0005	0.30	0.014	-	-
ALCOA-KB213	-	-	-	-	-	-	-
ALPEC-10780	-	-	-	0.003	0.29	-	-

Size	Grade	Type	Form
Ø 57x25mm	7075 Mod.	CRM	W
Ø 60x20mm		RM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 50x20mm	6205	CRM	C
Ø 60x20mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 40x15mm	213	CRM	C
Ø 60x20mm		RM	CCC
Ø 64x25mm		CRM	CCC
Ø 54x5mm		CRM	C

Values listed in mass %; () Uncertified Value

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Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	B	Ba	Be	Bi
MBH-55X G04H7 E	4.43	0.633	4.65	0.212	0.263	0.035	0.50	0.537	0.0476	-	-	-	-	0.022
ALCAN-6252AE	5.41	0.33	3.01	0.60	0.33	0.034	0.041	3.46	0.12	-	-	-	0.029	-
MBH-57X ALCU28 A	5.44	0.22	27.78	0.0032	0.002	-	0.003	5.42	-	-	-	-	-	-
ALCAN-6252CAC	(5.50)	(0.02)	(3.0)	(0.60)	(0.30)	<0.001	<0.001	(3.50)	(0.003)	-	-	-	-	<0.001
MBH-55X G04H3 N	5.56	0.643	3.67	0.362	0.173	0.0136	0.01	0.507	0.109	-	-	-	-	-
BAS-IMI27WM5	5.60	0.91	2.79	0.10	0.36	<0.005	0.005	1.13	0.005	-	-	-	-	-
MBH-57X ALCU25 A	5.80	0.40	25.60	0.005	0.001	-	0.001	5.90	-	-	-	-	-	-
ALCAN-B319.1AF	(6.14)	(0.64)	(3.11)	(0.43)	(0.33)	0.015	0.049	(0.72)	0.06	-	-	-	0.0017	0.022i
ALCAN-B319.1CAE	(6.30)	(0.65)	(3.34)	(0.43)	(0.32)	<0.0001	<0.0001	(0.70)	0.0001	-	0.0001	-	<0.0001	<0.0001
ALCAN-B319.1CAG	6.30	0.65	3.34	0.43	0.32	<0.0001	<0.0001	0.70	-	0.0002	-	<0.0001	<0.0001	<0.0001
BAS-IMI27WM4	6.50	0.76	2.45	0.24	0.31	0.035	0.11	0.98	0.06	-	-	-	-	-
MBH-55X G04H9 E	6.60	0.393	2.70	0.436	0.043	0.0172	0.16	1.70	0.117	-	-	-	-	(0.0037)
VAW-3012-4	6.78	0.50	0.51	0.54	0.22	0.13	0.10	0.51	0.17	-	<0.0002	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Mo	Na	P	Pb	Sb	Sc	Sn
MBH-55X G04H7 E	-	0.0073	0.03	-	-	-	0.0066	-	-	-	0.227	0.009	-	0.174
ALCAN-6252AE	-	-	0.011	-	-	-	-	0.026	-	-	0.029	-	0.012	-
MBH-57X ALCU28 A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0023
ALCAN-6252CAC	-	-	-	(0.001)	-	-	-	-	-	-	<0.001	-	-	<0.001
MBH-55X G04H3 N	0.001	-	-	-	-	-	-	-	(0.0009)	0.0021	0.025	-	-	0.0047
BAS-IMI27WM5	-	-	-	-	-	-	-	<0.005	-	-	0.15	-	-	-
MBH-57X ALCU25 A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
ALCAN-B319.1AF	0.0040i	0.0013	-	0.024	-	-	0.0024i	-	0.0026i	0.0016i	0.013	0.002	-	0.014
ALCAN-B319.1CAE	<0.0001	0.0001	<0.0001	<0.0001	-	-	<0.0001	-	<0.0001	0.0001	0.0002	0.0002	-	0.0002
ALCAN-B319.1CAG	0.0001	<0.0001	0.0001	-	-	<0.0001	-	<0.0001	0.0001	0.0002	0.0002	0.0002	-	<0.0001
BAS-IMI27WM4	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.12
MBH-55X G04H9 E	-	0.0018	0.0114	-	-	-	(0.0028)	-	-	-	0.101	-	-	0.0563
VAW-3012-4	0.0067	0.0068	0.0016	0.034	0.0014	-	0.0004	-	0.0003	0.0007	0.098	<0.0004	-	0.063

Product Code	Sr	Tl	V	Zr
MBH-55X G04H7 E	-	-	0.0057	-
ALCAN-6252AE	-	-	-	-
MBH-57X ALCU28 A	-	-	-	-
ALCAN-6252CAC	-	-	(0.004)	-
MBH-55X G04H3 N	0.0022	-	-	-
BAS-IMI27WM5	-	-	-	-
MBH-57X ALCU25 A	-	-	-	-
ALCAN-B319.1AF	0.044i	-	0.02	0.003
ALCAN-B319.1CAE	<0.0001	-	<0.0001	0.0001
ALCAN-B319.1CAG	0.0001	-	<0.0001	0.0001
BAS-IMI27WM4	-	0	-	-
MBH-55X G04H9 E	-	-	0.0188	-
VAW-3012-4	0.021	-	0.011	0.0072

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 40x13mm		CRM	C
Ø 57x25mm	363.1	CRM	W
Ø 50x20mm		RM	C
Ø 57x25mm	6252	CRM	W
Ø 45x20mm		CRM	C
Ø 58x7mm	320	CRM	C
Ø 50x20mm		RM	C
Ø 57x25mm	B319	CRM	CCC
Ø 57x25mm	B319	CRM	CCC
Ø 57x25mm	B319	CRM	CCC
Ø 58x7mm	320	CRM	C
Ø 50x15mm		CRM	C
Ø 60x20mm		CRM	CCC

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Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
VAW-3046-5	6.94	0.20	3.03	0.15	0.087	0.031	0.16	0.56	0.16	<0.0002	0.0017	0.01	0.001	0.004
MBH-55X G04H10 D	7.21	0.512	1.36	0.532	0.004	0.09	0.0232	2.26	0.0097	-	-	0.029	-	-
BAS-IMI27WM3	7.50	0.55	1.98	0.40	0.18	0.075	0.20	0.80	0.11	-	-	-	-	-
ALCOA-KB380	7.6x	0.65	4.1x	0.60	0.05x	0.03x	0.10x	0.90	0.03x	-	-	0.10x	-	-
MBH-55X G26H1 F	7.69	1.78	4.34	0.015	0.29	0.20	0.012	1.14	0.21	-	-	0.07	-	-
BAS-IMI27WM2	7.79	0.35	1.52	0.57	0.12	0.12	0.30	0.63	0.16	-	-	-	-	-
VAW-3047-4	7.79	0.67	3.07	0.86	0.32	0.032	0.20	1.09	0.20	<0.0002	-	0.0004	0.0013	0.0029
ALSUI-442/04	8.03	0.73	3.31	0.52	0.142	0.03	0.045	1.04	0.121	-	-	-	0.0057	-
VAW-3054-4	8.09	0.75	3.65	0.64	0.25	0.021	0.051	1.1	0.12	<0.0005	<0.0002	0.0012	0.0011	0.001
ALPEC-9539	8.23	0.499	3.90	0.382	0.551	0.061	0.5972	1.217	0.056	-	-	-	-	-
VAW-3415	8.24	0.52	1.42	0.27	0.36	0.01	0.18	8.0	0.055	<0.001	-	-	0.0028	-
ALCOA-KF380	8.4x	0.70	2.6x	0.45	0.30	0.02x	0.10x	3.5x	0.11x	-	-	0.10x	-	-

Product Code	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
VAW-3046-5	0.0048	0.018	0.001	<0.0002	0.059	0.0005	0.0019	0.085	<0.001	0.004	0.04	0.0063		
MBH-55X G04H10 D	0.043	0.011	-	(0.0005)	-	-	(0.0074)	-	<0.01	-	0.008	-		
BAS-IMI27WM3	-	-	-	-	-	-	0.10	-	0.085	-	-	-		
ALCOA-KB380	-	-	-	-	-	-	0.20x	-	0.10x	0.02x	-	-		
MBH-55X G26H1 F	0.022	-	-	-	-	-	0.24	-	(0.008)	-	0.012	-		
BAS-IMI27WM2	-	-	-	-	-	-	0.14	-	0.045	-	-	-		
VAW-3047-4	0.0013	0.018	0.0035	<0.0002	0.0002	0.0031	0.26	<0.0005	0.048	0.0003	0.01	0.0027		
ALSUI-442/04					0.0017-0.0027	(0.0020)	0.14		0.141		0.021	0.058		
VAW-3054-4	0.0007	0.012	0.0086	0.0003	0.0059	0.0027	0.066	0.0013	0.046	0.0016	0.016	0.017		
ALPEC-9539	-	-	-	-	-	-	0.284	0.01	0.013	-	-	-		
VAW-3415	-	-	-	<0.0003	<0.0003	0.0006	0.049	<0.0004	0.035	0.02	-	-		
ALCOA-KF380	-	-	-	-	-	-	0.10x	-	0.15x	0.02x	-	-		

Product Code
VAW-3046-5
MBH-55X G04H10 D
BAS-IMI27WM3
ALCOA-KB380
MBH-55X G26H1 F
BAS-IMI27WM2
VAW-3047-4
ALSUI-442/04
VAW-3054-4
ALPEC-9539
VAW-3415
ALCOA-KF380

Size	Grade	Type	Form
Ø 60X20mm	320	CRM	CCC
Ø 40X13mm		CRM	C
Ø 58x7mm	320	CRM	C
Ø 64X25mm	380	CRM	CCC
Ø 40X15mm		RM	C
Ø 58x7mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 60X25mm		CRM	CCC
Ø 60x20mm	320	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	380	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
MBH-54X G06H1 R	8.43	1.08	0.63	0.022	0.489	0.084	0.611	0.60	0.248	-	-	-	-	-
VAW-3412-2	8.46	0.37	1.40	0.156	0.49	0.0038	<0.005	9.20	0.0038	-	-	0.0005	-	-
MBH-55X G02D9 K	8.49	0.427	3.50	0.26	0.0935	0.184	0.497	2.49	0.096	-	-	-	-	0.0035
VAW-3048-8	8.66	0.853	2.82	0.331	0.307	0.0468	0.1429	0.98	0.1018	-	-	<0.0005	-	0.00072
ALCAN-A333.0CAC	(8.79)	(0.65)	(3.43)	(0.33)	0.0008	0.0011	0.0008	(2.30)	-	-	0.0002	-	<0.0001	<0.0001
BAS-IMI24WM4	8.85	0.69	2.93	0.43	0.26	0.045	0.45	1.50	0.16	-	-	-	-	-
VAW-3048-9	8.90	0.83	2.8	0.37	0.31	0.053	0.15	0.97	0.11	-	-	<0.0005	-	0.001
VAW-3413-2	8.91	0.24	1.13	0.10	0.29	0.0029	<0.005	9.70	0.012	-	-	0.0003	-	-
ALCOA-ST2-300	9.0x	1.1x	3.5x	0.50	0.20x	0.03x	0.10x	2.5x	0.10x	0.001x	-	-	-	0.0005
MBH-55X G02D8 M	(9.05)	(0.78)	(2.45)	(0.26)	(0.15)	(0.078)	(0.42)	(1.45)	(0.155)	-	-	-	-	-
ALCAN-A333.0AF	9.13	0.85	3.54	0.35	0.082i	0.015	0.13	2.34	0.032	-	-	-	-	<0.0001
ALCOA-KG380	9.2x	0.90	3.2x	0.30	0.10x	0.01x	0.3	3.0x	0.05x	-	-	-	-	-
ALCOA-KD380	9.2x	1.1x	3.6x	0.30	0.20x	0.06x	0.20x	2.7x	0.06x	-	-	-	-	-
VAW-3055-4	9.27	0.476	2.53	0.266	0.144	0.06	0.1245	0.812	0.0276	-	-	<0.0005	-	-
NIST-1256b	9.362	0.865	3.478	0.3857	0.0637	0.0572	0.4135	1.011	0.0859	-	-	-	-	-
Product Code	Bi	Ca	Cd	Co	Ga	Hg	In	Li	Mo	Na	P	Pb	Sb	Sc
MBH-54X G06H1 R	0.006	-	0.0074	0.015	-	-	-	<0.001	-	-	-	0.082	-	-
VAW-3412-2	-	0.0035	-	-	-	-	-	-	-	-	0.002	0.004	-	-
MBH-55X G02D9 K	0.0335	-	0.0012	0.0074	-	-	-	-	-	-	-	0.102	0.049	-
VAW-3048-8	0.005	0.00361	0.00494	0.00787	0.0334	0.0022	-	<0.0002	-	<0.0005	0.0042	0.0968	0.0035	-
ALCAN-A333.0CAC	0.003	<0.0001	0.0006	<0.0001	-	-	<0.0001	-	<0.0001	0.001	0.0002	<0.0001	<0.0001	-
BAS-IMI24WM4	-	-	-	-	-	-	-	-	-	-	-	0.24	-	-
VAW-3048-9	0.0021	0.0033	0.0029	0.0082	0.034	0.0022	-	<0.0002	-	<0.0005	0.0019	0.095	0.0051	-
VAW-3413-2	-	0.0063	-	-	-	-	-	-	-	-	0.004	0.003	-	-
ALCOA-ST2-300	0.001x	-	0.001x	0.001x	0.02x	-	-	-	-	-	-	0.003x	0.001x	-
MBH-55X G02D8 M	-	-	(0.0035)	(0.011)	-	-	-	-	-	-	-	(0.20)	(0.012)	-
ALCAN-A333.0AF	0.021	0.0043i	-	-	0.03	-	-	0.0015i	-	0.0033i	0.001	0.015	0.0057	-
ALCOA-KG380	0.05x	-	-	-	-	-	-	-	-	-	-	0.20x	-	-
ALCOA-KD380	-	-	-	-	-	-	-	-	-	-	-	0.05x	-	0.06x
VAW-3055-4	0.0031	0.00223	0.00173	0.00124	0.0312	0.0034	-	0.00041	-	0.00062	0.0025	0.127	0.0055	0.1108
NIST-1256b	-	-	-	-	(0.0183)	-	-	-	-	-	-	0.1075	-	0.0091
Product Code	Sn	Sr	V	Zr							Size	Grade	Type	Form
MBH-54X G06H1 R	0.133	-	0.01	-							Ø 40x13mm		CRM	C
VAW-3412-2	-	<0.001	-	-							Ø 60x20mm		RM	CCC
MBH-55X G02D9 K	0.185	-	0.022	-							Ø 50x20mm		CRM	C
VAW-3048-8	0.0839	0.091	0.0126	0.0088							Ø 60x20mm		CRM	CCC
ALCAN-A333.0CAC	<0.0001	0.008	0.0007	<0.0001							Ø 57x25mm	A333	CRM	CCC
BAS-IMI24WM4	0.16	-	-	-							Ø 58x7mm		CRM	C
VAW-3048-9	0.056	0.091	0.023	0.97							Ø 60x20mm		CRM	CCC
VAW-3413-2	-	<0.001	-	-							Ø 60x20mm		RM	CCC
ALCOA-ST2-300	0.001x	0.02x	0.01x	0.001x							Ø 64x25mm		CRM	CCC
MBH-55X G02D8 M	(0.20)	-	(0.053)	-							Ø 50x50mm		CRM	C
ALCAN-A333.0AF	0.017	0.0029i	0.03	0.018							Ø 57x25mm	A333	CRM	CCC
ALCOA-KG380	0.10x	0.02x	-	-							Ø 64x25mm	380	CRM	CCC
ALCOA-KD380	0.06x	0.02x	-	-							Ø 64x25mm	380	CRM	CCC
VAW-3055-4	0.1108	0.0139	0.0147	0.00243							Ø 60x20mm		CRM	C
NIST-1256b	(0.0091)	0.0173	0.0203	-							Ø 63x19mm	380	RM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
MBH-55X G02D8 L	9.38	0.779	2.36	0.443	0.119	0.0704	0.364	1.38	0.182	-	-	-	-	0.0008
VAW-3414-2	9.41	0.37	1.26	0.20	0.34	0.0018	<0.005	9.20	0.0033	-	-	0.0005	-	-
MBH-55X G02DX A	9.58	0.773	2.33	0.247	0.118	0.0321	0.206	1.03	0.041	0.0052	-	-	-	0.002
ALCOA-KH380	9.6x	1.2x	3.8x	0.15x	0.05x	<0.0050	0.40	2.2x	0.02x	-	-	-	-	-
ALCAN-A333.0CAH	(9.64)	(1.0)	(3.55)	(0.37)	0.0003	<0.0001	0.0001	(2.56)	-	-	0.0001	-	<0.0001	<0.0001
VAW-3300-2	10.03	0.70	2.41	0.35	0.35	0.011	0.0075	0.99	0.0104	-	-	0.0001	-	<0.0001
VAW-3302-2	10.10	0.68	3.40	0.41	0.38	0.001	0.058	1.10	0.01	-	-	0.0003	-	<0.0001
VAW-3053-4	10.18	0.99	3.65	0.45	0.41	0.038	0.32	1.07	0.16	-	-	<0.0002	-	-
VAW-3301-2	10.50	0.77	2.98	0.40	0.38	0.006	0.06	1.15	0.018	-	-	<0.001	-	-
MBH-54X G231H1 D	10.50	0.95	1.10	0.055	0.34	0.105	0.35	0.72	0.02	-	-	-	-	0.002
ALCAN-383.1CAC	(10.93)	(1.03)	(2.69)	(0.38)	0.0001	0.0007	0.0005	(2.63)	0.0011	-	-	0.0004	-	<0.0001
ALCOA-SS383	11.00	1.0x	2.5x	0.35	0.25	0.06x	0.10x	2.5x	0.08x	<0.0010	<0.0010	<0.0010	-	<0.0005
ALCAN-383.1AB	11.24	0.97	2.67	0.35	0.12	0.10	0.22	2.65	0.15	-	-	-	-	0.0013

Product Code	Bi	Ca	Cd	Co	Ga	Hg	In	Li	Mo	Na	P	Pb	Sb	Sc
MBH-55X G02D8 L	-	-	0.0049	0.0303	-	-	-	-	-	-	-	0.248	0.0245	0.239
VAW-3414-2	-	0.008	-	-	-	-	-	-	-	-	0.007	0.003	-	-
MBH-55X G02DX A	0.02	0.0011	0.0011	0.0108	-	-	-	-	-	-	0.0053	0.029	0.0095	0.0288
ALCOA-KH380	0.15x	-	-	-	-	-	-	-	-	-	-	0.05x	-	0.05x
ALCAN-A333.0CAH	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	-	<0.0001	0.0005	0.0001	0.0028	<0.0001	-
VAW-3300-2	<0.0004	0.0069	<0.0003	<0.0004	0.0098	-	-	<0.0001	-	-	0.0012	0.0099	<0.0004	-
VAW-3302-2	<0.001	0.0005	0.0044	0.0051	0.019	<0.0005	-	<0.0002	-	<0.0002	0.0021	0.12	0.0063	-
VAW-3053-4	0.0048	0.0065	0.0029	0.0014	0.01	-	-	0.0016	-	0.0027	0.005	0.17	0.015	-
VAW-3301-2	-	0.002	0.002	0.003	0.007	0.002	-	-	-	-	0.003	0.11	-	-
MBH-54X G231H1 D	-	-	-	-	-	-	-	-	-	-	-	0.09	-	-
ALCAN-383.1CAC	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	-	<0.0001	-	<0.0001	0.0007	0.0004	0.0001	-
ALCOA-SS383	<0.0010	-	<0.0010	<0.0010	0.02x	<0.0010	-	<0.0010	-	<0.0010	<0.0010	0.20x	<0.0010	<0.0010
ALCAN-383.1AB	0.016	-	0.0009	-	0.026	-	-	0.0030i	-	0.0023i	0.002	0.1	0.0069	-

Product Code	Sn	Sr	V	Zr
MBH-55X G02D8 L	0.239	-	0.0438	-
VAW-3414-2	-	<0.001	-	-
MBH-55X G02DX A	0.0288	-	0.0129	0.0103
ALCOA-KH380	0.05x	0.02x	-	-
ALCAN-A333.0CAH	<0.0001	<0.0001	<0.0001	<0.0001
VAW-3300-2	0.0029	<0.0002	0.0035	0.03
VAW-3302-2	0.0014	<0.0002	0.01	0.0045
VAW-3053-4	0.097	0.0076	0.014	0.0008
VAW-3301-2	0.005	-	0.006	0.005
MBH-54X G231H1 D	0.16	0.01	-	-
ALCAN-383.1CAC	<0.0001	<0.0001	0.0002	<0.0001
ALCOA-SS383	0.15x	0.03x	0.01x	<0.0030
ALCAN-383.1AB	0.11	0.0034i	0.036	0.017

Size	Grade	Type	Form
Ø 50x13mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 65x30mm	A383	CRM	CCC
Ø 64x25mm	380	CRM	CCC
Ø 57x25mm	A333	CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 50x20mm	413	CRM	C
Ø 57x25mm	383.1	CRM	CCC
Ø 64x25mm	383	CRM	CCC
Ø 57x25mm	383.1	CRM	CCC

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Si/Cu/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-462/02	11.3	0.816	1.96	0.402	0.189	0.049	0.19	1.21	0.15	-	0.0002	0.0005	0.0005	0.0062
SEI-NKADC12-NDC13	11.33	0.963	2.47	0.313	0.294	0.137	0.195	0.99	0.061	-	-	-	0.005	0.01
ALCOA-SS390	16.70	0.90	4.5x	0.25	0.60	0.05x	0.10x	0.50	0.10x	<0.0010	(<0.0010)	(<0.0010)	<0.0005	<0.0010
MBH-55X A30J5 A	17.08	0.727	4.51	0.213	0.722	0.069	0.209	0.693	0.07	-	-	-	0.0029	0.01

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-462/02	-	0.0001	0.0047	0.0113	0.0002	0.0003	0.0008	0.003	0.21	0.0108	-	0.0185	0.0087	0.0092
SEI-NKADC12-NDC13	0.0035	0.005	0.0056	0.016	-	-	-	0.0045	0.056	0.0092	-	0.049	-	0.0061
ALCOA-SS390	<0.0030	(<0.0010)	<0.0010	0.02x	(<0.0010)	<0.0010	<0.0010	(0.01x)	0.08x	<0.0010	<0.0010	0.08x	<0.0050	0.01x
MBH-55X A30J5 A	0.0053	-	0.0396	-	-	-	-	0.016	0.084	-	-	0.0776	-	-

Product Code	Zr
ALSUI-462/02	0.0049
SEI-NKADC12-NDC13	0.022
ALCOA-SS390	<0.0030
MBH-55X A30J5 A	-

Size	Grade	Type	Form
Ø 60X25mm		CRM	CCC
Ø 55X25mm	ADC 12	CRM	CCC
Ø 64X25mm	B390	CRM	CCC
Ø 65X30mm		CRM	HIP

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Ba	Be	Bi	Ca
VAW-2002-1	0.48	0.19	0.0074	0.011	0.44	0.0014	0.0015	0.018	0.012	-	-	-	-	-
SEI-NK63SND9	0.457	0.202	0.0081	0.01	0.481	0.0086	0.0081	0.0096	0.0091	0.0004	-	0.001	0.0053	0.0005
VAW-2013-1	0.48	0.20	0.057	0.052	0.49	0.017	0.016	0.022	0.02	0.0007	-	0.0009	0.0048	0.0009
ALCAN-A6005CAF	(0.79)	(0.22)	(0.12)	(0.23)	(0.52)	<0.0001	<0.0001	<0.0001	0.0001	0.0001	-	<0.0001	<0.0001	<0.0001
VAW-2003-1	0.62	0.18	0.0071	0.03	0.57	0.002	0.0028	0.03	0.022	<0.001	-	-	-	0.0003
SEI-NK63SND5	0.527	0.3	0.0021	0.0017	0.582	0.0013	0.001	0.0012	0.0005	0.0006	0.001	0.0004	0.0009	0.0003
ALCOA-WB6000	0.60	0.30	0.10x	0.03x	0.60	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCAN-6008AA	0.67	0.21	0.30	0.067	0.60	0.015	0.03	0.019	0.03	-	-	0.0012	0.008	0.0035
ALCOA-SS6022	0.89	0.126	0.07	0.073	0.60	0.0298	-	0.10	0.0395	-	-	-	-	-
ALSUI-662/02	0.70	0.32	0.212	0.07	0.601	0.147	0.0012	0.10	0.0048	0.0003	-	-	-	0.0013
VAW-2004	0.54	0.19	0.013	0.015	0.61	0.0019	-	0.011	0.012	-	-	-	-	-

Product Code	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
VAW-2002-1	-	-	-	0.0006	0.0007	-	-	-	-	-	0.0018	0.0025		
SEI-NK63SND9	0.0021	0.0009	0.012	0.0001	0.0003	-	0.0079	-	0.0079	0.0007	0.01	0.0083		
VAW-2013-1	0.0007	0.001	0.02	0.0009	0.0008	0.0022	0.0073	0.0024	0.01	0.0008	0.015	0.0019		
ALCAN-A6005CAF	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		
VAW-2003-1	-	-	0.011	0.0005	0.0006	-	0.0011	-	-	-	0.002	0.0026		
SEI-NK63SND5	-	0.0004	0.0044	0.0002	0.0005	-	0.0013	-	0.0018	0.0004	0.001	0.0008		
ALCOA-WB6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCAN-6008AA	0.0014	-	0.021	0.0024i	0.0029i	0.004	0.008	0.0032	0.013	0.0031	0.1	0.003		
ALCOA-SS6022	-	-	0.0155	-	-	-	-	-	-	-	0.0109	-		
ALSUI-662/02	-	-	-	-	0.0006	-	0.005	0.0053	0.0052	-	0.0042	0.0028		
VAW-2004	-	-	-	-	-	-	-	-	-	-	-	-		

Product Code
VAW-2002-1
SEI-NK63SND9
VAW-2013-1
ALCAN-A6005CAF
VAW-2003-1
SEI-NK63SND5
ALCOA-WB6000
ALCAN-6008AA
ALCOA-SS6022
ALSUI-662/02
VAW-2004

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x20mm		CRM	CCC
Ø 55x25mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 60x20mm		CRM	CCC
Ø 55x25mm		RM	C
Ø 64x25mm	6000	CRM	W
Ø 57x25mm	6008	CRM	W
Ø 64x25mm	6022	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x25mm		RM	CCC

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-A6005AE	0.84	0.22	0.12	0.24	0.61	0.019	0.031	0.03	0.031	-	-	-	0.0013	0.01
ALSUI-614/05	0.63	0.246	0.0299	0.0518	0.616	0.0209	0.0095	0.0523	0.0303	-	0.0033	-	-	0.0078
ALCAN-A6005AG	0.88	0.24	0.135	0.25	0.62	0.028	0.03	0.031	0.03	-	-	-	0.001	0.007x
ALSUI-451/05	6.93	0.12	0.051	0.0077	0.63	0.0022	0.006	0.0054	0.093	-	-	-	0.0005	-
ALSUI-451/04	6.93	0.12	0.051	0.0077	0.63	0.0022	0.0049	0.0054	0.093	-	-	-	0.0005	-
ALSUI-661/01	0.62	0.28	0.045	0.053	0.68	0.052	-	0.11	0.053	-	-	-	-	-
ALCAN-6006CAD	(0.69)	(0.18)	(0.14)	(0.15)	(0.69)	(0.080)	<0.0001	0.0001	0.0001	-	-	0.0001	<0.0001	<0.0001
ALCAN-6006AC	0.71	0.24	0.20	0.20	0.70	0.09	0.031	0.029	0.031	-	-	-	0.0012	0.0049
ALSUI-661/02	0.619	0.306	0.057	0.05	0.717	0.052	0.0032	0.113	0.051	-	-	(0.0001)	-	-
ALCAN-6201AD	0.68	0.25	0.021	0.018	0.72	0.019	0.022	0.021	0.02	-	-	-	0.0013	0.03
ALCAN-A6181-AA	0.86	0.27	0.14	0.16	0.73	0.059	0.031	0.073	0.03	-	-	-	0.0012	0.007
ALCOA-SS6201	0.75	0.25	0.03x	0.01x	0.75	<0.0050	<0.0050	0.02x	<0.0050	<0.0010	<0.0010	0.02x	<0.0005	<0.0010
ALCOA-WC6000	0.60	0.30	0.10x	0.03x	0.75	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCAN-6261CAB	(0.64)	(0.26)	(0.31)	(0.29)	(0.76)	0.0001	0.0001	<0.0001	0.0005	-	-	<0.0001	<0.0001	<0.0001
Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-A6005AE	0.0031	0.0012	-	0.022	-	0.0019i	0.0015i	0.0032	0.0084	0.0036	-	0.017	0.003	0.02
ALSUI-614/05	0.001x	0.0016	0.0041	-	0.0033	0.0003	0.0007-0.0011	0.0032	0.0052	0.0035	-	0.0055	-	0.0166
ALCAN-A6005AG	0.0036	0.0012	-	0.02	-	0.0028x	0.0025x	0.004	0.008	0.0024	-	0.02	0.0035	0.021
ALSUI-451/05	0.0012	0.0007	-	0.0079	0.0007	-	0.00097	0.0016	0.0016	-	-	0.0009	0.0208	0.0048
ALSUI-451/04	0.0012	0.0007	-	0.0079	0.0007	-	0.0007-0.0010	0.0016	0.0016	-	-	0.0009	0.0184-0.0204	0.0048
ALCAN-6006CAD	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	0.0001	<0.0001	-	0.0001	<0.0001	<0.0001
ALSUI-661/01	-	-	-	-	-	-	(0.0005)	-	(0.002)	-	-	-	-	0.0758
ALCAN-6006AC	0.0034	0.0012	-	0.021	-	0.0029i	0.0023i	0.0034	0.0039	0.0034	-	0.0035	0.0034	0.021
ALSUI-661/02	-	-	-	-	-	-	0.0004	0.0024	0.0025	-	-	-	-	0.08
ALCAN-6201AD	0.0033i	0.0015	-	0.024	-	0.0028i	0.0026i	0.0046i	0.019	0.0043	-	0.021	0.0031i	0.022
ALCAN-A6181-AA	0.0041i	0.0011	-	0.02	-	0.0022i	0.0029i	0.002	0.0086	0.003	-	0.019	0.0028i	0.02
ALCOA-SS6201	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050
ALCOA-WC6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-6261CAB	<0.0001	<0.0001	0.0002	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	0.0002	-	<0.0001	<0.0001	0.0001
Product Code	Zr										Size	Grade	Type	Form
ALCAN-A6005AE	0.0032										Ø 57x25mm	6005	CRM	W
ALSUI-614/05	0.0016										Ø 60x25mm	6105	CRM	CCC
ALCAN-A6005AG	0.0033										Ø 57x25mm	6005	CRM	CCC
ALSUI-451/05	0.0014										Ø 60x25mm		CRM	CCC
ALSUI-451/04	0.0014										Ø 60x25mm		CRM	CCC
ALCAN-6006CAD	<0.0001										Ø 57x25mm	6006	CRM	W
ALSUI-661/01	0.001										Ø 60x25mm		CRM	CCC
ALCAN-6006AC	0.0033										Ø 57x25mm	6006	CRM	W
ALSUI-661/02	0.0012										Ø 60x25mm	6008	CRM	CCC
ALCAN-6201AD	0.0032										Ø 57x25mm	6201	CRM	W
ALCAN-A6181-AA	0.0029										Ø 57x25mm	6181	CRM	W
ALCOA-SS6201	<0.0030										Ø 64x25mm	6201	CRM	W
ALCOA-WC6000	-										Ø 64x25mm	6000	CRM	W
ALCAN-6261CAB	<0.0001										Ø 57x25mm	6261	CRM	W

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
ALCOA-ST1-6000	0.55	0.30	0.15x	0.05x	0.80	0.15x	0.05x	0.08x	0.04x	<0.0010	<0.0005	0.0005	0.001x	-
ALSUI-652/01	0.548	0.309	0.40	0.39	0.82	0.025	0.012	0.023	0.034	-	-	-	0.57	-
MBH-511X G6262 B	0.557	0.329	0.243	0.0737	0.829	0.0666	0.0034	0.0209	0.0194	-	-	-	0.424	-
IARM-109C-G	[0.61]	[0.53]	[0.30]	[0.11]	[0.83]	[0.10]	[0.012]	[0.12]	[0.018]	-	[(0.001)]	-	[(0.001)]	[(0.001)]
ALCAN-6261AD	0.64	0.22	0.27	0.28	0.84	0.062	0.031	0.11	0.079	-	-	0.0011	0.0072i	0.0030i
ALCAN-6449CAB	(0.67)	(0.001)	(0.34)	<0.001	(0.89)	<0.001	(0.002)	<0.001	<0.001	-	-	-	(0.45)	-
MBH-511X G6061 A	0.696	0.304	0.260	0.0721	0.896	0.20	0.0044	0.0107	0.0204	-	-	-	-	-
ALCOA-WR6000	0.60	0.25	0.02x	0.08x	0.90	0.01x	0.05x	0.08x	0.03x	-	-	-	-	-
ALCOA-WRS6000	0.60	0.35	0.05x	0.02x	0.90	0.03x	0.01x	0.04x	0.08x	-	-	-	-	-
ALCOA-WK6000	0.50	0.30	0.10x	0.03x	0.90	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-WL6000	0.70	0.30	0.10x	0.03x	0.90	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-WM6000	0.90	0.30	0.10x	0.03x	0.90	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-WT6000	0.60	0.15x	0.10x	0.04x	0.90	0.08x	0.03x	0.02x	0.01x	-	-	-	-	-
ALCOA-WU6000	0.60	0.65	0.18x	0.04x	0.90	0.35	0.03x	0.15x	0.02x	-	-	-	-	-
ALCOA-WV6000	0.60	0.80	0.30	0.15x	0.90	0.15x	0.01x	0.08x	0.10x	-	-	-	-	-
Product Code	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
ALCOA-ST1-6000	0.001x	0.001x	0.02x	-	-	-	0.003x	0.001x	0.001x	0.001x	0.01x	0.001x		
ALSUI-652/01	0.117	-	-	-	-	-	0.52	-	-	-	0.013	-		
MBH-511X G6262 B	-	-	-	-	-	-	0.499	-	(0.0012)	-	-	-		
IARM-109C-G	-	[(0.001)]	[0.013]	-	-	[(0.001)]	[0.007]	-	[(0.002)]	-	[0.009]	[0.002]		
ALCAN-6261AD	0.0013	-	0.02	0.0020i	0.0026i	0.0023	0.0075	0.0029	0.012	0.0029i	0.022	0.0034		
ALCAN-6449CAB	-	-	(0.001)	-	-	-	(0.48)	-	(0.003)	-	<0.001	-		
MBH-511X G6061 A	-	-	0.0160	-	-	-	0.0014	-	0.0012	-	0.0138	-		
ALCOA-WR6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WRS6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WK6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WL6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WM6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WT6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WU6000	-	-	-	-	-	-	-	-	-	-	-	-		
ALCOA-WV6000	-	-	-	-	-	-	-	-	-	-	-	-		
Product Code											Size	Grade	Type	Form
ALCOA-ST1-6000											Ø 64x25mm	6061	CRM	W
ALSUI-652/01											Ø 60x25mm	6018	CRM	CCC
MBH-511X G6262 B											Ø 50x20mm	6262	CRM	C
IARM-109C-G											Ø 57x25mm	6061	CRM	W
ALCAN-6261AD											Ø 57x25mm	6261	CRM	W
ALCAN-6449CAB											Ø 57x25mm	6449	CRM	W
MBH-511X G6061 A											Ø 50x20mm	6061	CRM	C
ALCOA-WR6000											Ø 64x25mm	6000	CRM	W
ALCOA-WRS6000											Ø 64x25mm	6000	CRM	W
ALCOA-WK6000											Ø 64x25mm	6000	CRM	W
ALCOA-WL6000											Ø 64x25mm	6000	CRM	W
ALCOA-WM6000											Ø 64x25mm	6000	CRM	W
ALCOA-WT6000											Ø 64x25mm	6000	CRM	W
ALCOA-WU6000											Ø 64x25mm	6000	CRM	W
ALCOA-WV6000											Ø 64x25mm	6000	CRM	W

Values listed in mass %; () Uncertified Value

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-WW6000	0.60	0.50	0.45	0.08x	0.90	0.25	0.05x	0.04x	0.05x	-	-	-	-	-
ALSUI-6063/H1	0.64	0.36	0.105	0.159	0.93	0.041	0.052	0.105	0.105	-	-	-	-	-
ALCOA-WD6000	0.60	0.30	0.10x	0.03x	0.95	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
CTIF-ASG-1-1	0.83	0.244	0.31	0.097	0.96	0.102	0.10	(0.007)	0.063	-	-	-	0.046	-
ALCAN-6061DAO	(0.646)	(0.239)	(0.299)	(0.0081)	(0.962)	(0.142)	(0.0048)	(0.013)	(0.0136)	-	-	(0.0002)	(0.00001)	(0.00001)
ALSUI-663/02	0.61	0.20	0.25	0.012	1.00	0.35	0.006	0.012	0.071	-	-	-	-	-
ALSUI-651/01	0.597	0.198	0.29	0.30	1.03	0.012	0.0062	0.053	0.013	-	-	-	-	0.48
ALCAN-6061AR	0.73	0.33	0.36	0.081	1.03	0.21	0.031	0.04	0.04	-	-	-	0.0012	0.0069i
ALCOA-SS6262	0.60	0.35	0.30	0.05x	1.0x	0.04x	0.03x	0.05x	0.05x	<0.0010	<0.0010	<0.0010	<0.0005	0.58
ALCOA-WA6061	0.60	0.35	0.30	0.05x	1.0x	0.05x	0.05x	0.12x	0.05x	-	-	-	-	-
ALCOA-SS6061	0.65	0.35	0.30	0.05x	1.0x	0.23	0.05x	0.08x	0.04x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-6061CAR	(0.70)	(0.34)	(0.31)	0.0001	(1.09)	(0.20)	<0.0001	0.0001	<0.0001	-	-	<0.0001	<0.0001	<0.0001
SEI-NK61S-NDC2	0.557	0.708	0.313	0.122	1.10	0.203	0.0074	0.096	0.071	-	-	-	0.002	-
SEI-NK6061-NDC3	0.557	0.708	0.313	0.122	1.10	0.203	0.0074	0.096	0.071	-	-	-	0.002	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCOA-WW6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-6063/H1	-	0.0026	-	-	-	-	-	-	0.0033	-	-	0.0027	-	0.0205
ALCOA-WD6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTIF-ASG-1-1	-	-	-	-	-	-	-	-	0.0486	-	-	0.069	-	-
ALCAN-6061DAO	(0.0001)	(0.00001)	(0.0002)	(0.017)	-	(0.00001)	(0.0001)	(0.0008)	(0.001)	-	-	(0.0005)	(0.00001)	(0.012)
ALSUI-663/02	-	-	-	-	-	-	-	-	-	-	-	-	-	0.021
ALSUI-651/01	-	0.029	-	-	-	-	-	-	0.39	-	-	-	-	0.0071
ALCAN-6061AR	0.0032i	0.0013	-	0.019	-	0.0022i	0.0021i	0.0017	0.0081	0.0019	-	0.02	0.0025i	0.02
ALCOA-SS6262	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.58	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-WA6061	-	-	-	0.02x	-	-	-	-	-	-	-	-	-	0.01x
ALCOA-SS6061	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-6061CAR	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
SEI-NK61S-NDC2	-	-	-	0.035	-	-	-	-	-	-	-	-	-	0.0064
SEI-NK6061-NDC3	-	-	-	0.035	-	-	-	-	-	-	-	-	-	0.0064

Product Code	Zr
ALCOA-WW6000	-
ALSUI-6063/H1	0.0194
ALCOA-WD6000	-
CTIF-ASG-1-1	-
ALCAN-6061DAO	(0.0023)
ALSUI-663/02	-
ALSUI-651/01	-
ALCAN-6061AR	0.0018
ALCOA-SS6262	<0.0030
ALCOA-WA6061	-
ALCOA-SS6061	<0.0030
ALCAN-6061CAR	<0.0001
SEI-NK61S-NDC2	0.134
SEI-NK6061-NDC3	0.134

Size	Grade	Type	Form
Ø 64x25mm	6000	CRM	W
Ø 60x25mm	6063	CRM	CCC
Ø 64x25mm	6000	CRM	W
Ø 60x5mm		CRM	C
Ø 57x25mm	6061	CRM	W
Ø 60x25mm	6061	CRM	CCC
Ø 60x25mm	6103	CRM	CCC
Ø 57x25mm	6061	CRM	W
Ø 64x25mm	6262	CRM	W
Ø 64x25mm	6061	CRM	W
Ø 64x25mm	6061	CRM	W
Ø 57x25mm	6061	CRM	W
Ø 55x25mm		CRM	C
Ø 55x25mm		RM	C

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-2100-2	0.89	0.90	0.053	0.32	1.19	0.18	-	0.22	0.042	-	-	-	0.0058	-
ALCOA-WF6000	0.60	0.30	0.10x	0.03x	1.2x	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-SS6053	0.70	0.30	0.05x	0.02x	1.2x	0.25	0.03x	0.05x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-WG6000	0.60	0.30	0.10x	0.03x	1.4x	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALSUI-637C/01	1.569	0.377	0.379	0.304	1.468	0.3514	0.1026	0.0011	0.0648	-	-	-	-	-
ALCAN-4104AE	10.06	0.59	0.10	0.05	1.48	0.03	0.03	0.10	0.027	-	-	-	0.0012	0.11
ALCAN-4104CAD	(10.0)	(0.60)	(0.10)	0.001	(1.60)	0.0001	0.0004	0.0005	0.0002	-	-	0.0002	<0.0001	(0.10)
ALSUI-561/01	1.17	0.253	0.0245	0.28	2.75	0.025	0.0458	0.021	0.012	-	-	-	0.0121	-
ALCAN-B320CAB	(0.76)	(0.78)	(0.003)	(0.47)	(3.40)	<0.001	<0.001	<0.001	<0.001	-	-	-	<0.001	-
ALCAN-A320AC	0.54	0.20	0.057	0.036	4.10	0.02	0.032	0.047	0.15	-	-	-	0.005	0.037
VAW-2550	1.73	0.20	0.31	0.025	4.48	<0.01	<0.01	0.022	0.05	-	-	-	0.004	-
VAW-2511-1	1.20	0.33	0.015	0.29	4.92	0.0025	-	0.042	0.036	-	-	-	0.0003	-
ALCAN-6475CAB	(1.05)	-	(0.510)	<0.001	(5.0)	<0.001	<0.001	<0.001	<0.001	-	-	-	-	<0.001

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-2100-2	0.0012	-	-	-	-	0.0005	0.001	-	-	-	-	-	-	-
ALCOA-WF6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS6053	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-WG6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-637C/01	-	-	-	0.0495	-	-	-	-	0.02	-	-	0.0022	-	0.0291
ALCAN-4104AE	0.0029	0.0013	-	0.019	-	0.0024	0.0024	0.0027	0.028	0.0028	-	0.033	0.003	0.019
ALCAN-4104CAD	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0002	0.002	0.0011	-	<0.0001	0.0001	<0.0001
ALSUI-561/01	-	0.0009	-	0.019	-	-	(0.0043)	-	0.0444	-	-	0.0323	-	0.017
ALCAN-B320CAB	-	-	<0.001	-	-	-	-	-	(0.002)	-	-	(0.001)	-	<0.001
ALCAN-A320AC	-	-	-	0.018	-	-	-	-	0.042	-	-	0.038	-	0.012
VAW-2550	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01
VAW-2511-1	0.0003	-	-	-	-	0.0004	0.0022	-	-	-	-	-	-	-
ALCAN-6475CAB	-	-	-	(0.001)	-	-	-	-	<0.001	-	-	<0.001	-	(0.002)

Product Code	Zr
VAW-2100-2	-
ALCOA-WF6000	-
ALCOA-SS6053	<0.0030
ALCOA-WG6000	-
ALSUI-637C/01	0.0515
ALCAN-4104AE	0.0025
ALCAN-4104CAD	<0.0001
ALSUI-561/01	-
ALCAN-B320CAB	-
ALCAN-A320AC	-
VAW-2550	<0.01
VAW-2511-1	-
ALCAN-6475CAB	-

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 64x25mm	6000	CRM	W
Ø 64x25mm	6053	CRM	W
Ø 64x25mm	6000	CRM	W
Ø 60x26mm		CRM	CCC
Ø 57x25mm	4104	CRM	W
Ø 57x25mm	4104	CRM	CCC
Ø 60x25mm		CRM	C
Ø 57x25mm		CRM	CCC
Ø 57x25mm	511.2	CRM	C
Ø 60x20mm	512	RM	CCC
Ø 60x20mm	5019	CRM	CCC
Ø 57x25mm	6475	CRM	W

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Si/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al	B	Be	Bi	Ca
VAW-2510-2	0.98	0.37	0.037	0.21	5.01	0.0035	0.0047	0.022	0.046	-	<0.0002	0.0004	-	0.0007
VAW-2552-2	1.10	0.088	0.48	0.03	5.30	0.0072	0.0047	0.031	0.039	-	<0.0002	0.0039	-	0.0017
VAW-2552	1.15	0.09	0.48	0.026	5.39	<0.01	<0.01	0.028	0.05	-	-	0.0034	-	-
ALSUI-565/03	1.84	0.50	0.05	0.437	7.01	-	-	0.031	(0.21)	-	-	0.0099	-	-
VAW-2652-2	1.765	0.831	0.0472	0.513	7.75	0.00541	0.00537	0.0225	0.0595	(89.0)	<0.0002	0.00316	0.00017	0.00045
VAW-2650	2.56	0.65	0.016	0.17	9.50	<0.005	<0.005	0.038	0.14	-	-	0.0017	-	-

Product Code	Cd	Co	Ga	Li	Na	Pb	Sn	Sr	V	Zr	Size	Grade	Type	Form
VAW-2510-2	-	0.0002	0.0042	0.0052	0.0079	0.0089	0.0088	-	0.0099	0.011	Ø 60x20mm	5019	CRM	CCC
VAW-2552-2	0.0016	0.0008	0.0087	-	-	0.021	0.0092	-	0.012	0.0022	Ø 60x20mm	-	CRM	CCC
VAW-2552	-	-	-	-	-	-	-	-	<0.01	<0.01	Ø 60x20mm	-	RM	CCC
ALSUI-565/03	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm	-	CRM	CCC
VAW-2652-2	0.00139	-	0.0102	0.00072	0.00086	0.00342	0.00315	0.00054	0.00843	0.00429	Ø 60x20mm	-	CRM	CCC
VAW-2650	-	-	-	-	-	-	-	-	-	<0.005	Ø 60x20mm	-	RM	CCC

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Si/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Cr	Zn	Ti	Ag	B	Be	Bi	Ca
MBH-45X ZNAL11 A	2.21	0.139	0.037	-	0.011	-	-	27.40	0.012	-	-	-	-	0.002
SEI-NK6070-NDC1	2.29	0.597	0.14	0.539	0.452	0.028	0.094	0.932	0.095	-	-	0.0027	0.011	0.0019
MBH-45X ZNAL1 B	3.07	0.22	0.057	-	0.044	-	-	24.60	0.016	-	-	-	-	0.0021
VAW-3400-2	6.87	0.25	0.047	0.021	0.45	0.028	0.0018	8.93	0.0065	0.0008	0.0001	-	0.0002	0.0046
ALSUI-873/01	7.25	0.26	0.049	0.104	0.535	0.006	0.032	11.00	0.0154	-	-	-	-	-
VAW-3410-2	7.35	0.60	0.44	0.37	0.19	<0.005	0.0013	10.7	0.0072	-	0.0005	-	-	0.0006
ALCAN-X4343AA	7.57	0.53	0.048	0.046	0.051	0.029	0.025	0.98	0.031	-	-	0.0016	0.019	0.0023i
VAW-3401-2	7.99	0.27	0.061	0.036	0.23	0.011	0.0035	10.7	0.0051	<0.0002	<0.0005	-	<0.0002	0.0008
VAW-3402-2	8.94	0.39	0.044	0.05	0.39	0.0025	0.0028	9.90	0.0081	<0.0002	<0.0005	-	<0.0002	0.0028
VAW-3403-2	9.35	0.59	0.075	0.072	0.36	0.0055	0.0095	7.40	0.0087	<0.0002	<0.0005	-	<0.0003	0.0071
ALCAN-X4045AC	10.03	0.32	0.015	0.013	0.015	0.014	0.013	0.99	0.0129	-	-	0.0009	0.008	0.0024i

Product Code	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
MBH-45X ZNAL11 A	-	-	-	(0.0010)	-	-	0.01	-	0.008	-	-	-	-	
SEI-NK6070-NDC1	0.0075	0.0089	0.04	(0.00008)	0.0014	(0.0018)	0.0085	-	0.019	0.0006	0.023	0.02		
MBH-45X ZNAL1 B	-	-	-	0.0015	-	-	0.021	-	0.017	-	-	-		
VAW-3400-2	<0.0003	-	0.0067	-	-	0.0021	0.011	0.0003	0.0007	<0.0002	0.0051	<0.001		
ALSUI-873/01	-	-	-	-	-	-	-	-	-	-	-	-		
VAW-3410-2	-	-	-	-	-	0.002	0.002	-	-	<0.001	-	-		
ALCAN-X4343AA	-	-	0.025	0.0004i	0.0006i	0.0019	0.016	-	0.017	-	0.028	0.026		
VAW-3401-2	<0.0003	-	0.0073	-	-	0.0006	0.0011	<0.0001	<0.001	0.017	0.0029	0.0026		
VAW-3402-2	<0.0003	-	0.009	-	-	0.0006	0.0009	<0.0001	<0.001	<0.0003	0.0034	0.0014		
VAW-3403-2	<0.0003	-	0.0093	-	-	0.0017	0.0032	<0.0002	<0.001	0.04	0.0033	0.012		
ALCAN-X4045AC	0.0013	-	0.016	0.0019i	0.0041i	0.0058	0.008	0.0038	0.012	0.0029i	0.0123	0.0031		

Product Code
MBH-45X ZNAL11 A
SEI-NK6070-NDC1
MBH-45X ZNAL1 B
VAW-3400-2
ALSUI-873/01
VAW-3410-2
ALCAN-X4343AA
VAW-3401-2
VAW-3402-2
VAW-3403-2
ALCAN-X4045AC

Size	Grade	Type	Form
Ø 55x6mm		RM	CC
Ø 55x25mm		CRM	C
Ø 55x6mm		RM	CC
Ø 60x20mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 57x25mm	4343 Mod.	CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 57x25mm	4045 Mod.	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Si/Zn/Al Sets Only

Product Code	Si	Fe	Cu	Mn	Mg	Zn
NCS HS50711-1	7.0	0.43	0.68	0.38	0.10	11.0
NCS HS50711-2	7.0	0.67	0.89	0.19	0.17	11.0
NCS HS50711-3	7.0	1.01	0.24	0.28	0.20	11.0
NCS HS50711-4	7.0	0.24	0.42	0.56	0.40	11.0
NCS HS50711-5	7.0	0.15	0.15	0.95	0.65	11.0

Values listed in mass %; () Uncertified Value

	Size	Grade	Type	Unit
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Fe/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
VAW-2405	0.10	0.52	0.013	0.31	0.007	0.001	-	0.025	0.005	-	-	-	-	-
ALCAN-6151-AB	1.08	0.53	0.14	0.14	0.65	0.31	0.028	0.015i	0.036	-	0.0013	0.0079i	0.0030i	0.0012
ALCAN-3102AD	0.35	0.54	0.086	0.37	0.028	0.021	0.019	0.029	0.0271	-	0.001	0.008	0.0016	0.0012
ALCAN-3102CAF	(0.29)	(0.55)	(0.07)	(0.31)	0.0002	<0.0001	<0.0001	0.0002	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCOA-WA5005	0.12x	0.55	0.03x	0.01x	0.35	0.01x	0.01x	0.03x	0.01x	-	-	0.03x	-	-
ALCAN-D3SBC	0.092	0.56	0.15	0.40	0.022	0.03	0.034	0.044	0.034	-	0.0008	0.03	0.0032i	-
ALCAN-5005CAF	(0.17)	(0.58)	(0.080)	<0.0001	(0.87)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-1100AY	0.17	0.59	0.084	0.029	0.0096i	0.019	0.031	0.032	0.03	-	0.0009	0.0048	0.0008i	0.0013
ALPEC-509	0.321	0.597	0.0705	0.075	0.0566	0.0631	0.0363	0.1372	0.0404	-	-	-	-	-
ALCAN-1100AK	0.18	0.60	0.084	0.029	0.0123	0.018	0.03	0.031	0.03	-	0.0011	0.0056	0.0013i	0.0011
ALPEC-003	0.35	0.61	0.0065	0.042	0.41	0.06	0.029	0.018	0.054	-	-	-	-	-
ALSUI-143/04	0.15	0.62	0.0028	0.0069	0.006	0.02	0.002	0.0136	0.0019	-	0.0001	-	0-0.0001	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
VAW-2405	-	-	-	-	-	-	-	-	-	-	-			
ALCAN-6151-AB	-	0.022	0.0020i	0.0016i	0.0024	0.0077	0.0017	0.014	0.0020i	0.02	0.016			
ALCAN-3102AD	-	0.019	0.0014i	0.0010i	0.003	0.009	0.0035	0.021	0.0018i	0.0191	0.004			
ALCAN-3102CAF	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
ALCOA-WA5005	-	-	-	-	-	0.03x	-	0.01x	-	0.01x	-			
ALCAN-D3SBC	-	0.014	0.0003i	0.0034i	0.0002	0.03	-	0.037	-	0.003	0.021			
ALCAN-5005CAF	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
ALCAN-1100AY	-	0.02	0.0018i	0.0057i	0.0027	0.0082	0.0021	0.014	0.0016i	0.02	0.0034			
ALPEC-509	-	0.017	-	-	-	0.0488	0.04	0.039	-	-	-			
ALCAN-1100AK	-	0.02	0.0019i	0.0045i	0.0023	0.0085	0.0016	0.014	0.0018i	0.0178	0.0032			
ALPEC-003	-	-	-	-	-	0.0205	-	0.03	-	0.0145	-			
ALSUI-143/04	-	0.014	0.0001	0.0003	-	0.0032	-	0.003	-	0.003	0.0048			

Product Code
VAW-2405
ALCAN-6151-AB
ALCAN-3102AD
ALCAN-3102CAF
ALCOA-WA5005
ALCAN-D3SBC
ALCAN-5005CAF
ALCAN-1100AY
ALPEC-509
ALCAN-1100AK
ALPEC-003
ALSUI-143/04

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 57x25mm	6151	CRM	W
Ø 57x25mm	3102	CRM	W
Ø 57x25mm	3102	CRM	W
Ø 64x25mm	5005	CRM	W
Ø 57x25mm	3003	CRM	W
Ø 57x25mm	5005	CRM	W
Ø 57x25mm	1100	CRM	W
Ø 55x30mm		CRM	CCC
Ø 57x25mm	1100	CRM	W
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Fe/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-3003AK	0.24	0.63	0.09	1.14	0.011i	0.0142	0.023	0.0253	0.025	-	0.0010i	0.0078	0.0017i	0.0013
ALCAN-1200AJ	0.20	0.64	0.031	0.034	0.024i	0.03	0.029	0.061	0.03	-	0.0010i	0.008	0.0024i	0.0011
ALCAN-8112AB	0.071	0.66	0.18	0.18	0.02	0.029	0.031	0.05	0.029	-	0.0011	0.011	0.002	0.0014
VAW-1501-1	0.14	0.67	0.0025	0.021	0.005	0.023	0.015	0.049	0.0001	0.0027	<0.0001	-	<0.0002	0.0019
ALPEC-905	0.2041	0.6785	0.2962	0.412	0.1949	0.0416	0.0103	0.1484	0.0101	-	-	-	-	-
ALCAN-A8011-AC	0.75	0.74	0.028	0.022	0.014i	0.02	0.021	0.021	0.02	-	0.0007i	0.0075	0.0009i	0.0013
ALCAN-8030AC	0.066	0.83	0.20	0.0032	0.018	0.02	0.024	0.014	0.003	-	0.0009	0.027	0.0025i	0.0018
MBH-51X G00H1 D	0.142	0.831	0.0131	0.0074	0.054	0.0061	0.231	0.243	0.0135	-	-	0.023	-	(0.0001)
VAW-1511-1	0.13	0.97	0.0026	0.51	<0.0005	0.0042	0.0097	0.041	<0.0002	0.0016	<0.0001	-	<0.0002	0.0015
VAW-1502-1	0.021	0.98	0.071	0.0053	0.0013	0.0004	0.0004	0.0008	0.026	<0.0002	0.0001	-	0.0013	<0.0002
ALCAN-8079CAE	(0.21)	(1.06)	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-8079-AF	0.21	1.08	0.020i	0.020i	0.0028i	0.02	0.02	0.02	0.02	-	0.0008i	0.0078	0.0015i	0.0012

Product Code	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
ALCAN-3003AK	-	0.014	-	0.0023i	0.0014i	0.0016	0.0081	0.002	0.0148	0.0019i	0.02	0.002		
ALCAN-1200AJ	-	0.02	-	0.0027i	0.0018i	0.0028	0.0081	0.0021	0.019	0.0023i	0.02	0.0028		
ALCAN-8112AB	-	0.029	-	0.0017	0.0018	0.0036	0.011	0.0048	0.021	0.0022	0.029	0.003		
VAW-1501-1	-	0.0048	0.0023	<0.0001	0.0046	<0.0005	0.004	0.0024	<0.0002	<0.0001	<0.0002	<0.0002		
ALPEC-905	-	-	-	-	-	-	0.0087	-	0.0054	-	-	-		
ALCAN-A8011-AC	-	0.019	-	0.0009i	0.0013i	0.0029	0.0084	0.0016	0.015	0.0012i	0.019	0.0022		
ALCAN-8030AC	-	0.029	-	0.0016i	0.0018i	0.006	0.016	(0.006)	0.016	0.0027i	0.02	0.0028		
MBH-51X G00H1 D	-	-	-	-	-	-	0.0021	(0.003)	0.096	-	0.0081	(0.001)		
VAW-1511-1	-	0.0041	0.0048	<0.0001	0.0029	<0.0005	0.0034	<0.0002	0.0008	<0.0001	<0.0002	<0.0002		
VAW-1502-1	-	0.015	<0.0002	<0.0001	-	0.0026	<0.0002	<0.0002	0.0012	0.0002	0.0102	0.0032		
ALCAN-8079CAE	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001		
ALCAN-8079-AF	-	0.02	-	0.0016i	0.0015i	0.0017	0.0073	0.0029	0.019	0.0016i	0.02	0.0019		

Product Code
ALCAN-3003AK
ALCAN-1200AJ
ALCAN-8112AB
VAW-1501-1
ALPEC-905
ALCAN-A8011-AC
ALCAN-8030AC
MBH-51X G00H1 D
VAW-1511-1
VAW-1502-1
ALCAN-8079CAE
ALCAN-8079-AF

Size	Grade	Type	Form
Ø 57x25mm	3003	CRM	W
Ø 57x25mm	1200	CRM	W
Ø 57x25mm	8112	CRM	W
Ø 60x20mm		CRM	CCC
Ø 55x30mm	3007	CRM	CCC
Ø 57x25mm	8011	CRM	W
Ø 57x25mm	8030	CRM	W
Ø 40x15mm		CRM	C
Ø 60x20mm	8008	CRM	CCC
Ø 60x20mm	8130	CRM	CCC
Ø 57x25mm	8079	CRM	W
Ø 57x25mm	8079	CRM	W

Values listed in mass %; () Uncertified Value

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Fe/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-8015CAB	(0.13)	(1.10)	0.0005	(0.22)	0.0003	0.0004	0.001	0.0005	0.0002	-	-	<0.0001	<0.0001	<0.0001
ALCAN-8008AC	0.19	1.12	0.17	0.74	0.013	0.053	0.028	0.049	0.03	-	-	-	0.0012	0.024
ALCAN-7031AA	0.13	1.15	0.029	0.21	0.013	0.024	0.019	1.12	0.025	-	-	-	0.0035i	0.008i
ALCOA-ST2-8079	0.13x	1.2x	0.03x	0.003x	0.003x	0.003x	0.004x	0.015x	0.004x	-	-	<0.0010	0.0002	0.004x
ALCOA-ST1-8079	0.13x	1.2x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-7031CAB	0.13	(1.23)	0.0005	(0.21)	0.0002	0.0005	0.001	(1.04)	0.0002	-	-	<0.0001	<0.0001	<0.0001
ALSUI-156/02	0.31	1.28	0.052	0.056	0.063	0.031	0.022	0.035	0.042	-	-	-	-	-
MBH-59X G77J5 E	0.30	1.32	0.122	0.03	0.72	0.05	1.38	7.57	0.058	-	-	-	-	-
ALSUI-334/02	0.151	1.39	0.03	0.51	0.0075	0.022	0.021	0.032	0.024	-	-	-	-	-
VAW-1512-1	0.03	1.40	0.057	0.29	0.0055	0.0005	0.0006	0.0008	0.037	-	-	<0.0002	0.0001	-
ALCAN-8021AA	0.11	1.43	0.014	0.0075	0.0048i	0.01	0.01	0.01	0.021	-	-	-	0.0011	0.01
ALSUI-3345/02	0.101	1.53	0.012	0.40	0.0015	0.012	0.012	0.021	0.0032	-	-	0.0015	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	Sn	Sr	Sn	Sr	Sn	Sr	V
ALCAN-8015CAB	<0.0001	-	-	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004
ALCAN-8008AC	0.0022i	0.0014	-	0.024	-	0.0017i	0.0017i	0.017	0.0025i	0.017	0.0025i	0.017	0.0025i	0.032
ALCAN-7031AA	0.0028i	-	-	0.015	-	0.0032i	0.0033i	0.015	-	0.015	-	0.015	-	0.015
ALCOA-ST2-8079	0.002x	0.0005	0.0005	0.016	0.0002	0.001x	0.0015	0.005x	0.0012	0.005x	0.0012	0.005x	0.0012	0.002x
ALCOA-ST1-8079	<0.0010	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-7031CAB	<0.0001	-	-	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004
ALSUI-156/02	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0073
MBH-59X G77J5 E	-	0.012	-	0.02	-	-	-	<0.01	-	<0.01	-	<0.01	-	0.007
ALSUI-334/02	-	-	-	-	-	-	0.0004	-	-	-	-	-	-	0.0084
VAW-1512-1	0.0015	<0.0002	-	0.014	<0.0002	0.0004	<0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	0.0061
ALCAN-8021AA	0.0018	0.0013	-	0.032	-	0.0014	0.0010i	0.0083	0.002	0.0083	0.002	0.0083	0.002	0.022
ALSUI-3345/02	-	-	-	-	-	-	0.0008	-	-	-	-	-	-	0.012

Product Code	Zr
ALCAN-8015CAB	<0.0001
ALCAN-8008AC	0.0039
ALCAN-7031AA	0.007
ALCOA-ST2-8079	0.004x
ALCOA-ST1-8079	<0.0010
ALCAN-7031CAB	<0.0001
ALSUI-156/02	0.01
MBH-59X G77J5 E	-
ALSUI-334/02	-
VAW-1512-1	0.0022
ALCAN-8021AA	0.0033
ALSUI-3345/02	-

Size	Grade	Type	Form
Ø 57x25mm	8015	CRM	W
Ø 57x25mm	8008	CRM	W
Ø 57x25mm	7031	CRM	W
Ø 64x25mm	8079	CRM	W
Ø 64x25mm	8079	CRM	W
Ø 57x25mm	7031	CRM	W
Ø 60x25mm	8015	CRM	CCC
Ø 40x15mm		CRM	C
Ø 60x25mm	8150	CRM	CCC
Ø 60x20mm	8015	CRM	CCC
Ø 57x25mm	8021	CRM	W
Ø 60x25mm		CRM	CCC

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Fe/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-8007CAF	0.002	(1.57)	0.0008	(0.55)	0.0008	0.0007	0.0008	(1.09)	0.0002	-	<0.0001	<0.001	<0.0001	-
ALCAN-8006AG	0.22	1.60	0.042	0.55	0.0030i	0.02	0.021	0.046	0.014	-	0.0012	0.009	0.0017i	0.0015
ALCAN-8007AE	0.025	1.61	0.049	0.56	0.014	0.031	0.029	1.11	0.011	-	0.0021i	0.02	0.0027i	-
ALSUI-157/02	0.117	1.62	0.0112	0.0166	0.0203	0.0004	0.0025	0.0101	0.0024	-	-	-	-	-
ALCAN-8007AG	0.20	1.63	0.051	0.47	0.011	0.03	0.029	1.10	0.014	-	0.0023	0.017	0.0002	-
ALSUI-158/03	0.053	1.98	0.012	0.021	0.02	0.007	0.0085	0.0075	0.013	0.001	-	-	-	-
ALSUI-161/01	0.12	2.66	0.023	0.035	0.024	0.012	0.013	0.012	0.023	-	-	-	0.001	-
ALCOA-SSA2800	0.25	3.0x	0.03x	-	-	-	-	-	-	-	-	-	-	-
ALCAN-5100CBR	0.024	(3.70)	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0002	-	<0.001	-	-
ALCAN-5100BS	0.20	3.90	0.06	0.041	0.026	0.031	0.046	0.04	0.038	-	-	0.04	0.0033	-

Product Code	Ga	Li	Mo	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALCAN-8007CAF	<0.001	<0.0001	-	<0.0001	0.0004	<0.001	-	0.001	<0.0001	0.001	<0.001			
ALCAN-8006AG	0.02	0.0014i	-	0.0015i	0.0034	0.01	0.004	0.012	0.0019i	0.021	0.003			
ALCAN-8007AE	0.031	0.0007i	-	0.0018i	0.0032	0.015	-	0.018	-	0.02	-			
ALSUI-157/02	-	-	-	-	-	0.005	-	0.0019	-	0.0027	0.0051			
ALCAN-8007AG	0.018	0.0002	-	<0.0001	0.002	0.016	-	0.017	0.0004	0.019	0.019			
ALSUI-158/03	0.01	-	0.009	-	-	0.007	-	0.005	-	0.013	0.0055			
ALSUI-161/01	-	-	-	-	0.0016	0.011	0.0053	0.01	-	0.022	0.01			
ALCOA-SSA2800	-	-	-	-	-	-	-	-	-	-	-			
ALCAN-5100CBR	<0.001	-	-	-	-	<0.001	-	-	-	<0.001	-			
ALCAN-5100BS	0.032	0.0006	-	0.0006	0.002	0.035	-	0.043	-	0.013	0.02			

Product Code
ALCAN-8007CAF
ALCAN-8006AG
ALCAN-8007AE
ALSUI-157/02
ALCAN-8007AG
ALSUI-158/03
ALSUI-161/01
ALCOA-SSA2800
ALCAN-5100CBR
ALCAN-5100BS

Size	Grade	Type	Form
Ø 57x25mm	8007	CRM	W
Ø 57x25mm	8006	CRM	W
Ø 57x25mm	8007	CRM	W
Ø 60x25mm	8021	CRM	CCC
Ø 57x25mm	8007	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm		CRM	W
Ø 57x25mm	5100	CRM	W
Ø 57x25mm	5100	CRM	W

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Fe/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-55X G02D5 A	10.03	0.557	0.406	0.391	0.331	0.76	0.0652	0.131	0.018	-	-	-	0.0037	-
ALCAN-71SAR	0.24	0.50	0.55	0.21	0.39	0.043	0.05	0.81	0.036	-	-	-	-	0.037
ALPEC-9536	11.91	1.238	0.98	0.039	0.129	0.0122	0.137	0.049	0.017	-	-	-	-	-
ALPEC-9534	11.88	1.204	0.98	0.038	0.126	0.0108	0.1389	0.049	0.016	-	-	-	-	-
ALPEC-954	8.85	1.20	1.37	0.152	0.66	-	0.153	0.83	0.102	-	-	-	-	-
MBH-55X G26H3 F	9.60	1.07	2.19	0.45	1.01	0.13	0.51	0.79	0.147	-	-	-	-	-
ALCOA-SS2618	0.20x	1.2x	2.2x	0.05x	1.6x	<0.0050	1.1x	0.05x	0.07x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-6495AA	10.4	1.05	2.36	0.53	1.31	0.03	0.051	0.055	0.1	-	-	-	-	0.04
ALCAN-2618CAB	(0.22)	(1.13)	(2.44)	(0.18)	(1.52)	0.0005	(1.43)	0.0005	0.001	-	-	0.0001	<0.0001	<0.0001
MBH-518X 905 A	0.22	2.54	2.51	0.994	0.645	0.009	1.43	0.0005	0.001	-	-	-	-	-
ALCAN-2618AC	0.23	1.12	2.55	0.18	1.66	0.019	1.36	0.077	0.058	-	-	-	0.001	0.011

Product Code	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn	Sr
MBH-55X G02D5 A	-	0.0182	0.0752	-	-	-	-	-	-	0.067	0.031	-	0.051	-
ALCAN-71SAR	-	-	-	-	-	-	-	-	-	0.05	-	-	0.048	-
ALPEC-9536	-	-	-	-	-	-	-	-	-	0.133	0.0005	-	0.075	-
ALPEC-9534	-	-	-	-	-	-	-	-	-	0.134	0.0004	-	0.076	-
ALPEC-954	-	-	-	-	-	-	-	-	-	0.36	-	-	0.26	-
MBH-55X G26H3 F	-	-	0.076	0.011	-	0.006	-	-	-	0.23	-	-	0.16	-
ALCOA-SS2618	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-6495AA	-	-	-	-	-	-	-	-	-	0.032	-	-	0.028	-
ALCAN-2618CAB	<0.0001	0.0001	0.0005	0.0007	-	<0.0001	-	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001
MBH-518X 905 A	(0.0007)	-	0.0033	-	-	-	0.807	<0.0001	0.0001	<0.0001	<0.0001	-	(<0.0001)	<0.0001
ALCAN-2618AC	0.0035	0.0018	0.0022	0.018	-	0.0030i	-	0.0040i	0.0021	0.011	0.0027	-	0.021	0.0034

Product Code	V	Zr
MBH-55X G02D5 A	0.0129	-
ALCAN-71SAR	-	-
ALPEC-9536	-	-
ALPEC-9534	-	-
ALPEC-954	-	-
MBH-55X G26H3 F	0.02	-
ALCOA-SS2618	0.01x	<0.0030
ALCAN-6495AA	-	-
ALCAN-2618CAB	0.0006	0.0003
MBH-518X 905 A	0.0006	0.0003
ALCAN-2618AC	0.019	0.0027

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 50x15mm	8112	CRM	C
Ø 57x25mm		CRM	W
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x4mm	332	CRM	CCC
Ø 40x15mm		RM	C
Ø 64x25mm		CRM	W
Ø 57x25mm		CRM	W
Ø 57x25mm	2618	CRM	W
Ø 45x40mm		CRM	HIP
Ø 57x25mm		CRM	W

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Fe/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-254/01	0.25	1.23	2.68	0.06	1.62	0.053	1.20	0.10	0.10	-	-	-	-	-
ALSUI-445C/01	10.34	0.873	2.97	0.213	0.314	0.0272	0.336	0.29	0.107	-	-	-	-	-
ALPEC-245	0.01	1.28	3.0	0.0015	1.12	0.0007	0.60	0.119	0.0113	-	-	-	-	-
ALCOA-KA380	9.4x	1.1x	3.1x	0.15x	0.45	0.05x	0.45	0.15x	0.12x	-	-	-	-	-
ALCOA-SS384	11.5	1.0x	3.5x	0.30	0.10x	0.02x	0.25	0.60	0.05x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-KE380	9.6x	1.1x	3.6x	0.20x	<0.0050	0.02x	0.03x	<0.0050	0.03x	-	-	-	-	-
ALCOA-KC380	9.0x	1.2x	3.6x	0.30	0.20x	0.06x	0.20x	0.60	0.07x	-	-	-	-	-
MBH-56X G2000J2 C	0.517	1.38	3.73	0.837	1.292	0.02	0.149	0.711	0.096	0.0446	-	-	0.0054	0.078
ALSUI-472/02	17.70	1.43	4.02	0.321	0.344	0.035	0.498	0.321	0.103	-	-	-	-	-
ALCOA-KA295	0.55	1.0x	4.1x	0.10x	0.01x	<0.0050	0.02x	0.15x	0.07x	-	-	-	-	-
BAS-IMI4P5	3.94	1.03	4.25	0.14	<0.005	0.19	<0.005	0.61	<0.005	-	-	-	-	-
MBH-56X G2000J5 C	0.321	0.98	5.52	0.007	0.39	0.0078	0.204	0.368	0.063	0.234	-	-	0.005	0.136

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-254/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-445C/01	0.0018	-	-	-	-	-	0.002	0.0021	0.0507	0.0018	-	0.195	-	0.0393
ALPEC-245	-	-	-	-	-	-	-	-	0.0485	-	-	0.049	-	-
ALCOA-KA380	-	-	-	-	-	-	-	-	0.10x	-	-	0.20x	0.02x	-
ALCOA-SS384	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	0.12x	<0.0010	<0.0010	0.12x	0.02x	0.01x
ALCOA-KE380	-	-	-	-	-	-	-	-	-	-	-	-	0.02x	-
ALCOA-KC380	-	-	-	-	-	-	-	-	0.05x	-	-	0.06x	0.02x	-
MBH-56X G2000J2 C	-	-	0.056	-	-	0.0112	-	-	1.114	-	-	0.092	-	0.17
ALSUI-472/02	0.007	-	-	0.0113	-	-	-	0.0022	0.117	-	-	0.094	-	0.057
ALCOA-KA295	-	-	-	-	-	-	-	-	0.02x	-	-	0.004x	-	-
BAS-IMI4P5	-	-	-	-	-	-	-	-	<0.005	-	-	<0.005	-	-
MBH-56X G2000J5 C	-	-	0.077	-	-	0.009	-	-	0.69	-	-	<0.005	-	0.027

Product Code	Zr
ALSUI-254/01	-
ALSUI-445C/01	-
ALPEC-245	0.1425
ALCOA-KA380	-
ALCOA-SS384	<0.0030
ALCOA-KE380	-
ALCOA-KC380	-
MBH-56X G2000J2 C	0.188
ALSUI-472/02	0.0192
ALCOA-KA295	-
BAS-IMI4P5	-
MBH-56X G2000J5 C	0.064

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x25mm	242	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 64x25mm	380	CRM	CCC
Ø 64x25mm	384	CRM	CCC
Ø 64x25mm	380	CRM	CCC
Ø 64x25mm	380	CRM	CCC
Ø 50x20mm		CRM	C
Ø 60x25mm		CRM	CCC
Ø 64x25mm	295	CRM	CCC
Ø 58x7mm		CRM	C
Ø 40x15mm	2011 Mod.	CRM	C

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Fe/Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-56X G2011A	0.089	0.632	5.7	0.0183	0.0102	0.0031	0.0044	0.0188	0.0121	-	-	-	-	0.527
MBH-55X A30J1 H	14.60	1.07	5.75	0.132	1.03	0.031	0.014	0.233	0.194	-	-	-	0.0043	0.015
ALCAN-236AE	2.03	1.22	6.94	0.11	0.06	0.028	0.045	0.04	0.12	-	-	-	-	0.026
ALCAN-S250AB	4.15	0.74	9.95	0.041	0.27	0.027	0.04	0.05	(0.05)	-	-	-	-	0.042
ALCOA-KA222	0.75	1.0x	10.0	0.15x	0.30	<0.0050	0.15x	0.25	0.10x	-	-	-	-	-
ALCOA-SS238	4.0x	1.0x	10.2	0.20x	0.30	<0.0050	0.20x	0.20x	0.05x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
MBH-56X G2011A	-	-	-	-	-	-	-	-	0.332	-	-	0.0037	-	-
MBH-55X A30J1 H	-	-	0.091	-	-	-	-	0.004	0.135	-	-	0.006	-	0.0114
ALCAN-236AE	-	-	-	0.02	-	-	-	-	0.023	-	-	0.024	-	0.015
ALCAN-S250AB	-	-	-	-	-	-	-	-	0.04	-	-	0.038	-	-
ALCOA-KA222	-	-	-	-	-	-	-	-	0.20x	-	-	0.12x	-	-
ALCOA-SS238	<0.0030	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x

Product Code	Zr
MBH-56X G2011A	-
MBH-55X A30J1 H	-
ALCAN-236AE	-
ALCAN-S250AB	-
ALCOA-KA222	-
ALCOA-SS238	<0.0030

Size	Grade	Type	Form
Ø 50x20mm	2011	CRM	W
Ø 40x13mm		CRM	C
Ø 57x25mm	213	CRM	CCC
Ø 57x25mm	238.2	CRM	CCC
Ø 64x25mm	222	CRM	CCC
Ø 64x25mm	238	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-8081-CAB	(0.003)	(0.40)	(0.97)	(0.005)	0.001	-	(0.003)	0.02	(0.002)	-	-	-	-	(0.001)
ALCAN-16SAQ	0.26	0.29	2.37	0.25	0.49	0.028	0.029	0.05	0.03	-	-	-	0.001	0.028
ALCAN-16SAR	0.35	0.38	2.5	0.032	0.30	0.038	0.011	0.043	0.003	-	-	-	-	0.03
ALCAN-16SAN	0.37	0.37	2.56	0.052	0.32	0.032	0.041	0.054	0.044	-	-	-	-	0.04
ALCOA-SS2117	0.50	0.40	2.6x	0.05x	0.30	0.03x	0.03x	0.05x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-241/01	0.075	0.10	3.38	0.10	0.10	0.01	-	0.012	0.11	-	-	-	-	-
ALPEC-268	0.005	0.003	3.65	0.0003	0.398	0.0099	0.0495	0.001	0.231	-	-	-	0.0021	-
VAW-4504	0.13	0.083	3.85	0.05	0.30	0.0005	0.001	0.012	0.053	-	-	-	-	-
VAW-4004-1	0.11	0.25	4.10	0.34	0.94	0.002	0.002	0.07	0.012	-	-	0.0004	-	-
ALSUI-242/01	0.10	0.13	4.13	0.031	0.25	0.032	0.011	0.031	0.20	-	-	-	-	-
ALSUI-212/02	0.064	0.088	4.40	0.153	0.169	0.0055	0.0084	0.0095	0.265	0.448	-	-	-	-
SEI-NKAC1A-NDC1	0.322	0.321	4.42	0.099	0.069	0.0017	0.101	0.013	0.093	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-8081-CAB	<0.0001	-	-	(0.001)	-	<0.0001	<0.0001	-	(0.080)	-	-	(19.50)	-	(0.001)
ALCAN-16SAQ	-	-	-	0.018	-	0.0005	-	-	0.029	-	-	0.032	-	0.015
ALCAN-16SAR	0.0087i	-	-	0.017	-	-	0.0043i	-	0.037	-	-	0.041	-	0.005
ALCAN-16SAN	-	-	-	0.01	-	-	-	-	0.042	-	-	0.041	-	0.007
ALCOA-SS2117	<0.0005	<0.0010	<0.0010	0.02	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALSUI-241/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALPEC-268	-	-	-	-	-	-	-	-	0.0488	-	-	0.049	-	0.0008
VAW-4504	-	-	-	-	-	-	-	-	0.001	-	-	<0.001	-	-
VAW-4004-1	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-
ALSUI-242/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-212/02	-	0.0009	-	-	-	-	-	-	0.0027	-	-	0.002	-	0.0079
SEI-NKAC1A-NDC1	-	-	-	-	-	-	-	-	<0.0005	-	-	<0.0005	-	0.0005

Product Code	Zr
ALCAN-8081-CAB	-
ALCAN-16SAQ	0.03
ALCAN-16SAR	-
ALCAN-16SAN	-
ALCOA-SS2117	<0.0030
ALSUI-241/01	-
ALPEC-268	0-0.0005
VAW-4504	-
VAW-4004-1	0.20
ALSUI-242/01	-
ALSUI-212/02	0.0025
SEI-NKAC1A-NDC1	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 57x25mm	8081	CRM	W
Ø 57x25mm	2036	CRM	W
Ø 57x25mm	2117	CRM	W
Ø 57x25mm	2117	CRM	W
Ø 64x25mm	2117	CRM	W
Ø 60x25mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 55x25mm		CRM	C

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-4503-2	-	0.17	4.47	0.074	0.15	0.031	0.003	0.074	0.15	-	-	-	-	-
VAW-4502	0.08	0.31	4.49	0.22	0.061	0.001	0.0015	0.13	0.012	-	-	-	-	-
MBH-56X A201.1 A	0.193	0.089	4.49	0.31	0.198	0.0029	0.0066	0.0113	0.132	0.494	-	-	-	-
ALCAN-220AB	0.012	0.048	4.50	0.005	0.011	-	-	0.016	0.009	-	-	-	-	-
VAW-4201	0.15	0.50	4.57	0.22	0.38	0.002	-	0.60	0.008	-	-	-	-	0.053
ALCOA-SS206	0.06x	0.08x	4.6x	0.35	0.28	0.01x	0.01x	0.03x	0.20x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-B206AA	0.078	0.16	4.68	0.43	0.30i	0.028	0.029	0.029	0.22	-	-	-	0.0008	0.009
ALSUI-243/01	0.17	0.22	4.80	0.051	0.39	0.05	0.032	0.08	0.25	-	-	-	-	-
ALCAN-226AD	0.16	0.19	4.88	0.045	0.039	0.047	0.039	0.057	0.16	-	-	-	-	0.044
ALCOA-WA2011	0.20x	0.70	4.9x	0.06x	0.02x	0.06x	0.02x	0.15x	<0.0050	-	-	-	-	0.60
ALCAN-220AC	0.037	0.02	4.98	0.01	0.068	-	-	0.023	0.011	-	-	-	-	-
ALSUI-215/01	0.105	0.051	4.98	0.0195	0.049	0.0106	0.0108	0.052	0.198	0.047	-	0-0.0003	-	0.0045

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-4503-2	-	-	-	-	-	-	-	-	0.003	-	-	0.001	-	-
VAW-4502	-	-	-	-	-	-	-	-	0.004	-	-	0.004	-	-
MBH-56X A201.1 A	-	-	-	-	-	-	-	-	0.002	-	-	(0.0023)	-	-
ALCAN-220AB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-4201	-	-	-	-	-	-	-	-	0.87	-	-	0.3	-	-
ALCOA-SS206	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	0.01x
ALCAN-B206AA	0.0037i	0.0011	-	0.017	-	0.0030i	0.0033i	0.003	0.011	0.0038	-	0.02	0.0037i	0.02
ALSUI-243/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-226AD	-	-	-	-	-	-	-	-	0.041	-	-	0.041	-	-
ALCOA-WA2011	-	-	-	0.02x	-	-	-	-	0.40	-	-	-	-	0.01x
ALCAN-220AC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-215/01	-	0.0019	-	-	-	0.0003	0.0003	-	0.0055	0.0045	-	0.0065	-	0.0104

Product Code	Zr
VAW-4503-2	-
VAW-4502	0.0015
MBH-56X A201.1 A	-
ALCAN-220AB	0.088
VAW-4201	0.003
ALCOA-SS206	<0.0030
ALCAN-B206AA	0.003
ALSUI-243/01	-
ALCAN-226AD	-
ALCOA-WA2011	-
ALCAN-220AC	0.20
ALSUI-215/01	0.007

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x20mm	204	RM	CCC
Ø 60x20mm		RM	CCC
Ø 50x20mm		CRM	C
Ø 64x38mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	206	CRM	CCC
Ø 57x25mm	2022	CRM	W
Ø 60x25mm		CRM	CCC
Ø 57x25mm	2011	CRM	W
Ø 64x25mm	2011	CRM	W
Ø 64x38mm	2011	CRM	CCC
Ø 60x25mm		CRM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-231/01	0.295	0.30	5.05	0.10	0.115	0.032	0.031	0.15	0.054	-	-	-	-	0.57
ALPEC-288	0.086	0.126	5.10	0.151	0.086	0.064	0.0112	0.054	0.134	-	-	-	0.0076	-
ALPEC-241	0.073	0.699	5.15	0.988	0.33	0.0123	0.0017	0.0101	0.0755	-	-	-	0.0078	-
ALSUI-2154/02	0.01	0.004	5.27	0.46	0.53	0.001	0.001	0.001	0.14	0.95	-	-	-	-
VAW-4501	0.11	0.23	5.29	0.027	0.011	0.001	0.002	0.032	0.28	-	-	-	-	-
SEI-NK2011-NDC1	0.205	0.3	5.49	0.014	0.0041	0.0098	<0.0005	0.198	0.012	-	-	-	-	0.271
ALCOA-SS2011	0.30	0.55	5.5x	0.04x	0.04x	0.04x	0.04x	0.10x	<0.0050	<0.0010	<0.0010	<0.0010	<0.0005	0.50
ALCAN-220AD	0.10	0.10	5.55	0.021	0.15	-	-	0.034	0.019	-	-	-	-	-
ALCAN-2011AC	0.12	0.26	5.62	0.023	0.015	0.019	0.024	0.047	0.017	-	-	-	0.0004	0.49
ALSUI-244/01	0.25	0.30	5.78	0.19	0.45	0.05	0.10	0.044	0.166	-	-	-	-	-
ALSUI-236/01	0.206	0.203	5.79	0.052	0.051	0.022	0.022	0.054	0.026	-	-	-	-	0.48
ALCAN-220AE	0.13	0.087	5.94	0.027	0.24	-	-	0.049	0.032	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-231/01	-	-	-	-	-	-	-	-	0.47	-	-	-	-	-
ALPEC-288	-	-	-	-	-	-	-	-	0.0115	-	-	0.012	-	0.06
ALPEC-241	-	-	-	-	-	-	-	-	0.0011	-	-	0.0003	-	-
ALSUI-2154/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-4501	-	-	-	-	-	-	-	-	0.005	-	-	0.006	-	-
SEI-NK2011-NDC1	-	-	-	-	-	-	-	-	0.193	-	-	<0.0005	-	0.0006
ALCOA-SS2011	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.50	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-220AD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-2011AC	0.0009i	0.0011	-	0.02	-	0.0007i	0.0005i	0.002	0.53	0.0029	-	19.0	0.0009i	0.017
ALSUI-244/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-236/01	-	0.0048	-	0.0089	-	-	-	-	0.58	-	-	0-0.051	-	0.012
ALCAN-220AE	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Zr
ALSUI-231/01	-
ALPEC-288	0.0375
ALPEC-241	0.0016
ALSUI-2154/02	-
VAW-4501	0.002
SEI-NK2011-NDC1	-
ALCOA-SS2011	<0.0030
ALCAN-220AD	0.28
ALCAN-2011AC	0.0027
ALSUI-244/01	-
ALSUI-236/01	0.01
ALCAN-220AE	0.38

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 55x25mm		CRM	C
Ø 64x25mm	2011	CRM	W
Ø 64x38mm	2011	CRM	CCC
Ø 57x25mm	2011	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x25mm	2011	CRM	CCC
Ø 64x38mm	2011	CRM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-220AA	0.14	0.16	5.94	0.049	0.23	-	-	0.035	0.021	-	-	-	-	-
ALCAN-2011CAB	(0.13)	(0.30)	(6.0)	<0.0001	<0.0001	<0.0001	0.0003	0.0005	<0.0001	-	-	-	<0.0001	(0.45)
ALCOA-WB2011	0.4	0.25	6.0x	0.02x	0.06x	0.02x	0.06x	0.05x	<0.0050	-	-	-	-	0.4
ALPEC-289	0.195	0.308	6.05	0.373	0.0475	0.0325	0.0028	0.089	0.1005	-	-	-	0.00007	-
ALCAN-6012AF	0.13	0.21	6.05	0.28	0.02	0.047	0.045	0.049	0.14	-	-	-	-	0.038
ALSUI-245/01	0.15	0.22	6.2	0.31	0.315	0.022	0.02	0.05	0.11	-	-	-	-	-
ALCOA-SS2219	0.15x	0.20x	6.3x	0.28	0.02x	0.01x	0.01x	0.03x	0.06x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-2219CAB	(0.15)	(0.18)	(6.53)	(0.29)	0.0001	<0.0001	0.0002	0.0005	0.0003	-	-	<0.0001	<0.0001	<0.0001
ALCAN-2219AC	0.15	0.21	6.7	0.24	0.013	0.013	0.016	0.088	0.05	-	-	-	0.0011	0.0067
ALSUI-246/01	0.145	0.312	6.7	0.35	0.024	0.02	0.02	0.1	0.12	-	-	-	-	-
ALCAN-220AF	0.24	0.26	6.95	0.06	0.32	-	-	0.066	0.05	-	-	-	-	-
VAW-3360	0.33	0.59	7.12	0.5	0.09	<0.001	0.002	0.5	0.003	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-220AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-2011CAB	<0.0001	<0.0001	0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	(0.60)	0.001	-	0.0035	<0.0001	<0.0001
ALCOA-WB2011	-	-	-	0.02x	-	-	-	-	0.6	-	-	-	-	0.01x
ALPEC-289	-	-	-	-	-	-	-	-	0.0006	-	-	0.0019	-	0.085
ALCAN-6012AF	-	-	-	0.016	-	-	-	-	0.037	-	-	0.04	-	0.01
ALSUI-245/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS2219	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.12x
ALCAN-2219CAB	<0.0001	<0.0001	0.0001	0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	0.0001	-	<0.0001	<0.0001	0.0001
ALCAN-2219AC	0.0011i	0.002	-	0.015	-	0.0012i	0.0012i	0.0021	0.0087	0.0029	-	0.017	0.0018i	0.092
ALSUI-246/01	-	-	-	-	-	-	-	-	-	-	-	-	-	0.095
ALCAN-220AF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-3360	0.0001	-	-	-	-	-	-	0.002	-	-	-	-	-	-

Product Code	Zr
ALCAN-220AA	0.39
ALCAN-2011CAB	<0.0001
ALCOA-WB2011	-
ALPEC-289	0.1005
ALCAN-6012AF	-
ALSUI-245/01	-
ALCOA-SS2219	(0.16x)
ALCAN-2219CAB	0.14
ALCAN-2219AC	0.13
ALSUI-246/01	0.21
ALCAN-220AF	0.48
VAW-3360	-

Size	Grade	Type	Form
Ø 57x25mm	2011	CRM	C
Ø 57x25mm	2011	CRM	W
Ø 64x25mm	2011	CRM	W
Ø 55x30mm		CRM	CCC
Ø 57x25mm	6012	CRM	W
Ø 60x25mm		CRM	CCC
Ø 64x25mm	2219	CRM	W
Ø 57x25mm	2219	CRM	W
Ø 57x25mm	2219	CRM	W
Ø 60x25mm		CRM	CCC
Ø 64x38mm	2011	CRM	CCC
Ø 60x20mm		RM	CCC

Values listed in mass %; () Uncertified Value

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Cu/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Bi	Ca	Cd	Co
ALCAN-5000CAB	(0.001)	-	(10.0)	<0.001	(0.001)	<0.001	<0.001	(0.003)	<0.001	-	<0.001	-	-	-
ALPEC-10687	0.10	0.20	11.60	0.99	0.003	-	0.015	0.104	0.205	-	-	-	-	-
ALCAN-5001BI	0.36	0.30	19.50	0.05	0.053	0.049	0.052	0.045	0.049	0.0012	0.052	0.0018	0.0013	-
ALCAN-5001CBG	-	(0.02)	(20.0)	(0.001)	(0.002)	(0.001)	(0.003)	<0.001	(0.001)	-	<0.001	-	-	-

Product Code	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr	Size	Grade	Type	Form
ALCAN-5000CAB	(0.002)	-	-	-	(0.002)	-	<0.001	-	(0.002)	-	Ø 57x25mm	5000	CRM	W
ALPEC-10687	-	-	-	-	0-0.001	-	0.11	-	-	-	Ø 54x5mm		CRM	CCC
ALCAN-5001BI	0.02	0.0020i	0.0011i	0.0039i	0.048	0.004	0.047	0.0027i	0.025	0.003	Ø 57x25mm	5001	CRM	W
ALCAN-5001CBG	(0.002)	-	-	-	(0.002)	-	(0.002)	-	(0.002)	-	Ø 57x25mm	5001	CRM	W

Values listed in mass %; () Uncertified Value

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Cu/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	V	Zr			
NCS HS49733-1	0.358	0.455	4.76	0.476	0.002	-	0.0038	(0.007)	0.0037	0.027	0.038			
NCS HS49733-2	0.257	0.38	5.53	0.387	0.021	-	0.017	0.049	0.071	0.061	0.103			
NCS HS49733-3	0.198	0.302	6.21	0.318	0.04	-	0.041	0.105	0.16	0.175	0.157			
NCS HS49733-4	0.159	0.199	6.64	0.161	0.062	-	0.069	0.157	0.123	0.116	0.236			
NCS HS49733-5	0.106	0.105	6.97	0.09	0.126	-	0.09	0.189	(0.154)	0.17	0.197			
NCS HS49708A-1	0.448	0.69	2.14	0.341	2.15	-	0.111	0.054	0.088	-	-			
NCS HS49708A-2	0.525	0.453	3.25	1.0	0.737	-	0.021	0.134	0.017	-	-			
NCS HS49708A-3	0.127	0.35	4.11	0.532	1.51	-	0.037	0.147	0.039	-	-			
NCS HS49708A-4	0.23	0.213	5.82	0.24	0.95	-	0.057	0.32	0.181	-	-			
NCS HS49708A-5	0.103	0.772	1.21	0.084	2.64	-	0.21	0.712	0.013	-	-			
NCS HS49711-1	1.25	0.825	1.88	1.24	0.692	0.092	0.161	0.401	(0.121)	-	(0.191)			
NCS HS49711-2	0.893	0.657	2.89	0.932	0.298	0.223	0.113	0.343	(0.169)	-	(0.25)			
NCS HS49711-3A	0.552	0.427	4.03	0.561	0.481	0.157	0.045	0.236	0.047	-	0.137			
NCS HS49711-4	0.236	0.188	5.47	0.241	(0.108)	0.193	0.089	0.125	0.078	-	0.048			
NCS HS49711-5A	1.57	1.01	0.645	1.50	0.912	0.272	0.21	0.054	0.202	-	(0.0058)			
NCS HS49711-6A	0.092	0.12	6.57	0.073	0.03	0.0099	0.0084	0.539	0.018	-	0.301			

Product Code
NCS HS49733-1
NCS HS49733-2
NCS HS49733-3
NCS HS49733-4
NCS HS49733-5
NCS HS49708A-1
NCS HS49708A-2
NCS HS49708A-3
NCS HS49708A-4
NCS HS49708A-5
NCS HS49711-1
NCS HS49711-2
NCS HS49711-3A
NCS HS49711-4
NCS HS49711-5A
NCS HS49711-6A

	Size	Grade	Type	Unit
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 5	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

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Cu/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti
NCS HS49705-1	0.904	0.454	4.51	0.095	0.428	1.55	0.14	0.021
NCS HS49705-2	0.657	1.21	2.51	0.138	1.37	1.12	0.238	0.088
NCS HS49705-3	1.22	0.908	1.51	0.239	0.897	2.02	0.334	0.12
NCS HS49705-4	0.371	1.61	3.33	0.184	1.80	0.624	0.166	0.055
NCS HS49705-5	1.53	1.87	0.927	0.287	2.26	0.153	0.367	0.161
NCS HS49705-6	0.09	0.115	5.55	0.054	0.074	2.25	0.084	0.00095

	Size	Grade	Type	Unit
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Al Sets Only

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Pb	Sn		Size	Grade	Type	Unit
NCS HS50704-1	0.37	0.15	10.0	1.21	-	1.27	0.49	-	-	Set of 5 only	Ø 50x40x30mm		CRM	Disc
NCS HS50704-2	0.26	0.49	10.0	0.51	-	0.38	1.70	-	-	Set of 5 only	Ø 50x40x30mm		CRM	Disc
NCS HS50704-3	1.0	0.99	10.0	0.21	-	0.78	0.17	-	-	Set of 5 only	Ø 50x40x30mm		CRM	Disc
NCS HS50704-4	1.70	0.29	10.0	0.77	-	0.15	0.28	-	-	Set of 5 only	Ø 50x40x30mm		CRM	Disc
NCS HS50704-5	0.67	1.38	10.0	0.33	-	0.24	0.91	-	-	Set of 5 only	Ø 50x40x30mm		CRM	Disc
NCS HS50710-1	2.05	-	4.47	0.052	0.017	-	0.07	0.02	0.006	Set of 6 only	Ø 30x35x50mm		CRM	Disc
NCS HS50710-2	1.44	0.37	4.47	0.15	0.096	-	0.091	0.025	0.022	Set of 6 only	Ø 30x35x50mm		CRM	Disc
NCS HS50710-3	0.86	0.31	4.50	0.084	0.018	-	0.30	0.043	0.014	Set of 6 only	Ø 30x35x50mm		CRM	Disc
NCS HS50710-4	0.49	0.56	4.48	0.25	0.035	-	0.16	0.072	0.012	Set of 6 only	Ø 30x35x50mm		CRM	Disc
NCS HS50710-5	0.34	0.81	4.45	0.13	0.068	-	0.30	0.13	-	Set of 6 only	Ø 30x35x50mm		CRM	Disc
NCS HS50710-6	1.32	0.27	4.56	0.19	0.062	-	0.14	0.028	0.0095	Set of 6 only	Ø 30x35x50mm		CRM	Disc

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Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
MBH-55X G900J2 G	0.227	0.504	0.726	0.192	0.594	0.08	0.083	0.295	0.079	-	-	0.0035	0.366	-
MBH-55X G900J1 F	0.128	0.549	0.895	0.0134	0.962	0.0011	0.0048	0.152	0.0056	-	-	0.0011	0.0705	-
ALPEC-3977/2	(0.07)	(0.11)	(1.0)	(0.02)	(0.92)	(0.01)	(0.01)	(0.020)	(0.010)	-	-	-	-	-
ALSUI-221/02	0.15	0.21	1.37	0.20	0.41	0.03	0.03	0.0095	0.058	-	-	-	-	-
ALSUI-251/01	0.15	0.19	1.95	0.022	0.55	0.01	0.5	0.018	0.064	-	-	-	-	-
ALSUI-255/01	0.10	0.93	2.15	0.105	1.90	-	0.9	0.026	0.055	-	-	-	-	-
ALCOA-ST2-2000	0.50	0.45	2.5x	0.50	0.50	0.05x	0.01x	0.15x	0.03x	<0.0010	<0.0005	0.0005	0.001x	-
ALSUI-222/01	0.40	0.31	2.51	0.42	0.64	0.02	0.025	0.03	0.024	-	-	-	-	-
ALSUI-252/01	0.20	0.10	3.40	0.012	1.35	0.028	1.75	0.015	0.046	-	-	-	-	-
ALCOA-KA242	0.25	0.40	3.6x	0.02x	1.8x	<0.0050	2.2x	0.03x	0.06x	-	-	0.02x	-	-
MBH-56X G2007 A	0.328	0.252	3.699	0.605	0.663	0.0354	0.0087	0.386	0.0236	-	-	-	0.147	0.0051
HR-AL2014	0.57	0.57	3.92	0.53	0.59	0.04	0.02	0.07	0.04	-	-	-	-	-
ALCAN-218AR	0.18	0.49	4.0	0.037	1.50	0.03	2.0	0.035	0.12	-	-	-	0.04	-
ALCOA-WA2024	0.30	0.30	4.0x	0.70	1.6x	0.06x	0.04x	0.06x	0.03x	-	-	0.001x	-	-

Product Code	Cd	Co	Ga	Li	Pb	Sb	Sn	Sr	V	Zr	Size	Grade	Type	Form
MBH-55X G900J2 G	-	-	-	(0.007)	0.217	0.0374	0.24	-	-	0.0637	Ø 50x17mm		CRM	C
MBH-55X G900J1 F	-	-	-	-	0.202	-	0.35	-	0.011	0.0242	Ø 50x20mm		CRM	C
ALPEC-3977/2	-	-	-	-	(0.050)	-	-	-	-	-	Ø 56x30mm		CRM	CCC
ALSUI-221/02	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm		CRM	CCC
ALSUI-251/01	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm	242	CRM	CCC
ALSUI-255/01	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm	242	CRM	CCC
ALCOA-ST2-2000	0.001x	0.001x	0.02x	-	0.003x	0.001x	0.001x	0.001x	0.01x	0.001x	Ø 64x25mm		CRM	W
ALSUI-222/01	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm		CRM	CCC
ALSUI-252/01	-	-	-	-	-	-	-	-	-	-	Ø 60x25mm	242	CRM	CCC
ALCOA-KA242	-	-	-	-	0.02x	-	0.02x	-	-	-	Ø 64x25mm	242	CRM	CCC
MBH-56X G2007 A	-	-	-	-	0.889	-	0.0676	-	-	0.002	Ø 50x20mm	2007	CRM	W
HR-AL2014	-	-	-	-	0.02	-	-	-	-	0	Ø 35x20mm		RM	C
ALCAN-218AR	-	-	-	-	0.047	-	0.048	-	-	-	Ø 57x25mm	242.2	CRM	CCC
ALCOA-WA2024	-	-	-	-	-	-	-	-	-	-	Ø 64x25mm	2024	CRM	W

Values listed in mass %; () Uncertified Value

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Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-253/01	0.38	0.22	4.10	0.052	1.75	0.15	2.20	0.04	0.19	-	-	-	-	-
VAW-4001-1	0.14	0.25	4.15	0.69	1.39	0.002	0.002	0.10	0.03	-	-	<0.0005	-	-
ALCOA-SSA242	0.30	0.45	4.1x	0.05x	1.6x	0.20x	2.0x	0.10x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS2324	0.05x	0.05x	4.2x	0.50	1.5x	0.01x	0.01x	0.01x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-232/02	0.395	0.501	4.28	0.81	0.90	0.08	0.02	0.102	0.031	-	-	-	-	-
ALCAN-2007CAB	(0.45)	(0.45)	(4.30)	(0.65)	(0.55)	0.0002	0.0005	<0.0001	0.0001	-	-	<0.0001	<0.0001	0.0003
ALSUI-233/03	0.30	0.41	4.32	0.51	1.19	0.052	0.013	0.21	0.029	-	-	-	-	0.21
MBH-56X G2024 A	0.122	0.178	4.34	0.658	1.509	0.0389	0.0055	0.0446	0.0099	-	-	-	-	-
SEI-NK24S-NDC2	0.323	0.756	4.34	0.595	1.47	0.05	-	0.058	0.016	-	-	-	-	-
VAW-4003-1	0.33	0.30	4.39	0.79	1.74	0.002	0.003	0.15	0.027	-	-	<0.0007	-	-
ALPEC-850	0.275	0.1946	4.39	0.692	1.27	0.0003	0.0113	0.0481	0.0011	-	-	-	0.00012	-
ALCOA-KB242	0.40	0.20x	4.4x	0.05x	1.2x	<0.0050	1.8x	0.05x	0.15x	-	-	-	0.05x	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-253/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-4001-1	-	-	-	-	-	-	-	-	0.004	-	-	-	-	-
ALCOA-SSA242	<0.0030	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS2324	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALSUI-232/02	-	-	-	-	-	-	-	-	0.9	-	-	-	-	-
ALCAN-2007CAB	<0.0001	<0.0001	0.0002	<0.0001	-	<0.0001	<0.0001	0.0001	(1.1)	0.01	-	0.006	0.0001	0.0002
ALSUI-233/03	-	0.048	-	-	-	0.00007	-	-	1.1	-	-	-	-	0.013
MBH-56X G2024 A	-	-	-	-	-	-	-	0.001	-	-	-	0.001	-	0.007
SEI-NK24S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-4003-1	0.0002	-	-	-	-	-	-	-	0.004	-	-	-	-	-
ALPEC-850	-	-	-	-	-	-	-	-	0.0051	-	-	0.0097	-	-
ALCOA-KB242	-	-	-	-	-	-	-	-	0.05x	-	-	0.05x	-	-

Product Code	Zr
ALSUI-253/01	-
VAW-4001-1	0.08
ALCOA-SSA242	<0.0030
ALCOA-SS2324	<0.0030
ALSUI-232/02	-
ALCAN-2007CAB	0.0003
ALSUI-233/03	0.01
MBH-56X G2024 A	0.0053
SEI-NK24S-NDC2	-
VAW-4003-1	0.25
ALPEC-850	0.1472
ALCOA-KB242	-

Size	Grade	Type	Form
Ø 60x25mm	242	CRM	CCC
Ø 60x20mm	2124	RM	CCC
Ø 64x25mm	A242	CRM	CCC
Ø 64x25mm	2324	CRM	W
Ø 60x25mm	2030	CRM	CCC
Ø 57x25mm	2007	CRM	W
Ø 60x25mm	2007	CRM	CCC
Ø 50x20mm		CRM	C
Ø 55x25mm		CRM	C
Ø 60x20mm	2024	RM	CCC
Ø 55x30mm	2024	CRM	CCC
Ø 64x25mm	242	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-4005	0.32	0.30	4.54	0.80	1.31	0.002	0.003	0.21	0.004	-	-	<0.0007	-	-
VAW-4006	0.32	0.29	4.55	0.80	1.27	0.004	0.002	0.21	0.05	-	-	0.0001	-	-
ALCAN-2024AF	0.25	0.25	4.55	0.66	1.57	0.028	0.031	0.073	0.032	-	-	-	0.001	0.008
IARM-104B-G	[0.15]	[0.26]	[4.60]	[0.64]	[1.57]	[0.009]	[0.005]	[0.064]	[0.055]	[(0.001)]	-	[(0.002)]	[(0.0002)]	-
ALCOA-WF2024	0.15x	0.45	4.6x	0.8	1.6x	0.02x	0.07x	0.03x	0.06x	-	-	-	0.002x	-
ALCOA-WE2024	0.45	0.20x	4.6x	0.45	1.6x	0.10x	0.02x	0.25	0.01x	-	-	-	0.007x	-
ALCOA-SS2024	0.20x	0.35	4.6x	0.65	1.6x	0.06x	0.04x	0.10x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
MBH-56X G14H2 C	0.18	0.31	4.61	0.48	0.97	0.08	1.82	0.16	0.20	-	-	-	-	-
VAW-4002-1	0.21	0.25	4.62	0.67	1.48	0.002	0.003	0.20	0.051	-	-	0.0004	-	-
BAM-311	0.204	0.31	4.653	0.694	1.567	0.1037	0.0519	0.2005	0.0562	-	-	-	0.00052	0.05
ALCOA-WB2024	0.30	0.30	5.0x	0.7	1.6x	0.06x	0.04x	0.25	0.03x	-	-	-	0.000x	-
ALCAN-2024CAE	(0.26)	(0.30)	(5.0)	(0.69)	(2.0)	<0.0001	<0.0001	0.0002	<0.0001	-	-	0.0001	<0.0001	<0.0001

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-4005	0.0002	-	-	-	-	-	-	-	0.003	-	-	-	-	-
VAW-4006	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-
ALCAN-2024AF	0.0031i	0.0011i	-	0.022	-	0.0030i	0.0026i	0.0023	0.0077	0.003	-	0.015	0.0029	0.022
IARM-104B-G	[(0.001)]	-	-	[0.010]	-	-	[(0.0005)]	[(0.003)]	[0.014]	-	-	[(0.003)]	-	[0.007]
ALCOA-WF2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-WE2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS2024	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-56X G14H2 C	-	-	-	-	-	-	-	-	0.03	-	-	0.07	-	-
VAW-4002-1	0.0002	-	-	-	-	-	-	-	0.0045	-	-	-	-	-
BAM-311	(0.00056)	0.00127	0.00115	0.0159	-	0.00053	0.00184	-	0.0504	-	-	0.0127	-	0.024
ALCOA-WB2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-2024CAE	<0.0001	0.0001	<0.0001	0.0001	-	<0.0001	<0.0001	0.0001	0.0001	<0.0001	-	0.0005	<0.0001	0.0001

Product Code	Zr
VAW-4005	0.002
VAW-4006	0.15
ALCAN-2024AF	0.0024
IARM-104B-G	[(0.001)]
ALCOA-WF2024	-
ALCOA-WE2024	-
ALCOA-SS2024	<0.0030
MBH-56X G14H2 C	-
VAW-4002-1	0.13
BAM-311	0.14
ALCOA-WB2024	-
ALCAN-2024CAE	<0.0001

Size	Grade	Type	Form
Ø 60x20mm	2024	RM	CCC
Ø 60x20mm	2024	RM	CCC
Ø 57x25mm	2024	CRM	W
Ø 57x25mm	2024	CRM	W
Ø 64x25mm	2024	CRM	W
Ø 64x25mm	2024	CRM	W
Ø 64x25mm	2024	CRM	W
Ø 40x15mm		RM	C
Ø 60x20mm	2024	RM	CCC
Ø 60x25mm	2024	CRM	C
Ø 64x25mm	2024	CRM	W
Ø 57x25mm	2024	CRM	W

Values listed in mass %; () Uncertified Value

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Cu/Mg/Al Specially-Priced Standards

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Bi	Cd	Pb	Sn	Zr
PB AC1	0.80	1.17	7.86	0.24	0.21	(0.003)	0.052	0.26	0.038	0.032	-	0.037	0.035	(<0.001)
PB AC2	0.22	0.25	5.97	0.55	0.015	(0.004)	0.25	0.055	0.17	0.049	-	0.055	0.056	0.098
PB AC3	0.64	0.69	4.41	0.61	0.39	0.059	0.042	0.20	0.091	0.034	-	0.045	0.031	0.031
PB AC5	0.41	0.42	2.62	0.14	0.32	0.053	0.078	0.089	0.013	0.023	-	0.013	0.029	(<0.001)
PB AC6	0.86	0.38	2.39	0.54	0.43	0.11	0.068	0.086	0.075	0.044	-	0.048	0.045	0.024
PB AC12	0.31	1.38	2.39	0.17	1.43	-	1.33	0.16	0.085	-	-	-	-	-
PB AC13	0.99	1.12	2.18	0.11	1.51	-	1.06	0.21	0.075	-	-	-	-	-
PB AC14	0.71	0.32	3.08	0.20	0.74	-	1.92	0.11	0.16	-	-	-	-	-
PB AC21	0.52	0.41	3.14	0.47	1.39	0.10	0.11	0.41	0.12	0.073	0.045	0.064	0.07	-
PB AC22	0.79	0.80	3.72	0.74	0.81	(<0.01)	0.20	0.49	(<0.01)	0.73	0.12	0.84	0.12	-
PB AC23	0.31	0.67	5.25	(<0.01)	(<0.01)	(<0.01)	(<0.01)	0.18	(<0.01)	0.62	0.036	0.72	0.021	-
PB AC24	0.67	1.13	7.35	0.18	0.17	(<0.01)	0.033	0.27	0.03	0.048	0.01	0.018	0.01	-

Product Code
PB AC1
PB AC2
PB AC3
PB AC5
PB AC6
PB AC12
PB AC13
PB AC14
PB AC21
PB AC22
PB AC23
PB AC24

Size	Grade	Type	Unit
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-59X G77J1 F	0.15	0.21	2.41	0.46	4.83	0.24	0.17	1.91	0.178	-	0.004	-	-	0.06
MBH-59X G77J2 E	0.212	0.295	2.35	0.245	3.05	0.096	0.52	3.35	0.015	-	-	-	-	-
ALSUI-731/01	0.15	0.19	0.58	0.15	1.23	0.019	-	4.0	0.008	-	-	-	-	-
ALSUI-732/01	0.20	0.24	0.99	0.20	2.06	0.045	-	4.45	0.016	-	-	-	-	-
ALCAN-7079AA	0.20	0.24	0.66	0.25	3.28	0.22	0.029	4.55	0.056	-	-	-	0.0013	0.02
ALCOA-SS7079	0.15x	0.22x	0.65	0.20x	3.5x	0.16x	<0.0050	4.6x	0.03x	<0.0010	<0.0010	<0.0010	<0.0010	0.003x
ALCAN-79SAF	0.19	0.27	0.64	0.22	3.38	0.20	0.04	4.68	0.067	-	-	-	-	0.04
ALPEC-9154	(0.10)	(0.15)	(1.50)	(0.05)	(2.50)	(0.20)	(0.01)	(4.68)	(0.020)	-	-	-	(0.003)	-

Product Code	Ca	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V	Zr
MBH-59X G77J1 F	-	0.004	0.018	(0.013)	-	-	-	0.125	-	-	0.126	-	0.005	0.01
MBH-59X G77J2 E	-	0.0025	-	-	-	-	-	0.125	-	-	0.006	-	0.0155	0.153
ALSUI-731/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-732/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-7079AA	0.0026	0.0014	-	0.02	0.0038	0.0018	0.0015	0.014	0.0034	-	0.022	0.0028	0.021	0.0037
ALCOA-SS7079	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x	<0.0030
ALCAN-79SAF	-	-	-	0.02	-	-	-	0.04	-	-	0.042	-	-	-
ALPEC-9154	-	(0.005)	-	-	-	-	-	(0.005)	-	-	(0.005)	-	(0.005)	-

Product Code
MBH-59X G77J1 F
MBH-59X G77J2 E
ALSUI-731/01
ALSUI-732/01
ALCAN-7079AA
ALCOA-SS7079
ALCAN-79SAF
ALPEC-9154

Size	Grade	Type	Form
Ø 40x15mm		RM	C
Ø 40x15mm		CRM	C
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 57x25mm	7079	CRM	W
Ø 64x25mm	7079	CRM	W
Ø 57x25mm	7079	CRM	W
Ø 60x25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-59X G77J3 F	0.647	0.70	1.30	0.246	2.53	0.15	0.402	4.72	0.148	-	-	-	0.0297	-
ALCAN-7022CAB	(0.39)	(0.45)	(0.89)	(0.29)	(3.47)	(0.24)	0.0002	(4.84)	0.0001	-	-	0.0001	<0.0001	<0.0001
ALCOA-SS7029	0.10x	0.10x	0.75	0.02x	1.7x	<0.0050	<0.0050	4.8x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-7022AA	0.39	0.47	0.89	0.30	3.44	0.25	0.039	4.92	0.023	-	-	-	0.0013	0.015
ALSUI-733/03	0.104	0.142	1.45	0.282	2.36	0.258	0.017	5.02	0.021	-	-	-	0.001	-
MBH-59X G7022 A	0.126	0.12	0.631	0.127	2.69	0.14	0.003	5.17	0.016	-	-	-	-	-
ALCOA-WE7075	0.15x	0.25	1.6x	0.10x	2.6x	0.25	<0.0050	5.3x	0.05x	-	-	-	<0.0005	-
ALPEC-6018	0.027	-	1.47	0.165	2.26	0.294	0.0302	5.42	0.071	-	-	-	0.0036	-
NIST-1259	0.18	0.205	1.60	0.079	2.48	0.173	0.063	5.44	(0.04)	-	-	-	0.0025	-
ALPEC-9151	(0.10)	(0.15)	2.08	(0.050)	(2.50)	(0.20)	(0.010)	(5.60)	(0.020)	-	-	-	(0.003)	-
ALPEC-9152	(0.10)	(0.15)	(1.50)	(0.050)	1.47	(0.20)	(0.010)	(5.60)	(0.020)	-	-	-	(0.003)	-
ALPEC-619	0.096	0.086	1.47	0.0201	2.43	0.143	0.0002	5.62	0.0294	-	-	-	0-0.00001	-

Product Code	Ca	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V	Zr
MBH-59X G77J3 F	-	0.0095	0.032	-	-	-	-	0.108	-	-	0.122	-	0.0181	0.0144
ALCAN-7022CAB	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0006	0.0002	<0.0001	-	<0.0001	0.0003	0.0001	<0.0001
ALCOA-SS7029	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.02x	<0.0030
ALCAN-7022AA	0.0034	-	-	0.021	0.0016	0.0055i	0.001	0.017	0.0032	-	0.016	0.0027	0.023	0.0028
ALSUI-733/03	-	-	-	-	0.00024	0.0017	-	0.019	0.0023	-	0.00018	-	0.01	0.0101
MBH-59X G7022 A	-	-	-	-	-	-	-	0.0019	-	-	0.0006	-	-	0.0016
ALCOA-WE7075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALPEC-6018	-	0.0178	-	-	-	0.0009	-	0.0285	-	-	0.0274	-	0.0251	0.016
NIST-1259	-	-	-	(0.022)	-	-	-	-	-	-	-	-	-	-
ALPEC-9151	-	(0.005)	-	-	-	-	-	(0.005)	-	-	(0.005)	-	(0.005)	-
ALPEC-9152	-	(0.005)	-	-	-	-	-	(0.005)	-	-	(0.005)	-	(0.005)	-
ALPEC-619	-	0-0.0001	-	-	-	0-0.00004	-	0.0004	-	-	0-0.0001	-	0.0012	0.0885

Product Code
MBH-59X G77J3 F
ALCAN-7022CAB
ALCOA-SS7029
ALCAN-7022AA
ALSUI-733/03
MBH-59X G7022 A
ALCOA-WE7075
ALPEC-6018
NIST-1259
ALPEC-9151
ALPEC-9152
ALPEC-619

Size	Grade	Type	Form
Ø 40x15mm		CRM	C
Ø 57x25mm	7022	CRM	W
Ø 64x25mm	7029	CRM	W
Ø 57x25mm	7022	CRM	W
Ø 60x25mm		CRM	CCC
Ø 50x20mm	7022	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 55x30mm		CRM	CCC
Ø 63x19mm	7075	CRM	W
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

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Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALPEC-6017	0.247	0.014	1.52	0.265	2.37	0.018	0.052	5.63	0.0095	-	0.009	-	-	0.0077
ALCAN-7075CAC	(0.140)	(0.310)	(1.66)	0.0002	(2.64)	(0.210)	0.0001	(5.64)	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
BAM-308	0.071	0.163	1.32	0.034	2.29	0.196	0.012	5.67	0.029	-	0.00022	-	-	-
MBH-59X G7075 A	0.147	0.239	1.68	0.0757	2.324	0.196	0.0045	5.69	0.0615	-	-	-	-	-
IARM-343A-G	[0.20]	[0.23]	[1.37]	[0.093]	[2.17]	[0.21]	[0.010]	[5.7]	[0.043]	[(0.001)]	[0.0009]	-	[(0.001)]	-
ALPEC-9156	0.26	0.048	1.45	0.298	2.50	0.106	0.059	5.70	0.011	-	0.002	-	-	0.0105
ALCAN-7075AF	0.19	0.17	1.75	0.031	2.66	0.22	0.027	5.75	0.092	-	0.0011	0.007	0.0034i	0.0009i
ALCAN-7075CAE	(0.18)	(0.29)	(1.65)	0.0005	(2.58)	(0.21)	0.0001	(5.76)	0.0002	0.0001	<0.0001	<0.0001	<0.0001	0.0001
SEI-NK7075-NDC2	0.199	0.30	1.50	0.112	2.51	0.205	0.045	5.80	0.024	-	0.0027	-	-	-
ALCOA-WA7075	0.15x	0.25	1.2x	0.10x	2.6x	0.25	<0.0050	5.8x	0.05x	-	0.001x	-	-	-
ALCOA-WH7075	0.10x	0.35	1.6x	0.03x	2.6x	0.30	<0.0050	5.8x	0.01x	-	0.008x	-	-	-
ALCOA-WG7075	0.30	0.15x	1.6x	0.20x	2.6x	0.18x	<0.0050	5.8x	0.08x	-	0.001x	-	-	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALPEC-6017	-	-	-	0.00053	-	0.0163	-	0.0158	-	0.0311	0.138			
ALCAN-7075CAC	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0004	<0.0001	<0.0001	<0.0001	0.0001	<0.0001			
BAM-308	-	-	-	-	-	-	-	-	-	-	0.0078			
MBH-59X G7075 A	-	0.0088	-	-	-	0.0177	-	0.0008	-	-	0.0008			
IARM-343A-G	[(0.001)]	[0.009]	-	[(0.003)]	[(0.002)]	[0.006]	-	[(0.003)]	-	[0.004]	[0.013]			
ALPEC-9156	-	-	-	-	-	0.015	-	0.017	-	0.0315	-			
ALCAN-7075AF	-	0.019	0.0028i	0.0029i	0.001	0.0073	0.0026	0.014	0.0032i	0.02	0.0024			
ALCAN-7075CAE	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	<0.0001	0.0003	<0.0001	0.0001	<0.0001			
SEI-NK7075-NDC2	-	-	-	-	-	-	-	-	-	0.0043	0.142			
ALCOA-WA7075	-	-	-	-	-	-	-	-	-	-	-			
ALCOA-WH7075	-	-	-	-	-	-	-	-	-	-	-			
ALCOA-WG7075	-	-	-	-	-	-	-	-	-	-	-			

Product Code
ALPEC-6017
ALCAN-7075CAC
BAM-308
MBH-59X G7075 A
IARM-343A-G
ALPEC-9156
ALCAN-7075AF
ALCAN-7075CAE
SEI-NK7075-NDC2
ALCOA-WA7075
ALCOA-WH7075
ALCOA-WG7075

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 57x25mm	7075	CRM	W
Ø 60x25mm	7033	RM	C
Ø 50x20mm	7075	CRM	W
Ø 57x25mm	7055	CRM	W
Ø 55x30mm		CRM	CCC
Ø 57x25mm	7075	CRM	W
Ø 57x25mm	7075	CRM	W
Ø 55x25mm		CRM	C
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7075	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-WD7075	0.15x	0.25	1.6x	0.10x	2.9x	0.25	<0.0050	5.8x	0.05x	-	-	-	0.004x	-
ALCOA-WC7075	0.15x	0.25	1.6x	0.10x	2.6x	0.25	<0.0050	5.8x	0.05x	-	-	-	0.004x	-
ALCOA-SS7075	0.16x	0.25	1.6x	0.08x	2.6x	0.22x	<0.0050	5.8x	0.04x	<0.0010	<0.0010	<0.001	<0.0005	<0.0010
ALCOA-WB7075	0.15x	0.25	2.0x	0.10x	2.6x	0.25	<0.0050	5.8x	0.05x	-	-	-	0.002x	-
ALSUI-734/02	0.25	0.36	2.07	0.51	3.0	0.18	0.052	6.16	0.035	-	-	-	-	-
MBH-59X G7050 A	0.04	0.08	2.20	0.005	2.0	0.01	0.003	6.20	0.02	-	-	0.001	-	-
ALCOA-WF7075	0.15x	0.25	1.6x	0.10x	2.6x	0.25	<0.0050	6.2x	0.05x	-	-	-	<0.0005	-
ALCOA-SS7050	0.08x	0.15x	2.4x	0.03x	2.3x	0.02x	0.02x	6.2x	0.04x	<0.0010	<0.0010	<0.0010	0.001x	<0.0010
ALCAN-7010CAD	0.10	(0.14)	1.83	(0.09)	2.4	<0.0001	<0.0001	6.22	0.0001	-	-	0.0001	<0.0001	0.0001
ALPEC-10843	(0.08)	(0.12)	(1.60)	(0.02)	(2.80)	(0.15)	-	6.40	(0.010)	-	-	-	(0.001)	-
ALCAN-7010CAB	(0.11)	(0.14)	(1.89)	(0.081)	(2.51)	0.0001	0.0001	(6.45)	0.0001	-	-	<0.0001	<0.0001	<0.0001
ALCOA-ST1-7000	0.15x	0.25	1.5x	0.25	2.5x	0.15x	0.02x	6.5x	0.04x	0.001x	-	<0.0005	0.0005	0.001x

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALCOA-WD7075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-WC7075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7075	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-WB7075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-734/02	-	-	0.0214	-	-	-	-	-	-	0.01	-	-	0.004	-
MBH-59X G7050 A	-	-	-	-	-	-	-	-	-	0.005	-	-	0.001	-
ALCOA-WF7075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7050	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-7010CAD	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	0.0003	<0.0001
ALPEC-10843	-	-	-	-	-	-	-	-	-	-	-	-	(0.0010)	-
ALCAN-7010CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	0.0001	0.0001	<0.0001	-	<0.0001	<0.0001
ALCOA-ST1-7000	-	0.001x	0.001x	0.02x	0.003x	-	-	-	-	0.003x	0.001x	-	0.001x	0.001x

Product Code	V	Zr
ALCOA-WD7075	-	-
ALCOA-WC7075	-	-
ALCOA-SS7075	0.01x	<0.0030
ALCOA-WB7075	-	-
ALSUI-734/02	0.029	0.05
MBH-59X G7050 A	0.01	0.10
ALCOA-WF7075	-	-
ALCOA-SS7050	<0.0050	0.12x
ALCAN-7010CAD	<0.0001	(0.14)
ALPEC-10843	(0.005)	-
ALCAN-7010CAB	0.0001	(0.15)
ALCOA-ST1-7000	0.01x	0.001x

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 60x25mm		CRM	CCC
Ø 50x20mm	7050	CRM	W
Ø 64x25mm	7075	CRM	W
Ø 64x25mm	7050	CRM	W
Ø 57x25mm	7010	CRM	W
Ø 55x30mm		CRM	CCC
Ø 57x25mm	7010	CRM	W
Ø 64x25mm		CRM	W

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALPEC-9157	(0.10)	(0.15)	(1.50)	(0.05)	(2.5)	(0.20)	(0.01)	6.70	(0.02)	-	-	-	(0.003)	-
ALCOA-SS7178	0.15x	0.20x	2.0x	0.08x	2.9x	0.25	0.02x	6.8x	0.05x	<0.0010	<0.0010	<0.0010	0.0001	<0.0010
ERM-EB317	0.0271	0.112	1.77	0.0912	2.39	0.141	0.0359	6.92	0.0952	0.0073	-	0.0037	0.00101	0.0041
ALCAN-7050CAD	(0.11)	(0.15)	(2.0)	(0.08)	(2.0)	<0.0001	<0.0001	(7.0)	0.0001	-	-	0.0001	<0.0001	<0.0001
ALCAN-75SCCI	-	(0.001)	(1.60)	(0.001)	(2.40)	(0.001)	(0.001)	(7.50)	(0.001)	-	-	-	-	(0.001)
ALCOA-SS7085	0.03	0.04	1.70	0.02	1.50	0.02	-	7.50	0.03	-	-	-	-	-
ALCOA-SS7001	0.10x	0.15x	2.1x	0.04x	3.1x	0.21x	0.01x	7.6x	0.03x	<0.0010	<0.0010	<0.0010	0.003x	<0.0010
ALPEC-10840	(0.08)	(0.12)	(1.60)	(0.02)	2.15	(0.15)	-	(7.80)	(0.01)	-	-	-	(0.001)	-
ALPEC-10838	(0.08)	(0.12)	0.76	(0.02)	(2.80)	(0.15)	-	(7.80)	(0.01)	-	-	-	(0.001)	-
ALPEC-10839	(0.08)	(0.12)	2.32	(0.02)	(2.80)	(0.15)	-	(7.80)	(0.01)	-	-	-	(0.001)	-
ALPEC-10841	(0.08)	(0.12)	(1.60)	(0.02)	3.60	(0.15)	-	(7.80)	(0.01)	-	-	-	(0.001)	-
MBH-59X G7068 A	0.051	0.117	1.676	0.0156	2.70	0.03	0.0056	7.96	0.0419	-	-	-	-	-
ALCAN-6052CAE	(0.19)	(0.60)	(0.56)	<0.0001	(0.52)	<0.0001	<0.0001	(8.0)	<0.0001	-	-	<0.0001	<0.0001	<0.0001

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALPEC-9157	-	(0.005)	-	-	-	-	-	-	-	(0.005)	-	-	(0.005)	-
ALCOA-SS7178	<0.0005	<0.0010	<0.0010	0.015	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ERM-EB317	0.0006	-	-	0.0183	-	0.0162	-	-	0.0027	0.00479	-	-	0.0237	-
ALCAN-7050CAD	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	0.0001	0.0002	0.0002	-	0.002	<0.0001
ALCAN-75SCCI	-	-	(0.004)	(0.001)	-	-	-	-	-	(0.001)	-	-	(0.001)	-
ALCOA-SS7085	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7001	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALPEC-10840	-	-	-	-	-	-	-	-	-	-	-	-	(0.001)	-
ALPEC-10838	-	-	-	-	-	-	-	-	-	-	-	-	(0.001)	-
ALPEC-10839	-	-	-	-	-	-	-	-	-	-	-	-	(0.001)	-
ALPEC-10841	-	-	-	-	-	-	-	-	-	-	-	-	(0.001)	-
MBH-59X G7068 A	-	-	-	-	-	-	-	-	-	0.002	-	-	0.001	-
ALCAN-6052CAE	<0.0001	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001

Product Code	V	Zr
ALPEC-9157	(0.005)	-
ALCOA-SS7178	0.01x	<0.0030
ERM-EB317	0.0105	0.13
ALCAN-7050CAD	<0.0001	(0.14)
ALCAN-75SCCI	(0.001)	-
ALCOA-SS7085	-	0.1
ALCOA-SS7001	0.01x	<0.0030
ALPEC-10840	(0.005)	-
ALPEC-10838	(0.005)	-
ALPEC-10839	(0.005)	-
ALPEC-10841	(0.005)	-
MBH-59X G7068 A	-	0.088
ALCAN-6052CAE	<0.0001	-

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 64x25mm	7178	CRM	W
Ø 50x30mm	7150 Mod.	CRM	C
Ø 57x25mm	7050	CRM	W
Ø 57x25mm		CRM	W
Ø 64x25mm	7085	CRM	W
Ø 64x25mm	7001	CRM	W
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 50x20mm	7068	CRM	W
Ø 57x25mm	6052	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Cu/Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Ca	Cd	Co	Ga
IARM-111B-G	[0.05]	[0.09]	[2.29]	[0.001]	[2.04]	[0.001]	[0.004]	[8.1]	[0.018]	-	[(0.002)]	[(0.0002)]	-	[0.013]
ALPEC-757	(0.08)	(0.12)	1.53	(0.02)	2.70	(0.150)	-	9.54	(0.001)	(0.001)	-	-	-	-
MBH-59X G77J6 B	0.094	0.293	1.08	0.0318	2.60	0.0127	0.0248	12.02	0.02	0.0079	-	0.0015	0.0087	-

Product Code	P	Pb	Sn	V	Zr
IARM-111B-G	[(0.001)]	[0.001]	[(0.003)]	[0.005]	[0.15]
ALPEC-757	-	-	(0.001)	(0.005)	-
MBH-59X G77J6 B	-	0.0123	0.0267	0.0107	0.261

Size	Grade	Type	Form
Ø 57x25mm		CRM	W
Ø 55x32mm		CRM	CCC
Ø 50x17mm		CRM	CCC

Cu/Mg/Zn/Al Specially-Priced Standards

Product Code	Cr	Cu	Fe	Mg	Mn	Ni	Pb	Si	Sn	Ti	Zn	Zr		
PB AZ1	0.29	3.63	0.19	3.76	0.092	0.34	0.22	0.12	0.24	(0.21)	2.51	(0.25)		
PB AZ2	0.15	0.64	0.35	3.0	0.22	(<0.01)	(<0.01)	0.36	(<0.01)	0.079	5.92	(0.082)		
PB AZ3	0.16	1.75	0.42	2.14	0.37	0.11	0.072	0.46	0.07	0.043	6.05	0.042		
PB AZ4	0.10	0.041	0.45	0.93	0.29	0.024	0.032	0.45	0.02	0.19	4.31	0.019		
PB AZ5	0.041	2.59	0.46	0.30	0.39	0.20	0.15	0.49	0.17	0.33	3.39	0.20		
PB AZ6	0.20	0.11	0.25	1.05	0.34	0.036	0.036	0.24	0.03	0.048	4.50	0.15		

Product Code
PB AZ1
PB AZ2
PB AZ3
PB AZ4
PB AZ5
PB AZ6

Size	Grade	Type	Unit
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc

Values listed in mass %; () Uncertified Value

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Cu/Ni/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Bi	Cd	Co	Pb
ALCAN-A200AA	0.20	0.20	1.15	0.043	0.027	0.047	1.14	0.05	0.049	-	0.04	3.10	-	0.046
MBH-56X G250J1 C	0.26	0.41	3.82	0.04	0.075	0.0067	1.33	0.28	0.008	-	-	-	0.008	0.101
MBH-56X G250J5 D	0.205	0.535	4.36	0.15	0.022	0.047	1.77	0.086	0.051	0.0022	-	-	0.34	0.076
ALSUI-271/01	0.19	0.307	4.47	0.206	0.075	0.012	2.05	0.012	0.158	-	-	-	0.203	-
ALSUI-274/01	0.05	0.105	4.77	0.207	0.098	0.011	1.51	0.014	0.231	-	-	-	0.30	-
ALSUI-275/01	0.09	0.205	4.78	0.053	0.036	0.01	1.73	0.012	0.158	-	-	-	0.104	-
MBH-56X G250J2 D	0.211	0.346	4.81	0.225	0.06	0.063	1.10	0.155	0.21	-	-	-	0.195	(0.0016)
MBH-56X G250J3 C	0.11	0.079	4.90	0.278	(0.001)	0.024	0.92	0.103	0.162	0.0014	-	-	0.264	0.024
ALSUI-273/01	0.148	0.263	5.09	0.306	0.065	0.012	1.34	0.014	0.229	-	-	-	0.40	-
MBH-56X G250J7 A	0.23	0.43	5.14	0.17	0.06	0.09	1.30	0.185	0.247	-	-	-	1.48	<0.01
ALSUI-272/01	0.097	0.206	5.22	0.104	0.162	0.012	1.75	0.022	0.197	-	-	-	0.103	-

Product Code	Sb	Sn	V	Zr										
ALCAN-A200AA	-	0.042	-	(0.003)										
MBH-56X G250J1 C	(0.003)	0.125	0.102	0.003										
MBH-56X G250J5 D	0.076	0.097	0.021	0.22										
ALSUI-271/01	0.40	-	0.015	0.104										
ALSUI-274/01	0.27	-	0.014	0.171										
ALSUI-275/01	0.096	-	0.016	0.103										
MBH-56X G250J2 D	0.324	(0.004)	0.018	0.247										
MBH-56X G250J3 C	0.35	0.031	0.036	0.275										
ALSUI-273/01	0.199	-	0.016	0.233										
MBH-56X G250J7 A	0.24	<0.01	-	<0.01										
ALSUI-272/01	0.54	-	0.026	0.194										

Product Code
ALCAN-A200AA
MBH-56X G250J1 C
MBH-56X G250J5 D
ALSUI-271/01
ALSUI-274/01
ALSUI-275/01
MBH-56X G250J2 D
MBH-56X G250J3 C
ALSUI-273/01
MBH-56X G250J7 A
ALSUI-272/01

Size	Grade	Type	Form
Ø 57x25mm	8001	CRM	W
Ø 40x15mm		CRM	C
Ø 40x15mm		CRM	C
Ø 60x25mm	203	CRM	CCC
Ø 60x25mm	203	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 40x13mm		CRM	C
Ø 60x25mm	203	CRM	CCC
Ø 40x15mm		RM	C
Ø 60x25mm	203	CRM	CCC

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Co	Sb	V	Zr	
ALSUI-276/01	0.05	0.096	5.30	0.251	0-0.001	0-0.001	1.02	0-0.005	0.213	0.245	0.237	0.004	0.0002	

Product Code
ALSUI-276/01

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ERM-EB313	0.363	0.391	0.0932	0.495	3.40	0.1224	0.0278	0.1579	0.0947	-	0.00072	-	0.000547	0.0095
ALCOA-WA5454	0.08x	0.10x	0.02x	0.50	2.5x	0.55x	0.03x	0.15x	0.02x	-	-	-	0.001x	-
ALCOA-SS7005	0.15x	0.20x	0.10x	0.50	1.3x	0.10x	0.02x	4.5x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS5086	0.15x	0.25	0.05x	0.50	4.0x	0.12x	0.03x	0.05x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-WA5456	0.10x	0.25	0.10x	0.50	5.5x	0.15x	0.01x	0.25	0.05x	-	-	-	0.001x	-
ALSUI-716/02	0.10	0.26	0.051	0.50	3.50	0.036	0.05	4.50	0.033	-	-	-	0.001	-
ALSUI-723/01	0.30	0.33	0.115	0.50	1.80	0.22	0.052	4.69	0.035	-	-	-	-	-
ALSUI-553/01	0.039	0.202	0.048	0.50	1.48	0.106	0-0.001	0.021	0.032	-	-	-	-	-
ALCAN-5016AA	0.25	0.76	0.036	0.50	2.48	0.017	0.015	0.08	0.015	-	-	-	0.0038	0.019i
ALSUI-631/01	0.53	0.105	0.0105	0.505	0.515	0.103	0.01	0.018	0.0078	-	-	-	-	-
ALSUI-543/01	0.078	0.515	0.019	0.511	4.05	0.24	-	0.101	0.036	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn	Sr
ERM-EB313	0.00057	0.00074	-	0.0121	0.00041	0.0006	0.00053	0.0037	-	0.00433	0.00087	-	0.0197	-
ALCOA-WA5454	-	-	-	0.02x	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7005	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-SS5086	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-WA5456	-	-	-	0.02x	-	-	-	-	-	-	-	-	-	-
ALSUI-716/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-723/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-553/01	-	-	-	-	-	0.0005	-	(0.0027)	-	0.02	-	-	-	-
ALCAN-5016AA	0.0031i	0.0012	-	0.023	-	0.0028i	-	0.0026i	0.0014i	0.014	0.0025	-	0.014	0.0029i
ALSUI-631/01	-	-	-	-	-	-	-	(0.0004)	-	0.006	-	-	-	-
ALSUI-543/01	(0.012)	-	-	-	-	0.0005	-	0.0029	-	0.0095	-	-	0.0104	-

Product Code	Tl	V	Zr
ERM-EB313	0.00064	0.0299	0.0359
ALCOA-WA5454	-	0.01x	-
ALCOA-SS7005	-	0.01x	0.14x
ALCOA-SS5086	-	0.01x	<0.0030
ALCOA-WA5456	-	0.01x	-
ALSUI-716/02	-	-	-
ALSUI-723/01	-	-	0.16
ALSUI-553/01	-	0.0245	-
ALCAN-5016AA	-	0.023	0.0033
ALSUI-631/01	-	-	-
ALSUI-543/01	-	-	-

Size	Grade	Type	Form
Ø 60x25mm	5086	CRM	C
Ø 64x25mm	5454	CRM	W
Ø 64x25mm	7005	CRM	W
Ø 64x25mm	5086	CRM	W
Ø 64x25mm	5456	CRM	W
Ø 60x25mm	705	CRM	CCC
Ø 60x25mm	7005 Mod.	CRM	CCC
Ø 60x25mm	5016	CRM	CCC
Ø 57x25mm	5016	CRM	W
Ø 60x25mm	3015	CRM	CCC
Ø 60x25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al	B	Be	Bi	Ca
VAW-2652-2	1.765	0.831	0.0472	0.513	7.75	0.00541	0.00537	0.0225	0.0595	89.0	<0.0002	0.00316	0.00017	0.00045
ALSUI-555/03	0.419	0.404	0.107	0.516	3.01	0.105	0.011	0.101	0.094	-	-	-	0.017	-
ALCAN-7004AA	0.17	0.27	0.052	0.52	1.76	0.034	0.043	5.15	0.051	-	-	0.0013	0.022i	0.004
ALSUI-312/01	0.10	0.36	0.19	0.52	0.60	0.048	0.03	0.055	0.03	-	-	-	-	-
SEI-NKAC7A-NDC1	0.612	0.561	0.094	0.52	4.50	0.098	0.051	0.153	0.108	-	-	0.0048	-	-
ALCAN-3105CAI	(0.24)	(0.54)	(0.098)	(0.52)	(0.49)	(0.099)	<0.0001	(0.16)	<0.0001	-	0.0001	<0.0001	<0.0001	<0.0001
VAW-2110-2	0.95	0.235	0.069	0.521	0.616	0.00973	0.0094	0.0099	0.0246	(97.5)	0.00094	0.00103	0.0039	0.0022
ALCAN-3105CAF	(0.25)	(0.54)	(0.09)	(0.53)	(0.52)	(0.10)	0.0004	(0.14)	<0.0001	-	0.0002	<0.0001	<0.0001	<0.0001
ALSUI-713/01	0.33	0.35	0.10	0.53	1.67	0.19	-	4.60	0.017	-	-	-	-	-
MBH-511X G6082A	0.753	0.081	0.0184	0.534	0.759	0.0606	0.0035	0.054	0.0278	-	-	-	(0.0008)	-
ALCAN-B320AA	0.83	0.80	0.054	0.54	3.38	0.032	0.029	0.041	0.047	-	-	-	0.042	-
ALCAN-310AH	0.51	0.59	0.25	0.54	0.52	0.16	0.02	0.13	0.045	-	-	-	0.008	0.0023
MBH-511X G05H4 F	0.11	0.14	0.056	0.55	5.10	0.029	0.04	0.062	0.048	-	-	0.014	-	-
Product Code	Cd	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr		
VAW-2652-2	0.00139	-	0.0102	0.00072	0.00086	-	0.00342	-	0.00315	0.00054	0.00843	0.00429		
ALSUI-555/03	-	-	-	-	0.0004	-	0.01	-	-	-	0.0083	0.0092		
ALCAN-7004AA	0.0014	-	0.03	0.0015	0.0049i	0.001	0.029	0.0028	0.032	0.0027	0.032	0.14		
ALSUI-312/01	-	-	-	-	0.0048-0.0053	-	0.027	-	-	-	-	-		
SEI-NKAC7A-NDC1	-	-	-	-	-	-	0.049	-	0.046	-	-	-		
ALCAN-3105CAI	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0003		
ALCAN-3105CAF	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002		
ALSUI-713/01	-	-	-	-	-	-	-	-	-	-	-	0.17		
VAW-2110-2	0.00171	0.00139	0.00842	0.00191	0.00162	0.0031	0.0052	0.0049	0.0051	0.0017	0.0069	0.00281		
MBH-511X G6082A	-	-	-	-	-	-	0.0012	-	0.0011	-	-	-		
ALCAN-B320AA	-	-	0.017	-	-	-	0.041	-	0.04	-	0.011	-		
ALCAN-310AH	0.0013	-	0.021	0.0017i	0.0022i	0.0031	0.0086	0.0026	0.02	0.0021	0.021	0.0026		
MBH-511X G05H4 F	-	-	-	-	-	-	0.15	-	0.14	-	-	-		
Product Code											Size	Grade	Type	Form
VAW-2652-2											Ø 60x20mm		CRM	CCC
ALSUI-555/03											Ø 60x20mm		CRM	CCC
ALCAN-7004AA											Ø 57x25mm	7004	CRM	W
ALSUI-312/01											Ø 60x25mm	3016	CRM	CCC
SEI-NKAC7A-NDC1											Ø 55x25mm		CRM	C
ALCAN-3105CAI											Ø 57x25mm	3105	CRM	W
ALCAN-3105CAF											Ø 57x25mm	3105	CRM	W
ALSUI-713/01											Ø 60x25mm	705	CRM	CCC
VAW-2110-2											Ø 60x20mm		CRM	CCC
MBH-511X G6082A											Ø 50x20mm	6082	CRM	W
ALCAN-B320AA											Ø 57x25mm	515.2	CRM	CCC
ALCAN-310AH											Ø 57x25mm		CRM	W
MBH-511X G05H4 F											Ø 50x20mm	5283	RM	C

Values listed in mass %; () Uncertified Value

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-SS7076	0.15x	0.35	0.65	0.55	1.7x	0.02x	0.02x	7.6x	0.05x	<0.0010	<0.0010	<0.0010	0.002x	<0.0010
VAW-2207	0.90	0.35	0.022	0.56	1.21	0.018	-	0.029	0.014	-	-	<0.001	-	-
ALCAN-3105AE	0.28	0.60	0.26	0.56	0.51	0.089	0.031	0.19	0.053	-	-	-	0.0012	0.0065
MBH-511X G6082 B	0.91	0.18	0.0141	0.566	0.66	0.0055	0.0044	0.0016	0.0158	-	-	-	-	(0.0007)
SEI-NK3105-NDC1	0.321	0.628	0.182	0.578	0.492	0.099	0.031	0.15	0.097	-	-	(0.002)	0.0026	0.02
SEI-NK7NO1-NDC	0.106	0.163	0.055	0.613	1.50	0.113	0.01	4.26	0.08	-	-	-	<0.0002	-
ALPEC-1243	0.088	0.267	0.0049	0.629	0.0007	0.0016	0.0504	0.009	0.0076	-	-	-	-	-
BAS-IMI24WM6	6.55	1.02	1.85	0.63	0.20	0.19	0.45	0.56	0.23	-	-	-	-	-
ALSUI-313/01	0.14	0.50	0.10	0.65	0.23	0.031	0.022	0.037	0.02	-	-	-	-	-
ALCAN-B53SAG	0.16	0.54	0.077	0.67	1.72	0.023	0.031	0.03	0.026	-	-	-	-	(0.016)
VAW-2505-2	0.31	0.31	0.034	0.69	4.67	0.095	0.0031	0.012	0.02	-	-	<0.001	0.0012	0.0073
ALCAN-5017AA	0.37	0.40	0.28	0.70	1.95	0.016	0.03	0.026	0.036	-	-	-	0.003	0.02

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCOA-SS7076	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
VAW-2207	-	-	-	-	-	-	-	-	1.42	-	-	-	-	-
ALCAN-3105AE	0.0024	0.0014	-	0.021	-	0.0025i	0.0034i	0.0034	0.006	0.0038	-	0.0058	0.0029	0.021
MBH-511X G6082 B	-	-	-	-	-	-	-	-	(0.0009)	-	-	(0.0006)	-	-
SEI-NK3105-NDC1	0.0023	0.0097	0.0092	0.038	-	(0.00014)	(0.00180)	(0.0036)	0.019	-	-	0.02	0.0034	0.023
SEI-NK7NO1-NDC	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0019
ALPEC-1243	-	-	-	-	-	-	-	-	0.0468	-	-	0.047	-	-
BAS-IMI24WM6	-	-	-	-	-	-	-	-	0.26	-	-	0.10	-	-
ALSUI-313/01	-	-	-	-	-	-	0.0027-0.0033	-	0.02	-	-	-	-	-
ALCAN-B53SAG	0.0083	-	-	0.014	-	0.0005	0.005	0.0002	0.027	-	-	0.029	-	0.017
VAW-2505-2	0.0017	-	<0.001	0.011	-	0.0015	0.0016	-	0.031	-	-	-	-	-
ALCAN-5017AA	0.005	-	-	0.026	-	0.004	0.0044	-	0.026	-	-	0.027	0.0022	0.009

Product Code	Zr
ALCOA-SS7076	<0.0030
VAW-2207	-
ALCAN-3105AE	0.0035
MBH-511X G6082 B	-
SEI-NK3105-NDC1	0.021
SEI-NK7NO1-NDC	0.101
ALPEC-1243	-
BAS-IMI24WM6	-
ALSUI-313/01	-
ALCAN-B53SAG	-
VAW-2505-2	0.001
ALCAN-5017AA	0.014

Size	Grade	Type	Form
Ø 64x25mm	7076	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	3105	CRM	W
Ø 50x20mm		CRM	W
Ø 55x25mm		CRM	C
Ø 55x25mm		CRM	C
Ø 55x30mm		CRM	CCC
Ø 58x7mm		CRM	C
Ø 60x25mm	3105	CRM	CCC
Ø 57x25mm	5454	CRM	W
Ø 60x20mm	5083	CRM	CCC
Ø 57x25mm	5017	CRM	W

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-B53SAH	0.15	0.54	0.022	0.70	1.84	0.027	0.032	0.03	0.026	-	-	0.01	0.0084	-
ALSUI-547/01	0.155	0.406	0.104	0.702	4.58	0.158	0.011	0.065	0.099	-	0.0011	0.0036	0.0004-0.0007	0.0049
ALCAN-6070AC	1.25	0.26	0.33	0.74	0.75	0.019	0.019	0.021	0.021	-	0.0012	0.0063	0.0029	0.001
ALCAN-5083AF	0.17	0.34	0.078	0.74	4.85	0.15	0.03	0.05	0.027	-	0.0012	0.008	0.0031	0.0012
ALCAN-5454AC	0.25	0.40	0.10	0.75	3.16	0.03	0.033	0.03	0.064	-	0.0011	0.0048	0.0022i	0.0014
MBH-511X G3000B1 C	0.788	0.669	0.287	0.752	0.253	0.0972	0.142	0.0347	0.0327	-	(<0.0001)	-	-	-
ALSUI-321/01	0.348	0.051	0.10	0.76	0.11	0.02	0.022	0.01	0.15	-	-	-	-	-
ALCAN-B53SAD	0.16	0.58	0.15	0.76	2.5	0.023	0.031	0.033	0.042	-	0.001	0.019	-	-
VAW-2109-1	0.62	0.17	0.0066	0.78	0.55	0.0022	0.0029	0.029	0.018	<0.0002	<0.0001	<0.0002	0.0003	0.0011
SEI-NK5183-NDC	0.291	0.29	0.051	0.78	5.04	0.193	0.019	0.052	0.04	-	0.0028	-	-	-
ALSUI-552/02	0.144	0.097	0.099	0.798	1.95	0.198	0.0048	0.061	0.01	-	0.001	-	0.0009	0.0022

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALCAN-B53SAH	-	0.014	0.0006	0.006	0.0002	0.028	-	0.029	-	0.017	-			
ALSUI-547/01	-	0.013	0.00060	0.00150-0.00250	-	0.0057	-	0.0055	-	0.012	0.0056			
ALCAN-6070AC	-	0.02	0.0029i	0.0033i	0.0036	0.008	0.0027	0.0069	0.0036	0.016	0.003			
ALCAN-5083AF	-	0.022	0.0039i	0.0039i	0.0014	0.0077	0.0012	0.02	0.0033	0.021	0.0035			
ALCAN-5454AC	0.0015	0.022	0.0030i	0.0038i	0.0013	0.0035	0.0032	0.0029	0.002	0.02	0.0029			
MBH-511X G3000B1 C	-	0.051	-	-	-	0.145	-	0.163	-	0.054	-			
ALSUI-321/01	-	-	-	0.0011	-	0.021	-	-	-	0.031	-			
ALCAN-B53SAD	-	0.015	-	-	-	0.023	-	0.026	-	0.018	-			
VAW-2109-1	<0.0002	0.011	0.0006	0.0008	-	0.0007	<0.0003	<0.0005	<0.0001	0.0016	0.0012			
SEI-NK5183-NDC	-	-	-	-	-	-	-	-	-	-	-			
ALSUI-552/02	-	-	0.00045	0.0016	-	0.0038	-	0.0187	-	0.0092	0.005			

Product Code
ALCAN-B53SAH
ALSUI-547/01
ALCAN-6070AC
ALCAN-5083AF
ALCAN-5454AC
MBH-511X G3000B1 C
ALSUI-321/01
ALCAN-B53SAD
VAW-2109-1
SEI-NK5183-NDC
ALSUI-552/02

Size	Grade	Type	Form
Ø 57x25mm	5016	CRM	W
Ø 60x25mm	5087	CRM	CCC
Ø 57x25mm	6070	CRM	W
Ø 57x25mm	5183	CRM	W
Ø 57x25mm	5454	CRM	W
Ø 40x15mm		CRM	C
Ø 60x25mm	3107	CRM	CCC
Ø 57x25mm	5454	CRM	W
Ø 60x20mm	6082	CRM	CCC
Ø 55x25mm		CRM	C
Ø 60x25mm	5049	CRM	CCC

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-SS5083	0.15x	0.20x	0.05x	0.80	4.5x	0.10x	0.01x	0.05x	0.05x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS5456	0.15x	0.20x	0.06x	0.80	5.2x	0.10x	0.01x	0.05x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS5454	0.15x	0.20x	0.07x	0.80	2.8x	0.10x	0.01x	0.05x	0.04x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-556/01	0.24	0.495	0.019	0.80	3.29	0.25	0.0105	0.03	0.154	-	-	-	-	-
ALSUI-545/02	0.142	0.296	0.029	0.802	5.49	0.153	0.01	0.0216	0.105	-	-	-	-	-
ALSUI-542/01	0.20	0.29	0.045	0.81	4.08	0.146	-	0.054	0.0115	-	-	-	-	-
MBH-511X G3000B2 B	0.23	0.335	0.20	0.81	0.68	0.20	0.063	0.098	0.111	-	-	-	0.0017	-
VAW-2415	-	0.54	0.017	0.87	0.25	<0.001	-	0.035	0.03	-	-	-	-	-
ALSUI-336/01	0.29	0.40	0.20	0.88	0.017	0.162	0.033	0.007	0.054	-	-	-	-	-
ALCAN-B3SAF	0.27	0.48	0.043	0.88	0.35	0.027	0.036	0.051	0.032	-	-	-	0.007	0.037
ALPEC-6038	0.172	0.109	0.1507	0.889	3.00	0.0444	0.0021	0.0583	0.1035	-	-	-	0.00222	-
VAW-2407	0.20	0.52	0.031	0.89	0.013	0.067	0.001	0.039	0.013	-	-	0.005	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn	Sr
ALCOA-SS5083	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-SS5456	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-SS5454	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	-	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALSUI-556/01	-	-	-	-	-	0.0007	-	0.0011	-	-	-	-	-	-
ALSUI-545/02	-	-	-	-	-	0.0006	-	0.00135	-	-	-	-	0.011	-
ALSUI-542/01	(0.0075)	-	-	-	-	0.0014	-	(0.003)	-	0.009	-	-	0.011	-
MBH-511X G3000B2 B	-	(0.0007)	0.007	0.012	-	0.017	(0.059)	-	-	0.137	-	-	0.105	-
VAW-2415	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-336/01	-	-	-	-	-	-	-	0.0004	-	-	-	-	-	-
ALCAN-B3SAF	-	-	-	0.015	-	0.003	-	-	0.0001	0.038	-	-	0.045	-
ALPEC-6038	-	-	-	-	-	-	-	0.00009	-	0.0502	-	-	0.0009	-
VAW-2407	-	-	-	-	-	-	-	-	-	0.002	-	-	-	-

Product Code	V	Zr
ALCOA-SS5083	0.01x	<0.0030
ALCOA-SS5456	0.01x	<0.0030
ALCOA-SS5454	0.01x	<0.0030
ALSUI-556/01	-	-
ALSUI-545/02	-	-
ALSUI-542/01	0.01	-
MBH-511X G3000B2 B	<0.005	-
VAW-2415	-	-
ALSUI-336/01	0.023	0.17
ALCAN-B3SAF	0.012	-
ALPEC-6038	-	0.0024
VAW-2407	-	0.0026

Size	Grade	Type	Form
Ø 64x25mm	5083	CRM	W
Ø 64x25mm	5456	CRM	W
Ø 64x25mm	5454	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x25mm	5456	CRM	CCC
Ø 60x25mm	5383	CRM	CCC
Ø 40x15mm	3007	CRM	C
Ø 60x20mm		RM	CCC
Ø 60x25mm	3011	CRM	CCC
Ø 57x25mm	3105	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm	3012	RM	C

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALSUI-333/02	0.10	0.77	0.05	0.90	0.041	0.023	0.011	0.021	0.024	-	-	-	-	-
ALCAN-P57SAA	0.20	0.56	0.10	0.90	1.81	0.049	0.041	0.10	0.05	-	-	0.04	0.0029	-
ALPEC-758	0.4824	0.1488	0.503	0.908	0.0992	0.0112	0.0022	0.0224	0.0384	-	-	-	-	-
MBH-511X G6012	1.35	0.285	0.114	0.91	1.10	0.269	0.0154	0.255	0.016	-	0.0072	0.552	-	-
ALCAN-3204AA	0.23	0.43	0.21	0.91	1.34	0.027	0.031	0.028	0.035	-	0.001	0.017	0.0024i	-
MBH-511X G3000B4 C	0.13	0.44	0.086	0.916	1.267	0.0121	0.0347	0.058	0.052	-	0.014	-	-	-
ALCAN-3104DAS	(0.17)	(0.42)	(0.19)	(0.93)	(1.21)	(0.015)	(0.009)	(0.130)	(0.0085)	-	(0.0013)	(0.001)	(0.002)	(0.0011)
ALCOA-WA3003	0.4	0.65	0.09x	0.95	0.01x	0.03x	0.03x	0.05x	0.03x	-	0.001x	-	-	0.001x
ALCAN-3104AR	0.21	0.42	0.23	0.96	1.19	0.015	0.031	0.12	0.03	-	0.0012	0.007	0.0026i	0.0013
VAW-2410-2	0.27	0.57	0.11	0.97	0.014	0.048	0.0025	0.029	0.013	0.0015	0.0028	0.0005	0.0013	0.0026
VAW-2105	0.86	0.39	0.12	0.97	0.59	0.16	-	0.072	0.039	0.0003	0.0046	-	0.0004	-
VAW-2413	0.50	0.42	0.036	0.97	0.027	<0.001	-	0.004	0.009	-	-	-	-	-
ALSUI-331/01	0.24	0.487	0.256	0.97	0.052	0.224	0.0027	0.0142	0.0235	-	-	-	-	-

Product Code	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr				
ALSUI-333/02	-	-	0.0005	-	0.0038	-	-	-	-	-				
ALCAN-P57SAA	0.01	0.0018	0.0013	-	0.037	-	0.04	-	0.02	-				
ALPEC-758	-	-	-	-	0.0051	-	0.0298	-	-	-				
MBH-511X G6012	-	-	-	-	1.10	-	0.04	-	-	0.032				
ALCAN-3204AA	0.018	0.0016i	0.0018i	0.001	0.012	-	0.013	0.0026i	0.022	0.0029				
MBH-511X G3000B4 C	0.0284	-	-	-	0.0285	-	0.0456	-	0.0199	-				
ALCAN-3104DAS	(0.017)	(0.0017)	(0.001)	(0.002)	(0.0062)	(0.0021)	(0.0012)	(0.0016)	(0.014)	(0.0011)				
ALCOA-WA3003	0.02x	-	-	-	0.006x	-	-	-	0.01x	-				
ALCAN-3104AR	0.021	0.0024i	0.0030i	0.0017	0.0083	0.0021	0.015	0.0022i	0.021	0.0019				
VAW-2410-2	0.03	0.0005	0.0004	0.0021	0.0021	0.001	0.003	0.0011	0.0053	0.0043				
VAW-2105	-	-	0.0003	-	0.0021	-	-	-	-	-				
VAW-2413	-	-	-	-	0.0009	-	-	-	-	-				
ALSUI-331/01	-	-	-	-	-	-	-	-	0.0121	0.128				

Product Code
ALSUI-333/02
ALCAN-P57SAA
ALPEC-758
MBH-511X G6012
ALCAN-3204AA
MBH-511X G3000B4 C
ALCAN-3104DAS
ALCOA-WA3003
ALCAN-3104AR
VAW-2410-2
VAW-2105
VAW-2413
ALSUI-331/01

Size	Grade	Type	Form
Ø 60x25mm	3307	CRM	CCC
Ø 57x25mm	5052	CRM	W
Ø 55x30mm		CRM	CCC
Ø 50x17mm	6012	CRM	C
Ø 57x25mm	3204	CRM	W
Ø 50x20mm	3104	CRM	C
Ø 57x25mm	3104	CRM	W
Ø 64x25mm	3003	CRM	W
Ø 57x25mm	3104	CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm	3017	CRM	CCC

Values listed in mass %; () Uncertified Value

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCAN-3104-CAP	(0.23)	(0.42)	(0.23)	(0.99)	(1.13)	0.001	<0.0001	0.0001	0.0001	0.0003	<0.0001	<0.0001	0.0001	<0.0001
VAW-2410-1	0.24	0.58	0.1	1.0	0.016	0.048	0.0014	0.027	0.016	0.0024	-	-	-	-
ALSUI-636/02	1.387	0.576	0.0917	1.0	1.104	0.0512	0.0531	0.0997	0.1014	-	-	0.0094	0.00068	-
ALPEC-1211	1.16	0.118	3.52	1.004	0.82	0.0625	0.0348	0.01	0.175	-	-	-	-	-
VAW-2401	0.17	0.43	0.053	1.02	0.05	0.03	-	0.072	0.049	-	-	-	-	-
ALSUI-541/02	0.305	0.095	0.095	1.03	4.0	0.049	-	0.023	0.002	-	-	-	0.0024-0.0028	-
ALSUI-554/02	0.258	0.321	0.052	1.03	2.64	0.0321	0.0086	0.11	0.0466	-	0.0024	-	-	0.0051
VAW-2400	0.16	0.42	0.045	1.03	0.055	0.031	-	0.072	0.022	-	-	-	-	-
VAW-2403-1	0.16	0.42	0.049	1.03	0.057	0.032	0.0009	0.067	0.0017	0.0065	-	-	-	-
ALSUI-233/02	0.51	0.62	0.205	1.03	0.34	0.011	0.012	0.156	0.0282	-	-	0.0052	-	-
ALSUI-544/01	0.055	0.141	0.01	1.04	5.51	0.048	0.019	0.011	0.053	-	-	-	-	-
ALCOA-WA3004	0.22x	0.6	0.10x	1.0x	1.3x	0.01x	0.01x	0.15x	<0.0050	-	-	0.005x	-	0.001x

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALCAN-3104-CAP	<0.0001	<0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
VAW-2410-1	-	-	-	-	-	0.0012	-	-	-	-	0.003			
ALSUI-636/02	-	0.00832	0.00025	0.0005	-	0.0098	0.0048	0.0095	-	0.0037	0.0032			
ALPEC-1211	-	-	-	-	-	0.0007	-	0.0815	-	-	0.0013			
VAW-2401	-	-	-	-	-	-	-	-	-	-	-			
ALSUI-541/02	-	-	0.0013	0.0070-0.0090	-	0.0094	-	0.01	-	0.0052	-			
ALSUI-554/02	-	-	0.00017	0.0039-0.0047	-	0.0091	-	0.0124	-	0.0088	-			
VAW-2400	-	-	-	-	-	-	-	-	-	-	-			
VAW-2403-1	-	0.0083	-	-	-	0.0019	-	0.0003	-	0.0014	0.0016			
ALSUI-233/02	-	-	0.0001	0.001	-	-	-	-	-	0.012	0.01			
ALSUI-544/01	-	-	0.0006	0.0014	-	-	-	-	-	-	-			
ALCOA-WA3004	-	0.02x	-	-	-	0.006x	-	-	-	0.01x	-			

Product Code
ALCAN-3104-CAP
VAW-2410-1
ALSUI-636/02
ALPEC-1211
VAW-2401
ALSUI-541/02
ALSUI-554/02
VAW-2400
VAW-2403-1
ALSUI-233/02
ALSUI-544/01
ALCOA-WA3004

Size	Grade	Type	Form
Ø 57x25mm	3104	CRM	W
Ø 60x20mm	3103	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm	3003	RM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm	3004	CRM W	W

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ni	Ti	As	B	Be	Bi	Ca
VAW-2404	0.23	0.44	0.034	1.05	0.16	0.006	0.10	-	0.011	-	-	-	-	-
ALSUI-322/03	0.105	0.408	0.0218	1.05	0.0178	0.0053	0.051	0.0009	0.011	-	-	-	0.002	-
MBH-511X G3000B3 B	0.35	0.376	0.12	1.06	0.80	0.056	0.14	0.116	0.22	(0.006)	-	0.005	-	-
VAW-2102	1.82	0.43	0.20	1.07	0.45	0.043	0.05	-	0.03	-	0.0002	0.0038	-	0.0015
ALCAN-3003AJ	0.45	0.22	0.13	1.07	0.0065	0.016	0.083	0.02	0.04	-	-	0.0011	0.0073	0.0017i
ALCAN-3203CAX	(0.30)	(0.54)	<0.0001	(1.08)	0.0002	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001
ALSUI-551/02	0.23	0.06	0.14	1.08	1.42	0.30	0.10	0-0.001	0.01	-	-	-	-	-
VAW-2411-2	0.19	0.52	0.34	1.09	0.041	0.15	0.079	0.019	0.056	-	0.0003	0.0021	0.0041	0.0005
ALCAN-X3003CAB	(0.23)	(0.59)	<0.001	(1.09)	<0.001	<0.001	(0.98)	<0.001	<0.001	-	-	<0.0001	<0.001	<0.0001
VAW-2408	0.11	0.41	0.05	1.10	0.15	0.013	0.052	-	0.007	-	-	-	-	-
MBH-511X G05H5F	0.141	0.129	0.071	1.11	9.22	0.0113	0.019	0.0129	0.0157	-	-	0.0062	-	-

Product Code	Cd	Co	Ga	Hg	Li	Mo	Na	P	Pb	Sb	Sc	Sn	Sr	Tl
VAW-2404	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-
ALSUI-322/03	-	-	-	-	-	-	-	-	0.0041	-	-	-	-	-
MBH-511X G3000B3 B	0.001	0.008	0.014	-	-	(0.093)	-	-	0.062	-	-	0.028	-	-
VAW-2102	-	-	-	-	0.0005	-	0.001	-	-	-	-	-	-	-
ALCAN-3003AJ	0.0011	-	0.02	-	0.0021i	-	0.0025i	0.0034	0.0086	0.0025	-	0.022	0.0021i	-
ALCAN-3203CAX	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	-
ALSUI-551/02	-	-	-	-	0.0015	-	(0.0045)	-	0.019	-	-	-	-	-
VAW-2411-2	0.0028	0.0021	0.015	-	0.0002	-	0.0003	-	0.005	-	0.044	0.0085	-	0.0029
ALCAN-X3003CAB	-	-	<0.001	-	<0.0001	-	<0.0001	0.0006	<0.001	-	-	<0.001	-	-
VAW-2408	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-511X G05H5F	-	-	-	-	-	-	-	-	0.185	-	-	0.0089	-	-

Product Code	V	Zr
VAW-2404	-	0.005
ALSUI-322/03	0.0095	0.067
MBH-511X G3000B3 B	<0.005	-
VAW-2102	-	-
ALCAN-3003AJ	0.021	0.0027
ALCAN-3203CAX	<0.0001	<0.0001
ALSUI-551/02	0.022	-
VAW-2411-2	0.02	0.0066
ALCAN-X3003CAB	<0.001	<0.001
VAW-2408	-	-
MBH-511X G05H5F	0.041	0.107

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 60x25mm	3012	CRM	CCC
Ø 40x15mm	3104	CRM	C
Ø 60x20mm		RM	CCC
Ø 57x25mm	3003	CRM	W
Ø 57x25mm	3203	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x20mm	3103	CRM	CCC
Ø 57x25mm		CRM	W
Ø 60x20mm		RM	CCC
Ø 50x20mm		CRM	C

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	B	Be	Bi	Ca
VAW-2417-1	0.23	0.48	0.097	1.12	0.05	0.016	0.017	0.025	0.018	-	0.0007	0.0009	0.0053	0.0007
ALPEC-68452	(0.16)	(0.31)	(0.11)	(1.14)	(0.88)	(0.03)	(0.02)	(0.10)	(0.060)	-	-	-	-	-
ALCAN-3203AG	0.33	0.54	0.052	1.14	0.032	0.029	0.033	0.039	0.029	-	-	0.0011	0.028	0.0022i
ALCAN-3005AD	0.46	0.55	0.20	1.15	0.52	0.015	0.02	0.13	0.041	-	-	0.0011	0.0077	0.0026
VAW-2412	1.45	0.98	0.021	1.15	0.16	0.008	0.27	0.22	0.0042	-	0.0018	-	-	-
ALCAN-3005CAB	(0.19)	(0.44)	0.0001	(1.16)	(0.45)	0.0002	0.0003	<0.0001	0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-3005CAF	(0.21)	(0.44)	0.0002	(1.16)	(0.43)	0.0001	0.0001	0.001	0.0002	-	0.0002	<0.0001	<0.0001	<0.0001
ALSUI-350/02	0.255	0.461	0.149	1.16	1.08	0.0009	0.003	0.0522	0.0246	0-0.00003	-	-	-	-
VAW-2414	0.68	0.34	0.023	1.16	0.03	<0.001	-	0.048	0.02	-	-	-	-	-
MBH-55X G900J5 E	1.65	0.18	0.024	1.16	0.009	0.46	0.41	0.023	0.33	-	-	-	-	-
ALCAN-X3003AD	0.37	0.53	0.16	1.17	0.014	0.015	0.018	1.39	0.021	-	-	0.0011	0.0064	0.0019i
VAW-2409	0.15	0.39	0.20	1.20	0.041	0.084	-	0.061	0.058	-	-	-	-	-

Product Code	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr	
VAW-2417-1	0.0009	0.001	0.02	-	0.0005	0.0011	0.0023	0.0079	0.0035	0.011	0.0006	0.011	0.0019	
ALPEC-68452	-	-	-	-	-	-	-	(0.020)	-	(0.020)	-	-	-	
ALCAN-3203AG	0.0016	-	0.022	-	0.0017i	0.0021i	0.0069	0.021	0.0042	0.023	0.0023i	0.025	0.0039	
ALCAN-3005AD	0.0011	-	0.02	-	0.0023i	0.0022i	0.0035	0.008	0.0024	0.019	0.003	0.022	0.0031	
VAW-2412	-	-	0.011	-	-	-	-	0.11	-	0.095	-	0.058	-	
ALCAN-3005CAB	<0.0001	0.0002	<0.0001	-	<0.0001	<0.0001	0.0002	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
ALCAN-3005CAF	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
ALSUI-350/02	0-0.00002	-	-	0-0.00005	-	-	-	0.00066	-	-	-	0.0114	0.005	
VAW-2414	-	-	-	-	-	-	-	-	-	-	-	-	-	
MBH-55X G900J5 E	-	-	-	-	-	-	-	0.014	-	0.006	-	-	-	
ALCAN-X3003AD	0.0011	-	0.021	-	0.0021i	0.0025i	0.003	0.0077	0.0025	0.018	0.0019i	0.019	0.0024	
VAW-2409	-	-	-	-	-	-	-	-	-	-	-	-	-	

Product Code
VAW-2417-1
ALPEC-68452
ALCAN-3203AG
ALCAN-3005AD
VAW-2412
ALCAN-3005CAB
ALCAN-3005CAF
ALSUI-350/02
VAW-2414
MBH-55X G900J5 E
ALCAN-X3003AD
VAW-2409

Size	Grade	Type	Form
Ø 60x20mm	3103	CRM	CCC
Ø 55x30mm	3104	CRM	CCC
Ø 57x25mm	3203	CRM	W
Ø 57x25mm	3005	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	3005	CRM	W
Ø 57x25mm	3005	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 40x15mm		RM	CCC
Ø 57x25mm	3003 Mod.	CRM	W
Ø 60x20mm		RM	CCC

Values listed in mass %; () Uncertified Value

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-3004AO	0.23	0.48	0.21	1.20	1.24	0.029	0.027	0.13	0.029	-	-	-	0.0012	0.0069
ALSUI-332/02	0.20	0.61	0.10	1.20	0.193	0.006	0.006	0.06	0.10	-	-	-	0.0005	-
ALSUI-325/02	0.49	0.71	0.20	1.20	0.46	0.054	-	0.16	0.103	-	-	-	-	-
ALCAN-X3012AA	0.49	0.2	0.52	1.23	0.031	0.016	0.02	0.084	0.014	-	-	-	0.0012	0.0078
ALCAN-3004CAN	(0.22)	(0.62)	(0.17)	(1.23)	(1.27)	0.0001	0.0001	0.0008	0.0004	-	-	0.0002	<0.0001	<0.0001
VAW-2406	0.19	0.27	0.024	1.25	0.036	0.034	-	0.061	0.035	-	-	-	-	-
SEI-NK3S-NDC2	0.404	0.505	0.054	1.26	0.043	0.012	0.01	0.054	0.02	-	-	-	-	-
NIST-1240c	0.1804	0.501	0.1484	1.268	1.11	(0.00054)	0.00434	0.0514	0.0204	-	-	-	(0.000011)	-
MBH-56X G2000J1 C	0.099	0.086	3.29	1.27	1.70	0.0007	0.0046	0.864	0.0053	0.0048	-	-	-	0.008
SEI-NK4S-NDC2	0.21	0.401	0.105	1.27	1.02	0.011	0.011	0.056	0.02	-	-	-	-	-
ALCOA-ST2-3003	0.30	0.65	0.15x	1.2x	0.01x	0.015	0.02x	0.02x	0.02x	-	0.0005	<0.0010	0.0002	0.02x
ALCOA-ST2-3000	0.20x	0.50	0.15x	1.2x	0.03x	0.01x	0.01x	0.05x	0.02x	<0.0010	-	<0.0005	0.0005	0.001x

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr
ALCAN-3004AO	0.0038	0.0013	-	0.022	-	0.0019i	0.0028i	0.002	0.008	0.0035	0.013	0.0031	0.019	0.0033
ALSUI-332/02	-	-	-	-	-	0.0001	0.0006	-	0.004	-	-	-	-	-
ALSUI-325/02	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-
ALCAN-X3012AA	0.0015i	0.0014	-	0.02	-	0.0012i	0.0014i	0.0036	0.0085	0.002	0.022	0.0019i	0.02	0.003
ALCAN-3004CAN	<0.0001	<0.0001	<0.0001	0.0008	-	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0002
VAW-2406	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEI-NK3S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NIST-1240c	-	(0.00065)	-	0.0181	-	-	-	-	(0.00090)	-	(0.0004)	(<0.0001)	0.0185	(0.0023)
MBH-56X G2000J1 C	-	-	0.00044	-	-	(0.0001)	-	-	0.0022	-	0.099	-	0.0097	0.293
SEI-NK4S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-ST2-3003	0.002x	0.0005	0.0005	0.002x	0.0002	0.001x	0.0015	0.0005	0.02x	0.003x	0.02x	0.0012	0.015	0.004x
ALCOA-ST2-3000	-	0.001x	0.001x	0.02x	0.003x	-	-	-	0.003x	0.001x	0.001x	0.001x	0.01x	0.001x

Product Code
ALCAN-3004AO
ALSUI-332/02
ALSUI-325/02
ALCAN-X3012AA
ALCAN-3004CAN
VAW-2406
SEI-NK3S-NDC2
NIST-1240c
MBH-56X G2000J1 C
SEI-NK4S-NDC2
ALCOA-ST2-3003
ALCOA-ST2-3000

Size	Grade	Type	Form
Ø 57x25mm	3004	CRM	W
Ø 60x25mm	3005	CRM	CCC
Ø 60x25mm	3005	CRM	CCC
Ø 57x25mm	3012 Mod.	CRM	W
Ø 57x25mm	3004	CRM	W
Ø 60x20mm		RM	CCC
Ø 55x25mm		CRM	C
Ø 63x19mm	3004	CRM	CCC
Ø 40x15mm	2039 Mod.	CRM	C
Ø 55x25mm		CRM	C
Ø 64x25mm	3003	CRM	W
Ø 64x25mm	3103	CRM	W

Values listed in mass %; () Uncertified Value

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-SS3003	0.20x	0.50	0.15x	1.2x	0.03x	<0.0050	<0.0050	0.08x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS3005	0.22x	0.60	0.15x	1.2x	0.40	0.02x	0.01x	0.03x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-ST1-1000	0.20x	0.50	0.15x	1.2x	1.0x	0.01x	0.01x	0.05x	0.02x	<0.0010	-	<0.0005	0.0005	0.001x
ALCOA-SS3004	0.18x	0.50	0.15x	1.2x	1.1x	<0.0050	<0.0050	0.05x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
VAW-2107	0.71	0.56	0.15	1.37	1.52	0.08	-	0.28	0.032	-	-	<0.0003	0.0037	-
ALCAN-3916AA	0.22	0.17	0.75	1.38	0.0025i	0.03	0.088	0.03	0.028	-	-	-	0.0011i	0.0087i
ALCOA-WB3004	-	0.40	0.20x	1.4x	0.90	0.02x	0.02x	0.10x	0.05x	-	-	-	-	0.002x
ALCAN-4007AA	1.62	0.55	0.011	1.43	0.008	0.091	0.21	0.029	0.029	-	-	-	0.0011	0.007
ALPEC-68451	(0.70)	(0.10)	(0.06)	(1.45)	(0.41)	(0.10)	(0.04)	(0.18)	(0.20)	-	-	-	-	-
VAW-3501	14.10	0.19	-	1.45	0.007	0.001	-	0.004	0.097	-	-	-	-	-
ALSUI-391C/01	0.0205	0.0463	0.198	1.483	0.0123	0.0905	0.0258	0.0505	0.0847	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCOA-SS3003	<0.0005	<0.0005	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.001x	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS3005	<0.0005	<0.0005	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-ST1-1000	-	0.001x	0.0001	0.02x	0.003x	-	-	-	0.003x	0.001x	-	0.001x	0.001x	0.01x
ALCOA-SS3004	<0.0005	<0.0005	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.001x	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
VAW-2107	0.0008	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-3916AA	0.0016i	0.0008	-	0.019	-	0.0017i	0.0021i	0.0034	0.0081	0.0033	-	0.02	0.0017i	0.02
ALCOA-WB3004	-	0.003x	-	0.02x	-	-	-	-	0.02x	-	-	-	-	0.01x
ALCAN-4007AA	0.0011i	0.0012	-	0.019	-	0.0009i	0.0012i	0.0023	0.0041	0.0042	-	0.0022	0.0012i	0.015
ALPEC-68451	-	-	-	-	-	-	-	-	(0.040)	-	-	(0.040)	-	-
VAW-3501	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-391C/01	-	-	-	-	-	-	0.00003	-	0.02	-	-	0.0046	-	-

Product Code	Zr
ALCOA-SS3003	<0.0030
ALCOA-SS3005	<0.0030
ALCOA-ST1-1000	0.001x
ALCOA-SS3004	<0.0030
VAW-2107	-
ALCAN-3916AA	0.0029
ALCOA-WB3004	-
ALCAN-4007AA	0.0022
ALPEC-68451	-
VAW-3501	-
ALSUI-391C/01	0.0011

Size	Grade	Type	Form
Ø 64x25mm	3003	CRM	W
Ø 64x25mm	3005	CRM	W
Ø 64x25mm		CRM	W
Ø 64x25mm	3004	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	3916	CRM	W
Ø 64x25mm	3004	CRM	W
Ø 57x25mm	4007	CRM	W
Ø 58x32mm	3005	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x26mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Mn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALCOA-WB3003	0.15x	0.30	0.20x	1.5x	0.05x	<0.0050	<0.0050	0.02x	0.01x	-	-	-	-	0.003x
ALCAN-X3005AB	0.081	0.21	0.53	1.51	0.12	0.016	0.021	0.025	0.02	-	0.0011	0.008	0.0017	0.002
ALSUI-326/02	0.45	0.81	0.0064	1.51	0.0022	0.0027	0.0035	0.034	0.077	0.001	-	-	-	-
VAW-2106	1.30	0.52	0.03	1.52	0.90	0.083	-	0.07	0.04	-	0.0021	-	0.0016	-
ALCAN-3SCBW	0.23	0.45	0.08	1.53	0.021	0.038	0.039	0.044	0.032	-	0.004	0.043	0.0050i	-
VAW-2702	2.34	0.27	0.045	1.54	9.80	<0.005	<0.01	0.062	0.40	-	0.0013	-	-	-
ALCAN-X3005CAC	(0.19)	(0.22)	(0.59)	(1.56)	(0.16)	0.0001	<0.0001	0.0003	0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
VAW-2701-2	2.54	0.23	0.031	1.64	9.59	<0.005	-	0.043	0.30	<0.003	0.0044	-	0.001	-
VAW-3500	11.70	0.38	0.001	1.72	0.011	0.001	-	0.005	0.046	-	-	-	-	-
ALSUI-327/01	0.054	0.138	0.025	1.74	0.006	0.005	0.0052	0.052	0.068	-	-	-	-	-
MBH-514X 9091.1 C	0.035	0.081	0.046	6.93	0.001	<0.005	0.0026	0.029	0.0017	-	-	-	-	-
MBH-514X 9091.3 D	0.74	0.94	0.62	11.30	0.148	0.106	0.141	0.223	0.424	-	-	-	-	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
ALCOA-WB3003	-	0.02x	-	-	-	0.02x	-	-	-	0.01x				
ALCAN-X3005AB	-	0.02	0.0018i	0.0018i	0.003	0.009	0.002	0.018	0.0021	0.02	0.0018			
ALSUI-326/02	-	-	-	-	-	-	-	-	-	0.0079	-			
VAW-2106	-	-	-	-	-	-	-	-	-	-	-			
ALCAN-3SCBW	-	0.015	0.0006i	0.0004i	-	0.039	-	0.048	-	0.002	0.03			
VAW-2702	-	-	-	-	-	-	-	-	-	-	-			
ALCAN-X3005CAC	<0.0001	<0.0001	<0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002			
VAW-2701-2	-	-	-	-	-	-	-	-	-	-	-			
VAW-3500	-	-	-	-	-	-	-	-	-	-	-			
ALSUI-327/01	-	-	-	0.0008	-	0.0063	-	-	-	0.008	-			
MBH-514X 9091.1 C	-	-	-	-	-	0.016	-	0.013	-	-	0.184			
MBH-514X 9091.3 D	-	-	-	-	-	0.111	-	0.019	-	-	<0.005			

Product Code
ALCOA-WB3003
ALCAN-X3005AB
ALSUI-326/02
VAW-2106
ALCAN-3SCBW
VAW-2702
ALCAN-X3005CAC
VAW-2701-2
VAW-3500
ALSUI-327/01
MBH-514X 9091.1 C
MBH-514X 9091.3 D

Size	Grade	Type	Form
Ø 64x25mm	3003	CRM	W
Ø 57x25mm	3005 Mod.	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 57x25mm	3203	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	3005 Mod.	CRM	W
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 40x15mm		CRM	C

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Mn/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Ti	Zn	Pb		Size	Grade	Type	Unit
NCS HS49704B-1	0.588	0.671	0.184	0.851	0.0097	0.024	0.018	0.028	0.0043	Set of 6	Ø 62x30mm			Disc
NCS HS49704B-2	0.423	0.537	0.097	1.20	0.032	0.049	0.032	0.114	(0.0027)	Set of 6	Ø 62x30mm			Disc
NCS HS49704B-3	0.287	0.313	0.129	1.52	0.052	0.075	0.06	0.047	0.0067	Set of 6	Ø 62x30mm			Disc
NCS HS49704B-4	0.145	0.242	0.057	1.93	0.073	0.109	0.088	0.081	0.017	Set of 6	Ø 62x30mm			Disc
NCS HS49704B-5	0.695	0.83	0.228	0.544	0.101	0.152	0.123	0.165	0.019	Set of 6	Ø 62x30mm			Disc
NCS HS49704B-6	0.05	0.149	0.0063	2.38	0.006	0.0046	0.01	0.017	0.0011	Set of 6	Ø 62x30mm			Disc

Values listed in mass %; () Uncertified Value

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-511X G6063 A	0.412	0.185	0.0014	0.0239	0.437	0.0021	0.0021	0.0062	0.011	-	-	-	-	-
ALCAN-5010CAF	(0.15)	(0.44)	0.0001	(0.210)	(0.46)	<0.0001	<0.0001	0.0001	0.0001	-	-	0.0001	<0.0001	<0.0001
ALSUI-6063/L1	0.36	0.152	0.0105	0.022	0.46	0.0107	0.0108	0.0162	0.0133	-	-	-	-	-
ALCOA-WA6063	0.45	0.164	0.0105	0.0315	0.482	-	-	-	0.0133	-	-	-	-	-
ALSUI-512/02	0.0377	0.0306	0.0126	0.0107	0.498	0.0107	0.0117	0.0116	0.0135	-	0.0016	-	0.00092	-
ALCOA-SS3105	0.20x	0.50	0.15x	0.40	0.50	0.05x	0.02x	0.20x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
VAW-1300	0.036	0.026	0.0018	0.0012	0.51	-	-	0.0065	0.0015	-	-	-	-	-
VAW-1302	0.076	0.024	0.0016	0.009	0.51	0.0007	-	0.014	0.0015	-	-	-	-	-
ALCAN-6063DAZ	(0.443)	(0.197)	(0.021)	(0.078)	(0.517)	(0.0039)	(0.0048)	(0.0128)	(0.010)	-	-	(0.0003)	(0.00001)	(0.00001)
VAW-2000-1	0.49	0.19	0.0054	0.01	0.52	0.0015	0.0017	0.021	0.0098	-	-	<0.002	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
MBH-511X G6063 A	-	-	-	-	-	-	-	-	0.0011	-	-	(0.0006)	-	0.0087
ALCAN-5010CAF	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
ALSUI-6063/L1	-	0.0025	-	-	-	-	-	-	0.0032	-	-	0.0025	-	0.0064
ALCOA-WA6063	-	-	-	0.014	-	-	-	-	-	-	-	-	-	0.01
ALSUI-512/02	-	0.001	-	0.0042	0.0036	-	-	-	0.00126	0.0014	-	0.0012	-	0.0057
ALCOA-SS3105	<0.0005	<0.0005	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.001x	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
VAW-1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1302	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-6063DAZ	(0.0001)	(0.00001)	(0.0003)	(0.0179)	-	(0.00001)	(0.0001)	(0.0008)	(0.0011)	(0.0002)	-	(0.0006)	(0.00001)	(0.0122)
VAW-2000-1	<0.0003	-	<0.002	-	-	-	-	-	0.0012	-	-	<0.004	-	0.0015

Product Code	Zr
MBH-511X G6063 A	-
ALCAN-5010CAF	<0.0001
ALSUI-6063/L1	0.0052
ALCOA-WA6063	-
ALSUI-512/02	0.0052
ALCOA-SS3105	<0.0030
VAW-1300	-
VAW-1302	-
ALCAN-6063DAZ	(0.0026)
VAW-2000-1	0.0035

Size	Grade	Type	Form
Ø 50x20mm	6063	CRM	C
Ø 57x25mm	5010	CRM	W
Ø 60x25mm	6063	CRM	CCC
Ø 64x25mm	6063	CRM	W
Ø 60x25mm		CRM	CCC
Ø 64x25mm	3105	CRM	W
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 57x25mm	6063	CRM	W
Ø 60x20mm	6060	CRM	CCC

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Be
VAW-2012-4	0.458	0.215	0.0726	0.0611	0.521	0.0104	0.03	0.031	0.03	-	(98.6)	-	0.00108	0.00091
ALCAN-6063CBB	(0.43)	(0.20)	0.0001	0.0008	(0.53)	<0.0001	<0.0001	0.0001	0.0001	-	-	-	0.0001	<0.0001
VAW-2104-4	0.30	0.23	0.25	0.22	0.54	0.05	0.0046	0.13	0.083	0.0007	-	-	<0.0002	0.0041
VAW-2012-3	0.482	0.21	0.059	0.0519	0.545	0.0197	0.0149	0.0216	0.0261	-	(98.5)	-	0.0009	0.00088
ALCAN-5010AE	0.18	0.44	0.032	0.26	0.57	0.025	0.022	0.027	0.025	-	-	-	-	0.0014
ALCAN-6006AB	0.45	0.29	0.24	0.17	0.57	0.016	0.032	0.044	0.043	-	-	-	-	0.0013
ALCOA-WX6000	0.42	0.20x	0.03x	0.02x	0.65	0.32	0.01x	0.02x	0.01x	-	-	-	-	-
ALCOA-SS6063	0.48	0.25	0.06x	0.02x	0.65	0.02x	0.02x	0.05x	0.03x	<0.0010	-	<0.0010	<0.0010	<0.0005
SEI-NK63SND3	0.407	0.196	0.054	0.013	0.655	0.052	0.048	0.058	0.013	-	-	-	-	-
ALPEC-2350	0.197	0.374	0.0517	0.0506	0.669	0.0985	0.0519	0.0498	0.0231	-	-	-	-	0.00044
ALCOA-WXZ6000	0.40	0.15x	0.03x	0.01x	0.70	<0.0050	<0.0050	<0.0050	<0.0050	-	-	-	<0.005	-
ALCOA-SS6951	0.40	0.40	0.30	0.03x	0.70	0.02x	0.02x	0.10x	0.02x	<0.0010	-	<0.0010	<0.0010	<0.0005
ALCAN-5657AA	0.052	0.077	0.05	0.03	0.74	0.02	0.02	0.029	0.022	-	-	-	-	0.0042

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr
VAW-2012-4	0.0056	0.00075	0.00108	0.00118	0.0201	<0.0004	0.00099	0.00076	0.0018	0.005	0.0027	-	0.0049	0.00101
ALCAN-6063CBB	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	0.0001	0.0004	<0.0001	<0.0001	-	<0.0001	<0.0001
VAW-2104-4	0.0003	0.0002	0.0094	0.0008	0.013	0.0014	0.0003	0.0003		0.011	-	-	0.0003	-
VAW-2012-3	0.0047	0.001	0.00096	0.00116	0.0196	-	0.00064	0.0011	0.0023	0.0058	0.0028	-	0.0049	0.00083
ALCAN-5010AE	0.023	0.0031i	0.0016	-	0.026	-	0.0034i	0.0031i	0.0058i	0.016	-	-	0.018	0.0020i
ALCAN-6006AB	0.015	0.0029	0.0013	-	0.02	-	0.0024i	0.0025i	0.0034	0.016	0.0031	-	0.015	0.0031
ALCOA-WX6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS6063	<0.0010	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
SEI-NK63SND3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALPEC-2350	-	-	-	-	-	-	-	-	-	0.0106	-	-	0.0203	-
ALCOA-WXZ6000	-	-	-	-	0.02x	-	-	-	-	-	-	-	-	-
ALCOA-SS6951	<0.0010	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALCAN-5657AA	0.018	0.0066i	-	-	0.03	-	0.0022i	0.0027i	0.004	0.019	-	-	0.022	-

Product Code	V	Zr
VAW-2012-4	0.0095	0.0203
ALCAN-6063CBB	<0.0001	<0.0001
VAW-2104-4	0.01	0.0057
VAW-2012-3	0.0186	0.00252
ALCAN-5010AE	0.024	0.0034
ALCAN-6006AB	0.02	0.003
ALCOA-WX6000	-	-
ALCOA-SS6063	0.01x	<0.0030
SEI-NK63SND3	0.012	
ALPEC-2350	0.0273	0.019
ALCOA-WXZ6000	0.005x	-
ALCOA-SS6951	0.01x	<0.0030
ALCAN-5657AA	0.027	-

Size	Grade	Type	Form
Ø 60x20mm	6060	CRM	CCC
Ø 57x25mm	6063	CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm	6060	CRM	CCC
Ø 57x25mm	5010	CRM	W
Ø 57x25mm	6006	CRM	W
Ø 64x25mm	6000	CRM	W
Ø 64x25mm	6063	CRM	W
Ø 55x25mm		CRM	C
Ø 55x30mm	5005	CRM	CCC
Ø 64x25mm	6000	CRM	W
Ø 64x25mm	6951	CRM	W
Ø 57x25mm	5657	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-1110	0.0026	0.0018	0.0003	0.0001	0.75	-	-	0.0015	-	-	-	-	-	-
VAW-1101	0.013	0.007	0.014	0.002	0.75	-	-	0.054	0.006	-	-	-	-	-
VAW-1105	0.0065	0.007	0.0025	0.0006	0.79	-	-	0.0035	-	-	-	-	-	-
VAW-1303	0.067	0.024	0.0017	0.0095	0.79	-	-	0.017	0.004	-	-	-	-	-
ALCOA-SS5657	0.04x	0.06x	0.04x	0.02x	0.80	0.01x	0.01x	0.02x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS5005	0.15x	0.50	0.06x	0.03x	0.85	0.02x	0.02x	0.06x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-5005CAB	(0.16)	(0.57)	0.07	<0.001	(0.87)	<0.001	<0.001	<0.001	<0.001	-	-	-	<0.0001	<0.001
ALCOA-WH6000	0.25	0.30	0.10x	0.03x	0.90	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-
ALCOA-WJ6000	0.35	0.30	0.10x	0.03x	0.90	0.03x	0.03x	0.03x	0.03x	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-1110	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1303	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS5657	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS5005	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-5005CAB	<0.0001	-	-	<0.001	-	<0.0001	<0.0001	0.0001	<0.001	-	-	<0.001	<0.0001	<0.001
ALCOA-WH6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-WJ6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Zr
VAW-1110	-
VAW-1101	-
VAW-1105	-
VAW-1303	-
ALCOA-SS5657	<0.0030
ALCOA-SS5005	<0.0030
ALCAN-5005CAB	<0.0001
ALCOA-WH6000	-
ALCOA-WJ6000	-

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	5657	CRM	W
Ø 64x25mm	5005	CRM	W
Ø 57x25mm	5005	CRM	W
Ø 64x25mm	6000	CRM	W
Ø 64x25mm	6000	CRM	W

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Bi	Ca	Cd	Ga
ALCAN-5005AE	0.16	0.49	0.066	0.039	0.91	0.027	0.017	0.026	0.018	0.0013	0.028	0.0032i	0.003	0.024
ALCAN-5457AA	0.078	0.082	0.13	0.25	0.93	0.014	0.021	0.02	0.029	0.003	0.019	0.0016	-	0.021
ALSUI-513/02	0.0057	0.0056	0.0033	0.001	0.98	0.001	0.0012	0.0035	0.003	-	-	-	-	-
VAW-1111	0.003	0.0025	0.0002	0.0001	0.99	-	-	0.002	-	-	-	-	-	-
ALCAN-5457AB	0.100i	0.12	0.16	0.42	0.99	0.026	0.027	0.030i	0.028i	0.0013	0.0081	0.0035i	0.0010i	0.02
BAM-310	0.0797	0.0705	0.00169	0.00307	0.994	0.0009	0.00244	0.0086	0.00301	-	-	-	-	-
ALPEC-2340	0.097	0.189	0.1007	0.0016	1.009	0.051	0.0208	0.0979	0.0562	0.00127	-	-	-	-
ALSUI-522/03	0.203	0.197	0.03	0.102	1.01	0.0158	0.0103	0.0219	0.0104	0.0039	-	0.001	0.001	0.0051
VAW-1114	0.021	0.002	0.0002	0.0003	1.02	<0.0005	<0.0005	0.0046	<0.0005	-	-	-	-	-
VAW-1304	0.066	0.024	0.0018	0.0095	1.03	-	-	0.017	0.009	-	-	-	-	-

Product Code	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr
ALCAN-5005AE	0.0022i	0.0030i	0.0045i	0.014	0.0041	0.017	0.0038i	0.024	0.0032
ALCAN-5457AA	0.0028i	0.0044i	0.003	0.019	-	0.022	0.007	0.011	0.012
ALSUI-513/02	-	-	-	-	-	-	-	0.0012	0.001
VAW-1111	-	-	-	-	-	-	-	-	-
ALCAN-5457AB	0.0034i	0.0031i	0.0027	0.0078	0.0024	0.021	0.0037i	0.022	0.003
BAM-310	-	-	-	-	-	-	-	-	-
ALPEC-2340	-	-	-	0.0302	-	0.0996	-	0.0349	0.0455
ALSUI-522/03	-	0.0011	-	0.0039	-	-	-	0.0027	-
VAW-1114	-	-	-	-	-	-	-	-	-
VAW-1304	-	-	-	-	-	-	-	-	-

Size	Grade	Type	Form
Ø 57x25mm	5005	CRM	W
Ø 57x25mm	5457	CRM	W
Ø 60x25mm	5005	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 57x25mm	5457	CRM	W
Ø 60x25mm	5305	CRM	C
Ø 55x30mm	5005	CRM	CCC
Ø 60x25mm	5005	CRM	CCC
Ø 60x20mm	5005	RM	CCC
Ø 60x20mm		RM	CCC

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALPEC-6033	0.019	0.014	0.0674	0.153	1.05	0.001	0.0181	0.2136	0.0027	-	-	-	0.00002	-
VAW-1102	0.02	0.014	0.011	0.0012	1.1	-	-	0.037	0.009	-	-	-	-	-
ALCOA-SS5357	0.05x	0.08x	0.08x	0.25	1.1x	0.01x	0.01x	0.02x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
MBH-511X G6065 A	0.495	0.74	0.214	0.131	1.18	0.0759	0.0144	0.164	0.112	-	-	-	0.0011	1.27
VAW-1106	0.014	0.015	0.0018	0.0006	1.25	-	-	0.003	-	-	-	-	-	-
ALPEC-2330	0.029	0.039	0.1484	0.2494	1.324	0.0002	0.0015	0.1485	0.1115	-	-	-	0.00295	-
ALCAN-K57SCAF		(0.50)	(0.003)	0.0002	(1.35)	<0.001	<0.001	0.0003	<0.001	-	-	0.0004	<0.0001	<0.0001
VAW-2009	0.35	0.28	0.0035	0.0075	1.39	0.0006	-	0.02	0.0025	-	-	-	-	-
ALSUI-551/03	0.246	0.06	0.137	1.10	1.40	0.338	0.0031	0.10	0.0117	-	-	-	-	-
VAW-1112	0.0033	0.004	0.0002	0.0002	1.47	-	-	0.002	-	-	-	-	-	-
ALCOA-SS5050	0.18x	0.45	0.05x	0.04x	1.4x	0.03x	0.03x	0.04x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALPEC-6033	-	-	-	-	-	-	0.00005	-	0.0135	-	-	0.0205	-	-
VAW-1102	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS5357	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-511X G6065 A	-	-	-	-	-	-	-	-	0.031	-	-	0.0251	-	-
VAW-1106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALPEC-2330	-	-	-	-	-	-	-	-	0.0213	-	-	0.0512	-	0.019
ALCAN-K57SCAF	0.0001	-	-	<0.0001	-	<0.0001	<0.0001	0.0008	<0.0001	-	-	<0.001	<0.0001	<0.001
VAW-2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-551/03	-	-	-	-	-	0.0014	0.0027	-	0.0186	-	-	-	-	0.0215
VAW-1112	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS5050	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x

Product Code	Zr
ALPEC-6033	0.0726
VAW-1102	-
ALCOA-SS5357	<0.0030
MBH-511X G6065 A	0.144
VAW-1106	-
ALPEC-2330	0.0868
ALCAN-K57SCAF	<0.0001
VAW-2009	-
ALSUI-551/03	-
VAW-1112	-
ALCOA-SS5050	<0.0030

Size	Grade	Type	Form
Ø 55x30mm	5005	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	5357	CRM	W
Ø 50x17mm		CRM	C
Ø 60x20mm		RM	CCC
Ø 55x30mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	5050	CRM	W

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
VAW-1305	0.072	0.025	0.0018	0.0095	1.49	-	-	0.018	0.007	-	-	-	-	-
ALSUI-523/01	0.087	0.084	0.0011	0.15	1.51	0.105	0.0097	0.012	0.11	-	-	-	0.009	-
ALCOA-ST1-5000	0.15	0.30	0.05x	0.05x	1.8x	0.15x	0.03x	0.04x	0.02x	<0.0010	<0.0005	0.0005	0.001x	-
VAW-1107	0.017	0.026	0.0005	0.0009	1.83	-	-	0.0025	-	-	-	-	-	-
ALSUI-524/04	0.403	0.50	0.10	0.20	2.0	0.176	0.029	0.0586	0.0614	-	-	0.001	0.001	0.002
ALCAN-5017CAC	(0.250)	(0.29)	(0.38)	(0.35)	(2.0)	0.0002	0.0003	<0.0001	0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-5017CAD	(0.36)	(0.38)	(0.19)	(0.80)	(2.0)	0.0003	0.0005	<0.0003	0.0004	-	<0.0001	<0.0001	<0.0001	<0.0001
VAW-1113	0.0035	0.0016	0.0001	0.0001	2.01	-	-	0.0012	-	-	-	-	-	-
ALCAN-5017AB	0.28	0.27	0.40	0.28	2.01	0.018	0.03	0.026	0.056	-	-	0.0035	0.013	0.0054
MBH-511X G05H1 H	0.42	0.79	0.32	0.012	2.02	0.242	0.125	0.47	0.204	-	-	(0.0002)	-	-
ALPEC-6036	0.102	0.276	0.0065	0.383	2.07	0.1248	0.0487	0.0936	0.0527	-	-	0.00096	-	-
VAW-2300-1	0.49	0.39	0.069	0.38	2.1	0.20	0.0036	0.20	0.0069	<0.0001	0.0001	0.0033	<0.0001	0.0006

Product Code	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-1305	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-523/01	-	-	-	-	-	-	-	-	0.02	-	-	-	-	0.0172
ALCOA-ST1-5000	0.001x	0.001x	0.02x	0.003x	-	-	-	-	0.003x	0.001x	-	0.001x	0.001x	0.01x
VAW-1107	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-524/04	0.0022	-	-	-	-	0.00024	0.0029	0.0011	0.0068	0.0007	-	0.0025	-	0.0072
ALCAN-5017CAC	<0.0001	0.0001	<0.0001	-	-	<0.0001	<0.0001	0.0001	0.0003	<0.0001	-	<0.0001	<0.0001	0.0001
ALCAN-5017CAD	<0.0001	<0.0003	<0.0001	-	-	<0.0001	<0.0001	0.0003	<0.0001	0.0001	-	<0.0001	<0.0001	0.0002
VAW-1113	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-5017AB	-	-	0.02	-	-	0.0046i	0.0042	0.001	0.02	-	-	0.021	-	0.015
MBH-511X G05H1 H	0.013	-	-	-	-	-	-	-	0.023	-	-	0.178	-	0.053
ALPEC-6036	-	-	-	-	-	-	0.00034	-	0.0195	-	-	0.0023	-	-
VAW-2300-1	0.0001	0.0002	0.0096	<0.0001	<0.0002	0.0006	0.0012	0.0004	0.0023	<0.0002	<0.0002	0.0007	<0.0001	0.0024

Product Code	Zr
VAW-1305	-
ALSUI-523/01	-
ALCOA-ST1-5000	0.001x
VAW-1107	-
ALSUI-524/04	0.0042
ALCAN-5017CAC	<0.0001
ALCAN-5017CAD	0.0002
VAW-1113	-
ALCAN-5017AB	0.014
MBH-511X G05H1 H	(0.002)
ALPEC-6036	0.0504
VAW-2300-1	0.0033

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm	5451	CRM	W
Ø 60x25mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 57x25mm	5017	CRM	W
Ø 57x25mm	5017	CRM	W
Ø 60x25mm		RM	CCC
Ø 57x25mm	5017	CRM	W
Ø 40x15mm		CRM	C
Ø 55x30mm	5251	CRM	CCC
Ø 60x20mm	5754	CRM	CCC

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Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-5251AF	0.36	0.45	0.10	0.29	2.14i	0.096	0.03	0.091	0.098	-	-	-	0.001	0.006
ALCOA-WA5052	0.25	0.10x	0.10x	0.02x	2.2x	0.30	0.01x	0.12x	<0.0050	-	-	-	-	-
ALCAN-5251AD	0.21	0.33	0.089	0.33	2.30	0.031	0.02	0.047	0.03	-	-	-	0.0013	0.015i
ALCAN-5052DAK	(0.09)	(0.284)	(0.041)	(0.057)	(2.40)	(0.197)	(0.0051)	(0.0125)	(0.015)	-	-	(0.0002)	(0.00001)	(0.00001)
ALSUI-514/02	0.066	0.0629	0.011	0.0305	2.42	0.0055	0.0062	0.0219	0.0241	-	0-0.0001	-	0.002	0.0019
SEI-NK52S-NDC3	0.146	0.201	0.047	0.049	2.46	0.314	0.023	0.022	0.02	-	-	-	0.0015	-
ALCOA-SS5252	0.03x	0.05x	0.04x	0.01x	2.5x	<0.0050	<0.0050	0.01x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS5052	0.15x	0.20x	0.06x	0.05x	2.6x	0.25	0.05x	0.08x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-5454CAB	(0.13)	(0.15)	0.0004	(0.79)	(2.66)	(0.10)	0.0001	0.0004	0.0002	-	-	<0.0001	<0.0001	<0.0001
VAW-2302-3	0.31	0.24	0.085	0.22	2.72	0.10	-	0.22	0.031	-	-	-	0.002	-
ALCOA-ST2-5052	0.15x	0.30	0.10x	0.05x	2.7x	0.25	0.02x	0.03x	0.03x	-	-	<0.0010	0.0002	0.02x

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-5251AF	0.0036	0.001	-	0.02	-	0.0040i	0.0041i	0.001	0.009	0.003	-	0.02	0.0036i	0.0205
ALCOA-WA5052	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-5251AD	0.0031i	0.0015	-	0.021	-	0.0026i	0.0026i	0.001	0.015	0.0016	-	0.016	0.0022i	0.021
ALCAN-5052DAK	(0.0001)	(0.00001)	(0.0003)	(0.019)	-	(0.00001)	(0.0001)	(0.0007)	(0.0011)	-	-	(0.0005)	(0.00001)	(0.0125)
ALSUI-514/02	-	0.002	-	0.0081	-	-	0.0014	-	0.0035	0.003	-	0.0032	-	0.01
SEI-NK52S-NDC3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS5252	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050
ALCOA-SS5052	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-5454CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
VAW-2302-3	0.0005	0.0066	-	-	-	0.0001	0.0001	-	0.0089	-	-	-	-	-
ALCOA-ST2-5052	0.002x	0.0005	0.0005	0.025	-	0.001x	0.0015	0.0005	0.02x	0.003x	-	0.02x	0.0012	0.015

Product Code	Zr
ALCAN-5251AF	0.003
ALCOA-WA5052	-
ALCAN-5251AD	0.0031
ALCAN-5052DAK	(0.0023)
ALSUI-514/02	0.005
SEI-NK52S-NDC3	-
ALCOA-SS5252	<0.0030
ALCOA-SS5052	<0.0030
ALCAN-5454CAB	<0.0001
VAW-2302-3	-
ALCOA-ST2-5052	0.004x

Size	Grade	Type	Form
Ø 57x25mm	5251	CRM	W
Ø 64x25mm	5052	CRM	W
Ø 57x25mm	5251	CRM	W
Ø 57x25mm	5052	CRM	W
Ø 60x25mm	5252	CRM	CCC
Ø 55x25mm		CRM	C
Ø 64x25mm	5252	CRM	W
Ø 64x25mm	5052	CRM	W
Ø 57x25mm	5454	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	5052	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
ALCAN-5754CAF	0.18	0.34	0.0001	0.32	2.72	0.0001	<0.0001	0.0001	0.0001	-	0.0001	<0.0001	<0.0001	0.0001
VAW-2302-2	0.30	0.24	0.086	0.23	2.76	0.10	-	0.23	0.032	-	-	0.002	-	0.0005
VAW-2302-1	0.29	0.24	0.088	0.22	2.78	0.10	0.0009	0.22	0.033	<0.0001	<0.001	0.0021	0.0001	0.0007
ALCOA-WB5052	0.08x	0.3	0.02x	0.10x	2.8x	0.15x	0.03x	0.03x	0.03x	-	-	-	-	-
ALSUI-525/04	0.22	0.313	0.066	0.285	2.87	0.327	0.028	0.035	0.029	-	-	0.00053	0.024	0.0007
ALCAN-5052CAL	(0.08)	(0.32)	0.0001	0.0001	(3.0)	(0.21)	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-X5754CAF	(0.35)	(0.34)	0.0002	(0.45)	(3.05)	0.0002	<0.0001	0.0001	<0.0001	-	0.0001	<0.0001	<0.0001	<0.0001
ALCAN-X5754AE	0.38	0.35	0.057	0.45	3.18	0.051	0.031	0.056	0.053	-	-	0.0011	0.0045	0.0024i
VAW-2301-1	0.20	0.21	0.11	0.11	3.24	0.043	0.0021	0.13	0.038	<0.0002	<0.0002	0.0012	<0.0002	0.0006
SEI-NK54S-ND2	0.194	0.198	0.019	0.054	3.36	0.236	0.046	0.058	0.035	-	-	0.0023	-	-

Product Code	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-5754CAF	<0.0001	<0.0001	<0.0001	-	-	<0.0001	0.0002	0.0004	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
VAW-2302-2	0.0024	-	-	-	-	0.0001	0.0002	-	0.0055	-	-	-	-	-
VAW-2302-1	0.0009	<0.0002	0.01	<0.0001	-	<0.0001	<0.001	<0.001	0.0037	<0.0002	<0.0001	<0.001	<0.0002	0.0029
ALCOA-WB5052	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-525/04	0.0008	-	0.021	-	-	0.0015	0.0013	-	0.021	0.004	-	0.016	-	0.018
ALCAN-5052CAL	<0.0001	<0.0001	<0.0001	-	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001
ALCAN-X5754CAF	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
ALCAN-X5754AE	0.0009	-	0.029	-	-	0.0036i	0.0045i	0.0018	0.0038	0.0018	-	0.026	0.0017i	0.021
VAW-2301-1	<0.0001	<0.0003	0.0088	<0.0002	<0.0001	0.0009	0.0019	0.0005	0.0029	<0.0005	<0.0002	0.0013	<0.0001	0.0032
SEI-NK54S-ND2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Zr
ALCAN-5754CAF	<0.0001
VAW-2302-2	-
VAW-2302-1	0.0059
ALCOA-WB5052	-
ALSUI-525/04	0.0058
ALCAN-5052CAL	<0.0001
ALCAN-X5754CAF	<0.0001
ALCAN-X5754AE	0.0024
VAW-2301-1	0.0037
SEI-NK54S-ND2	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 57x25mm	5754	CRM	W
Ø 60x20mm		RM	CCC
Ø 60x20mm	5754	CRM	CCC
Ø 64x25mm	5052	CRM	W
Ø 60x25mm	5754	CRM	CCC
Ø 57x25mm	5052	CRM	W
Ø 57x25mm	5754 Mod.	CRM	W
Ø 57x25mm	5754 Mod.	CRM	W
Ø 60x20mm	5754	CRM	CCC
Ø 55x25mm		CRM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCOA-KA514	0.08x	0.35	0.10x	0.05x	3.5x	<0.0050	<0.0050	<0.0050	0.16x	-	-	-	0.001x	-
ALCOA-SS5042	0.10x	0.23x	0.03x	0.30	3.5x	<0.0050	<0.0050	0.01x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-A5154CAB	(0.21)	(0.19)	0.0017	(0.20)	(3.53)	0.0001	0.0003	0.0003	0.0001	-	-	0.0001	<0.0001	<0.0001
ALCAN-5154CAB	(0.12)	(0.21)	0.0004	0.0003	(3.56)	(0.22)	0.0002	0.0002	<0.0001	-	-	<0.0001	<0.0001	<0.0001
MBH-511X G05H2 H	0.301	0.638	0.187	0.126	3.58	0.173	0.156	0.372	0.07	-	-	0.0083	0.0018	-
ALCOA-SS5154	0.15x	0.25	0.05x	0.03x	3.6x	0.25	0.03x	0.05x	0.08x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-5042CAB	0.0018	(0.25)	0.0001	(0.33)	(3.68)	0.0001	0.0001	0.0002	<0.0001	-	-	<0.0001	<0.0001	<0.0001
ALCAN-5042-AC	0.15	0.25	0.031i	0.35	3.74	0.06	0.031	0.03	0.03	-	-	-	0.0013	0.009
ALSUI-516/01	0.002	0.005	0.001	0.001	3.8	0.001	0.002	0.002	0-0.0005	-	-	-	0.0005	-
ALCAN-A320CAB	(0.001)	-	(0.003)	<0.001	(3.90)	<0.001	<0.001	<0.001	<0.001	-	-	-	-	<0.001
MBH-511X G05H3 H	0.21	0.41	0.093	0.40	3.97	0.095	0.09	0.092	0.25	-	-	-	0.0074	-
MBH-511X G5083 A	0.22	0.363	0.042	0.592	3.98	0.237	0.0094	0.0488	0.0294	-	-	-	-	0.0016
ALCOA-SS514	0.15x	0.25	0.05x	0.12x	4.1x	0.03x	0.03x	0.08x	0.12x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCOA-KA514	-	-	-	-	-	-	-	-	0.03x	-	-	0.03x	-	-
ALCOA-SS5042	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-511X G05H2 H	-	0.0023	-	-	-	-	-	-	0.049	-	-	0.0495	-	0.0251
ALCAN-A5154CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	0.0001	<0.0001	0.0003	0.0001	<0.0001	-	0.0001	0.0002	<0.0001
ALCAN-5154CAB	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	0.0001
ALCOA-SS5154	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-5042CAB	<0.0001	<0.0001	0.0001	<0.0001	-	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001
ALCAN-5042-AC	0.0036i	0.0012	-	0.02	-	0.0043i	0.0029i	0.0008	0.0081	0.0012	-	0.015	0.0028i	0.018
ALSUI-516/01	0.001	0.001	0.0006	0.001	-	0.0002	0.0001	-	0.001	-	-	0.001	-	0-0.001
ALCAN-A320CAB	-	-	-	<0.001	-	-	-	-	(0.001)	-	-	<0.001	-	<0.001
MBH-511X G05H3 H	-	-	-	-	-	-	-	-	0.107	-	-	0.095	-	-
MBH-511X G5083 A	-	-	-	-	-	-	-	-	0.0069	-	-	0.0015	-	0.0092
ALCOA-SS514	<0.0010	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	<0.0010	0.01x

Product Code	Zr
ALCOA-KA514	-
ALCOA-SS5042	<0.0030
MBH-511X G05H2 H	0.0108
ALCAN-A5154CAB	<0.0001
ALCAN-5154CAB	<0.0001
ALCOA-SS5154	<0.0030
ALCAN-5042CAB	<0.0001
ALCAN-5042-AC	0.0016
ALSUI-516/01	0.001
ALCAN-A320CAB	-
MBH-511X G05H3 H	-
MBH-511X G5083 A	0.0011
ALCOA-SS514	<0.0030

Size	Grade	Type	Form
Ø 64x25mm	514	CRM	CCC
Ø 64x25mm	5042	CRM	W
Ø 50x15mm		CRM	C
Ø 57x25mm	A515	CRM	W
Ø 57x25mm	5154	CRM	W
Ø 64x25mm	5154	CRM	W
Ø 57x25mm	5042	CRM	W
Ø 57x25mm	5042	CRM	W
Ø 60x25mm		CRM	CCC
Ø 57x25mm		CRM	CCC
Ø 40x15mm	3107	RM	C
Ø 50x20mm	5083	CRM	W
Ø 64x25mm	514	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-532/01	0.009	0.011	0.012	0.0009	4.33	0.005	0.0043	0.0008	0.0005	-	-	-	0.0005	-
ALSUI-536/01	0.12	0.24	0.031	0.305	4.40	0.055	0.01	0.052	0.049	-	-	-	-	(0.0019)
ALCOA-WB5182	0.08x	0.10x	0.07x	0.45	4.4x	0.01x	0.04x	0.10x	0.01x	-	-	-	0.001x	-
VAW-2501-1	0.19	0.236	0.044	0.14	4.47	0.041	-	0.017	0.03	-	-	-	0.0008	-
NIST-1241c	0.1601	0.1997	0.0497	0.3792	4.498	0.0343	0.0198	0.0506	0.0334	-	-	-	-	-
ALCOA-SS5082	0.12x	0.25	0.04x	0.04x	4.5x	0.04x	0.01x	0.04x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-KB514	0.25	0.10x	0.02x	0.20x	4.5x	<0.0050	<0.0050	<0.0050	0.05x	-	-	-	0.003x	-
ALCAN-5082CAB	(0.08)	(0.20)	<0.001	<0.001	(4.57)	<0.001	<0.001	<0.001	<0.001	-	-	<0.0001	<0.0001	<0.001
VAW-2507-2	0.22	0.16	0.054	0.10	4.57	0.011	0.0021	0.21	0.0096	-	-	<0.0003	0.005	0.027
VAW-2503-1	0.15	0.30	0.013	0.20	4.60	0.013	<0.003	0.031	0.019	-	-	-	0.0026	-
ALCOA-SS5182	0.15x	0.20x	0.05x	0.35	4.6x	0.03x	0.02x	0.05x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-WA5056	0.15x	0.20x	0.08x	0.10x	4.7x	0.11x	0.05x	0.05x	<0.0050	-	-	-	0.0001	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-532/01	-	-	-	0.0015	-	-	(0.006)	0.0012	0.0044	-	-	0.0038	-	0.0003
ALSUI-536/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-WB5182	-	0.001x	-	0.02x	-	-	-	-	0.006x	-	-	-	-	0.01x
VAW-2501-1	0.0002	-	-	-	-	0.0001	0.0012	-	-	-	-	-	-	-
NIST-1241c	-	(0.00062)	-	0.0184	-	-	-	-	(0.00052)	-	-	(0.0002)	(0.0002)	0.0174
ALCOA-SS5082	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-KB514	-	-	-	-	-	-	-	-	0.06x	-	-	0.06x	-	-
ALCAN-5082CAB	<0.0001	-	-	<0.001	-	<0.0001	0.0002	0.0002	<0.001	-	-	0.0004	<0.0001	<0.001
VAW-2507-2	0.0026	<0.0002	<0.0002	0.012	-	0.0026	0.0004	-	0.0068	-	-	0.0003	-	0.0027
VAW-2503-1	0.0002	-	-	-	-	0.0045	0.0031	-	0.0023	-	-	-	-	-
ALCOA-SS5182	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.001x	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-WA5056	-	-	-	0.02x	-	-	-	-	-	-	-	-	-	0.01x

Product Code	Zr
ALSUI-532/01	0-0.0002
ALSUI-536/01	-
ALCOA-WB5182	-
VAW-2501-1	-
NIST-1241c	(0.002)
ALCOA-SS5082	<0.0030
ALCOA-KB514	0.06x
ALCAN-5082CAB	<0.001
VAW-2507-2	0.001
VAW-2503-1	-
ALCOA-SS5182	<0.0030
ALCOA-WA5056	-

Size	Grade	Type	Form
Ø 60x25mm	514	CRM	CCC
Ø 60x25mm	514	CRM	CCC
Ø 64x25mm	5182	CRM	W
Ø 60x20mm		RM	CCC
Ø 57x25mm	5182	CRM	CCC
Ø 64x25mm	5082	CRM	W
Ø 64x25mm	514	CRM	CCC
Ø 57x25mm	5082	CRM	W
Ø 60x20mm	5019	CRM	CCC
Ø 60x20mm	5019	RM	CCC
Ø 64x25mm	5182	CRM	W
Ø 64x25mm	5056	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-537/02	0.224	0.33	0.0189	0.45	4.76	0.0104	0.0066	0.0154	0.0036	-	-	-	0.0005	0.0012
ALCOA-WA5182	0.20x	0.30	0.01x	0.30	4.8x	0.05x	0.01x	0.02x	0.04x	-	-	-	0.001x	-
ALCAN-5182DAU	(0.097)	(0.23)	(0.037)	(0.345)	(4.82)	(0.0011)	(0.0049)	(0.012)	(0.0059)	-	-	(0.0001)	(0.00001)	(0.00001)
ALCAN-5182CBB	(0.13)	(0.25)	0.0001	(0.33)	(4.86)	0.0001	0.0008	0.0002	<0.0001	-	-	<0.0001	<0.0001	<0.0001
VAW-2509-2	0.38	0.40	0.25	0.37	4.93	0.42	0.20	0.11	0.0069	0.0006	0.0004	0.0006	0.0055	0.0058
ALCAN-5056AD	0.12	0.27	0.053	0.13	4.97	0.086	0.032	0.04	0.028	-	-	-	0.0011	0.01
ALCAN-A56SCAF	(0.15)	(0.25)	0.003	(0.60)	(5.0)	<0.001	<0.001	<0.001	<0.001	-	-	-	<0.0001	<0.001
ALCAN-5083CAE	(0.15)	(0.30)	0.0001	(0.68)	(5.0)	(0.13)	<0.0001	0.0001	0.0002	-	-	0.0001	<0.0001	<0.0001
VAW-2502-1	0.10	0.37	0.036	0.32	5	0.063	-	0.05	0.012	-	-	-	0.0015	-
SEI-NK56S-NDC2	0.104	0.201	0.014	0.203	5.01	0.147	0.011	0.016	0.013	-	-	-	0.003	-
VAW-2504-2	0.15	0.35	0.017	0.20	5.02	0.0055	0.0027	0.10	0.05	-	-	<0.0002	0.0002	<0.002
ALCAN-5182-AV	0.12	0.27	0.041	0.34	5.02	0.029	0.014	0.047	0.048	-	(0.0001)	0.0012i	0.0013	0.007

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALSUI-537/02	0.0023	0.0011	-	0.0298	-	-	0.00041	0.0023	-	0.0023	-	-	0.0015	0.0007
ALCOA-WA5182	-	0.003x	-	0.02x	-	-	-	-	-	0.02x	-	-	-	-
ALCAN-5182DAU	(0.0002)	(0.00001)	(0.0002)	(0.017)	-	-	(0.00001)	(0.00001)	(0.0003)	(0.0009)	-	-	(0.0005)	(0.00001)
ALCAN-5182CBB	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001
VAW-2509-2	0.0007	0.0048	0.0056	0.028	0.0072	0.023	0.0021	0.0018	0.0024	0.011	0.0083	0.044	0.01	-
ALCAN-5056AD	0.0023i	0.0015	-	0.021	-	-	0.0031	0.0034	0.0014i	0.008	0.0032	-	0.012	-
ALCAN-A56SCAF	0.0004	-	-	<0.001	-	-	<0.0001	0.0006	0.001	0.0002	-	-	<0.001	-
ALCAN-5083CAE	<0.0001	<0.0001	<0.0001	0.0001	-	-	<0.0001	<0.0001	0.0001	0.0001	<0.0001	-	<0.0001	<0.0001
VAW-2502-1	0.0002	-	-	-	-	-	<0.0001	0.0007	-	-	-	-	-	-
SEI-NK56S-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-2504-2	0.0004	-	<0.0005	0.011	-	-	0.0006	0.0007	-	0.049	-	-	-	-
ALCAN-5182-AV	0.0028i	0.0013	-	0.021	(0.0001)	-	0.0023i	0.0034i	(0.0014)	0.0074	0.001	-	0.014	0.0021i

Product Code	Tl	V	Zr
ALSUI-537/02	-	0.0102	0.0041
ALCOA-WA5182	-	0.01x	-
ALCAN-5182DAU	-	(0.012)	(0.0022)
ALCAN-5182CBB	-	<0.0001	<0.0001
VAW-2509-2	0.0022	0.013	0.023
ALCAN-5056AD	-	0.02	0.0023
ALCAN-A56SCAF	-	<0.001	-
ALCAN-5083CAE	-	0.0001	<0.0001
VAW-2502-1	-	-	-
SEI-NK56S-NDC2	-	-	-
VAW-2504-2	-	-	0.001
ALCAN-5182-AV	-	0.02	0.0031

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x25mm	5186	CRM	CCC
Ø 64x25mm	5182	CRM	W
Ø 57x25mm	5182	CRM	W
Ø 57x25mm	5182	CRM	W
Ø 60x20mm	5019	CRM	CCC
Ø 57x25mm	5056	CRM	W
Ø 57x25mm	5056	CRM	W
Ø 57x25mm	5056	CRM	W
Ø 60x40mm	5083	RM	CCC
Ø 55x25mm		CRM	C
Ø 60x20mm	5019	CRM	C
Ø 57x25mm	5182	CRM	W

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-533/03	0.319	0.216	0.0544	0.102	5.03	0.102	0.0117	0.0311	0.0188	-	-	0.0007	0.0041	0.0009
ALCAN-5056CAC	(0.13)	(0.29)	0.0003	(0.14)	(5.06)	(0.10)	0.0005	<0.001	0.0006	-	-	<0.0001	<0.0001	<0.001
VAW-2506-2	0.27	0.26	0.081	0.49	5.11	0.077	0.0022	0.061	0.088	-	-	0.0002	0.0026	0.032
VAW-2500-1	0.31	0.27	0.047	0.33	5.23	0.11	-	0.14	0.038	-	-	-	0.0039	-
ALCOA-SS5056	0.15x	0.20x	0.08x	0.10x	5.3x	0.11x	0.05x	0.05x	0.01x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-WC5056	0.25	0.40	0.01x	0.05x	5.3x	0.20x	0.02x	0.02x	<0.0050	-	-	-	0.008x	-
ALSUI-534/01	0.145	0.302	0.03	0.3	5.42	0.15	-	0.031	0.10	-	-	-	-	-
ALCOA-WB5056	0.15x	0.20x	0.08x	0.10x	5.8x	0.11x	0.05x	0.05x	<0.0050	-	-	-	0.003x	-
ALSUI-527C/1	0.091	0.249	0.252	0.147	5.83	0.0045	0.0508	0.1016	0.0192	-	-	-	0.00066	-
ALSUI-535/01	0.044	0.051	0.03	0.118	5.88	0.051	0.01	0.10	0.01	-	-	-	0.014	-
ALSUI-571/01	0.14	0.15	0.10	0.20	6.5	0.012	0.015	0.062	0.054	-	-	-	-	-
ALCOA-SS535	0.10x	0.10x	0.03x	0.18x	7.0x	0.02x	0.02x	0.03x	0.18x	<0.0010	<0.0010	<0.0010	0.0001	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-533/03	0.0019-0.0023	0.0015	-	-	-	0.00022	0.0032-0.0035	-	0.0022	-	-	0.0011	0.001	0.0062
ALCAN-5056CAC	<0.0001	-	-	<0.001	-	<0.0001	<0.0001	0.0001	<0.001	-	-	<0.001	<0.0001	<0.001
VAW-2506-2	0.0002	<0.0002	<0.0002	0.011	-	0.0007	0.0013	-	0.0097	-	-	0.0003	-	0.0027
VAW-2500-1	0.0006	-	-	-	-	0.0002	0.0011	-	0.0006	-	-	-	-	-
				0.02x	<0.0005	<0.0010	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-WC5056	-	-	-	0.02x	-	-	-	-	0.08x	-	-	-	-	0.01x
						0.0014-0.0018	0.0019-0.0036	-	-	-	-	-	-	0.0133
ALSUI-534/01	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01x
ALCOA-WB5056	-	-	-	0.02x	-	-	-	-	-	-	-	-	-	0.01x
ALSUI-527C/1	0.00174	0.002	-	0.0049	0.0023	0-0.00005	0.00045	-	0.01	-	-	0.0204	-	0.0051
ALSUI-535/01	-	-	-	-	-	-	0.0063	-	0.02	-	-	-	-	-
ALSUI-571/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS535	<0.0010	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	<0.0010	0.01x

Product Code	Zr
ALSUI-533/03	0.0055
ALCAN-5056CAC	0.0001
VAW-2506-2	0.001
VAW-2500-1	0.003
ALCOA-SS5056	<0.0030
ALCOA-WC5056	-
ALSUI-534/01	-
ALCOA-WB5056	-
ALSUI-527C/1	0.0458
ALSUI-535/01	-
ALSUI-571/01	-
ALCOA-SS535	<0.0030

Size	Grade	Type	Form
Ø 60x25mm	5119	CRM	CCC
Ø 57x25mm	5056	CRM	W
Ø 60x20mm	5019	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	5056	CRM	W
Ø 64x25mm	5056	CRM	W
Ø 60x25mm		CRM	CCC
Ø 64x25mm	5056	CRM	W
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 64x25mm	535	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-A535.0AA	0.12	0.17	0.053	0.17	7.3	0.053	0.052	0.044	0.16	-	-	-	0.0012	0.043i
ALSUI-572/01	0.42	0.307	0.019	0.195	7.87	-	-	0.126	0.064	-	-	-	0.005	-
VAW-2602	0.10	0.25	0.006	0.48	7.95	<0.01	<0.01	0.058	0.05	-	-	0.0008	0.0032	-
ALCOA-KA518	0.20x	1.0x	0.08x	0.05x	8.1x	<0.0050	0.05x	0.10x	0.01x	-	-	-	0.004x	-
VAW-2601	0.22	0.18	0.009	0.32	8.8	<0.005	<0.01	0.025	0.1	-	-	-	0.0045	-
ALSUI-573/01	0.221	0.198	0.0105	0.112	8.97	-	-	0.051	0.16	-	-	-	0.008	-
VAW-2600	0.26	0.09	0.014	0.11	9.35	<0.01	<0.01	0.012	0.14	-	-	-	0.0015	-
ALCOA-KA520	0.20x	0.10x	0.17x	0.02x	9.5x	<0.0050	<0.0050	0.08x	0.05x	-	-	-	0.002x	-
ALSUI-574/01	0.096	0.106	0.046	0.026	9.88	0.0043	0.0044	0.024	0.097	-	-	-	0.013	-
ALCAN-350CAU	(0.006)	(0.009)	(0.004)	(0.001)	(10.0)	<0.001	<0.001	(0.002)	<0.001	-	-	-	-	<0.001
SIE-NKAC7B-NDC2	0.217	0.299	0.079	0.201	10.17	0.095	0.049	0.102	0.104	-	-	-	0.0046	-
ALCOA-SS520	0.15x	0.20x	0.12x	0.05x	10.2	<0.0050	<0.0050	0.04x	0.10x	<0.0010	<0.0010	<0.0010	0.0001	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-A535.0AA	0.0025i	0.0012	-	0.021	-	0.0033	0.0019i	0.0010i	0.044	0.0024	-	0.047	0.0025i	0.02
ALSUI-572/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-2602	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-KA518	-	-	-	-	-	-	-	-	-	-	-	0.05x	-	-
VAW-2601	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-573/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-2600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-KA520	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-574/01	-	-	-	-	-	-	-	-	0.014	-	-	0.016	-	0.007
ALCAN-350CAU	-	-	-	<0.001	-	-	-	-	(0.002)	-	-	<0.001	-	(0.001)
SIE-NKAC7B-NDC2	0.0023	-	-	-	-	-	-	-	0.05	-	-	0.048	-	-
ALCOA-SS520	<0.0010	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	<0.0010	0.01x

Product Code	Zr
ALCAN-A535.0AA	0.0048
ALSUI-572/01	-
VAW-2602	-
ALCOA-KA518	-
VAW-2601	-
ALSUI-573/01	-
VAW-2600	-
ALCOA-KA520	-
ALSUI-574/01	-
ALCAN-350CAU	-
SIE-NKAC7B-NDC2	-
ALCOA-SS520	<0.0030

Values listed in mass %; () Uncertified Value

Size	Grade	Type/Form	Unit
Ø 57x25mm	A535	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	518	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	520	CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 57x25mm		CRM	CCC
Ø 55x25mm		CRM	C
Ø 64x25mm	520	CRM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Li	Pb	Sn	
MBH-511X G10H4 C	0.244	0.193	0.163	0.228	10.24	0.083	0.117	0.117	0.155	0.0061	-	0.08	0.075	
ALCOA-KB520	0.08x	0.3	0.08x	0.08x	10.60	-	-	0.02x	0.01x	0.005x	-	-	-	
MBH-511X G10H5 B	0.05	0.057	0.0227	0.098	13.97	0.0017	0.036	0.029	0.0052	0.0274	0.0032	0.165	0.013	

Product Code
MBH-511X G10H4 C
ALCOA-KB520
MBH-511X G10H5 B

Size	Grade	Type	Form
Ø 64x25mm	520	CRM	CCC
Ø 50x20mm	520	RM	C
Ø 64x25mm		CRM	CCC

Mg/Al Specially-Priced Standards

Product Code	Si	Fe	Cu	Mn	Mg	Zn
PB AM1	0.24	0.49	0.059	0.66	6.18	0.031
PB AM2	0.53	0.065	0.048	0.28	5.07	0.10
PB AM3	0.46	0.64	0.063	0.48	3.90	0.16
PB AM5	0.44	0.17	0.095	0.23	2.05	0.078
PB AM6	1.14	0.5	0.054	0.73	0.84	0.13
PB AM7	0.68	0.32	0.097	0.066	0.57	0.10
PB AM8	1.14	0.43	0.077	0.54	0.74	0.26
PB AM9	0.21	0.66	0.16	1.30	0.13	0.068
PB AM11	0.014	0.025	0.01	0.003	0.41	-
PB AM12	0.02	0.016	0.017	0.01	0.89	-
PB AM13	0.021	0.062	0.009	-	1.89	-
PB AM14	0.042	0.031	0.056	0.025	2.85	-

Size	Grade	Type	Unit
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc
Ø 57x25mm		RM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Na			
NCS HS49706A-1	0.238	0.202	0.045	0.168	3.95	0.252	0.038	0.098	(0.30)	-	(0.0028)			
NCS HS49706A-2	0.462	0.34	0.101	0.327	2.24	0.219	0.233	0.052	0.046	-	0.00011			
NCS HS49706A-3	0.702	0.444	0.153	0.495	2.90	0.123	0.071	0.143	0.149	-	0.0011			
NCS HS49706A-4	0.788	0.624	0.184	0.677	1.39	0.314	0.097	0.235	0.188	-	0.00014			
NCS HS49706A-5	0.102	0.093	0.0085	0.051	5.09	0.042	0.011	0.03	0.019	-	-			
NCS HS49706A-6	0.898	0.684	0.21	0.826	0.611	0.359	0.122	0.306	0.215	-	-			
NCS HS49707A-1	0.195	0.301	0.167	0.137	8.46	0.106	0.164	0.118	0.142	0.0061	-			
NCS HS49707A-2	0.304	0.364	0.09	0.366	5.33	0.192	0.06	0.225	0.0033	0.044	-			
NCS HS49707A-3	0.377	0.458	0.128	0.526	6.38	0.14	0.089	0.156	0.0068	0.111	-			
NCS HS49707A-4	0.459	0.584	0.229	0.677	7.04	0.246	0.169	0.586	0.087	0.0011	-			
NCS HS49707A-5	0.078	0.134	0.0074	0.065	10.14	0.0123	0.146	0.038	0.007	0.0087	-			
NCS HS49707A-6	0.60	0.696	0.243	0.865	3.76	0.273	0.035	0.285	0.191	0.00056	-			

Product Code
NCS HS49706A-1
NCS HS49706A-2
NCS HS49706A-3
NCS HS49706A-4
NCS HS49706A-5
NCS HS49706A-6
NCS HS49707A-1
NCS HS49707A-2
NCS HS49707A-3
NCS HS49707A-4
NCS HS49707A-5
NCS HS49707A-6

	Size	Grade	Type	Unit
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc
Set of 6	Ø 60x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

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Mg/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Li	Zr			
NCS HS49726-1	0.027	0.034	0.0025	0.0017	1.20	-	0.0093	0.0072	0.009	-	-			
NCS HS49726-2	0.0033	0.0097	0.0065	0.0017	1.88	-	0.00088	0.013	0.00084	-	-			
NCS HS49726-3	0.0073	0.012	0.0038	0.0042	1.63	-	0.0036	0.0047	0.0042	-	-			
NCS HS49726-4	0.013	0.027	0.011	0.011	2.10	-	0.0098	0.0012	0.011	-	-			
NCS HS49726-5	0.015	0.004	0.012	0.0013	2.13	-	0.00028	0.0024	0.0006	-	-			
NCS HS49729-1	0.069	0.076	0.0025	-	6.0	-	-	-	-	1.23	0.091			
NCS HS49729-2	0.086	0.129	0.0019	-	5.49	-	-	-	-	2.25	0.073			
NCS HS49729-3	0.222	0.227	0.042	-	4.29	-	-	-	-	1.98	0.109			
NCS HS49729-4	0.056	0.163	0.04	0.015	4.95	0.023	-	0.022	0.026	1.35	0.057			
NCS HS49729-5	0.129	0.075	0.012	0.053	3.84	0.047	-	0.094	0.079	1.50	0.14			
NCS HS49729-6	0.132	0.055	0.10	0.045	3.81	0.046	-	0.093	0.091	1.54	(0.168)			
NCS HS49729-7	0.098	0.089	0.42	0.03	2.18	0.126	-	0.058	(0.128)	1.03	0.143			
NCS HS49729-8	0.025	0.043	0.824	0.097	0.68	0.103	-	0.041	0.134	2.52	0.042			
NCS HS49729-9	0.15	0.4148	1.11	0.081	1.33	0.073	-	0.146	0.092	1.99	0.077			
NCS HS49729-10	0.214	0.264	1.60	0.138	1.62	0.058	-	(0.204)	0.07	1.63	0.061			
NCS HS49729-11	0.118	0.112	1.22	0.032	0.193	0.021	-	0.107	0.01	2.12	0.082			
NCS HS49729-12	0.136	0.094	1.46	0.082	0.291	0.029	-	0.118	0.0026	2.48	0.088			

Product Code
NCS HS49726-1
NCS HS49726-2
NCS HS49726-3
NCS HS49726-4
NCS HS49726-5
NCS HS49729-1
NCS HS49729-2
NCS HS49729-3
NCS HS49729-4
NCS HS49729-5
NCS HS49729-6
NCS HS49729-7
NCS HS49729-8
NCS HS49729-9
NCS HS49729-10
NCS HS49729-11
NCS HS49729-12

	Size	Grade	Type	Unit
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc
Set of 12	Ø 45x40mm		CRM	Disc

Values listed in mass %; () Uncertified Value

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Mg/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Cd	Co	Ga
NCS HS49732-1	-	-	-	-	1.04	-	-	-	-	0.0068	-	0.0045	0.0052	0.018
NCS HS49732-2	-	-	-	-	1.09	-	-	-	-	0.001	-	(0.00022)	-	-
NCS HS49732-3	-	-	-	-	0.092	-	-	-	-	0.0011	-	0.00023	0.00025	0.0093
NCS HS49732-4	-	-	-	-	0.106	-	-	-	-	0.0032	-	0.019	0.0037	0.0097
NCS HS49732-5	-	-	-	-	2.67	-	-	-	-	0.0015	-	0.0012	(0.00013)	0.411
NCS HS49732-6	-	-	-	-	0.629	-	-	-	-	0.00067	-	0.052	0.0098	0.069
NCS HS49732-7	-	-	-	-	2.01	-	-	-	-	0.004	-	0.0015	0.0111	0.04
NCS HS49734-1	0.246	0.361	0.013	1.11	4.85	0.214	0.013	0.101	0.0094	0.001	0.00011	-	-	-
NCS HS49734-2	0.206	0.273	0.051	0.849	6.28	0.127	0.014	0.029	0.062	0.002	0.0012	-	-	-
NCS HS49734-3	0.131	0.197	0.029	0.413	5.61	0.023	0.0097	0.044	0.029	0.0027	0.0034	-	-	-
NCS HS49734-4	0.05	0.155	0.072	0.14	7.11	0.134	0.035	0.135	0.178	0.0084	0.0051	-	-	-
NCS HS49734-5	0.10	0.299	0.097	0.783	7.30	0.066	0.108	0.076	0.079	0.006	0.00051	-	-	-
NCS HS49734-6	0.049	0.089	0.012	0.341	5.19	(0.014)	0.0066	0.008	0.04	-	0.0013	-	-	-
NCS HS49734-7	0.045	0.089	0.011	0.306	4.52	(0.013)	0.0058	0.0074	0.039	-	0.0011	-	-	-

Product Code	Li	Na	Sc	Zr
NCS HS49732-1	0.0054	-	-	-
NCS HS49732-2	0.00012	-	-	-
NCS HS49732-3	0.00058	-	-	-
NCS HS49732-4	0.039	-	-	-
NCS HS49732-5	0.0001	-	-	-
NCS HS49732-6	0.0042	-	-	-
NCS HS49732-7	0.0023	-	-	-
NCS HS49734-1	-	-	0.031	0.035
NCS HS49734-2	-	-	0.103	0.162
NCS HS49734-3	-	-	0.181	0.092
NCS HS49734-4	-	-	0.236	0.22
NCS HS49734-5	-	-	0.257	0.055
NCS HS49734-6	-	(0.0005)	0.349	(0.097)
NCS HS49734-7	-	(0.0005)	0.535	0.088

	Size	Grade	Type	Unit
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7			CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc
Set of 7	Ø 60x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Cd	Ga	Na	Pb	V
NCS HS49736-1	0.658	0.847	0.03	0.687	1.39	-	0.0041	0.052	0.039	0.00017	0.02	(0.0012)	0.0085	0.102
NCS HS49736-2	0.488	0.664	0.111	0.795	1.19	-	0.018	0.109	0.105	0.0028	0.034	0.00025	0.016	0.068
NCS HS49736-3	0.194	0.497	0.203	0.957	1.16	-	0.055	0.206	0.091	0.0042	0.059	0.00055	0.011	0.056
NCS HS49736-4	0.342	0.332	0.38	1.05	0.869	-	0.071	0.271	0.156	0.0044	0.086	0.0013	0.0051	0.033
NCS HS49736-5	0.056	0.209	0.298	1.18	0.712	-	0.086	0.33	0.201	0.0058	0.096	(0.0016)	0.0016	0.018
NCS HS49737-1	0.039	0.091	0.019	0.092	5.94	0.01	0.007	0.327	0.011	0.00011	-	0.0002	0.0011	-
NCS HS49737-2	0.086	0.238	0.168	0.478	5.16	0.11	0.022	-	0.129	0.0068	-	0.00076	0.0075	-
NCS HS49737-3	0.138	0.314	0.072	0.37	4.56	0.067	0.044	0.258	0.074	0.0053	-	0.0014	0.0068	-
NCS HS49737-4	0.214	0.397	0.105	0.221	3.76	0.173	0.067	0.105	0.175	0.0087	-	(0.001)	0.015	-
NCS HS49737-5	0.296	0.471	0.209	0.601	2.94	0.22	0.107	0.05	0.235	0.019	-	(0.00039)	0.023	-
NCS HS49737-6	0.116	0.284	0.056	0.342	4.25	0.041	0.022	0.055	0.041	0.0011	-	0.00013	0.0034	-

Product Code
NCS HS49736-1
NCS HS49736-2
NCS HS49736-3
NCS HS49736-4
NCS HS49736-5
NCS HS49737-1
NCS HS49737-2
NCS HS49737-3
NCS HS49737-4
NCS HS49737-5
NCS HS49737-6

	Size	Grade	Type	Unit
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 5			CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Al Sets Only

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be				
NCS HS50712-1	1.73	1.0	0.28	0.48	3.78	-	-	0.41	-	-				
NCS HS50712-2	0.85	0.70	0.17	0.32	4.34	-	-	0.22	-	-				
NCS HS50712-3	1.13	0.46	0.10	0.172	5.30	-	-	0.164	-	-				
NCS HS50712-4	0.65	0.29	0.055	0.11	6.57	-	-	0.11	-	-				
NCS HS50712-5	0.48	0.17	0.036	0.063	7.68	-	-	0.071	-	-				
NCS HS53704-1	0.907	1.17	0.222	1.04	1.71	0.13	0.153	0.293	0.218	0.000498				
NCS HS53704-2	0.587	0.392	0.083	0.417	3.41	0.066	0.076	0.031	0.10	0.000158				
NCS HS53704-3	0.379	0.654	0.117	0.215	4.72	0.391	0.102	0.178	0.168	0.00528				
NCS HS53704-4	0.187	0.248	0.033	0.742	6.62	0.022	0.034	0.111	0.021	0.00146				
NCS HS53704-5	0.082	0.122	0.012	0.102	7.81	0.183	0.023	0.047	0.06	0.00315				

Product Code
NCS HS50712-1
NCS HS50712-2
NCS HS50712-3
NCS HS50712-4
NCS HS50712-5
NCS HS53704-1
NCS HS53704-2
NCS HS53704-3
NCS HS53704-4
NCS HS53704-5

	Size	Grade	Type	Unit
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 30x35x50mm		CRM	Disc
Set of 5 only	Ø 50x40x30mm		CRM	Disc
Set of 5 only	Ø 50x40x30mm		CRM	Disc
Set of 5 only	Ø 50x40x30mm		CRM	Disc
Set of 5 only	Ø 50x40x30mm		CRM	Disc
Set of 5 only	Ø 50x40x30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALPEC-246	0.26	0.673	0.394	0.308	0.504	0.392	0.0029	4.93	0.0051	-	-	-	0.0059	-
ALCOA-SS712	0.20x	0.50	0.15x	0.10x	0.65	0.50	<0.0050	5.9x	0.15x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MBH-58X G40H8 B	0.10	0.30	0.14	0.20	0.69	0.22	0.22	6.5	0.063	-	-	-	-	-
ALCAN-7003CAB	(0.001)	-0.002	(0.004)	<0.001	(0.70)	<0.001	<0.001	(5.60)	<0.001	-	-	-	<0.001	<0.001
VAW-5010-1	0.079	0.15	0.011	0.022	0.73	0.021	0.012	5.61	0.018	-	-	0.0005	-	-
SEI-NK7003-NDC2	0.14	0.263	0.211	0.0016	0.747	-	-	6.56	0.023	-	-	-	-	-
VAW-5004-1	0.29	0.27	0.049	0.29	0.75	0.22	<0.005	4.80	0.044	-	-	-	-	-
SEI-NK7003-NDC2	0.263	0.301	0.217	0.203	0.768	0.208	0.046	5.30	0.081	-	-	-	0.003	-
ALSUI-721/01	0.10	0.20	0.05	0.15	0.81	0.09	0.011	3.70	0.01	-	-	-	-	-
ALCAN-7003AC	0.14	0.28	0.15	0.12	0.90	0.18	0.03	6.23	0.032	-	-	-	0.0012	0.007
ALCAN-6348AC	0.081	0.093	0.082	0.087	0.91	0.18	0.052	6.94	0.17	-	-	-	0.0012	0.055

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALPEC-246	-	-	-	-	-	-	-	-	0.05	-	-	0.05	-	-
ALCOA-SS712	<0.0010	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-58X G40H8 B	-	-	-	-	-	-	-	-	0.09	-	-	0.01	-	-
ALCAN-7003CAB	0.0001	-	-	<0.001	-	<0.0001	0.0001	-	<0.001	-	-	<0.001	-	<0.001
VAW-5010-1	0.0011	-	-	-	-	0.0008	0.0009	-	-	-	-	-	-	-
SEI-NK7003-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-5004-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEI-NK7003-NDC2	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0047
ALSUI-721/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-7003AC	0.0026	0.0016	-	0.02	-	0.0032	0.0030i	0.0031	0.008	0.0035	-	0.017	0.0029	0.019
ALCAN-6348AC	0.0032	0.0012	-	0.02	-	0.0024	0.0028i	0.0032i	0.044	0.0041	-	0.047	0.0034	0.023

Product Code	Zr
ALPEC-246	0.0103
ALCOA-SS712	<0.0030
MBH-58X G40H8 B	0.004
ALCAN-7003CAB	0.15
VAW-5010-1	0.14
SEI-NK7003-NDC2	0.225
VAW-5004-1	0.21
SEI-NK7003-NDC2	0.183
ALSUI-721/01	0.05
ALCAN-7003AC	0.17
ALCAN-6348AC	0.0031

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 64x25mm	712	CRM	CCC
Ø 40x15mm		RM	C
Ø 57x25mm	7003	CRM	W
Ø 60x2mm	7003	CRM	CCC
Ø 55x25mm	7003	CRM	C
Ø 60x20mm	7024 Mod.	RM	CCC
Ø 55x25mm	7003	CRM	C
Ø 65x25mm	7024	CRM	CCC
Ø 57x25mm	7003	CRM	W
Ø 57x25mm	771.2	CRM	C

Values listed in mass %; () Uncertified Value

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Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-58X G40H9 C	0.347	0.32	0.172	0.0372	0.96	0.241	0.062	4.83	0.279	-	(0.0001)	-	-	-
VAW-5003-1	0.10	0.18	0.022	0.096	0.97	0.047	<0.005	4.29	0.026	-	-	-	-	-
ALPEC-756	0.128	0.105	0.0127	0.05	0.971	0.27	0.0093	5.79	0.0099	-	0.002	-	-	-
ALCAN-6348CAD	(0.08)	(0.07)	0.0001	0.0001	(0.98)	(0.14)	<0.0001	(6.98)	0.19	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALSUI-714/02	0.10	0.10	0.0105	0.013	0.98	0.092	0.011	3.65	0.057	-	0.0005	-	-	-
NIST-1258-I	0.80	0.08	0.848	0.481	1.00	(0.0011)	(0.0006)	1.03	(0.04)	-	(<0.0001)	-	-	-
ALPEC-254	0.149	0.272	0.149	0.22	1.01	0.096	0.049	2.00	0.124	-	0-0.0002	-	-	-
ALCAN-7018CAB	(0.20)	(0.39)	(0.15)	(0.29)	(1.03)	(0.14)	0.0003	(4.81)	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
ALCAN-7018AC	0.20	0.33	0.16	0.30	1.09	0.12	0.074	4.87	0.08	-	0.001	0.0069	0.0033i	0.0012
VAW-5055	0.09	0.18	0.054	0.26	1.09	0.07	-	5.63	0.051	-	-	-	-	-
VAW-5005	0.14	0.20	0.097	0.22	1.11	0.087	<0.005	4.73	0.068	-	-	-	-	-
VAW-5009	0.09	0.17	0.003	0.033	1.18	0.053	-	5.74	0.027	-	-	-	-	-
VAW-5001-1	0.13	0.22	0.048	0.20	1.18	0.098	<0.005	4.75	0.056	-	-	-	-	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
MBH-58X G40H9 C	0.015	-	-	-	-	0.19	-	0.068	-	-	0.157			
VAW-5003-1	-	-	-	-	-	-	-	-	-	-	0.15			
ALPEC-756	-	-	-	-	-	0.0089	-	0.0093	-	-	0.1889			
ALCAN-6348CAD	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
ALSUI-714/02	-	-	-	-	-	-	-	-	-	-	-			
NIST-1258-I	-	(0.011)	-	-	-	-	-	-	-	-	-			
ALPEC-254	-	-	-	-	-	0.052	-	0.053	-	-	-			
ALCAN-7018CAB	0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	0.0001	(0.14)			
ALCAN-7018AC	-	0.019	0.0027i	0.0028i	0.0021	0.0079	0.0028	0.015	0.0036i	0.018	0.16			
VAW-5055	-	-	-	-	-	-	-	-	-	-	0.17			
VAW-5005	-	-	-	-	-	0.003	-	-	-	-	0.20			
VAW-5009	-	-	-	-	-	-	-	-	-	-	0.15			
VAW-5001-1	-	-	-	-	-	-	-	-	-	-	0.086			

Product Code
MBH-58X G40H9 C
VAW-5003-1
ALPEC-756
ALCAN-6348CAD
ALSUI-714/02
NIST-1258-I
ALPEC-254
ALCAN-7018CAB
ALCAN-7018AC
VAW-5055
VAW-5005
VAW-5009
VAW-5001-1

Size	Grade	Type	Form
Ø 50x20mm		CRM	C
Ø 60x20mm	7025 Mod.	RM	CCC
Ø 55x32mm		CRM	CCC
Ø 57x25mm	6348	CRM	W
Ø 60x25mm	705	CRM	CCC
Ø 63x19mm	6011	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 57x25mm	7018	CRM	W
Ø 60x20mm	7018	RM	CCC
Ø 60x20mm	7018	RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm	7005	RM	CCC

Values listed in mass %; () Uncertified Value

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Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-5054	0.095	0.19	0.075	0.27	1.20	0.18	-	4.82	0.05	-	-	-	-	-
VAW-5106-1	0.078	0.15	0.29	0.022	1.23	0.02	0.017	5.52	0.017	-	-	0.0005	-	-
ALSUI-722/01	0.18	0.24	0.08	0.35	1.23	0.14	0.03	4.24	0.015	-	-	-	-	-
VAW-5002-1	0.25	0.22	0.047	0.24	1.23	0.17	<0.005	4.7	0.054	-	-	-	-	-
MBH-58X G40H10 C	0.224	0.361	0.188	0.269	1.25	0.468	0.097	4.66	0.187	-	-	-	(0.0003)	-
ALCAN-6392AC	0.10	0.11	0.10	0.055	1.26	0.051	0.046	4.26	0.043	-	-	-	0.006	0.042
VAW-5053	0.094	0.19	0.048	0.26	1.29	0.12	-	4.03	-	-	-	-	-	-
ALCOA-SS6253	0.70	0.25	0.05x	0.02x	1.3x	0.22x	0.01x	2.0x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-ST2-7000	0.15x	0.25	0.15x	0.20x	1.3x	0.10x	0.02x	3.5x	0.04x	0.001x	-	<0.0005	0.0005	0.001x
ALCOA-SS7046	0.12x	0.14x	0.15x	0.20x	1.3x	0.10x	<0.0050	7.1x	0.04x	<0.0010	<0.0010	<0.0010	0.002x	<0.0010
MBH-59X G7020 A	0.05	0.20	0.035	0.20	1.35	0.20	0.005	4.7	0.025	-	-	0.003	-	-
ALCAN-7146CAD	0.22	0.33	0.0006	0.0029	1.39	0.0011	0.0043	6.40	0.0065	-	-	-	<0.0001	<0.0001
VAW-5052	0.09	0.19	0.059	0.26	1.40	0.15	-	2.99	0.042	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-5054	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-5106-1	0.001	-	-	-	-	0.001	0.0014	-	-	-	-	-	-	-
ALSUI-722/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-5002-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-58X G40H10 C	-	-	0.05	-	-	-	-	-	0.044	-	-	0.042	-	-
ALCAN-6392AC	-	-	-	0.021	-	-	-	-	0.044	-	-	0.042	-	0.011
VAW-5053	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS6253	<0.0005	<0.0010	<0.0010	0.015	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-ST2-7000	-	0.001x	0.001x	0.02x	-	-	-	-	0.003x	0.001x	-	0.001x	0.001x	0.01x
ALCOA-SS7046	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-59X G7020 A	0.002	-	-	-	-	-	-	-	0.002	-	-	(0.002)	-	0.01
ALCAN-7146CAD	<0.0001	-	-	0.014	-	<0.0001	0.0002	<0.0001	0.0027	<0.0001	-	0.0004	0.0002	0.01
VAW-5052	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Zr
VAW-5054	0.17
VAW-5106-1	0.13
ALSUI-722/01	0.11
VAW-5002-1	0.17
MBH-58X G40H10 C	0.215
ALCAN-6392AC	-
VAW-5053	0.16
ALCOA-SS6253	<0.0030
ALCOA-ST2-7000	0.001x
ALCOA-SS7046	0.12x
MBH-59X G7020 A	0.15
ALCAN-7146CAD	0.15
VAW-5052	0.16

Size	Grade	Type	Form
Ø 60x20mm		RM	CCC
Ø 60x20mm	7030 Mod.	CRM	CCC
Ø 60x25mm	7005	CRM	CCC
Ø 60x20mm	7005	RM	CCC
Ø 50x20mm		CRM	C
Ø 57x25mm	707	CRM	W
Ø 60x20mm		RM	CCC
Ø 64x25mm	6253	CRM	W
Ø 64x25mm		CRM	W
Ø 64x25mm	7046	CRM	W
Ø 50x20mm		CRM	C
Ø 57x25mm	7146	CRM	W
Ø 60x20mm		RM	CCC

Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-7146CAE	0.23	0.34	-	-	1.41	-	-	7.64	-	-	-	-	-	-
ALCAN-7146AA	0.22	0.36	0.031	0.037	1.41	0.028	0.036	6.86	0.042	-	-	-	-	0.025
ALPEC-248	0.46	0.375	0.258	0.418	1.49	0.056	0.035	4.90	0.153	-	-	-	0.0002	-
VAW-5022-1	0.034	0.24	0.016	0.44	1.50	0.019	0.011	5.70	0.018	-	-	<0.0004	0.0021	-
VAW-5051	0.097	0.18	0.056	0.26	1.55	0.17	-	2.00	0.04	-	-	-	-	-
ALCOA-SS7021	0.12x	0.30x	0.08x	0.05x	1.5x	0.03x	<0.0050	5.4x	0.04x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCAN-7021AC	0.10	0.28	0.05	0.059	1.60	0.025	0.034	5.51	0.029	-	-	-	-	0.031
ALCAN-7021CAB	0.005	0.006	(0.003)	<0.001	(1.60)	<0.001	<0.001	(5.50)	<0.001	-	-	-	-	(0.002)
VAW-5021-1	0.043	0.16	0.056	0.19	1.70	0.015	0.007	5.40	0.044	-	-	<0.0004	0.0014	-
VAW-5050	0.10	0.18	0.06	0.26	1.74	0.10	-	1.02	0.03	-	-	-	-	-
VAW-5006	0.16	0.20	0.083	0.24	1.80	0.048	<0.005	4.09	0.06	-	-	-	-	-
ALCAN-74SCAB	0.003	0.004	0.002	0.0001	(1.90)	0.0001	0.0001	(3.90)	0.0001	-	-	<0.0001	<0.0001	<0.0001

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-7146CAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-7146AA	-	-	-	0.015	-	-	-	-	0.03	-	-	0.032	-	0.011
ALPEC-248	-	-	-	-	-	-	-	-	0.10	-	-	0.101	-	-
VAW-5022-1	0.0027	0.0034	-	0.0012	-	0.0036	0.0025	-	0.024	-	0.0055	0.023	-	-
VAW-5051	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7021	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-7021AC	0.0022	-	-	0.015	-	0.0007	0.0005	-	0.033	-	-	0.032	-	0.012
ALCAN-7021CAB	<0.0001	-	-	-	-	<0.0001	0.0001	-	<0.001	-	-	<0.001	-	-
VAW-5021-1	0.0011	0.0019	-	0.021	-	0.0014	0.0012	-	0.016	-	0.053	0.015	-	-
VAW-5050	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-5006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-74SCAB	0.0001	-	-	0.0002	-	<0.0001	0.0001	0.0001	0.0002	-	-	<0.0001	<0.0001	0.0001

Product Code	Zr
ALCAN-7146CAE	0.001
ALCAN-7146AA	0.16
ALPEC-248	0.055
VAW-5022-1	0.011
VAW-5051	0.15
ALCOA-SS7021	0.13x
ALCAN-7021AC	0.15
ALCAN-7021CAB	-
VAW-5021-1	0.052
VAW-5050	0.14
VAW-5006	0.16
ALCAN-74SCAB	<0.0001

Size	Grade	Type	Form
Ø 57x25mm	7146	CRM	W
Ø 57x25mm	7146	CRM	W
Ø 55x30mm	7146	CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	7021	CRM	W
Ø 57x25mm	7021	CRM	W
Ø 57x25mm	7121	CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm	7019	RM	CCC
Ø 57x25mm		CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-5123-1	0.064	0.12	0.30	0.32	2.00	0.011	0.0053	5.30	0.03	-	-	<0.0004	0.0005	-
ALCAN-7019CAB	(0.14)	(0.20)	(0.17)	(0.24)	(2.04)	0.0029	0.0072	(4.0)	0.0021	-	-	0.0001	<0.0001	<0.0001
VAW-5122-1	0.069	0.053	0.20	0.093	2.20	0.007	0.003	5.00	0.051	-	-	<0.0004	0.0009	-
VAW-5121-1	0.088	0.026	0.39	0.051	2.40	0.0053	0.0024	4.70	0.0064	-	-	<0.0004	<0.0002	-
ALPEC-257	0.056	0.058	0.062	0.45	2.55	0.253	0.115	2.91	0.20	-	-	-	0-0.0002	-
ALSUI-724/02	0.366	0.43	0.149	0.19	2.66	0.158	0.097	4.84	0.093	-	-	-	-	0.0038
VAW-5008	0.28	0.26	0.051	0.41	2.76	0.16	-	4.60	0.022	-	-	-	-	-
ALCOA-SS7039	0.15x	0.20x	0.08x	0.25	3.0x	0.20x	0.02x	4.0x	0.05	<0.0010	<0.0010	<0.0010	0.003x	<0.0010
ALCAN-74SCAH	(0.004)	(0.003)	0.001	0.001	(3.40)	<0.001	<0.001	(2.90)	<0.001	-	-	-	<0.0001	<0.001
ALCAN-74SAF	0.17	0.17	0.08	0.08	3.41	0.03	0.03	2.87	0.07	-	-	-	-	0.02

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-5123-1	0.0006	0.0009	-	0.011	-	0.0012	0.0009	-	0.011	-	0.14	0.011	-	-
ALCAN-7019CAB	<0.0001	0.0001	0.0001	0.0054	-	<0.0001	<0.0001	0.0001	0.001	<0.0001	-	0.003	<0.0001	0.001
VAW-5122-1	0.0007	0.0007	-	0.014	-	0.0007	0.0005	-	0.0045	-	0.089	0.0054	-	-
VAW-5121-1	0.0012	0.0001	-	0.0071	-	<0.0002	<0.0003	-	0.0022	-	0.21	0.0044	-	-
ALPEC-257	-	-	-	-	-	-	-	-	0.098	-	-	0.103	-	-
ALSUI-724/02	0.0009	-	-	-	-	-	0.0005	-	0.005	-	-	0.0062	-	0.0067
VAW-5008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS7039	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCAN-74SCAH	<0.001	-	-	<0.001	-	<0.0001	<0.0001	0.0003	<0.001	-	-	<0.001	-	<0.001
ALCAN-74SAF	-	-	-	0.02	-	-	-	-	0.03	-	-	0.02	-	0.01

Product Code	Zr
VAW-5123-1	0.13
ALCAN-7019CAB	(0.13)
VAW-5122-1	0.078
VAW-5121-1	0.18
ALPEC-257	-
ALSUI-724/02	0.105
VAW-5008	0.002
ALCOA-SS7039	<0.0030
ALCAN-74SCAH	-
ALCAN-74SAF	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60x20mm	7019	CRM	CCC
Ø 57x25mm		CRM	W
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x25mm	7039	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm		CRM	W
Ø 57x25mm		CRM	W
Ø 57x25mm		CRM	W

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Mg/Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALSUI-712/02	0.131	0.191	0.0295	0.158	3.64	-	-	2.29	0.027	-	-	-	0.0022	-
ALCOA-SS513	0.20x	0.30	0.05x	0.08x	4.0x	0.03x	0.03x	1.8x	0.03x	<0.0010	<0.0010	<0.0010	0.0001	<0.0010
ALSUI-711/02	0.40	0.452	0.049	0.204	4.45	0.0092	-	1.30	0.106	-	-	-	0.005	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALSUI-712/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS513	<0.0010	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0030	<0.001	0.01x
ALSUI-711/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Zr
ALSUI-712/02	-
ALCOA-SS513	<0.0030
ALSUI-711/02	-

Size	Grade	Type	Form
Ø 60x25mm	705	CRM	CCC
Ø 64x25mm	513	CRM	CCC
Ø 60x25mm	705	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-72SAV	0.10	0.20	0.047	0.04	0.039	0.035	0.04	0.98	0.034	-	-	-	0.0007	0.04
ALCOA-SS7072	0.14x	0.28	0.03x	0.04x	0.03x	0.03x	0.03x	1.1x	0.03x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALSUI-742/01	0.15	0.30	0.05	0.053	0.065	0.012	0.011	1.29	0.016	-	-	-	-	-
ALCAN-72SCAU	(0.050)	(0.140)	0.003	(0.002)	<0.001	<0.001	0.003	(1.30)	0.006	-	-	<0.0001	<0.0001	0.0001
ALPEC-255	0.0309	0.145	0.295	0.059	0.258	0.052	0.013	1.40	0.034	-	-	-	0-0.0002	-
ALSUI-743/01	0.10	0.15	0.10	0.10	0.039	0.012	0.012	1.79	0.016	-	-	-	-	-
VAW-5060-1	0.35	0.65	0.20	1.29	0.098	0.21	0.065	2.12	0.051	0.0017	-	<0.0005	0.0002	-
ALSUI-744/01	0.21	0.50	0.051	0.056	0.074	0.023	0.012	2.77	0.028	-	-	-	-	-
MBH-517X LF1 A	0.248	0.101	0.002	0.0013	0.0097	(0.001)	0.001	3.71	0.0396	-	-	-	-	-
ALCAN-420CAB	-	-	(0.002)	<0.001	<0.001	<0.001	<0.001	(4.50)	<0.001	-	-	-	-	<0.001

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALCAN-72SAV	0.0049	-	-	0.015	-	-	<0.0001	0.0022	(0.0001)	0.029	-	-	0.043	-
ALCOA-SS7072	<0.0005	<0.0010	<0.0010	0.02x	<0.0005	-	<0.0005	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010
ALSUI-742/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-72SCAU	0.0001	-	-	0.01	-	-	<0.0001	<0.0001	0.0003	0.001	-	-	0.0006	-
ALPEC-255	-	-	-	-	-	-	-	-	-	0.011	-	-	0.01	-
ALSUI-743/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-5060-1	0.0006	0.001	0.0013	0.028	-	-	0.0006	0.0009	-	0.049	-	-	0.006	<0.0002
ALSUI-744/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBH-517X LF1 A	-	<0.0005	-	0.0164	-	0.0187	-	-	-	(0.002)	-	-	(0.0050)	-
ALCAN-420CAB	-	-	-	(0.001)	-	-	-	<0.0001	-	<0.001	-	-	<0.001	-

Product Code	V	Zr
ALCAN-72SAV	0.005	-
ALCOA-SS7072	0.01x	<0.0030
ALSUI-742/01	-	-
ALCAN-72SCAU	0.015	-
ALPEC-255	-	-
ALSUI-743/01	-	-
VAW-5060-1	0.022	0.26
ALSUI-744/01	-	-
MBH-517X LF1 A	-	-
ALCAN-420CAB	(0.002)	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 57x25mm	7072	CRM	W
Ø 64x25mm	7072	CRM	W
Ø 60x25mm		CRM	CCC
Ø 57x25mm		CRM	W
Ø 55x30mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x20mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 45x20mm		CRM	C
Ø 57x25mm		CRM	W

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Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
ALCAN-420AA	0.16	0.12	0.026	0.033	0.028	0.028	0.032	4.70	0.024	-	-	-	-	0.034
ALCAN-8050CAB	-	-	-	-	0.023	-	-	(4.90)	-	-	-	-	-	-
ALSUI-715/02	0.20	0.60	0.30	0.351	0.45	0.33	0.05	5.40	0.15	-	-	-	-	-
ALCAN-6235AB	0.10	0.15	0.046	0.04	0.031	0.04	0.04	5.45	0.041	-	-	-	-	0.048
ALCOA-SS711	0.15x	0.90	0.50	0.03x	0.40	0.03x	0.03x	6.5x	0.10x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MBH-58X G40H7 B	0.161	0.101	0.05	0.078	0.304	0.0018	0.142	7.16	0.0045	-	-	-	0.0012	-

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
ALCAN-420AA	-	-	-	0.014	-	-	-	-	0.032	-	-	0.10	-	-
ALCAN-8050CAB	(4.9)	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-715/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCAN-6235AB	-	-	-	-	-	-	-	-	0.046	-	-	0.038	-	-
ALCOA-SS711	<0.0010	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
MBH-58X G40H7 B	-	0.027	0.026	-	-	0.0003	-	-	0.054	0.007	-	0.067	-	0.0016

Product Code	Zr
ALCAN-420AA	-
ALCAN-8050CAB	-
ALSUI-715/02	-
ALCAN-6235AB	-
ALCOA-SS711	<0.0030
MBH-58X G40H7 B	0.003

Size	Grade	Type	Form
Ø 57x25mm	7104	CRM	W
Ø 57x25mm	8050	CRM	W
Ø 60x25mm	705	CRM	CCC
Ø 57x25mm	6235	CRM	W
Ø 64x25mm	711	CRM	CCC
Ø 40x15mm	-	CRM	C

Values listed in mass %; () Uncertified Value

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Zn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
MBH-58X G40H6 B	0.09	0.08	0.111	0.004	(0.003)	0.005	0.008	7.55	0.064	-	-	-	(0.002)	-
ALCOA-SS713	0.12x	0.55	0.80	0.20x	0.40	0.06x	0.05x	7.6x	0.20x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V
MBH-58X G40H6 B	-	0.032	0.006	-	-	(0.004)	-	-	<0.002	<0.0005	-	<0.005	-	<0.005
ALCOA-SS713	<0.0010	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x

Product Code	Zr
MBH-58X G40H6 B	(0.004)
ALCOA-SS713	<0.0030

Size	Grade	Type	Form
Ø 40x15mm		RM	C
Ø 64x25mm	713	CRM	CCC

Zn/Al Sets (Individuals Available)

Product Code	Si	Cu	Fe	Mn	Mg	Cr	Ni	Zn	Ti	Zr	Size	Grade	Type	Unit
NCS HS49702A-1	0.352	0.191	0.136	0.153	0.708	0.087	0.137	6.66	0.07	0.087	Ø 62x30mm		CRM	Disc
NCS HS49702A-2	0.455	0.684	0.261	0.501	2.95	0.186	0.076	4.53	0.104	0.059	Ø 62x30mm		CRM	Disc
NCS HS49702A-3	0.275	1.37	0.358	0.329	2.19	0.143	0.037	5.15	0.037	0.106	Ø 62x30mm		CRM	Disc
NCS HS49702A-4	0.168	2.09	0.584	0.664	1.4	0.262	0.128	2.83	0.156	0.154	Ø 62x30mm		CRM	Disc
NCS HS49702A-5	0.078	1.54	0.43	0.819	0.274	0.367	0.205	8.3	0.0061	0.0085	Ø 62x30mm		CRM	Disc
NCS HS49702A-6	0.756	2.88	0.77	0.066	4.07	0.129	0.015	1.27	0.26	0.203	Ø 62x30mm		CRM	Disc

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Zn/Al Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Ca	Na	Zr			
NCS HS49720-1	0.044	0.122	0.015	0.095	0.842	0.011	5.78	0.01	-	-	0.067			
NCS HS49720-2	0.115	0.206	0.041	0.243	1.16	0.039	5.20	0.019	-	-	0.104			
NCS HS49720-3	0.177	0.312	0.086	0.397	1.35	0.067	4.41	0.035	-	-	0.138			
NCS HS49720-4	0.284	0.396	0.116	0.556	1.940	0.099	3.50	0.059	-	-	0.204			
NCS HS49720-5	0.401	0.481	0.119	0.719	1.76	0.145	2.78	0.073	-	-	0.235			
NCS HS49738-1	0.147	0.283	1.83	0.043	3.17	0.0043	7.24	0.014	0.00048	0.0007	0.019			
NCS HS49738-2	0.13	0.239	2.17	0.11	2.75	0.037	6.42	0.05	0.0023	0.0027	0.092			
NCS HS49738-3	0.082	0.184	2.95	0.147	2.110	0.062	5.35	0.086	0.00023	(0.00008)	0.162			
NCS HS49738-4	0.019	0.041	3.48	0.207	1.88	0.104	4.60	0.134	0.001	0.00014	0.198			
NCS HS49738-5	0.055	0.113	2.43	0.254	1.4	0.133	3.95	0.164	0.0012	0.0011	0.207			
NCS HS49743-1	8.23	0.673	0.66	0.134	0.127	-	8.99	-	-	-	-			
NCS HS49743-2	6.85	0.409	0.408	0.291	0.217	-	11.14	-	-	-	-			
NCS HS49743-3	5.42	0.223	0.203	0.509	0.285	-	12.61	-	-	-	-			
NCS HS49743-4	7.22	0.536	0.251	0.402	0.421	-	13.02	0.194	-	-	-			
NCS HS49743-5	4.76	0.437	0.46	0.208	0.51	-	13.79	0.159	-	-	-			
NCS HS49743-6	3.41	0.224	0.544	0.072	0.713	-	16.50	0.107	-	-	-			

Product Code
NCS HS49720-1
NCS HS49720-2
NCS HS49720-3
NCS HS49720-4
NCS HS49720-5
NCS HS49738-1
NCS HS49738-2
NCS HS49738-3
NCS HS49738-4
NCS HS49738-5
NCS HS49743-1
NCS HS49743-2
NCS HS49743-3
NCS HS49743-4
NCS HS49743-5
NCS HS49743-6

	Size	Grade	Type	Unit
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 5	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc
Set of 6	Ø 62X30mm		CRM	Disc

Values listed in mass %; () Uncertified Value

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Sn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
MBH-55X G02D10 L	7.33	0.975	4.59	0.0524	0.0206	0.128	0.645	2.77	0.0302	-	0.0389	-	-	0.0012
MBH-55X G900J3 F	0.82	0.29	0.41	0.56	0.38	0.25	0.21	0.39	0.16	-	-	-	-	-
BAS-IMI2WM1	8.90	0.26	1.69	0.60	0.005	<0.005	0.39	2.420	0.20	-	-	-	-	-
VAW-3045-2	11.08	0.858	3.16	0.61	0.89	0.0071	0.40	0.50	0.23	-	-	-	0.0049	-
MBH-55X G26H4 D	10.37	0.511	3.72	0.165	1.64	0.0623	0.909	0.286	0.304	-	-	(0.025)	-	-
MBH-54X G13H1 N	8.91	0.801	1.87	0.0137	2.89	0.062	1.83	0.37	0.112	-	0.0078	<0.001	<0.002	-
MBH-57X G12H2 B	2.57	1.30	8.50	0.15	0.32	0.03	0.35	0.71	0.15	-	-	-	-	-
ALSUI-473/02	19.60	0.194	0.96	0.062	1.08	0.013	1.20	0.51	0.059	-	-	-	0.002	-
VAW-2204	0.67	0.50	0.014	0.33	0.89	0.0041	-	0.025	0.0115	<0.0005	-	-	-	-
VAW-2201	0.65	0.51	0.016	0.36	0.90	0.005	-	0.027	0.0091	<0.0005	-	-	<0.0005	-
MBH-55X G900J1 E	0.14	0.81	1.02	0.008	0.94	0.002	0.005	0.26	<0.005	-	-	-	-	-

Product Code	Co	Ga	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr			
MBH-55X G02D10 L	0.0544	-	-	-	-	0.022	0.0086	0.14	-	0.0341	-			
MBH-55X G900J3 F	0.07	-	-	-	-	0.14	(0.029)	0.14	-	-	-			
BAS-IMI2WM1	-	-	-	-	-	0.21	-	0.20	-	-	-			
VAW-3045-2	-	-	<0.0003	<0.0003	<0.001	0.16	-	0.20	0.051	-	-			
MBH-55X G26H4 D	-	-	-	-	-	0.12	-	0.234	-	0.0189	-			
MBH-54X G13H1 N	0.0051	-	-	-	-	0.24	<0.005	0.26	<0.001	-	<0.005			
MBH-57X G12H2 B	-	-	-	-	-	0.17	-	0.27	-	-	-			
ALSUI-473/02	-	0.008	-	-	0.0043	0.086	-	0.29	-	0.02	0.0076			
VAW-2204	-	-	-	-	<0.001	0.97	-	0.30	-	-	0.001			
VAW-2201	-	-	-	-	-	0.95	-	0.32	-	-	0.0021			
MBH-55X G900J1 E	-	-	-	-	-	0.35	-	0.32	-	-	-			

Product Code
MBH-55X G02D10 L
MBH-55X G900J3 F
BAS-IMI2WM1
VAW-3045-2
MBH-55X G26H4 D
MBH-54X G13H1 N
MBH-57X G12H2 B
ALSUI-473/02
VAW-2204
VAW-2201
MBH-55X G900J1 E

Size	Grade	Type	Form
Ø 50x15mm		CRM	C
Ø 40x15mm		RM	C
Ø 58x7mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 40x13mm		CRM	C
Ø 40x15mm		RM	C
Ø 60x25mm		CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 40x15mm		RM	C

Values listed in mass %; () Uncertified Value

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Sn/Al Alloys

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
VAW-3043-4	5.56	0.78	2.86	0.55	0.64	0.091	0.65	0.77	0.16	-	<0.0003	-	0.0029	0.01
MBH-511X G6262 A	0.649	0.58	0.267	0.163	0.881	0.121	0.028	0.198	0.045	-	-	0.0011	0.444	-
ALCOA-KA213	2.0x	1.0x	7.0x	0.30x	0.05x	<0.0050	0.20x	1.0x	0.05x	-	-	-	-	-
MBH-511X G6023 A	1.21	0.51	0.451	0.556	0.512	0.0054	0.036	0.026	0.0117	-	-	0.002	0.353	-
VAW-2210-1	1.07	0.35	0.093	0.60	0.88	0.17	0.0037	0.19	0.10	-	0.0003	-	0.41	-
MBH-511X G6012A	0.768	0.71	0.351	0.424	0.712	0.0223	0.048	0.06	0.197	-	-	0.011	0.701	-
VAW-4213-1	0.32	0.10	3.46	0.07	1.06	0.042	0.005	0.055	0.0093	-	<0.0005	-	-	0.0021
VAW-4211-1	0.18	0.157	3.2	0.037	0.88	0.017	0.027	0.027	0.076	-	<0.0005	-	-	0.001
VAW-4212-1	0.076	0.214	2.93	0.019	0.72	0.0057	0.059	0.0044	0.15	-	0.0015	-	-	0.0002
ALCOA-SS852	0.22x	0.35	2.0x	0.05x	0.84	<0.0050	1.2x	0.05x	0.04x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-SS851	2.5x	0.45	1.0x	0.05x	0.03x	<0.0050	0.50	0.03x	0.08x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
ALCOA-SS850	0.50	0.40	1.1x	0.05x	<0.0050	<0.0050	1.1x	<0.0050	0.12x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Product Code	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr	V	Zr
VAW-3043-4	0.0013	-	0.016	-	-	-	0.0022	0.20	<0.0005	-	0.34	0.093	0.011	0.0015
MBH-511X G6262 A	-	-	-	-	-	-	-	0.0081	-	-	0.539	-	-	0.0051
ALCOA-KA213	-	-	-	-	-	-	-	-	-	-	0.55	-	-	-
MBH-511X G6023 A	-	-	-	-	-	-	-	0.011	-	-	1.037	-	-	0.011
VAW-2210-1	-	-	0.0059	-	-	-	-	0.046	-	-	1.21	-	0.0061	-
MBH-511X G6012A	-	-	-	-	-	-	-	0.211	-	-	1.88	-	-	0.048
VAW-4213-1	0.005	0.0021	0.004	-	-	-	-	0.0036	-	-	3.41	-	0.0051	0.0053
VAW-4211-1	0.0026	0.0013	0.0089	-	-	-	-	0.026	-	-	3.67	-	0.0058	0.0026
VAW-4212-1	0.0009	0.0012	0.014	-	-	-	-	0.053	-	-	4.03	-	0.0057	0.0019
ALCOA-SS852	<0.0010	<0.0010	0.02x	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	6.3x	<0.0010	0.01x	<0.0030
ALCOA-SS851	<0.0010	<0.0010	0.015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	6.3x	<0.0010	0.01x	<0.0030
ALCOA-SS850	<0.0010	<0.0010	0.012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030	<0.0010	<0.0010	6.3x	<0.0010	0.01x	<0.0030

Product Code
VAW-3043-4
MBH-511X G6262 A
ALCOA-KA213
MBH-511X G6023 A
VAW-2210-1
MBH-511X G6012A
VAW-4213-1
VAW-4211-1
VAW-4212-1
ALCOA-SS852
ALCOA-SS851
ALCOA-SS850

Size	Grade	Type	Form
Ø 60x20mm		CRM	CCC
Ø 50x17mm	6262	CRM	C
Ø 64x25mm	213	CRM	CCC
Ø 50x17mm	213	CRM	C
Ø 60x20mm	6021	CRM	CCC
Ø 50x17mm	6012 Mod.	CRM	C
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 60x20mm		RM	CCC
Ø 64x25mm	852	CRM	CCC
Ø 64x25mm	851	CRM	CCC
Ø 64x25mm	850	CRM	CCC

Values listed in mass %; () Uncertified Value

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
VAW-R12	0.0001	0.00003	0.000068	0.000003	0.00008	0.000001	<0.000005	0.000005	0.000011	-	0.00054	<0.00001	-	-
VAW-R02	<0.0001	<0.00003	(<0.00004)	0.000004	0.00006	0.000002	<0.00001	0.000008	<0.00001	-	<0.000008	<0.00005	-	-
VAW-R09	<0.0001	0.00005	0.00004	0.000006	0.00008	0.000004	<0.00001	0.000020	<0.00005	-	<0.000008	<0.00005	-	-
VAW-R17	0.0003	0.0002	0.00025	<0.00003	0.00024	0.000005	<0.00001	0.000053	0.000031	-	0.000017	0.0002	-	-
ALPEC-9201	0-0.0005	0.00005	0.000035	0.000004	0-0.00005	0.000008	-	0.000033	0.00002	-	-	0.00005	-	-
VAW-R16	0.00012	0.00005	0.000032	<0.00003	0.00019	0.000008	<0.000013	0.00001	0.000017	-	0.000001	<0.00002	-	-
VAW-1067	0.0003	0.0002	0.00025	<0.00003	0.00024	<0.00001	<0.00001	0.00005	0.00003	<0.00001	0.00002	0.0002	<0.00002	<0.00001
VAW-1062	0.0001	0.00003	0.00007	<0.00001	0.00008	<0.00001	<0.00001	<0.00002	0.00001	<0.00001	0.00054	<0.00001	<0.00005	<0.00001
VAW-1066	0.00012	0.00005	0.00003	<0.00003	0.00019	0.00001	<0.00002	0.00001	0.00002	<0.00001	<0.00001	<0.00003	<0.00002	<0.00001
ALPEC-9203	0.0011	0.00131	0.00399	0.000014	0.0004	0.000016	-	0.00106	0.00045	-	-	0.00135	-	-
VAW-1071	0.0005	0.0003	0.00015	0.00002	0.00018	0.00002	0.00002	0.000005	0.00009	<0.00001	0.00007	<0.00005	<0.00002	0.00001

Product Code	Bi	Ca	Cd	Ce	Co	Ga	La	Li	Na	Nd	P	Pb	Sb	Sc
VAW-R12	-	-	-	0.000039	-	<0.00001	0.00001	-	-	0.000024	-	0.000005	0.00011	0.000004
VAW-R02	-	-	-	<0.000001	-	0.000004	<0.000001	-	-	<0.000001	-	0.000002	<0.000001	<0.000002
VAW-R09	-	-	-	<0.000001	-	<0.000001	<0.000001	-	-	<0.000001	-	0.000002	<0.000001	0.000009
VAW-R17	-	-	-	0.00038	-	0.000002	0.00009	-	-	0.000019	-	0.00002	0.000008	0.000006
ALPEC-9201	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-R16	-	-	-	0.000044	-	<0.000001	0.000015	-	-	0.000021	-	<0.000003	0.000003	0.000007
VAW-1067	<0.00001	<0.00006	<0.00001	0.00004	<0.00001	<0.00001	-	<0.00001	<0.00008	-	0.0018	0.00002	0.00001	<0.00002
VAW-1062	<0.00001	<0.00005	<0.00001	0.00004	<0.00001	<0.00001	-	<0.00002	<0.00004	-	0.0004	<0.00001	0.00011	<0.00002
VAW-1066	<0.00001	<0.00002	<0.00001	0.00004	<0.00001	<0.00001	-	<0.00001	<0.00008	-	<0.0002	<0.00001	<0.00001	0.00001
ALPEC-9203	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1071	<0.00001	<0.00003	<0.00001	0.00005	<0.00001	<0.00001	-	<0.00001	<0.00008	-	0.0005	0.00001	0.0001	<0.00001

Product Code	Sn	Sr	Th	U	V	Zr
VAW-R12	-	-	0.000055	0.0000016	<0.000006	0.000003
VAW-R02	-	-	<0.0000001	<0.0000001	<0.00001	<0.00002
VAW-R09	-	-	<0.0000000	<0.0000000	<0.00001	<0.00002
VAW-R17	-	-	<0.0000063	0.0000095	<0.00002	0.00012
ALPEC-9201	-	-	-	-	0-0.00002	-
VAW-R16	-	-	0.0000052	0.0000056	<0.00001	0.00006
VAW-1067	<0.0003	<0.00002	-	-	<0.00002	0.00012
VAW-1062	<0.00002	<0.00002	-	-	<0.00001	<0.00006
VAW-1066	<0.0003	<0.00002	-	-	<0.00001	0.00006
ALPEC-9203	-	-	-	-	0.00008	-
VAW-1071	<0.0003	<0.00002	-	-	<0.00002	0.00002

Size	Grade	Type	Form
Ø 60x20mm	1199	CRM	CCC
Ø 60x20mm	1199	CRM	CCC
Ø 60x20mm	1199	CRM	CCC
Ø 60x20mm	1199	CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm	1199	CRM	CCC
Ø 60x20mm	1188	RM	CCC
Ø 60x20mm	1188	RM	CCC
Ø 60x20mm	1188	RM	CCC
Ø 55x30mm		CRM	CCC
Ø 60x20mm	1188	RM	CCC

Values listed in mass %; () Uncertified Value

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Co	Ag	As	B	Ba
ALPEC-9206	-	-	-	-	-	-	0.00006	-	-	0.000006	0-0.000005	-	-	-
VAW-1003	0.0035	0.0045	0.003	0.0005	0.0005	<0.00004	<0.00004	0.0045	<0.00003	-	-	-	0.00013	-
ALSUI-112/03	0.00007	0.00006	0-0.00004	0-0.00001	0.00005	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0.0000001	0-0.00001	0.00001	0.00001	0-0.00001
VAW-1001	0.0048	0.00086	0.00013	0.00007	0.0014	<0.00004	0.00006	0.0009	0.00008	<0.00005	<0.00001	0.00007	0.00016	<0.00005
VAW-1000-1	0.0012	0.00027	0.00011	0.00005	0.00028	<0.00006	<0.00004	0.00035	0.00002	<0.00002	<0.00001	0.00004	<0.00002	<0.00002
VAW-1005	0.0027	0.0018	0.0011	0.0012	0.0018	0.00006	0.00005	0.0022	<0.00002	-	-	-	0.0002	<0.00005
SEI-NKHP-NDC2	0.001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	-	-	<0.0001	-
ALCOA-SS1000	0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-
ALSUI-113/03	0.0012	0.0054	0.00023	0.0001	0.0008	0-0.0001	0.0001	0.00025	0.00011	0.0005	-	-	0.009	-

Product Code	Be	Bi	Ca	Cd	Ce	Co	Hg	In	La	Li	Mo	Na	P	Pb
ALPEC-9206	-	0.000005	-	-	0.000002	0.000006	-	0.000001	1E-06	-	-	-	-	0.00002
VAW-1003	-	-	0.00006	-	-	-	-	-	-	-	-	-	-	-
ALSUI-112/03	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0.00005	0-0.00001	0-0.00001	0-0.00001	0.00001	0-0.00001	0-0.00001	0-0.00001	0-0.00012	0-0.00001
VAW-1001	-	-	0.00007	<0.00002	0.0001	<0.00005	-	-	-	-	-	-	0.0006	0.00005
VAW-1000-1	<0.00003	<0.00004	<0.00007	<0.00002	0.00005	<0.00002	-	-	-	<0.00002	-	<0.00001	0.0004	<0.00002
VAW-1005	-	-	<0.00005	-	-	-	-	-	-	-	-	<0.00002	-	-
SEI-NKHP-NDC2	-	-	<0.0001	-	-	-	-	-	-	-	-	<0.0001	-	-
ALCOA-SS1000	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	-	-	<0.0001	-	<0.0001	<0.0001	<0.0001
ALSUI-113/03	0-0.00001	0.00053	0-0.0001	0-0.00001	-	0.0005	-	-	-	0-0.00001	-	0-0.00005	0.0013	0.0007

Product Code	Sb	Sc	Se	Sn	Sr	Tl	V	W	Zr
ALPEC-9206	-	-	-	0.00001	-	-	-	-	0-0.00003
VAW-1003	-	-	-	-	-	-	-	-	-
ALSUI-112/03	0.00003	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0-0.00001	0-0.00001
VAW-1001	0.003	0.00003	-	-	<0.00002	-	<0.00002	-	<0.00001
VAW-1000-1	<0.0001	<0.00002	-	<0.00005	<0.00002	-	<0.00004	-	<0.00002
VAW-1005	0.00006	<0.00003	-	-	-	-	-	-	-
SEI-NKHP-NDC2	-	-	-	-	-	-	<0.0001	-	-
ALCOA-SS1000	<0.0001	<0.0001	-	<0.0001	<0.0001	-	<0.0001	-	<0.0001
ALSUI-113/03	0.00065	-	-	0.0006	-	-	0.00039	-	0.0003

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 60x20mm	1200	RM	CCC
Ø 60x25mm	1199	CRM	CCC
Ø 60x20mm	1199	RM	CCC
Ø 60x20mm	1199	CRM	CCC
Ø 60x20mm		RM	CCC
Ø 60x25mm		CRM	C
Ø 64x25mm	1000	CRM	W
Ø 64x25mm	1199	CRM	W

Values listed in mass %; () Uncertified Value

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Ba
ALPEC-149	0.02	0.018	0.0029	0.0005	0.0004	0.0001	0.0005	0.0038	0.0006	-	-	-	-	-
VAW-1004	0.0076	0.0064	0.004	0.0012	0.0025	0.00014	0.00014	0.0068	0.0001	-	-	-	0.0001	-
VAW-1002-1	0.0071	0.00106	0.00029	0.0002	0.00079	<0.0002	<0.0002	0.00157	<0.0001	<0.00005	-	<0.00005	0.00012	0.00053
VAW-1202-1	0.014	0.024	0.00070	0.0004	0.0021	<0.0002	0.0022	0.0021	<0.0002	-	-	-	0.0002	-
VAW-1203	0.052	0.022	0.00210	0.0014	0.0014	<0.0003	0.0006	0.019	0.00200	-	-	-	-	-
VAW-1200-1	0.01	0.0027	0.0054	0.0107	0.0011	0.0004	0.0004	0.0062	0.0001	<0.0001	-	-	0.0002	0.0001
ALPEC-9202	0.0039	0.004	0.001	0.00046	0.00088	0.0005	-	0.00031	0.00018	-	-	-	0.00046	-
VAW-1209-1	0.013	0.0018	0.074	0.0001	0.0002	<0.0006	0.02	0.0002	<0.0002	0.0001	-	-	0.005	<0.0001
VAW-1401	0.062	0.038	0.019	0.0015	0.001	0.0006	0.0011	0.012	0.0022	-	-	-	-	-
VAW-1403	0.089	0.092	0.014	0.0066	0.00840	0.0007	0.0024	0.024	0.0025	<0.0002	(99.7)	-	0.0006	-

Product Code	Be	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	Li	Na	P	Pb	Sb
ALPEC-149	-	-	-	-	-	-	0.0032	-	-	-	-	-	0.0004	-
VAW-1004	-	-	0.00006	-	-	-	-	-	-	-	-	0.0004	-	-
VAW-1002-1	<0.00001	<0.0001	0.00028	<0.00005	<0.0001	<0.0001	<0.00005	-	-	<0.00002	<0.0001	0.0005	<0.00002	<0.00005
VAW-1202-1	-	-	-	-	-	-	0.0001	-	-	-	-	-	-	0.011
VAW-1203	-	-	<0.0001	-	-	<0.0005	0.0035	-	-	-	-	-	-	-
VAW-1200-1	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	0.0006	-	0.0032
ALPEC-9202	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAW-1209-1	<0.0001	0.053	<0.0002	<0.0001	-	<0.0001	0.005	<0.0001	<0.0004	<0.0001	<0.0002	0.0056	-	0.04
VAW-1401	-	-	<0.0002	-	-	-	0.004	-	-	-	<0.0001	-	0.0006	-
VAW-1403	-	-	<0.0002	-	-	-	0.0054	<0.0002	-	-	-	<0.0004	0.0005	-

Product Code	Sc	Sn	Sr	Zr
ALPEC-149	-	0-0.0001	-	-
VAW-1004	-	-	-	-
VAW-1002-1	<0.0001	<0.0001	<0.00005	<0.00005
VAW-1202-1	-	<0.0005	-	<0.0002
VAW-1203	-	<0.0001	-	0.0009
VAW-1200-1	-	<0.0002	<0.0001	<0.0001
ALPEC-9202	-	-	-	-
VAW-1209-1	-	0.022	<0.0001	<0.0001
VAW-1401	-	-	-	0.0017
VAW-1403	-	-	-	0.002

Values listed in mass %; () Uncertified Value

Type	Size	Grade	Type	Form
CRM	Ø 60x20mm	1200	CRM	CCC
CRM	Ø 60x20mm	1200	CRM	CCC
CRM	Ø 60x20mm	1188	CRM	CCC
CRM	Ø 60x20mm	1188	CRM	CCC
CRM	Ø 55x30mm	1200	CRM	CCC
CRM	Ø 60x20mm	1188	CRM	CCC
RM	Ø 60x20mm		RM	CCC
RM	Ø 60x20mm	1100	RM	CCC
RM	Ø 60x20mm	1080	RM	CCC
RM	Ø 60x20mm	1080	RM	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Ba
ALSUI-114/03	0.0034	0.005	0.0018	0.0019	0.0013	0.0006	0.0009	0-0.0002	(0.0004)	0-0.00005	-	0-0.0001	0.017	0-0.0001
ALCOA-WA1199	<0.0010	0.002x	0.001x	0.001x	0.001x	0.001x	0.001x	0.001x	0.001x	0.001x	-	-	<0.0010	-
ALSUI-117/02	0.0162	0.0155	0.002x	0.001	0.002	0.0013	0.0016	0.0013	(0.0003)	0.0003	-	(0.0002)	(0.0013)	0.00014
ALPEC-9204	0.0097	0.00889	0.00984	0.00154	0.00191	0.0021	-	0.00434	0.00341	-	-	-	0.00014	-
ALPEC-122C/01	0.0585	0.0981	0.0148	0.0104	0.0042	0.0027	0.0024	0.0153	0.0038	-	-	-	-	-
ALPEC-574	0.0152	0.0175	0.0094	0.0052	0.0325	0.00475	0.00556	0.0138	0.0057	-	-	-	-	-
ALCOA-SS1188	0.04x	0.06x	<0.0050	0.005x	0.01x	<0.0050	<0.0050	0.01x	0.01x	<0.0010	-	<0.0010	<0.0010	-
BAS-BCS-RM 195G	0.035	0.08	0.001	0.001	-	-	-	0.015	-	-	99.85	-	-	-
BAS-BCS-RM 198F	-	0.001	0.005	-	-	-	-	-	-	-	99.99	-	-	-

Product Code	Be	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Mo	Na	P
ALSUI-114/03	0-0.00005	0.0011	(0.0001)	0.0031	0-0.0001	0.00104	0.0011	0-0.0001	0-0.0001	0-0.0001	0.0002	0-0.0001	0-0.0001	0.0004
ALCOA-WA1199	0.0005	0.001x	<0.0005	0.001x	-	0.001x	0.001x	-	-	-	<0.0005	-	<0.0005	-
ALSUI-117/02	0.00056	0.0032	(0.0002)	0.0006	0.0022	0.0014	0.0014	0.0004	0.0007	0.0012	0,00006-0,00011	-	0.00030-0.00045	0.0005
ALPEC-9204	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALPEC-122C/01	-	-	-	0.0002	-	0.0008	0.0009	-	-	-	-	-	-	-
ALPEC-574	-	-	-	-	-	0.0054	0.00585	-	-	-	-	-	-	-
ALCOA-SS1188	<0.0005	<0.0010	<0.0005	<0.0010	-	<0.0010	0.02x	<0.0005	-	-	<0.0005	-	<0.0005	<0.0010
BAS-BCS-RM 195G	-	-	-	-	-	-	0.009	-	-	-	-	-	-	-
BAS-BCS-RM 198F	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Pb	Sb	Sc	Se	Sn	Sr	Ta	Tl	V	Zr	Size	Grade	Type	Form
ALSUI-114/03	0.0017	0.0021	-	0.00011	0.0012	0-0.0001	0-0.0001	0-0.0001	0.00008	-	Ø 60x25mm	1199	CRM	CCC
ALCOA-WA1199	0.003x	0.001x	-	-	0.001x	0.001x	-	-	0.001x	0.001x	Ø 64x19mm	1199	CRM	W
ALSUI-117/02	0.0022	0.0003	-	-	0.0022	-	-	-	0.0017	0.0022	Ø 60x25mm	1200	CRM	CCC
ALPEC-9204	-	-	-	-	-	-	-	-	0.00127	-	Ø 55x30mm	-	CRM	CCC
ALPEC-122C/01	0.0146	0.0032	-	-	0.0147	-	-	-	0.0018	0.0001	Ø 60x26mm	1080	CRM	CCC
ALPEC-574	0.0051	-	-	-	0.0055	-	-	-	-	-	Ø 55x30mm	1200	CRM	CCC
ALCOA-SS1188	<0.0030	<0.0010	<0.0010	-	<0.0010	<0.0010	-	-	0.01x	<0.0010	Ø 64x25mm	1188	CRM	W
BAS-BCS-RM 195G	-	-	-	-	-	-	-	-	0.004	-	90x35x35mm	-	RM	C
BAS-BCS-RM 198F	-	-	-	-	-	-	-	-	-	-	65x20x45mm	-	RM	C

Values listed in mass %; () Uncertified Value

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Ba
ALSUI-116/04	0.0111	0.0105	0.007	0.0051	0.005	0.0051	0.0049	0.0052	0.002	0.002	-	0.0058	0.0004	0-0.0001
ALCAN-HPFL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00001	0.0001	0.0001	0.0001	-	0.0001	0.0001	0.0001
ALPEC-566	0.0004	0.00075	0.00022	0.000007	0.00035	7E-06	0.000008	0.0001	0.000015	-	-	-	-	-
ALSUI-134/05	0.152	0.286	0.0038	0.0032	0.0025	0.0002	0.0011	0.0012	0-0.0001	-	-	-	0.0055	0.0025-0.0038
VAW-1402-2	0.064	0.048	0.012	0.0023	0.002	0.0005	0.0013	0.016	0.017	0.0005	-	-	0.0006	-
VAW-2011-1	0.24	0.085	0.0062	0.015	0.26	0.0007	0.0008	0.16	<0.0005	0.0003	-	0.0032	0.004	0.0012
ALSUI-611/03	0.198	0.069	0.0012	0.002	0.211	0.001	0.0016	0.0013	0.0015	-	-	-	0.0002	-
VAW-1411-1	0.0238	0.00078	0.00119	0.00042	0.0002	0.001	0.00355	0.00274	<0.0002	-	(99.9)	<0.0002	0.00893	<0.0002
VAW-1410-3	0.0619	0.1068	0.0118	0.00717	0.00342	0.00418	0.00549	0.0119	0.00289	0.00121	(99.7)	0.00204	0.00032	0.0006

Product Code	Be	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Mo	Na	P
ALSUI-116/04	0.00028	0.0021	(0.00007)	0.0011	0.0011	0.002	0.0048	0.0004	0.0049	0.0033	0.00011	0.0076	0-0.0001	0.0019
ALCAN-HPFL	0.0001	0.0001	0.0001	0.0001	-	0.0001	0.0001	0.0001	0.0001	-	0.0001	0.0001	0.0001	0.0001
ALPEC-566	-	-	-	-	-	0.0000007	0.000005	-	-	-	-	-	-	-
ALSUI-134/05	0.001	-	0.0002-0.0005	0.001	-	0.001	0.001	-	-	-	0.00006-0.00012	-	0.0020-0.0064	-
VAW-1402-2	-	-	0.0001	0.0009	-	0.0005	0.0078	-	0.001	-	<0.0002	-	<0.0002	<0.0004
VAW-2011-1	0.0002	0.002	0.0007	0.0011	-	0.0022	0.0044	0.0044	-	-	0.0006	-	0.0007	0.0009
ALSUI-611/03	-	-	0.0017	0.0058	-	0.001	-	0.0108	-	-	0.00065-0.00087	-	0-0.0001	0.0018
VAW-1411-1	0.00007	0.0118	<0.0002	0.0003	<0.0002	0.00024	0.0307	<0.0005	0.0001	<0.0002	0.00012	<0.0002	0.00029	<0.0004
VAW-1410-3	0.00073	0.004	0.00021	0.00308	0.0039	0.00504	0.0238	0.00152	0.00689	-	0.0016	<0.0002	0.0042	0.00096

Product Code	Pb	Sb	Sc	Se	Sn	Sr	Tl	V	W	Zr	Size	Grade	Type	Form
ALSUI-116/04	0.0029	0.0035	-	-	0.0031	0.00085	-	0.0026	0.0015	0.0019	Ø 60x25mm	1200	CRM	CCC
ALCAN-HPFL	0.0001	0.0001	-	-	0.0001	0.0001	0.0001	0.0001	-	0.0001	57x25mm 57x40mm		CRM	W
ALPEC-566	0-0.00004	-	-	-	0-0.00001	-	-	-	-	-	Ø 57x25mm	1199	CRM	CCC
ALSUI-134/05	0.0011	-	-	-	0.0013	0.000x	-	0-0.0001	-	0.0002	Ø 60x25mm	1050	CRM	CCC
VAW-1402-2	0.0007	<0.0005	0.0017	-	0.0008	<0.0002	0.0013	0.0044	-	0.0009	Ø 60x20mm	1080	CRM	C
VAW-2011-1	0.0042	0.0057	0.016	-	0.0041	<0.0002	-	<0.0002	-	0.0015	Ø 60x20mm	6005	CRM	C
ALSUI-611/03	0.0009	-	-	-	0.001	-	-	0.0004	-	0.001	Ø 60x25mm	8112	CRM	CCC
VAW-1411-1	0.00107	0.0059	-	<0.0002	0.0185	<0.0002	<0.0002	0.0008	-	0.00017	Ø 60x20mm	1188	CRM	C
VAW-1410-3	0.00497	0.0077	-	-	0.0048	0.00019	0.00228	0.00518	-	0.00278	Ø 60x20mm	1080	CRM	C

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Be	Bi
VAW-1406-1	0.35	0.38	0.05	0.05	0.024	0.0013	0.0054	0.11	0.0007	-	-	0.002	-	-
ALCOA-WB1100	0.22x	0.60	0.10x	0.02x	0.01x	<0.0050	<0.0050	0.04x	0.01x	-	-	-	-	-
ALCOA-WA1100	0.12x	0.30	0.20x	0.08x	0.05x	<0.0050	<0.0050	0.02x	0.04x	-	-	-	-	-
ALCOA-SS1075	0.07x	0.12x	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.003x	<0.0005	<0.0005	0.0015	<0.0050
ALCOA-SS1100	0.18x	0.50	0.15x	0.04x	0.03x	<0.0050	<0.0050	0.08x	0.02x	<0.0010	<0.0010	<0.0010	<0.0005	<0.0010
ALCOA-SS1050	0.12x	0.30	0.04x	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.001x	0.008x	<0.0005	0.0005	0.001x
ALCAN-1S-WN	0.15	0.80	0.044	0.21	0.04	0.04	0.04	0.042	0.028	-	-	-	-	0.04
ALPEC-9205	0.0285	0.0298	0.0312	0.00495	0.0048	0.00502	-	0.00993	0.00813	-	-	0.00007	-	-
ALCOA-WD1000	0.004x	0.004x	0.004x	0.004x	0.004x	0.004x	0.004x	0.004x	0.004x	-	-	-	-	0.004x
ALPEC-769	0.0999	0.2009	0.0004	0.0204	0.0093	0.0056	0.0051	0.0002	0.0105	-	-	-	-	-

Product Code	Cd	Co	Ga	Hg	Li	Pb	Na	P	Pb	Sb	Sc	Sn	Sr	V
VAW-1406-1	-	-	0.0074	-	-	0.0021	-	-	0.0021	<0.0003	-	<0.0006	-	0.019
ALCOA-WB1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-WA1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SS1075	0.003x	0.003x	0.02x	<0.0005	<0.0005	<0.003x	<0.0005	<0.0005	<0.003x	0.003x	<0.0005	<0.001x	0.003x	0.03x
ALCOA-SS1100	<0.0010	<0.0010	0.02x	<0.0005	<0.0005	<0.0030	<0.0005	<0.0010	<0.0030	<0.0010	<0.0010	<0.0010	<0.0010	0.01x
ALCOA-SS1050	0.001x	0.001x	0.02x	<0.0005	<0.0005	<0.003x	<0.0005	<0.0005	<0.003x	0.001x	<0.0005	<0.001x	0.001x	0.01x
ALCAN-1S-WN	-	0.005	0.003	-	-	0.038	-	-	0.0380	<0.0001	-	0.045	-	0.014
ALPEC-9205	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00222
ALCOA-WD1000	-	-	0.004x	-	-	0.004x	-	-	0.004x	-	-	0.004x	-	0.004x
ALPEC-769	0.0004	0.0034	0-0.0004	-	-	0.004	-	-	0.004	0.0095	-	0.004	-	0.0139

Product Code	Zr
VAW-1406-1	0.0008
ALCOA-WB1100	-
ALCOA-WA1100	-
ALCOA-SS1075	0.003x
ALCOA-SS1100	<0.0030
ALCOA-SS1050	0.001x
ALCAN-1S-WN	-
ALPEC-9205	-
ALCOA-WD1000	-
ALPEC-769	0.004

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 60X20mm	1200	CRM	CCC
Ø 64X25mm	1100	CRM	W
Ø 64X25mm	1100	CRM	W
Ø 64X25mm	1075	CRM	W
Ø 64X25mm	1100	CRM	W
Ø 64X25mm	1000	CRM	W
Ø 57X25mm		CRM	CCC
Ø 55X30mm	1000	CRM	CCC
Ø 64X19mm	1000	CRM	W
Ø 55X30mm	1075	CRM	CCC

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALCAN-1188-AD	0.052	0.053	0.0052i	0.0066	0.0051i	0.007	0.0073	0.007	0.0072	0.003	0.0028	-	0.0009i	0.0009i
ALSUI-121/06	0.0201	0.0251	0.0099	0.0098	0.0092	0.0088	0.0097	0.009	0.01	0.01	0.0025	(0.0001)	0.0014	0.0019
ALSUI-131/03	0.112	0.123	0.021	0.0123	0.0211	0.0096	0.0025	0.0118	0.0045	-	-	(0.0003)	-	0.00024
ALPEC-768	0.0994	0.1935	0.0006	0.0203	0.0093	0.0056	0.0051	0.0003	0.0104	-	-	-	-	-
SEI-NK1S-NDC6	0.012	0.013	0.01	0.01	0.01	0.01	0.0099	0.01	0.011	-	-	-	0.0007	0.009
ALPEC-579	0.0285	0.0305	0.019	0.0127	0.0138	0.0103	0.011	0.0277	0.0128	-	-	-	-	-
SEI-NK1S-NDC3	0.039	0.043	0.0099	0.0098	0.0082	0.011	0.01	0.01	0.0099	-	-	-	-	-
ALSUI-135/02	0.052	0.29	0.02	0.02	0.02	0.015	0.016	0.008	0.023	-	-	-	-	-
ALCAN-X11AH	0.43	0.42	0.088	0.037	0.015	0.016	0.031	0.026	0.028	-	-	-	-	0.001

Product Code	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Mo	Na	P	Pb
ALCAN-1188-AD	0.0058	0.0010i	0.0011	-	0.0011	0.02	0.0021	0.0028	-	0.0009i	0.0144	0.0013i	0.0031	0.0071
ALSUI-121/06	0.0049	(0.0012)	0.0018	0.0048	0.0093	0.0096	0.0003	0.0097	0.0076	0-0.00002	0.0098	0.0007-0.0010	0.0007	0.0048
ALSUI-131/03	0.0012	0.0032-0.0037	0.0009	-	-	0.0054	-	-	-	0.00007-0.00011	-	0.0004-0.0008	0.001	0.0058
ALPEC-768	-	-	0.0004	-	0.0041	0-0.0004	-	-	-	-	-	-	-	0.004
SEI-NK1S-NDC6	-	0.0037	-	-	-	0.0098	-	-	-	-	-	(0.002)	-	-
ALPEC-579	-	-	-	-	0.0106	0.0112	-	-	-	-	-	-	-	0.0103
SEI-NK1S-NDC3	-	-	-	-	-	0.0091	-	-	-	-	-	-	-	0.0096
ALSUI-135/02	0.002	-	-	-	0.001	0.013	-	0.002	-	-	-	-	-	0.0023
ALCAN-X11AH	0.016	0.0021i	0.001	-	-	0.022	-	-	-	0.0014i	-	0.0021i	0.0038	0.013

Product Code	Sb	Sc	Sn	Sr	Ta	Tl	V	W	Zr
ALCAN-1188-AD	0.0028	-	0.0065	0.0013i	-	0.0026	0.02	-	0.0026
ALSUI-121/06	0.0032	0.001	0.0049	0-0.0001	0.0007	-	0.0103	0.0037	0.0096
ALSUI-131/03	0.0003	-	0.0024	-	-	-	0.0068	-	0.001
ALPEC-768	0.0093	-	0.004	-	-	-	0.0138	-	0.0061
SEI-NK1S-NDC6	-	-	-	-	-	-	0.011	-	0.0099
ALPEC-579	-	-	0.0107	-	-	-	-	-	-
SEI-NK1S-NDC3	-	-	0.0096	-	-	-	0.01	-	-
ALSUI-135/02	-	-	0.0052	-	-	-	0.0062	-	0.005
ALCAN-X11AH	0.0039	-	0.015	0.0024i	-	-	0.0215	-	0.0032

Size	Grade	Type	Form
Ø 57X25mm	1188	CRM	W
Ø 60X25mm	1080	CRM	CCC
Ø 60X25mm	1080	CRM	CCC
Ø 55X31mm	1075	CRM	CCC
Ø 55X25mm	-	CRM	C
Ø 55X30mm	1200	CRM	CCC
Ø 55X25mm	-	CRM	C
Ø 60X25mm	1050	CRM	CCC
Ø 57X25mm	-	CRM	W

Values listed in mass %; () Uncertified Value

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Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALCAN-1050AJ	0.174	0.297	0.04	0.0374	0.0264i	0.0172	0.0227	0.0399	0.0287	-	-	-	-	0.0010i
ALCO-WE1000	0.01x	0.01x	0.01x	0.01x	0.01x	0.01x	0.01x	0.01x	0.01x	-	-	-	-	-
ALSUI-133/02	0.05	0.20	0.0105	0.0115	0.0058	0.02	0.021	0.021	0.013	-	-	0.00005	-	0.0002
ALSUI-122/06	0.0497	0.0586	0.0205	0.0197	0.0167-0.0176	0.0197	0.0201	0.0193	0.0195	0.0199	0.005	(0.0001)	0.0028-0.0042	0.00037
VAW-1413-1	0.14	0.35	0.038	0.017	0.031	0.022	0.021	0.032	0.028	-	-	0.0012	-	0.0013
ALCOA-ST1-1050	0.015	0.33	0.03x	0.04x	0.03x	0.02x	0.01x	0.04x	0.03x	-	0.0005	<0.0010	-	0.0002
SIE-NK1S-NDC4	0.11	0.107	0.035	0.032	0.025	0.032	0.031	0.055	0.026	-	-	-	-	0.0016
ALSUI-123/04	0.073	0.107	0.0321	0.0301	0.0267	0.0321	0.0309	0.0301	0.0312	0.0048	-	-	-	0.0008

Product Code	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Mo	Na	P	Pb
ALCAN-1050AJ	0.0081	0.0016i	0.0011	-	-	0.019	-	-	-	0.0022i	-	0.0013i	0.0014	0.008
ALCO-WE1000	0.01x	-	-	-	-	0.01x	-	-	-	-	-	-	-	0.01x
ALSUI-133/02	0.0001	0.0001	0.001	-	0-0.0001	0.031	-	-	-	0.00003	-	0.0007	0.0001	0.0015
ALSUI-122/06	0.0088	0.0003	0.0051	0.0097	0.016	0.0256	0.0079	0.0147	0.0152	0.00015-0.00045	0.0091	0.0007-0.0019	0.0045	0.0078
VAW-1413-1	0.0058	0.0013	0.0016	-	0.0013	0.02	-	-	-	0.0013	-	0.0017	0.0023	0.0073
ALCOA-ST1-1050	0.03x	0.002x	0.0005	-	0.0005	0.025	0.0002	-	-	0.001x	-	0.0015	0.0005	0.02x
SIE-NK1S-NDC4	0.0097	0.0007	-	-	-	0.029	-	-	-	-	-	-	-	0.02
ALSUI-123/04	0.0206	-	0.0096	-	0.0159	0.0207	-	-	-	-	-	0.0002-0.0005	-	0.0109

Product Code	Sb	Sc	Sn	Sr	Ta	Tl	V	W	Zr
ALCAN-1050AJ	0.002	-	0.0148	0.0018i	-	-	0.0168	-	0.0019
ALCO-WE1000	-	-	0.01x	-	-	-	0.01x	-	-
ALSUI-133/02	0.001	-	0.0012	0-0.0001	-	-	0.023	-	0.0048
ALSUI-122/06	0.0076	0.0024	0.0095	0.00022	0.0014	0.0135	0.0171	0.0078	0.0148
VAW-1413-1	0.003	-	0.005	0.0006	-	-	0.02	-	0.0031
ALCOA-ST1-1050	0.003x	-	0.02x	0.0012	-	-	0.025	-	0.004x
SIE-NK1S-NDC4	0.009	-	0.02	-	-	-	0.029	-	0.01
ALSUI-123/04	-	-	0.0158	-	-	-	0.0311	-	0.0311

Size	Grade	Type	Form
Ø 57x25mm	1050	CRM	W
Ø 64x25mm	1000	CRM	W
Ø 60x25mm	1075	CRM	CCC
Ø 60x25mm	1080	CRM	CCC
Ø 60x20mm	1050	CRM	CCC
Ø 64x25mm	1050	CRM	W
Ø 55x25mm		CRM	CCC
Ø 60x25mm	1050	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pure Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	Bi	Cd	Co	Ga
ALCOA-WB1000	0.10x	0.10x	0.03x	0.03x	0.03x	0.03x	0.03x	0.03x	0.03x	-	0.03x	-	-	-
MBH-51X G00H4 B	0.028	0.072	0.051	0.0309	0.024	0.04	0.036	0.151	0.029	0.0014	0.0202	0.0208	0.03	0.022
ALCOA-WC1000	0.10x	0.10x	0.08x	0.08x	0.08x	0.08x	0.08x	0.08x	0.08x	-	0.08x	-	-	-

Product Code	Hg	Pb	Sn	V	Zr
ALCOA-WB1000	-	0.03x	0.03x	0.02x	-
MBH-51X G00H4 B	0.012	0.021	0.031	0.0108	0.0261
ALCOA-WC1000	-	0.08x	0.08x	0.04x	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 64x19mm	1000	CRM	W
Ø 50x20mm	8010	CRM	CC
Ø 64x25mm	1000	CRM	W

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pure Aluminium Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Zr		
NCS HS49710D-1	0.168	0.137	0.01	0.0074	0.0074	-	0.0051	0.017	0.011	0.12	-	-		
NCS HS49710D-2	0.052	0.058	0.0052	0.0027	0.0027	-	0.0036	0.0044	0.001	0.0034	-	-		
NCS HS49710D-3	1.18	1.20	0.093	0.068	0.068	-	0.033	0.083	0.037	0.02	-	-		
NCS HS49710D-4	0.363	0.334	0.035	0.025	0.025	-	0.052	0.045	0.018	0.029	-	-		
NCS HS49710D-5	0.577	0.709	0.051	0.043	0.043	-	0.089	0.136	0.086	0.04	-	-		
NCS HS49710D-6	0.913	0.92	0.028	0.143	0.143	-	0.114	0.188	0.064	0.05	-	-		
NCS HS49715-1	0.00079	0.00051	0.00034	(0.00007)	0.00027	0.00054	0.00022	(0.00015)	0.00014	(0.0001)	(0.0004)	0.0002		
NCS HS49715-2	0.0015	0.0016	0.00017	0.0019	0.00039	0.00097	0.0026	0.0025	0.00084	0.0032	(0.00077)	0.0025		
NCS HS49715-3	0.01	0.012	0.0061	0.0066	0.0079	0.004	0.0063	0.0073	0.003	0.0082	(0.00093)	0.0053		
NCS HS49715-4	0.031	0.033	0.012	0.01	0.0092	0.0069	0.011	0.011	0.012	0.011	(0.0014)	0.014		
NCS HS49715-5	0.0073	0.0091	0.0033	0.0041	0.0052	0.0018	0.0059	0.0047	0.0021	0.0012	(0.00052)	0.0057		
NCS HS49715-6	0.044	0.063	0.014	0.012	0.014	0.015	0.042	0.016	0.017	0.015	(0.0012)	0.019		
NCS HS49715-7	0.111	0.397	0.002	0.003	0.0022	-	-	-	0.012	-	0.0099	-		

Product Code
NCS HS49710D-1
NCS HS49710D-2
NCS HS49710D-3
NCS HS49710D-4
NCS HS49710D-5
NCS HS49710D-6
NCS HS49715-1
NCS HS49715-2
NCS HS49715-3
NCS HS49715-4
NCS HS49715-5
NCS HS49715-6
NCS HS49715-7

	Size	Grade	Type	Unit
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc
Set of 7	Ø 40x35mm		CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pure Aluminium (Sets Only)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Ga	Pb	Re	Sn
NCS HS53703-1	0.067	0.071	0.015	0.0077	0.0044	-	0.0092	0.0088	0.012	-	-	-	-	-
NCS HS53703-2	0.133	0.166	0.0093	0.029	0.017	-	0.019	0.013	0.026	-	-	-	-	-
NCS HS53703-3	0.58	0.59	0.291	0.014	0.022	-	0.032	0.122	0.041	-	-	-	-	-
NCS HS53703-4	0.29	0.35	0.033	0.055	0.04	-	0.054	0.035	0.062	-	-	0.035	0.029	0.047
NCS HS53703-5	1.28	1.31	0.079	0.112	0.103	-	0.10	0.073	0.093	-	-	-	-	-
NCS HS91701-1	0.047	0.055	0.0056	0.0019	0.0024	0.0005	-	0.0081	0.0018	0.0005	0.0042	-	-	-
NCS HS91701-2	0.11	0.14	0.01	0.0084	0.022	0.0015	-	0.031	0.0063	0.0006	0.03	-	-	-
NCS HS91701-3	0.634	0.773	0.03	0.017	0.0096	0.0048	-	0.035	0.015	0.0022	0.026	-	-	-
NCS HS91701-4	0.203	0.325	0.058	0.026	0.067	0.0099	-	0.126	0.029	0.0039	0.012	-	-	-
NCS HS91701-5	0.347	0.435	0.097	0.042	0.038	0.015	-	0.074	0.048	0.0097	0.05	-	-	-
NCS HS91701-6	0.537	0.744	0.147	0.065	0.069	0.025	-	0.106	0.079	0.016	0.076	-	-	-

Product Code	V
NCS HS53703-1	-
NCS HS53703-2	-
NCS HS53703-3	-
NCS HS53703-4	-
NCS HS53703-5	-
NCS HS91701-1	0.0012
NCS HS91701-2	0.0052
NCS HS91701-3	0.0028
NCS HS91701-4	0.0047
NCS HS91701-5	0.0086
NCS HS91701-6	0.029

Size	Grade	Type	Unit
Set of 5		CRM	Disc
Set of 5		CRM	Disc
Set of 5		CRM	Disc
Set of 5		CRM	Disc
Set of 5		CRM	Disc
Set of 6		CRM	Disc
Set of 6		CRM	Disc
Set of 6		CRM	Disc
Set of 6		CRM	Disc
Set of 6		CRM	Disc
Set of 6		CRM	Disc

Values listed in mass %; () Uncertified Value

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Low Alloy Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Co	Na	P
ALPEC-258	0.0036	0.0033	0.0087	0.0075	0.05	0.0052	0.0006	0.80	0.0013	-	0-0.0002	-	-	-
VAW-1108	0.0055	0.001	0.0001	0.0001	0.26	-	-	0.0007	0.0002	-	-	-	-	-
VAW-1109	0.0062	0.0012	0.0001	0.0001	0.47	<0.001	<0.0005	0.0019	<0.0002	-	<0.0001	-	-	-
VAW-1104	0.0073	0.0033	0.0042	0.0004	0.36	<0.001	<0.0005	0.0048	<0.0002	-	<0.0001	-	-	-
VAW-1201	0.012	0.013	0.0018	0.0004	0.001	-	-	0.003	0.0005	-	-	-	-	-
VAW-1205	0.034	0.024	0.0013	0.0009	0.001	<0.0005	-	0.0069	0.0014	-	-	-	-	-
VAW-1400	0.036	0.02	0.0023	0.0003	0.0004	0.0002	-	0.019	0.0004	-	-	-	-	-
VAW-1204	0.039	0.018	0.0018	0.0011	0.0009	<0.0003	-	0.015	0.0016	-	-	-	-	-
ALSUI-521/02	0.053	0.056	0.0104	0.0289	0.493	0.0054	0.0049	0.115	(0.0033)	(0.0025)	-	0.0045	0.0019-0.0022	0.0028
ALSUI-311/01	0.055	0.21	0.044	0.420	0.34	0.095	0.05	0.075	0.09	-	-	-	0.0054-0.0065	-
VAW-1306	0.06	0.059	0.0018	0.0014	0.092	0.0006	-	0.024	0.0022	-	-	-	-	-
VAW-1206	0.072	0.022	0.0013	0.0083	0.0018	0.0009	-	0.014	0.0016	-	-	-	-	-
VAW-1301	0.075	0.024	0.0018	0.009	0.26	0.0008	-	0.014	0.0013	-	-	-	-	-

Product Code	Pb	Sn	V	Zr
ALPEC-258	0.0004	0.0003	-	-
VAW-1108	-	-	-	-
VAW-1109	-	-	-	-
VAW-1104	-	-	-	-
VAW-1201	-	-	-	-
VAW-1205	-	-	-	0.001
VAW-1400	<0.0003	-	0.0011	-
VAW-1204	-	-	0.0011	-
ALSUI-521/02	-	-	-	-
ALSUI-311/01	0.042	-	0.059	-
VAW-1306	-	-	-	-
VAW-1206	-	-	0.0006	-
VAW-1301	-	-	-	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 55X30mm	7072	CRM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm	5310	RM	CCC
Ø 60X20mm	5210	RM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm		RM	CCC
Ø 60X25mm	5005	CRM	CCC
Ø 60X25mm	3105	CRM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm		RM	CCC
Ø 60X20mm		RM	CCC

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Low Alloy Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALCAN-1170AK	0.086	0.18	0.028	0.03	0.022i	0.03	0.032	0.029	0.029	-	-	-	-	0.0009
ALCAN-3002AB	0.075	0.086	0.12	0.24	0.15	0.021	0.021	0.048	0.02	-	-	-	-	0.0011
ALCAN-1170AL	0.089	0.155	0.026	0.028	0.022i	0.026	0.03	0.027	0.03	-	-	-	-	0.0009
ALCAN-1145AD	0.098	0.155	0.026	0.032	0.03	0.026	0.031	0.036	0.028	-	-	-	-	0.0009
ALCAN-1145AE	0.10	0.40	0.028	0.031	0.022i	0.02	0.03	0.03	0.031	-	-	-	-	0.0008
ALCAN-X1120AC	0.10	0.15	0.45	0.15	0.015i	0.019	0.022	0.02	0.019	-	-	-	-	0.0010i
ALSUI-132/04	0.140	0.210	0.0063	0.0057	0.17	0.0034	0.004	0.02	0.002	-	-	0.0006	-	0.00026
ALSUI-134/11	(0.15)	(0.25)	(0.003)	(0.002)	(0.003)	0-0.0002	(0.001)	(0.002)	(0.0001)	-	-	(0.005)	-	0.00065
ALPEC-67995	0.17	0.37	0.040	0.039	0.024	0.0215	0.019	0.074	0.017	-	-	-	-	-
SEI-NK63SND7	0.209	0.298	0.0041	0.0055	0.398	0.0045	0.0046	0.0052	0.016	-	-	0.0022	0.0008	0.0001
ALSUI-136/02	0.24	0.36	0.05	0.05	0.04	0.032	0.031	0.041	0.032	-	-	0.0002	-	0.0005
ALCOA-SS3102	0.25	0.45	0.07x	0.18x	0.02x	0.02x	0.02x	0.10x	0.02x	0.001	<0.0010	<0.0010	-	<0.0005

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALCAN-1170AK	0.0079	0.0016i	0.0012	-	0.019	-	0.0016i	0.0020i	0.0023	0.0083	0.0031	-	0.02	0.0018i
ALCAN-3002AB	0.009	0.0027i	0.0013	-	0.021	-	0.0018i	0.0017i	0.0041	0.008	0.0038	-	0.021	0.0030i
ALCAN-1170AL	0.0066	0.0016i	0.0012	-	0.015	-	0.0016i	0.0020i	0.0036	0.0065	0.0025	-	0.019	0.0018i
ALCAN-1145AD	0.0066	0.0016i	(0.0012)	-	0.015	-	0.0022i	0.0024i	0.0027	0.0076	0.004	-	0.018	0.0028i
ALCAN-1145AE	0.0082	0.0014i	0.0011	-	0.019	-	0.0019i	0.0021i	0.0025	0.008	0.0021	-	0.02	0.0017i
ALCAN-X1120AC	0.007	0.0016i	0.0012	-	0.019	-	0.0020i	0.0021i	0.0016	0.0078	0.002	-	0.021	0.0019i
ALSUI-132/04	0-0.00005	0.00	0-0.00005	0.00006	0.0282	-	0.00037	0.0015	-	0.0012	-	-	0.0011	-
ALSUI-134/11	(0.001)	(0.0035-0.0045)	(0.001)	(0.0006)	(0.0006)	-	0.0065-0.0075	0.0070-0.0082	-	(0.0014)	-	-	(0.001)	-
ALPEC-67995	-	-	-	(0.0002)	0.010	-	-	-	-	(0.020)	0.019	-	(0.020)	-
SEI-NK63SND7	0.0004	0.0001	-	0.0002	0.01	-	0.00020	0.0003	0	0.0007	-	-	0.0012	0.0008
ALSUI-136/02	0.0001	0.00025	0.0005	0-0.0001	0.02	-	0.00003	0.0070-0.0010	0-0.0001	0.0024	0.002	-	0.0022	0-0.0001
ALCOA-SS3102	<0.0010	<0.0005	<0.0005	<0.0010	0.02x	<0.0005	<0.0005	<0.0005	<0.0010	0.001x	<0.0010	<0.0010	<0.0010	<0.0010

Product Code	V	Zr
ALCAN-1170AK	0.02	0.003
ALCAN-3002AB	0.019	0.002
ALCAN-1170AL	0.0205	0.0027
ALCAN-1145AD	0.022	0.0026
ALCAN-1145AE	0.02	0.003
ALCAN-X1120AC	0.021	0.0019
ALSUI-132/04	0.0087	0.0022
ALSUI-134/11	0-0.0001	0-0.0001
ALPEC-67995	-	-
SEI-NK63SND7	0.0052	0.044
ALSUI-136/02	0.034	0.009
ALCOA-SS3102	0.01x	<0.0030

Size	Grade	Type	Form
Ø 57X25mm	1170	CRM	W
Ø 57X25mm	3002	CRM	W
Ø 57X25mm	1170	CRM	W
Ø 57X25mm	8176	CRM	W
Ø 57X25mm	8176	CRM	W
Ø 57X25mm	1120 Mod.	CRM	W
Ø 60X25mm		CRM	W
Ø 60X25mm		CRM	C
Ø 55X30mm		CRM	CCC
Ø 55X25mm		CRM	CCC
Ø 60X25mm	3102	CRM	CCC
Ø 64X25mm	3102	CRM	CCC

Values listed in mass %; () Uncertified Value

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Low Alloy Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	B	Ba	Be	Bi
SEI-NK2S-NDC2	0.286	0.303	0.106	0.052	0.051	0.054	0.046	0.096	0.048	-	0	-	0.004	0.054
ALSUI-741/01	0.31	0.40	0.10	0.105	0.035	0.023	0.011	0.805	0.027	-	-	-	-	-
ALSUI-612/02	0.315	0.132	0.01	0.0065	0.316	0.003	0.0009	0.0031	(0.0023)	-	(0.0006)	-	0.0023	-
ALCAN-6463AC	0.35	0.12	0.14	0.019	0.49	0.02	0.02	0.02	0.017	-	-	-	0.0011	0.012
MBH-51X G00H2 E	0.35	0.356	0.111	0.154	0.093	0.0174	0.119	0.113	0.128	0.005	-	-	-	0.011
VAW-1407	0.40	0.28	0.06	0.024	0.027	0.0098	0.003	0.042	0.022	-	-	-	-	-
ALSUI-613/07	0.407	0.268	0.0103	0.0193	0.421	0.005	0.0053	0.01	0.0145	0.0013	-	-	0.0008	0.0047
ALSUI-141/01	0.41	0.40	0.02	0.022	0.011	0.004	0.006	0.014	0-0.001	-	0.015	-	-	-
SEI-NK63SND4	0.423	0.197	0.0005	0.0005	0.495	0.0001	0.0002	0.0004	0.0003	-	0.0001	0.0003	<0.0001	<0.0001
ALCOA-ST2-6063	0.45	0.22x	0.05x	0.05x	0.05x	0.015	0.03x	0.03x	0.03x	-	<0.0010	-	0.0002	0.02x

Product Code	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr
SEI-NK2S-NDC2	-	-	0.049	0.058	-	-	-	-	0.051	0.06	0.052	-	0.048	0.046
ALSUI-741/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALSUI-612/02	-	-	-	-	-	-	-	0.0005	0.0027	-	-	-	(0.0048)	-
ALCAN-6463AC	0.0033i	0.0012	-	0.018	-	0.0024i	0.0026i	0.0048	0.007	0.0038	0.019	0.0047i	0.02	0.0031
MBH-51X G00H2 E	-	0.0031	-	0.011	-	-	-	-	0.114	0.0265	0.0065	-	0.0148	0.015
VAW-1407	0.0002	-	-	0.01	-	-	0.0003	-	0.001	-	0.001	-	0.026	0.002
ALSUI-613/07	0.0003	0.0043	-	0.0143	0.0012	0.0004	0.0002	0.0009	0.011	0.0086	0.0104	-	0.0112	0.0055
ALSUI-141/01	-	-	0.009	-	-	-	-	-	0.01	0.01	0.01	-	0.001	-
SEI-NK63SND4	<0.0001	-	<0.0001	0.0002	-	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0001	0.0002	<0.0001
ALCOA-ST2-6063	0.002x	0.0005	0.0005	0.025	-	0.001x	0.0015	0.0005	0.02x	-	0.02x	0.0012	0.03x	0.004x

Product Code
SEI-NK2S-NDC2
ALSUI-741/01
ALSUI-612/02
ALCAN-6463AC
MBH-51X G00H2 E
VAW-1407
ALSUI-613/07
ALSUI-141/01
SEI-NK63SND4
ALCOA-ST2-6063

Size	Grade	Type	Form
Ø 55X25mm		CRM	C
Ø 60X25mm		CRM	CCC
Ø 60X25mm		CRM	CCC
Ø 57X25mm	6463	CRM	CCC
Ø 40X15/50X20mm		CRM	C
Ø 60X20mm		CRM	CCC
Ø 60X25mm	6060	CRM	CCC
Ø 60X25mm	8005	CRM	CCC
Ø 55X25mm		CRM	C
Ø 64X25mm	6063	CRM	W

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Low Alloy Aluminium Sets (Individuals Available)

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Be	Cd	Li			
NCS HS49728-1	0.044	0.108	0.066	0.017	0.003	0.0082	0.012	0.0054	0.000079	0.00084	0.000053			
NCS HS49728-2	0.104	0.359	0.042	0.02	0.0016	0.046	0.029	0.018	0.0003	0.0045	0.00016			
NCS HS49728-3	0.375	0.48	0.008	0.08	0.011	0.07	0.087	0.038	0.00032	0.008	0.0002			
NCS HS49728-4	0.594	0.665	0.072	0.032	0.036	0.095	0.027	0.031	0.002	0.0067	0.00088			
NCS HS49728-5	0.772	0.828	0.072	0.0066	0.029	0.11	0.05	0.011	0.0012	0.0097	0.0055			
NCS HS49728-6	0.65	0.478	0.10	0.033	0.0086	0.098	0.03	0.028	0.00078	0.0042	0.00042			
NCS HS49728-7	1.03	0.932	0.111	0.096	0.046	0.118	0.079	0.075	0.0026	0.0223	0.0048			

Product Code
NCS HS49728-1
NCS HS49728-2
NCS HS49728-3
NCS HS49728-4
NCS HS49728-5
NCS HS49728-6
NCS HS49728-7

	Size	Grade	Type	Unit
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc
Set of 7	Ø 62X30mm		CRM	Disc

Low Alloy Aluminium (Set Only)

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ti	Zn
NCS-HS91702-1	0.109	0.587	0.306	0.414	0.189	0.176	0.002	0.004
NCS-HS91702-2	0.199	0.457	0.202	0.314	0.396	0.107	0.0065	0.012
NCS-HS91702-3	0.39	0.358	0.05	0.053	0.589	0.054	0.085	0.058
NCS-HS91702-4	0.586	0.265	0.101	0.207	0.871	0.031	0.034	0.048
NCS-HS91702-5	0.785	0.155	0.02	0.105	1.23	0.011	0.053	0.071
NCS-HS91702-6	1.05	0.09	0.0092	0.021	1.51	0.0052	0.01	0.02

	Size	Grade	Type	Unit
Set of 6			CRM	Disc
Set of 6			CRM	Disc
Set of 6			CRM	Disc
Set of 6			CRM	Disc
Set of 6			CRM	Disc
Set of 6			CRM	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Special milling machine HK81F



Technical features

Semi-automatic machine for reproducible surface preparation of non-ferrous metal samples for emission and X-ray spectrometer analysis.

- Compact desk-top machine
- Fully contained working compartment with halogen lighting
- Continuous setting of spindle and cutting speed
- Display of cutting speed, frequency, voltage and current
- Clean operation and millings collection container
- Automatic sample feeding with adjustable speed and exact depth setting.

The standard machine and control unit comes with the following accessories: three-point-chuck with reverse brackets, set of tools, lubricant, dust brush, tool for cutter positioning and exchange, transport handles.

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LGC Quality - ISO Guide 34 • GMP/GLP • ISO 9001 • ISO/IEC 17025 • ISO/IEC 17043

Silver in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	As	B	Ba	Be
ALPEC-9209	-	-	-	-	-	-	0.00187	-	-	0.000024	-	-	-	-
ALPEC-9207	-	-	-	-	-	-	0.00024	-	-	0.00058	-	-	-	-
ALPEC-9208	-	-	-	-	-	-	0.00105	-	-	0.00128	-	-	-	-
ALPEC-9210	-	-	-	-	-	-	0.00089	-	-	0.00497	-	-	-	-
MBH-51X G00H3 D	0.895	0.313	0.399	0.21	0.0077	0.095	0.0115	0.097	0.0043	0.0079	(0.0003)	-	-	-
ALSUI-144/01	0.065	0.73	0.20	0.10	0.16	0.034	0.022	0.055	0.053	0.010	-	-	-	-
SEI-NK1S-NDC7	0.01	0.01	0.01	-	-	-	-	-	-	0.010	-	0.01	-	-
VAW-1412-1	0.26	0.52	0.095	0.016	0.016	0.02	0.019	0.019	0.019	0.011	-	<0.0003	0.0011	0.0004
ALSUI-124/04	0.105	0.145	0.0533	0.054	0.0558	0.0509	0.0592	0.0515	0.0505	0.019	-	0.0002	-	0.0019
SEI-NK2S-NDC10	0.517	0.516	0.189	0.098	0.093	0.104	0.099	0.197	0.099	0.096	-	-	-	0.017
MBH-51X G00H5 B	0.739	0.49	0.227	0.196	0.11	0.0249	0.161	0.479	0.10	0.11	(0.0005)	-	-	-

Product Code	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Na	P	Pb	Sb
ALPEC-9209	0-0.000005	-	-	0.00171	0-0.000006	0.01063	-	0.000006	0.00192	-	-	-	0.00002	-
ALPEC-9207	0.00035	-	-	0.000009	0.00053	0.00032	-	0.00012	0-0.000005	-	-	-	0.00039	-
ALPEC-9208	0-0.000005	-	-	0.00063	0.000008	0.00436	-	0.00045	0.00081	-	-	-	0.0041	-
ALPEC-9210	0.00133	-	-	0.000017	0.00187	0.00133	-	0.00194	0-0.000005	-	-	-	0.00096	-
MBH-51X G00H3 D	0.076	-	0.0186	-	0.0042	0.01	<0.001	-	-	-	-	-	0.055	0.0025
ALSUI-144/01	-	-	-	-	-	-	-	-	-	0.0012-0.0025	0.0037-0.0065	-	0.006	-
SEI-NK1S-NDC7	0.02	-	0.01	-	0.01	-	-	0.01	-	0.000	-	(0.003)	0.02	(0.009)
VAW-1412-1	0.0012	0.0012	0.0094	-	0.003	0.0097	<0.0002	<0.0001	-	0.0009	0.0064	0.0063	0.0067	0.0012
ALSUI-124/04	0.0151	0.0003	0.021	0.0451	0.0201	0.0365	-	-	0.0307	0.00060-0.00080	0.0014-0.0020	-	0.0232	0.0252
SEI-NK2S-NDC10	0.093	-	0.086	-	0.097	0.105	-	0.095	-	-	-	-	0.095	-
MBH-51X G00H5 B	0.13	-	0.0103	-	0.045	0.0122	<0.001	-	-	-	-	-	0.13	0.056

Product Code	Sn	Sr	V	Zr
ALPEC-9209	0.000021	-	-	0.00406
ALPEC-9207	0.00055	-	-	0.00003
ALPEC-9208	0.000053	-	-	0.00193
ALPEC-9210	0.00186	-	-	0-0.00003
MBH-51X G00H3 D	0.083	-	0.0142	0.0095
ALSUI-144/01	0.005	-	0.036	0.007
SEI-NK1S-NDC7	0.01	-	-	-
VAW-1412-1	<0.001	0.0005	0.012	0.002
ALSUI-124/04	0.0208	-	0.0449	0.0054
SEI-NK2S-NDC10	0.095	-	0.107	0.104
MBH-51X G00H5 B	0.201	-	0.0295	0.0005

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 40x15mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 55x25mm		CRM	C
Ø 60x20mm		CRM	CCC
Ø 60x20mm	8077	CRM	CCC
Ø 55x25mm		CRM	C
Ø 40x15mm		CRM	C

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Silver in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	B	Be	Bi
VAW-2108-1	0.96	0.96	0.202	0.157	0.191	0.0543	0.194	0.1053	0.206	(0.235)	(96.1)	<0.0001	0.0038	<0.0005
ALSUI-211/02	0.064	0.088	4.40	0.153	0.169	0.0055	0.0084	0.0095	0.265	0.448	-	-	-	-

Product Code	Ca	Cd	Co	Ga	Hg	In	Li	Na	P	Pb	Sb	Sc	Sn	Sr
VAW-2108-1	0.0064	<0.0002	0.0535	0.0532	<0.0002	<0.0002	<0.0001	0.0112	0.00056	0.0964	<0.001	<0.0002	0.17	0.095
ALSUI-211/02	-	0.0009	-	-	-	-	-	-	-	0.0027	-	-	0.002	-

Product Code	V	Zr
VAW-2108-1	0.114	0.00278
ALSUI-211/02	0.0079	0.0025

Size	Grade	Type	Form
Ø 60x20mm		CRM	CCC
Ø 60x20mm		CRM	CCC

Gold in Aluminium

Product Code	Au
ERM-EB530B	0.1005
ERM-EB530C	0.1005

Size	Grade	Type	Form
N/A		CRM	Wire
N/A		CRM	Wire

Boron in Aluminium

Product Code	Si	Fe	Mg	B	Ca	Li	Na
ALPEC-436-2A	(0.11)	(0.21)	-	0.0001	0-0.0001	0.0118	0.01
ALPEC-212	(0.10)	(0.20)	(0.80)	0.00011	0.00018	-	-
ALPEC-436-1A	(0.11)	(0.21)	-	0.00011	0-0.0001	0.0112	0.0095
ALPEC-11524	(0.05)	(0.10)	-	0.0004	-	-	-
ALPEC-214	(0.10)	(0.20)	(0.80)	0.00072	0.0006	-	-
ALPEC-11525	(0.05)	(0.01)	-	0.0012	-	-	-
ALPEC-11526	(0.05)	(0.10)	-	0.0021	-	-	-
ALPEC-215-1	(0.10)	(0.20)	(0.80)	0.00235	0.0016	-	-
ALPEC-437-3A	(0.11)	(0.22)	-	0.0026	0.0016	0.00103	0.0015
ALPEC-437-2A	(0.11)	(0.22)	-	0.0028	0.0016	0.00109	0.0015
ALPEC-217-2	(0.10)	(0.20)	(0.80)	0.00527	0.00224	-	-

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Product Code	Si	Fe	B	Ca	Li	Na
ALPEC-425/01	(0.10)	(0.18)	0.0074	0.0035	0.043	0.0222
ALPEC-425/02	(0.10)	(0.18)	0.0074	0.0037	0.0467	0.025
ALPEC-424A	(0.09)	(0.18)	0.008	0.00034	0.000004	0-0.00001

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Product Code	B
ALCOA-BN1	0.0005-0.0034
ALCOA-BN2	0.0035-0.0074
ALCOA-BN3	0.0075-0.014
ALCOA-BN4	0.015-0.025
ALCOA-BN5	0.026-0.034
ALCOA-BN11	0.0005-0.0034
ALCOA-BN12	0.0035-0.0074
ALCOA-BN13	0.0075-0.014
ALCOA-BN14E	0.015-0.025

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Beryllium in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
ALSUI-134/11	(0.15)	(0.25)	(0.003)	(0.002)	(0.003)	0-0.0002	(0.001)	(0.002)	(0.0001)	(0.005)	0.00065	(0.001)	(0.0035-0.0045)	(0.001)
ALCOA-BE1	-	-	-	-	-	-	-	-	-	-	0.0005-0.0025	-	-	-
ALCOA-BE2	-	-	-	-	-	-	-	-	-	-	0.0035-0.0065	-	-	-

Product Code	Co	Ga	Li	Na	Pb	Sn	V	Zr
ALSUI-134/11	(0.0006)	(0.0006)	0.0065-0.0075	0.0070-0.0082	(0.0014)	(0.001)	0-0.0001	0-0.0001
ALCOA-BE1	-	-	-	-	-	-	-	-
ALCOA-BE2	-	-	-	-	-	-	-	-

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC

Calcium in Aluminium

Product Code	Ca
ALCOA-CA11	0.0005-0.0024
ALCOA-CA1	0.0005-0.0034
ALCOA-CA12	0.0025-0.0064
ALCOA-CA2	0.0035-0.0084
ALCOA-CA13	0.0065-0.012
ALCOA-CA3	0.0084-0.024
ALCOA-CA14	0.013-0.020
ALCOA-CA15	0.021-0.040
ALCOA-CA4	0.025-0.060

Size	Grade	Type	Form
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC

Cobalt in Aluminium

Product Code	Co
ALCOA-CO1	0.001x
ALCOA-CO2	0.007x

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Cadmium/Lead in Aluminium

Product Code	Cd	Pb
NIST-1710	0.000843	0.00177
NIST-1713	0.000878	0.001712
NIST-1714	0.002013	0.00653
NIST-1711	0.00209	0.00639
NIST-1715	0.00502	0.01509
NIST-1712	0.005165	0.01559
ALCOA-CD1	0.0005-0.0044	-
ALCOA-CD2	0.0045-0.010	-
ALCOA-CD3	0.015-0.034	-
ALCOA-CD4	0.035-0.060	-

Size	Grade	Type	Form
Ø 63x19mm	3004	CRM	W
Ø 63x19mm	5182	CRM	W
Ø 63x19mm	5182	CRM	W
Ø 63x19mm	3004	CRM	W
Ø 63x19mm	5182	CRM	W
Ø 63x19mm	3004	CRM	W
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

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Copper in Aluminium

Product Code	Si	Fe	Cu
ALCOA-CU1	0.15	0.25	1.0x
ALCOA-CU2	0.15	0.25	2.5x
ALCOA-CU3	0.15	0.25	4.5x
ALCOA-CU7	0.15	0.25	20

Iron in Aluminium

Product Code	Si	Fe	Cu
ALCOA-FE4	(0.10)	0.25	(0.01)
ALCOA-FE6	(0.10)	0.60	(0.01)
ALCOA-FE7	(0.10)	0.80	(0.01)
ALCOA-FE8	(0.10)	1.0x	(0.01)
ALCOA-FE9	(0.10)	1.2x	(0.01)
ALCOA-FE10	(0.10)	1.5x	(0.01)
ALCOA-FE11	(0.10)	2.0x	(0.01)
ALCOA-FE12	(0.10)	2.5x	(0.01)
ALCOA-SSA2800	(0.25)	3.0x	(0.03x)

Antimony in Aluminium

Product Code	Sb
ALCOA-AN1	0.005x
ALCOA-AN2	0.015x
ALCOA-AN3	0.04x
ALCOA-AN11	0.05x
ALCOA-AN4	0.09x
ALCOA-AN12	0.10x

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

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Antimony/Gallium in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	As	B	Ca	Cd	Co
ALPEC-203	(0.12)	(0.28)	-	(0.37)	(4.80)	-	-	-	-	(0.0037)	0.00009	(0.00024)	0-0.00003	0.00051
ALPEC-9716	(9.6)	(0.18)	-	-	(0.32)	-	-	-	(0.15)	-	-	-	-	-
ALPEC-9706	(7.0)	(0.20)	-	-	(0.39)	-	-	-	(0.13)	-	-	-	-	-
ALPEC-9720	(9.4)	(0.11)	-	-	(0.26)	-	-	-	(0.10)	-	-	-	-	-
ALPEC-9711	(6.9)	(0.16)	-	-	(0.39)	-	-	-	(0.10)	-	-	-	-	-
ALPEC-9718	(9.2)	(0.08)	-	-	(0.310)	-	-	-	(0.10)	-	-	-	-	-
ALPEC-9709	(7.1)	(0.08)	-	-	(0.4)	-	-	-	(0.10)	-	-	-	-	-
ALPEC-9714	(9.2)	(0.04)	-	-	(0.3)	-	-	-	(0.11)	-	-	-	-	-
ALPEC-02002	(9.2)	(0.30)	(5.50)	(0.10)	(2.0)	(0.20)	(3.6)	0.0036	(0.10)	-	0.0009	-	-	-
ALPEC-9704	(6.9)	(0.04)	(0.42)	-	-	-	-	-	(0.12)	-	-	-	-	-

Product Code	Ga	Hg	Li	Mo	Pb	Sb	Sn	V	Zr
ALPEC-203	-	0-0.00005	0.00006	0-0.0001	-	0.000013	-	(0.000024)	-
ALPEC-9716	0.0032	-	-	-	-	0.0001	-	-	-
ALPEC-9706	0.0035	-	-	-	-	0.00046	-	-	-
ALPEC-9720	0.0089	-	-	-	-	0.006	-	-	-
ALPEC-9711	0.0091	-	-	-	-	0.0063	-	-	-
ALPEC-9718	0.0166	-	-	-	-	0.0115	-	-	-
ALPEC-9709	0.0168	-	-	-	-	0.0115	-	-	-
ALPEC-9714	0.0409	-	-	-	-	0.0148	-	-	-
ALPEC-02002	-	-	-	-	0.0042	0.0166	0.0043	(0.1)	0.057
ALPEC-9704	0.0395	-	-	-	-	0.0194	-	-	-

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Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Mercury in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Cr	As	B	Be	Bi	Ca	Cd	Co	Hg
ALPEC-4200	(1.2)	(1.07)	-	(0.014)	-	(0.18)	0.0359	-	-	-	-	0.0115	-	0.00002
ALPEC-172	(0.12)	(0.26)	-	-	-	-	0.000007	0.00021	0.00002	0.0001	(0.00022)	-	-	0.0001
ALPEC-137	(0.21)	(0.30)	(0.150)	(1.30)	(1.20)	-	(0-0.00002)	-	-	0.00027	0.00014	0.00011	0.00017	0.0001
ALPEC-4017	(0.73)	(1.24)	(0.0094)	(0.0077)	-	(0.0022)	0.0257	-	-	-	-	0.0114	-	0.00015
ALPEC-202	(0.13)	(0.28)	-	(0.37)	(4.60)	-	0.0006	0.00013	-	-	(0.00004)	0.00013	0.00015	0.00017
ALPEC-138	(0.22)	(0.30)	(0.15)	(1.30)	(1.20)	-	(0.0004)	-	-	0.00153	0.00035	0.00113	0.00058	0.00043
ALPEC-4270	(1.11)	(0.59)	-	(0.056)	-	(0.17)	0.0024	-	-	-	-	0.0006	-	0.00057
ALPEC-4018	(0.74)	(1.02)	(0.0069)	(0.0231)	-	(0.0019)	0.0061	-	-	-	-	0.00252	-	0.00077
ALPEC-151	(0.21)	(0.30)	(0.16)	(1.30)	(1.20)	-	(0.0175)	-	-	0.00365	0.00005	0.0021	0.00201	0.00142
ALPEC-174	(0.12)	(0.26)	-	-	-	-	0.0068	0.0033	0.00043	0.00135	(0.00052)	-	-	0.00165
ALPEC-200	(0.140)	(0.26)	-	(0.36)	(4.80)	-	0.0031	0.00162	-	-	(0.00062)	0.00226	0.00212	0.00232

Product Code	Li	Mo	Na	Pb	Sb	Se	V	Zr
ALPEC-4200	-	-	-	0.0107	-	-	-	-
ALPEC-172	(0.000006)	0.00015	0-0.00002	-	0.00021	0.0001	-	0.00026
ALPEC-137	0.00002	-	-	0-0.0002	0.00009	0-0.00002	0.00012	-
ALPEC-4017	-	-	-	0.0121	-	-	-	-
ALPEC-202	0.000009	0.00014	-	-	0.000009	-	0.00193	-
ALPEC-138	0.00006	-	-	0.00125	0.00052	0-0.00002	0.00104	-
ALPEC-4270	-	-	-	0.00063	-	-	-	-
ALPEC-4018	-	-	-	0.002	-	-	-	-
ALPEC-151	0.0006	-	-	0-0.0002	0.0016	0-0.00002	0.00158	-
ALPEC-174	(0.00039)	0.0027	(0.00021)	-	0.0043	0.0011	-	0.005
ALPEC-200	0.00141	0.0001	-	-	0.00146	-	0.00113	-

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Product Code	Si	Fe	Cu	Mn	Mg	Cr	As	B	Bi	Ca	Cd	Co	Hg	Li
ALPEC-4190	(1.20)	(0.79)	-	(0.031)	-	(0.17)	0.0084	-	-	-	0.00222	-	0.0024	-
ALPEC-4029	(0.72)	(0.790)	(0.0039)	(0.0552)	-	(0.0002)	0.0028	-	-	-	0.00074	-	0.003	-
ALPEC-152	(0.21)	(0.30)	(0.160)	(1.30)	(1.20)	-	(0.0213)	-	0.00021	0.00011	0.0106	0.0099	0.0064	0.00103
ALPEC-201	(0.15)	(0.31)	-	(0.38)	(4.60)	-	(0.0037)	0.0037	-	(0.0007)	0.0117	0.0095	0.0137	0.0094
ALPEC-4260	(1.11)	(0.38)	-	(0.076)	-	(0.16)	0.00006	-	-	-	0-0.0001	-	0.0138	-
ALPEC-4028	(0.70)	(0.62)	(0.0039)	(0.1056)	-	(0.0018)	0.00032	-	-	-	0-0.0001	-	0.0142	-

Product Code	Mo	Pb	Sb	Se	V
ALPEC-4190	-	0.00176	-	-	-
ALPEC-4029	-	0.00035	-	-	-
ALPEC-152	-	0.0102	0.0098	0-0.00002	0.00338
ALPEC-201	0.0075	-	0.0093	-	0.0004
ALPEC-4260	-	0-0.00025	-	-	-
ALPEC-4028	-	0.00021	-	-	-

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x32mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Lithium in Aluminium

Product Code	Li
ALCOA-LI1	0.0002-0.0009
ALCOA-LI2	0.0010-0.0024
ALCOA-LI3	0.0025-0.0064
ALCOA-LI4	0.0065-0.010
ALCOA-LI5	0.011-0.020
ALCOA-LI6	0.021-0.030

Size	Grade	Type	Form
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC

Lithium in Aluminium Sets; NCS Individuals Available

Product Code	Si	Fe	Cu	Cr	Mn	Mg	Ni	Zn	Ti	Ag	Be	Ca	K	Li
NCS HS49730-1	-	-	2.45	-	-	0.584	-	-	0.104	0.224	-	-	-	1.76
NCS HS49730-2	-	-	3.12	-	-	0.473	-	-	0.092	0.234	-	-	-	1.28
NCS HS49730-3	-	-	3.83	-	-	0.417	-	-	0.025	0.425	-	-	-	0.387
NCS HS49730-4	-	-	4.57	-	-	0.274	-	-	0.052	0.455	-	-	-	1.23
NCS HS49730-5	-	-	5.43	-	-	0.19	-	-	0.027	0.59	-	-	-	0.954
PB ALLI2	0.007	0.035	0.017	0.001	0.0021	5.32	0.0038	(0.008)	0.001	-	0.0023	0.004	(0.0004)	1.15
PB ALLI3	0.022	0.10	2.67	0.002	0.007	0.043	0.001	0.0051	0.044	-	0.05	-	-	2.01
Product Code	Na	Zr									Size	Grade	Type	Unit
NCS HS49730-1	-	0.045									Set of 5 Ø 40x25mm		CRM	Disc
NCS HS49730-2	-	0.061									Set of 5 Ø 40x25mm		CRM	Disc
NCS HS49730-3	-	0.097									Set of 5 Ø 40x25mm		CRM	Disc
NCS HS49730-4	-	0.126									Set of 5 Ø 40x25mm		CRM	Disc
NCS HS49730-5	-	0.142									Set of 5 Ø 40x25mm		CRM	Disc
PB ALLI2	0.001	0.068									Set of 2 Ø 55x25mm		RM	Disc
PB ALLI3	-	0.10									Set of 2 Ø 55x25mm		RM	Disc

Manganese in Aluminium

Product Code	Mn
ALCOA-MN3	0.7

Size	Grade	Type/Form	Unit
Ø 64x25mm		CRM CCC	Disc

Sodium in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Ti	B	Bi	Ca	Na	Sr		
ALPEC-1947	(12.0)	(0.10)	(1.40)	-	(1.20)	(1.10)	(0.10)	-	-	0.0001	0-0.000005	-		
ALPEC-975	(0.20)	(0.30)	(0.15)	(1.0)	(1.0)	-	-	0.0022	-	-	0.00018			
ALPEC-1227	(0.20)	(0.30)	(0.15)	(1.0)	(0.90)	-	-	0.00048	-	-	0.000019			
ALPEC-231	(0.10)	(0.20)	-	(0.15)	(4.60)	-	-	-	0-0.00001	-	0.00002			
ALPEC-004	(18.0)	(0.10)	(1.0)	-	(1.20)	(1.0)	(0.10)	-	-	0.0002	0.00003			
ALPEC-8035	(7.0)	(0.10)	-	-	(0.40)	-	(0.10)	-	-	0.00057	0-0.0002	0.0801		
Product Code											Size	Grade	Type	Form
ALPEC-1947											Ø 55x30mm		CRM	CCC
ALPEC-975											Ø 55x32mm		CRM	CCC
ALPEC-1227											Ø 55x30mm		CRM	CCC
ALPEC-231											Ø 55x30mm		CRM	CCC
ALPEC-004											Ø 55x30mm		CRM	CCC
ALPEC-8035											Ø 55x30mm		CRM	CCC

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Sodium in Aluminium

Product Code	Si	Fe	Cu	Mn	Mg	Ni	Ti	B	Bi	Ca	Na	Pb	Sr	
ALPEC-230	(0.10)	(0.20)	-	(0.15)	(4.6)	-	-	-	0.00066	-	0.00038	-	-	
ALPEC-9826	(0.30)	(0.30)	(0.15)	(1.0)	(0.9)	-	-	-	-	-	0.00081	-	-	
ALPEC-005-1	(18.0)	(0.10)	(1.0)	-	(1.2)	(1.0)	(0.1)	-	-	0.00345	0.00086	-	-	
ALPEC-232	(0.10)	(0.20)	-	(0.15)	(4.6)	-	-	-	0.00198	-	0.00119	-	-	
ALPEC-1948	(12.0)	(0.10)	(1.4)	-	(1.2)	(1.1)	(0.1)	-	-	0.0035	0.00126	-	-	
ALPEC-6082	(0.50)	(0.20)	-	-	(0.5)	-	-	0.00319	-	-	0.00134	0.0037	-	
ALPEC-1225	(0.20)	(0.30)	(0.15)	(1.0)	(1.0)	-	-	0.0026	-	-	0.00144	-	-	
ALPEC-233	(0.10)	(0.20)	-	(0.15)	(4.6)	-	-	-	0.00459	-	0.00202	-	-	
ALPEC-006-1	(18.0)	(0.10)	(1.0)	-	(1.2)	(1.0)	(0.1)	-	-	0.0089	0.00245	-	-	
ALPEC-1949-1	(12.0)	(0.10)	(1.5)	-	(1.2)	(1.1)	(0.1)	-	-	0.00735	0.00292	-	-	
ALPEC-1949-2	(12.0)	(0.10)	(1.5)	-	(1.2)	(1.1)	(0.1)	-	-	0.00755	0.0032	-	-	
ALPEC-1226	(0.20)	(0.30)	(0.15)	(1.0)	(0.9)	-	-	0.0104	-	-	0.00344	-	-	
ALPEC-9913	(7.0)	(0.10)	-	-	(0.4)	-	(0.1)	-	-	0.00311	0.00355	-	0.0454	
ALPEC-6083	(0.50)	(0.20)	-	-	(0.5)	-	-	0.00899	-	-	0.00369	0.0066	-	
ALPEC-1950-1	(12.0)	(0.10)	(1.4)	-	(1.3)	(1.1)	(0.1)	-	-	0.0123	0.0051	-	-	
ALPEC-1950-2	(12.0)	(0.10)	(1.4)	-	(1.3)	(1.1)	(0.1)	-	-	0.0123	0.00552	-	-	
ALPEC-932	(7.0)	(0.10)	-	-	(0.4)	-	(0.1)	-	-	0.0050-0.0081	0.0054-0.0127	-	0.0140-0.0211	

Product Code
ALPEC-230
ALPEC-9826
ALPEC-005-1
ALPEC-232
ALPEC-1948
ALPEC-6082
ALPEC-1225
ALPEC-233
ALPEC-006-1
ALPEC-1949-1
ALPEC-1949-2
ALPEC-1226
ALPEC-9913
ALPEC-6083
ALPEC-1950-1
ALPEC-1950-2
ALPEC-932

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Values listed in mass %; () Uncertified Value

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Sodium in Aluminium

Product Code	Na
ALCOA-NA1	0.0005-0.0024
ALCOA-NA2	0.0025-0.0064
ALCOA-NA3	0.0065-0.012
ALCOA-NA4	0.013-0.020
ALCOA-NA5	0.021-0.030
ALCOA-NA11	0.0005-0.0024
ALCOA-NA12	0.0025-0.0064
ALCOA-NA13	0.0065-0.012
ALCOA-NA14	0.013-0.020
ALCOA-NA15	0.021-0.030

Size	Grade	Type	Form
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC
Ø 64x12mm		CRM	CCC

Nickel in Aluminium

Product Code	Fe	Cu	Mg	Ni	B	Cd	Co	Li
ALCOA-NI4	-	-	-	1.0x	-	-	-	-
ALCAN-8001CAB	(0.60)	(0.001)	<0.001	(1.20)	0.001	0.034	0.013	(0.001)
ALCAN-8001CAC	-	-	-	1.22	0.001	0.004	0.004	-
ALCOA-NI5	-	-	-	1.5x	-	-	-	-

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 57x25mm	8001	CRM	W
Ø 57x25mm	8001	CRM	W
Ø 64x25mm		CRM	CCC

Phosphorus in Aluminium

Product Code	Si	Fe	Cu	Mg	Ni	Ti	Ca	Na	P	Sr	Size	Grade	Type	Form
ALPEC-6084	(0.04)	(0.04)	-	-	-	-	-	-	0.00002	-	Ø 55x30mm		CRM	CCC
ALPEC-6049	(7.0)	(0.10)	-	(0.3)	-	(0.01)	-	-	0.00004	-	Ø 55x30mm		CRM	CCC
ALPEC-8054-2	(9.7)	(0.11)	-	(0.4)	-	(0.1)	0.01442	0.00869	0.0002	-	Ø 55x30mm		CRM	CCC
ALPEC-8054-1	(9.7)	(0.11)	-	(0.4)	-	(0.1)	0.01425	0.00806	0.0002	-	Ø 55x30mm		CRM	CCC
ALPEC-6085	(0.04)	(0.07)	-	-	-	-	-	-	0.00021	-	Ø 55x30mm		CRM	CCC
ALPEC-8045	(9.8)	(0.20)	-	(0.4)	-	(0.09)	0.00887	0.00456	0.00027	-	Ø 55x30mm		CRM	CCC
ALPEC-6076-2	(5.0)	(0.10)	(3.0)	(0.3)	-	(0.1)	0.00595	0.00505	0.00034	-	Ø 55x30mm		CRM	CCC
ALPEC-6076-1	(5.0)	(0.10)	(3.0)	(0.3)	-	(0.1)	0.00595	0.0048	0.00034	-	Ø 55x30mm		CRM	CCC
ALPEC-6075	(5.0)	(0.10)	(3.0)	(0.3)	-	(0.1)	0.00973	0.00939	0.00038	-	Ø 55x30mm		CRM	CCC
ALPEC-6078	(5.0)	(0.10)	(3.0)	(0.3)	-	(0.1)	0.00176	0.00189	0.00114	-	Ø 55x30mm		CRM	CCC
ALPEC-6051	(7.0)	(0.10)	-	(0.3)	-	(0.01)	-	-	0.00118	-	Ø 55x30mm		CRM	CCC
ALPEC-977	(9.5)	(0.20)	-	(0.4)	-	(0.1)	0.0022	0.0009	0.0017	-	Ø 55x32mm		CRM	CCC
ALPEC-6052	(7.1)	(0.10)	-	(0.3)	-	(0.01)	-	-	0.0021	-	Ø 55x30mm		CRM	CCC
ALPEC-6079	(5.0)	(0.10)	(3.0)	(0.3)	-	(0.1)	0.00037	0.000025	0.00229	-	Ø 55x30mm		CRM	CCC
ALPEC-9813-2	(11.0)	(0.20)	(1.4)	(1.3)	(1.1)	(0.1)	-	-	0.0031	0.0034	Ø 55x30mm		CRM	CCC
ALPEC-8041	(9.5)	(0.14)	-	(0.4)	-	(0.09)	0.0009	0.00053	0.00333	-	Ø 55x30mm		CRM	CCC
ALCOA-P1	-	-	-	-	-	-	-	-	0.005x	-	Ø 64x25mm		CRM	CCC

Product Code	Cu	Fe	Mg	Ni	P	Si	Ti
APLEC-9506	(1.2)	(0.5)	(1.0)	(0.9)	0.016	(12.0)	(0.1)
ALPEC-9507	(1.2)	(0.5)	(1.0)	(0.9)	0.0165	(12.0)	(0.1)

Size	Grade	Type	Form
Ø 55x30mm		CRM	CCC
Ø 55x30mm		CRM	CCC

Silicon in Aluminium

Product Code	Si	Fe
ALCOA-SI1	0.50	0.50
ALCOA-SI2	1.0x	0.50
ALCOA-SI3	1.6x	0.50
ALCOA-SI4	2.2x	0.50
ALCOA-SI5	3.0x	0.50
ALCOA-SI6	5.0x	0.50
ALCOA-SI7	7.0x	0.50
ALCOA-SI8	10.0	0.5
ALCOA-SI9	12.5	0.5

Titanium in Aluminium

Product Code	Ti
ALCOA-TI2	0.15x
ALCOA-TI3	0.30

Zinc in Aluminium

Product Code	Zn
ALCOA-ZN1	0.25
ALCOA-ZN2	0.6
ALCOA-ZN4	2.6x
ALCOA-ZN5	4.0x
ALCOA-ZN6	7.0x
ALCOA-ZN7	10.0

Zirconium in Aluminium

Product Code	Zr
ALCOA-ZR1	0.0035-0.014
ALCOA-ZR11	0.01x
ALCOA-ZR2	0.015-0.044
ALCOA-ZR3	0.045-0.070
ALCOA-ZR13	0.08x
ALCOA-ZR14	0.16x
ALCOA-ZR15	0.26

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC
Ø 64X2mm		CRM	CCC

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

Size	Grade	Type	Form
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC
Ø 64x25mm		CRM	CCC

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RoHS / WEEE

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Ti	Zn	As	Cd	Hg	Pb	V
ALSUI-351/02	(0.26)	(0.46)	(0.15)	(1.16)	(1.08)	(0.001)	(0.003)	(0.025)	(0.052)	0.00135	0.0013	0.00094	0.0025	0.011
ALSUI-352/02	(0.26)	(0.48)	(0.15)	(1.13)	(1.06)	(0.0007)	(0.003)	(0.019)	(0.049)	0.00142	0.0021	0.0022	0.0039	0.01
ALSUI-353/02	(0.26)	(0.46)	(0.15)	(1.16)	(1.08)	(0.001)	(0.003)	(0.025)	(0.052)	0.0061	0.005	0.0059	0.0053	0.011

Product Code	Zr
ALSUI-351/02	0.005
ALSUI-352/02	0.005
ALSUI-353/02	0.005

Size	Grade	Type	Form
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC
Ø 60x25mm		CRM	CCC

RoHS / WEEE Sets (Individuals Available)

Product Code	Cu	As	Cd	Hg	Pb
NCS HS49727-1	0.082	0.017	0.0038	-	0.0022
NCS HS49727-2	0.469	-	0.019	-	0.011
NCS HS49727-3	0.284	0.038	0.01	-	0.029
NCS HS49727-4	0.08	0.011	0.027	-	0.019
NCS HS49727-5	-	0.0057	-	-	-
NCS HS49727-6	-	0.024	-	-	-

Values listed in mass %; () Uncertified Value

	Size	Grade	Type	Unit
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc
Set of 6	Ø 62x30mm		CRM	Disc

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Setting-Up Samples

ARMI Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	B	Be	Bi	Ca	Cd
IARM-220F-G	(0.0003)	(0.00030)	(0.0002)	(0.0001)	(0.0002)	-	<0.0001	(0.0002)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
IARM-221A-G	(0.2)	(0.2)	(0.6)	(0.4)	(4.8)	(0.22)	-	(6.8)	(0.1)	-	(0.005)	-	(0.03)	-
IARM-221B-G	-	(0.2)	(0.6)	(0.4)	(4.8)	(0.22)	-	(6.8)	(0.1)	-	(0.005)	-	(0.03)	-
IARM-221C-G	-	(0.2)	(0.6)	(0.4)	(4.8)	(0.22)	-	(6.8)	(0.1)	-	(0.005)	-	(0.03)	-
IARM-221D-G	-	(0.2)	(0.6)	(0.4)	(4.8)	(0.22)	-	(6.8)	(0.1)	-	(0.005)	-	(0.03)	-

Product Code	Co	Ga	Li	Mo	Na	P	Sb	Sn	Sr	V	Zr			
IARM-220F-G	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	(0.0001)	(0.0001)	<0.0001	<0.0001	<0.0001	<0.0001			
IARM-221A-G	(0.2)	(0.03)	-	-	-	-	(0.01)	-	-	-	-			
IARM-221B-G	(0.2)	(0.03)	-	-	-	-	(0.01)	-	-	-	-			
IARM-221C-G	(0.2)	(0.03)	-	-	-	-	(0.01)	-	-	-	-			
IARM-221D-G	(0.2)	(0.03)	-	-	-	-	-	-	-	-	-			

Product Code
IARM-220F-G
IARM-221A-G
IARM-221B-G
IARM-221C-G
IARM-221D-G

Size	Grade	Type	Form
Ø 57x38mm		SUS	W
Ø 38x19mm		SUS	W
Ø 38x19mm		SUS	W
Ø 38x19mm		SUS	W
Ø 38x19mm		SUS	W

SUS Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb	Sb	Sn		
SUS-3.1645	(0.57)	(0.39)	(3.26)	(0.58)	(0.91)	(0.03)	(0.02)	(0.60)	(0.06)	(>0.80)	(0.008)	(0.03)		
SUS-3.2315	(1.04)	(0.10)	(0.01)	(0.62)	(0.71)	(0.108)	(0.004)	(0.025)	(0.04)	(<0.001)	(0.001)	(0.004)		
SUS-3.23525	(0.08)	(0.170)	(0.004)	(0.22)	(2.80)	(0.001)	(0.002)	(0.007)	(0.009)	(0.002)	-	(0.002)		
SUS-3.4345	(0.15)	(0.29)	(1.48)	(0.09)	(2.55)	(0.20)	(0.005)	(5.59)	(0.03)	(0.01)	-	(0.02)		

Product Code
SUS-3.1645
SUS-3.2315
SUS-3.23525
SUS-3.4345

Size	Grade	Type	Unit
Ø 40x30mm		SUS	Disc
Ø 40x30mm		SUS	Disc
Ø 40x30mm		SUS	Disc
Ø 40x30mm		SUS	Disc

Product Code	Ce	La	Mg	Nd	Pr	Sm	Y	Zr
SUS-RALCE+	(0.09)	(0.40)	4.50	(0.10)	(0.07)	(0.01)	(0.20)	(0.02)
SUS-RALCE/3	0.70	0.30	-	0.10	-	-	-	-

Size	Grade	Type	Unit
Ø 40x40mm		SUS	Disc
Ø 40x40mm		SUS	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

SUS Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Be
SUS-RAL10+	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0005	99.96	-	<0.0005	<0.0001
SUS-RAL16+	15.0	0.20	4.0	<0.001	0.20	0.003	2.70	0.30	<0.001	<0.001	-	-	0.01	<0.001
SUS-RAL18+	15.95	0.42	8.26	0.32	0.25	0.004	2.70	0.32	<0.001	0.002	70.8	0.004	0.003	<0.001
SUS-RAL19+	1.19	1.22	0.68	1.17	8.47	0.21	0.62	7.82	0.22	0.20	76.88	-	0.002	0.005
SUS-RAL20+	13.50	0.70	5.20	0.25	1.0	0.09	2.70	0.17	0.05	-	-	-	0.0007	<0.0001
SUS-200	10.0	0.60	0.10	-	0.5	-	-	10.0	0.12	-	-	-	-	-

Product Code	Bi	Ca	Cd	Co	Ga	In	Li	Na	P	Pb	Sb	Sn	Sr	V
SUS-RAL10+	<0.0020	<0.0005	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0001	-	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010
SUS-RAL16+	<0.001	0.002	0.01	<0.001	0.01	<0.001	<0.001	0.003	0.005	0.40	>0.2	0.10	0.03	<0.001
SUS-RAL18+	0.005	0.006	0.001	0.006	0.011	0.001	<0.001	0.003	0.01	0.28	0.3	0.21	0.05	0.004
SUS-RAL19+	0.18	<0.005	0.018	0.29	0.07	0.15	0.01	0.001	0.002	0.01	0.02	0.06	0.003	0.13
SUS-RAL20+	-	-	-	0.017	-	-	0.001	0.008	0.02	0.10	0.008	0.06	0.004	0.10
SUS-200	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-

Product Code	Zr
SUS-RAL10+	<0.0010
SUS-RAL16+	0.002
SUS-RAL18+	0.004
SUS-RAL19+	0.13
SUS-RAL20+	0.09
SUS-200	-

Size	Grade	Type	Unit
Ø 50x50mm		SUS	Disc
Ø 55x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al	B	Ca	Ga	P
SUS-CAL0	(X)	-	-	-	-	-	-	-	-	(X)	-	-	-	-
SUS-CAL2	1.205	0.439	0.0614	0.662	0.809	0.0036	-	0.05	0.052	-	-	-	0.01	-
SUS-CAL3	0.08	0.17	0.004	0.215	2.80	0.001	0.002	0.007	0.009	96.0	-	-	0.011	-
SUS-CAL4	18.0	5.0	0.01	0.03	<0.001	-	1.90	<0.01	-	75.0	0.0008	0.009	-	-
SUS-CAL5	-	0.70	1.40	0.08	1.90	0.08	1.30	0.24	0.09	85.3	0.001	-	-	0.005

Product Code	Pb	Sn
SUS-CAL0	-	-
SUS-CAL2	-	-
SUS-CAL3	0.002	0.002
SUS-CAL4	<0.01	-
SUS-CAL5	0.07	0.07

Size	Grade	Type	Unit
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc
Ø 50x50mm		SUS	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Brammer Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Bi	Pb	Sn	V	Zr
BS-2011	0.052	0.32	5.2	0.01	0.016	0.001	0.004	0.024	0.006	0.44	0.56	0.001	0.007	<0.002
BS-2017	0.30	0.25	4.05	0.51	0.51	0.015	0.006	0.065	0.02	0.002	0.01	0.002	0.007	0.002
BS-2024	0.08	0.20	4.70	0.57	1.30	0.03	0.006	0.07	0.03	0.002	0.006	0.001	0.01	0.01
BS-6061	0.55	0.19	0.29	0.01	0.81	0.05	0.004	0.04	0.024	0.006	0.01	<0.001	0.01	<0.002
BS-7075	0.10	0.13	1.40	0.03	2.26	0.19	0.005	5.60	0.028	<0.001	0.003	0.001	0.006	0.006

Product Code
BS-2011
BS-2017
BS-2024
BS-6061
BS-7075

Size	Grade	Type	Unit
Ø 62x50mm		SUS	Disc
Ø 62x50mm		SUS	Disc
Ø 62x50mm		SUS	Disc
Ø 62x50mm		SUS	Disc
Ø 62x50mm		SUS	Disc

AluSuisse (Suisse Technologies) Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Bi	Ca	Cd	Co
ALSUI-AS20/01+	0.217	0.301	4.54	0.73	1.60	0.105	0.05	0.177	0.064	-	-	-	-	-
ALSUI-AS20/02+	0.204	0.31	4.65	0.694	1.57	0.104	0.052	0.201	0.0562	0.00052	0.05	0.0006	0.0013	0.0012
ALSUI-AS40/01+	12.15	0.70	1.01	0.254	1.09	0-0.001	2.50	0.21	0.106	-	-	0.0025	-	-
ALSUI-AS50/01+	0.22	0.347	0.084	0.85	4.50	0.10	0.03	0.101	0.04	0.005	0.0173	-	-	-
ALSUI-AS60/02+	0.639	0.253	0.033	0.0397	0.794	0.0258	0.0113	0.0259	0.0216	-	0.0048	-	-	-
ALSUI-AS70/02+	0.157	0.291	1.62	0.165	2.71	0.209	0.031	5.53	0.03	-	-	-	-	-

Product Code	Ga	Li	Na	Pb	Sb	Sn	V	Zr
ALSUI-AS20/01+	-	0.0006	0.0011	0.0093	-	-	0.027	-
ALSUI-AS20/02+	0.016	0.00055	(0.002)	0.051	-	0.0125	0.0245	0.14
ALSUI-AS40/01+	-	-	0-0.0001	-	-	-	-	-
ALSUI-AS50/01+	-	0.0006	0.0011	0.009	-	-	0.026	-
ALSUI-AS60/02+	-	-	-	0.0058	0.0045	0.0036	0.0147	-
ALSUI-AS70/02+	-	0.00092-0.00101	0.0014-0.0018	0.011	-	-	0.023	0.119

Size	Grade	Type	Form
Ø 60x25mm	2024	CRM	CCC
Ø 60x25mm	2024	CRM	CCC
Ø 60x25mm	336	CRM	CCC
Ø 60x25mm	5083	CRM	CCC
Ø 60x25mm	6101	CRM	CCC
Ø 60x25mm	7075	CRM	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

AluSuisse (Suisse Technologies) Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Co	Ag	As	B	Ba
ALSUI-RC10/01+	(0-0.002)	(0.0019)	(0.0002)	(0-0.0002)	(0-0.0003)	(0-0.0002)	(0-0.0002)	(0-0.0005)	(0-0.0002)	(0-0.0002)	(0-0.0002)	-	(0-0.0002)	(0-0.0001)
ALSUI-RC11-05	(0.023)	(0.046)	(0.016)	(0.016)	(0.016)	(0.014)	(0.01)	(0.02)	(0.015)	(0.012)	(0.01)	(0.005)	-	(0.005)
ALSUI-RC20/01+	(0.03)	(0.05)	(6.0)	(0.30)	(0.20)	-	(1.50)	(0.30)	-	(0.50)	(0.60)	-	-	-
ALSUI-RC20/02+	(0.029)	(0.061)	(6.0)	(0.24)	(0.29)	-	(1.45)	(0.24)	-	(0.440)	(0.73)	-	-	-
ALSUI-RC40/02+	(13.2)	(1.19)	(1.03)	-	(1.09)	-	-	(6.03)	(0.20)	-	-	-	-	-
ALSUI-RC40/03	(12.5)	(1.23)	(1.03)	-	(1.05)	-	-	(6.14)	(0.20)	-	-	-	-	-
ALSUI-RC41/01	(5.9)	(0.40)	(5.1)	(0.50)	(0.09)	(0.03)	(0.02)	(1.30)	0.03	-	-	-	-	-
ALSUI-RC50/02	(0.5)	(0.85)	(0.003)	(0.005)	(4.5)	(0.50)	(0.50)	(0.02)	-	-	-	-	(0.005)	(0.02)
ALSUI-RC60/01+	(1.5)	(0.50)	(0.20)	(1.0)	(0.9)	(0.20)	(0.10)	(0.10)	(0.20)	-	-	-	-	-
ALSUI-RC60/02+	(1.34)	(0.49)	(0.29)	(1.1)	(0.92)	(0.20)	(0.10)	(0.10)	(0.21)	-	-	-	-	-

Product Code	Bi	Ca	Cd	Ce	Co	Ga	Hg	In	La	Li	Mo	Na	P	Pb
ALSUI-RC10/01+	(0-0.0002)	(0-0.0001)	(0-0.0002)	-	(0-0.0002)	(0-0.0002)	-	(0-0.0002)	-	(0-0.0001)	-	(0-0.0001)	(0.001)	(0-0.0002)
ALSUI-RC11-05	(0.0081)	(0.0027)	(0.005)	(0.0026)	(0.012)	(0.021)	(0.005)	(0.01)	(0.013)	(0.0006)	(0.047)	(0.003)	(0.0028)	(0.015)
ALSUI-RC20/01+	(0.40)	-	(0.05)	-	(0.05)	-	-	-	-	-	-	-	-	(0.50)
ALSUI-RC20/02+	(0.38)	-	(0.036)	-	(0.44)	-	-	-	-	-	-	-	-	(0.41)
ALSUI-RC40/02+	-	(0.0131)	-	-	-	-	-	-	-	-	-	-	-	(0.10)
ALSUI-RC40/03	-	(0.0195)	-	-	-	-	-	-	-	-	-	-	-	(0.11)
ALSUI-RC41/01	-	(0.004)	(0.001)	-	-	(0.01)	-	-	-	-	-	-	-	(0.02)
ALSUI-RC50/02	-	(0.02)	(0.20)	(0.10)	-	(0.03)	-	(0.05)	(0.10)	(0.003)	(0.03)	(0.004)	(0.005)	-
ALSUI-RC60/01+	(0.10)	-	-	-	-	(0.01)	-	-	-	-	-	-	(0.005)	-
ALSUI-RC60/02+	(0.10)	-	-	-	-	(0.011)	-	-	-	-	-	-	(0.0045)	-

Product Code	Sb	Sc	Sn	Sr	V	W	Zr
ALSUI-RC10/01+	(0-0.0003)	-	(0-0.0002)	(0-0.0001)	(0-0.0002)	-	(0-0.0002)
ALSUI-RC11-05	(0.013)	(0.0086)	(0.017)	(0.007)	(0.017)	(0.0045)	(0.016)
ALSUI-RC20/01+	(0.20)	-	(0.05)	-	-	-	(0.20)
ALSUI-RC20/02+	(0.20)	-	(0.051)	-	-	-	(0.17)
ALSUI-RC40/02+	-	(0.20)	(0.21)	(0.14)	-	-	-
ALSUI-RC40/03	-	(0.20)	(0.21)	(0.14)	-	-	-
ALSUI-RC41/01	-	-	(0.02)	(0.02)	(0.008)	-	(0.005)
ALSUI-RC50/02	0.05	-	(0.30)	(0.02)	(0.01)	(0.04)	(0.01)
ALSUI-RC60/01+	-	-	-	-	(0.10)	-	-
ALSUI-RC60/02+	-	-	-	-	(0.11)	-	-

Size	Grade	Type	Form
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC
Ø 60x35mm		SUS	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pechiney (Suisse Technologies) SUS and Monitor Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
ALPEC-10914+	(0.9)	(0.2)	(0.3)	-	(1.2)	-	-	-	(0.05)	-	-	-	(0.70)	-
ALPEC-20001	(5.4)	(0.48)	(3.1)	(0.22)	(0.23)	-	(0.03)	(0.14)	(0.07)	-	-	-	-	(0.0033)
ALPEC-2001	(8.5)	(0.7)	(2.9)	(0.23)	(0.22)	-	(0.05)	(0.13)	(0.08)	-	-	-	-	(0.002)
ALPEC-2003	(8.60)	(0.71)	(3.0)	(0.23)	(0.22)	-	(0.05)	(0.13)	(0.080)	-	-	-	-	(0.001)
ALPEC-2004	(1.1)	(0.11)	(0.08)	(0.07)	(6.1)	-	(0.07)	(7.7)	(0.06)	-	-	(0.001)	-	(0.03)
ALPEC-2006	(1.2)	(0.11)	(0.07)	(0.07)	(6.2)	-	(0.06)	(7.8)	(0.06)	-	-	(0.001)	-	(0.03)
ALPEC-2150+	(10.6)	-	(0.60)	(0.40)	(0.9)	(0.006)	(0.50)	(1.2)	(0.30)	(0.9)	-	-	(0.02)	-
ALPEC-310	(0.160)	(0.58)	(0.0037)	(0.0003)	(0.00004)	(0.0028)	(0.004)	(0.017)	(0.004)	-	-	-	-	-
ALPEC-325	(0.10)	(0.27)	(0.003)	(0.005)	(0.74)	(0.011)	(0-0.001)	(0.021)	(0.010)	-	(0.0007)	-	-	(0.0011)
ALPEC-327	(0.230)	(0.35)	(0.16)	(0.93)	(1.181)	(0.025)	(0.004)	(0.016)	(0.007)	-	-	(0.00002)	-	(0.0011)
ALPEC-60548+	(0-0.01)	(0-0.01)	(0-0.01)	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)	-	(0-0.001)	(0-0.001)	(0-0.001)

Product Code	Cd	Co	Ga	Hg	In	Li	Mo	Na	P	Pb	Sb	Sn	Sr	V
ALPEC-10914+	-	-	-	-	-	-	-	-	-	(0.80)	-	-	-	-
ALPEC-20001	-	-	-	-	-	-	-	(0.00004)	(0.001)	(0.01)	-	(0.01)	-	-
ALPEC-2001	-	-	-	-	-	-	-	-	-	(0.07)	-	(0.012)	-	-
ALPEC-2003	-	-	-	-	-	-	-	(0.0003)	-	(0.07)	-	(0.012)	-	-
ALPEC-2004	(0.02)	-	(0.03)	-	-	(0.01)	-	(0.03)	-	(0.04)	-	(0.06)	-	-
ALPEC-2006	(0.01)	-	(0.03)	-	-	(0.01)	-	(0.02)	-	(0.04)	-	(0.06)	-	-
ALPEC-2150+	-	(0.04)	-	-	(0.06)	-	(0.04)	-	-	(0.80)	-	(0.30)	(0.10)	(0.02)
ALPEC-310	(0-0.0002)	-	-	(0-0.00002)	-	-	(0.0078)	(0-0.00002)	-	(0.0019)	-	-	-	-
ALPEC-325	-	-	-	-	-	-	-	(0.0001)	-	(0.001)	-	-	-	(0.006)
ALPEC-327	(0-0.0001)	-	-	(0-0.0001)	-	-	-	(0.0006)	-	(0.002)	-	-	-	-
ALPEC-60548+	(0-0.001)	(0-0.001)	(0-0.001)	-	-	(0-0.001)	-	(0-0.001)	-	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)	(0-0.001)

Product Code	Zr
ALPEC-10914+	-
ALPEC-20001	-
ALPEC-2001	-
ALPEC-2003	-
ALPEC-2004	(0.02)
ALPEC-2006	(0.02)
ALPEC-2150+	-
ALPEC-310	-
ALPEC-325	(0.005)
ALPEC-327	-
ALPEC-60548+	(0-0.001)

Size	Grade	Type	Form
Ø 60x40mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 60x40mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 60x40mm		SUS	CCC

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pechiney (Suisse Technologies) SUS and Monitor Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Be	Ca	Cd	Hg	Na
ALPEC-9313	(8.8)	(0.10)	(0.003)	(0.005)	(0.32)	-	(0-0.002)	(0.01)	(0.12)	-	(0.0009)	-	-	(0-0.0004)
ALPEC-9321	(0.07)	(0.13)	(4.2)	(0.02)	(0.27)	-	(0.01)	(0.04)	(0.21)	-	-	-	-	(0-0.00002)
ALPEC-9324	(0.11)	(0.24)	(0.0055)	(0.40)	(4.28)	(0.0007)	-	(0.014)	(0.005)	(0.0001)	(0.0003)	(0-0.0001)	-	(0-0.00002)
ALPEC-9325	(0.11)	(0.24)	(0.0069)	(0.40)	(4.33)	(0.0007)	-	(0.014)	(0.005)	(0.0001)	(0.0003)	(0-0.0001)	-	(0-0.00002)
ALPEC-9326	(12.8)	(0.15)	(0.01)	(0.005)	(0.003)	-	(0.003)	(0.01)	(0.006)	-	(0-0.0007)	-	-	(0-0.0004)
ALPEC-9327	(12.8)	(0.15)	(0.01)	(0.005)	(0.003)	-	(0.003)	(0.01)	(0.006)	-	(0-0.0007)	-	-	(0-0.0004)
ALPEC-9401	(0.04)	(0.12)	(1.58)	(0.01)	(2.29)	(0.006)	(0.007)	(5.84)	(0.032)	-	-	-	-	(0-0.00002)
ALPEC-9415	(11.7)	(0.53)	(1.24)	(0.12)	(1.0)	-	(0.86)	(0.07)	(0.02)	-	(0.0006)	-	-	(0.00004)
ALPEC-9517	(6.4)	(0.48)	(2.8)	(0.250)	(0.3)	-	(0.02)	(0.2)	(0.13)	-	(0.009)	-	-	(0.001)
ALPEC-9520	(6.6)	(0.10)	(0.012)	(0.005)	(0.34)	-	(0.003)	(0.017)	(0.12)	-	(0.0044)	-	-	(0.0005)
ALPEC-9601	(17.3)	(0.43)	(1.21)	(0.12)	(1.09)	-	(1.1)	(0.07)	(0.08)	-	(0.0026)	-	-	(0.0003)
ALPEC-9614	(0.08)	(0.18)	(0.043)	(0.055)	(2.28)	(0.210)	(0.01)	(0.051)	(0.019)	-	(0.0009)	(0.0001)	(0.0004)	(0.00006)

Product Code	P	Pb	Sb	Sn	Sr	Zr
ALPEC-9313	(0.0011)	(0-0.0004)	(0-0.0003)	(0.0004)	-	-
ALPEC-9321	-	(0.001)	-	-	-	-
ALPEC-9324	-	(0.007)	-	-	-	-
ALPEC-9325	-	(0.007)	-	-	-	-
ALPEC-9326	(0.0017)	(0.001)	(0-0.0003)	(0.0003)	-	-
ALPEC-9327	(0.0017)	(0.001)	(0-0.0003)	(0.0003)	-	-
ALPEC-9401	-	-	-	-	-	(0.13)
ALPEC-9415	(0.0058)	(0.01)	(0.01)	(0.01)	-	-
ALPEC-9517	(0.002)	(0.02)	(0.01)	(0.01)	(0.014)	-
ALPEC-9520	(0.0009)	(0-0.0001)	(0-0.008)	(0.0004)	(0.052)	-
ALPEC-9601	(0.0086)	(0.006)	(0.02)	(0.004)	(0.0058)	-
ALPEC-9614	-	(0.0057)	-	-	-	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Pechiney (Suisse Technologies) SUS and Monitor Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Bi	Cd	Co	Hg	Li
ALPEC-9627	(0.2)	(0.57)	(0.13)	(1.06)	(0.0004)	(0.0223)	(0.001)	(0.057)	(0.022)	-	(0-0.0001)	-	(0.0001)	(0.00002)
ALPEC-9630	(0.1)	(0.46)	(0.062)	(0.0123)	(0.0006)	(0.0216)	(0.008)	(0.054)	(0.018)	-	(0.0002)	-	(0.0001)	(0.00007)
ALPEC-9632	(0.8)	(0.32)	(4.1)	(0.71)	(0.48)	(0.0181)	-	(0.033)	(0.022)	-	-	-	-	-
ALPEC-9806-1+	(0.08)	(1.3)	(6.9)	(1.9)	(0.08)	(0.30)	-	(0.05)	-	(0.7)	-	(0.9)	-	-
ALPEC-9809+	(5.5)	(0.5)	-	-	-	-	(1.9)	-	-	-	-	-	-	-

Product Code	Na	P	Pb	Sb	V	Zr
ALPEC-9627	0-0.00002	-	-	-	-	(0.01)
ALPEC-9630	(0.00003)	-	(0.0035)	-	-	-
ALPEC-9632	-	-	(0.0096)	-	-	(0.033)
ALPEC-9806-1+	-	-	-	(0.4)	-	-
ALPEC-9809+	-	(0.01)	-	-	(0.12)	(0.14)

Size	Grade	Type	Form
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 50x50mm		SUS	CCC
Ø 60x40mm		SUS	CCC
Ø 60x40mm		SUS	CCC

Special SUS Samples for ARL Spectrometers

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb	Sn			
OES-RA10	0.003	0.002	0.002	-	-	-	-	-	-	-	-			
OES-RA13	0.50	0.50	4.0	0.70	0.80	0.05	0.05	0.40	0.03	2.00	0.02			
OEA-RA20	8.60	0.96	2.54	0.28	0.14	-	0.10	-	0.076	0.16	1.13			

Product Code
OES-RA10
OES-RA13
OEA-RA20

Size	Grade	Type	Unit
Ø 40x40mm		SUS	Disc
Ø 40x40mm		SUS	Disc
Ø 40x40mm		SUS	Disc

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

Alcoa Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Al	As	B	Be
ALCOA-SQ10+	-	-	-	-	-	-	-	-	-	-	99.999	-	-	-
ALCOA-SQ11+	0.20	0.20	0.50	0.40	3.0	0.25	-	-	0.10	-	-	-	-	0.005
ALCOA-SQ12+	1.10	0.60	4.80	1.10	0.15	-	0.25	6.6	-	0.05	-	-	-	0.005
ALCOA-SQ13+	0.50	0.60	0.04	0.04	0.04	0.04	0.04	0.20	0.04	-	-	-	-	0.005
ALCOA-SQ14+	0.10	0.10	0.50	0.40	0.90	-	0.40	0.04	0.10	-	-	-	-	0.002
ALCOA-SQ15+	12.0	0.70	0.50	0.05	1.20	0.05	2.50	1.20	0.10	-	-	-	-	-
ALCOA-SQ16+	4.00	1.0	10.0	0.20	0.30	-	0.20	-	-	-	-	-	-	-
ALCOA-SQ17+	0.70	0.40	0.35	0.12	1.60	0.25	0.12	0.20	0.08	-	-	-	-	0.005
ALCOA-SQ18+	-	-	-	-	-	-	-	0.12	-	-	-	-	(0.02)	-
ALCOA-SQ19+	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-

Product Code	Bi	Ca	Cd	Co	Ga	Hg	Li	Na	P	Pb	Sb	Sc	Sn	Sr
ALCOA-SQ10+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SQ11+	-	0.02	-	0.01	0.03	-	-	-	-	-	-	-	-	-
ALCOA-SQ12+	0.06	-	0.20	0.01	0.03	0.01	-	-	-	0.06	-	-	0.06	-
ALCOA-SQ13+	0.04	-	0.04	0.01	0.03	-	-	-	-	0.04	-	-	0.04	-
ALCOA-SQ14+	0.50	-	-	-	-	-	-	-	-	0.50	-	-	0.10	-
ALCOA-SQ15+	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
ALCOA-SQ16+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALCOA-SQ17+	0.08	-	-	-	0.03	-	-	-	-	0.10	-	-	0.10	-
ALCOA-SQ18+	-	-	-	-	-	-	(0.02)	(0.02)	-	-	-	-	-	-
ALCOA-SQ19+	-	-	-	-	-	-	-	-	0.014	-	0.02	0.20	-	-

Product Code	V	Zr
ALCOA-SQ10+	-	-
ALCOA-SQ11+	-	-
ALCOA-SQ12+	0.10	-
ALCOA-SQ13+	0.04	0.15
ALCOA-SQ14+	-	0.40
ALCOA-SQ15+	-	-
ALCOA-SQ16+	-	-
ALCOA-SQ17+	0.03	-
ALCOA-SQ18+	-	-
ALCOA-SQ19+	-	-

Values listed in mass %; () Uncertified Value

Size	Grade	Type	Form
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC
Ø 64x37mm		SUS	CCC

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder

VAW (Hydro Aluminium) Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Ba	Be	Bi
VAW-E0+	<0.00008	<0.00005	<0.00004	<0.00002	<0.00006	<0.00003	<0.00001	<0.00005	<0.00005	<0.00001	<0.00004	<0.00001	<0.00001	<0.00002
VAW-E1+	<0.00005	<0.00003	<0.00004	<0.00005	<0.00003	<0.00005	<0.00005	<0.00002	<0.00001	<0.00001	<0.00002	<0.00001	<0.00001	<0.00005
VAW-E2+	0.90	0.90	0.20	0.18	0.20	0.05	0.20	0.10	0.20	0.23	-	-	0.004	-
VAW-E3+	10.0	-	4.0	-	-	-	1.0	-	-	-	0.01	-	-	-
VAW-E4+	-	-	-	0.70	1.10	0.20	-	5.2	-	0.20	-	-	-	-
VAW-E5+	0.012	-	-	1.30	4.60	-	0.004	0.05	0.004	-	-	-	-	0.20
VAW-E8+	<0.0010	0.017	0.020	0.006	0.005	0.005	<0.0001	<0.0003	<0.0001	0.005	-	0.004	0.001	0.005
VAW-E10+	-	<0.0005	<0.0004	<0.0001	<0.0003	<0.0001	-	-	-	<0.00005	<0.0002	<0.0003	<0.00002	<0.0003
VAW-E13+	-	4.80	-	-	-	-	-	-	-	-	-	-	-	-

Product Code	Ca	Cd	Co	Ga	In	Li	Na	Pb	Sb	Sn	Sr	V	Zr	
VAW-E0+	<0.00004	<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00003	<0.00003	
VAW-E1+	<0.0001	<0.00002	<0.00001	<0.00002	<0.00001	<0.00001	<0.0001	<0.00005	<0.0001	<0.00002	<0.00005	<0.00003	<0.00005	
VAW-E2+	0.006	-	0.04	0.06	-	-	0.01	0.10	-	0.19	0.11	0.10	-	
VAW-E3+	0.009	-	-	-	-	0.007	-	0.40	0.30	-	-	-	-	
VAW-E4+	-	0.06	0.40	-	-	-	-	-	-	-	-	-	0.20	
VAW-E5+	-	-	-	-	-	0.01	-	0.00	0.008	0.004	0.002	0.003	0.004	
VAW-E8+	0.003	0.0025	0.0025	0.006	0.005	-	-	<0.0002	<0.0003	<0.0003	<0.00005	<0.0002	<0.0001	
VAW-E10+	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.00002	<0.0001	-	-	-	-	-	-	
VAW-E13+	-	-	-	-	-	-	-	-	-	-	-	-	-	

Product Code
VAW-E0+
VAW-E1+
VAW-E2+
VAW-E3+
VAW-E4+
VAW-E5+
VAW-E8+
VAW-E10+
VAW-E13+

Size	Grade	Type	Unit
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc
Ø 60x40mm		SUS	Disc

Values listed in mass %; () Uncertified Value

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Assorted SUS Setting-Up Samples

Product Code	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Be	Bi	Ca
SEI-NKRST600	1.50	0.60	0.50	1.30	1.30	0.30	0.05	0.30	0.10	0.01	0.001	0.005	0.04	0.002
MBH-164X ALSUS7	0.90	0.55	4.0	0.06	0.15	0.01	1.10	0.12	0.30	-	-	0.10	-	<0.001
MBH-164X ALSUS8	9.50	0.25	0.75	0.45	0.90	0.06	0.12	0.25	0.02	0.09	-	0.015	-	<0.001
VASKUT-AL4N+	0.0013	0.0016	0.0025	0.0002	0.0015	0.00006	0.00004	0.0003	0.00006	-	0.00006	0.00001	0.00001	0.00002
VASKUT-AMS1+	1.20	0.80	0.60	0.50	1.30	0.20	0.02	0.40	0.20	-	0.004	0.002	0.01	0.01
VASKUT-ASC1+	14.0	1.60	6.0	0.40	1.20	0.20	0.60	0.50	0.50	-	-	0.003	0.10	0.02

Product Code	Cd	Co	Ga	In	Li	Na	P	Pb	Sb	Sn	Sr	V	Zr	
SEI-NKRST600	0.01	0.01	0.03	0.01	0.0001	0.001	0.002	0.05	0.04	0.05	0.0005	0.02	0.04	
MBH-164X ALSUS7	-	0.20	-	-	-	-	-	0.11	0.12	0.01	0.003	-	0.18	
MBH-164X ALSUS8	-	0.025	-	-	-	-	-	0.001	0.03	0.13	0.07	-	0.025	
VASKUT-AL4N+	0.0001	-	0.00005	-	0.00002	0.0001	-	0.0001	0.0002	0.00005	0.0001	0.0001	0.00005	
VASKUT-AMS1+	0.03	-	0.01	-	0.01	0.005	-	0.05	0.02	0.03	-	0.03	-	
VASKUT-ASC1+	0.05	-	0.04	-	-	-	-	0.10	0.02	0.10	0.03	0.02	0.01	

Product Code
SEI-NKRST600
MBH-164X ALSUS7
MBH-164X ALSUS8
VASKUT-AL4N+
VASKUT-AMS1+
VASKUT-ASC1+

Size	Grade	Type	Form
Ø 55x30mm		SUS	C
Ø 50x25mm		SUS	C
Ø 50x25mm		SUS	C
Ø 50x35mm		SUS	
Ø 45x35mm		SUS	
Ø 45x35mm		SUS	

Values listed in mass %; () Uncertified Value

C=Cast CC=Chill Cast CCC=Continuous Chill Cast W=Wrought HIP=Hot Isostatically-Pressed Powder



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ALCAN-1100AK.....	56	ALCAN-3005AD.....	89	ALCAN-5052CAL.....	101	ALCAN-6449CAB.....	50
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ALCAN-1145AD.....	137	ALCAN-3005CAF.....	89	ALCAN-5056AD.....	104	ALCAN-6475CAB.....	52
ALCAN-1145AE.....	137	ALCAN-3102AD.....	56	ALCAN-5056CAC.....	105	ALCAN-6495AA.....	60
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ALCAN-1200AJ.....	57	ALCAN-3105AE.....	83	ALCAN-5100CBR.....	59	ALCAN-7010CAD.....	77
ALCAN-125AQ.....	30	ALCAN-3105CAF.....	82	ALCAN-5154CAB.....	102	ALCAN-7018AC.....	114
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ALCAN-125AT.....	36	ALCAN-3203AG.....	89	ALCAN-5182CBB.....	104	ALCAN-7019CAB.....	117
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ALCAN-135AQ.....	30	ALCAN-3204AA.....	86	ALCAN-5251AD.....	100	ALCAN-7021CAB.....	116
ALCAN-160DD.....	20	ALCAN-339.0AD.....	40	ALCAN-5251AF.....	100	ALCAN-7022AA.....	75
ALCAN-160DF.....	19	ALCAN-339.0CAB.....	39	ALCAN-5454AC.....	84	ALCAN-7022CAB.....	75
ALCAN-160DP.....	18	ALCAN-350CAU.....	106	ALCAN-5454CAB.....	100	ALCAN-7031AA.....	58
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ALCAN-161CAH.....	19	ALCAN-356.2CAR.....	14	ALCAN-5500CAU.....	21	ALCAN-7075AF.....	76
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ALCAN-16SAR.....	63	ALCAN-383.1CAC.....	46	ALCAN-6006AB.....	95	ALCAN-7079AA.....	74
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ALCAN-2014AE.....	35	ALCAN-4104AE.....	52	ALCAN-6061AR.....	51	ALCAN-74SAF.....	117
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ALCAN-2017CAB.....	34	ALCAN-4147AA.....	18	ALCAN-6063CBB.....	95	ALCAN-75SCCI.....	78
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ALCAN-220AB.....	64	ALCAN-443.2AC.....	12	ALCAN-6082AA.....	9	ALCAN-8007AG.....	59
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VAW-2502-1	104	VAW-3166-2	18	VAW-4503-2	65		
VAW-2503-1	103	VAW-3167-1	17	VAW-4504	64		
VAW-2504-2	104	VAW-3200-2	39	VAW-5001-1	114		
VAW-2505-2	83	VAW-3201-2	40	VAW-5002-1	115		
VAW-2506-2	105	VAW-3202-3	39	VAW-5003-1	114		
VAW-2507-2	103	VAW-3203-2	38	VAW-5004-1	113		
VAW-2509-2	104	VAW-3204-2	39	VAW-5005	114		

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