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CRM ISO 17034 BISMUTH ALLOYS

40mm Ø x 25 mm

Number	Sn	Ag	Al	As	Au	Cd	Cu	Fe	In	Ni	Pb	Sb	Zn
IMN LD 1	43.65	0.00092	(0.0005)	0.000628	0.00661	0.000439	0.00277	0.00522	0.00144	0.001525	0.01125	0.00219	0.000186
IMN LD 2	43.39	0.1207	.	0.00703	0.0166	0.001541	0.0333	0.00624	0.120	0.0157	0.01503	0.1225	0.000625
IMN LD 4	43.16	0.00559	(0.0018)	0.0202	0.0406	0.00235	0.0440	0.0261	0.00983	0.00140	0.0711	0.01110	0.000668
IMN LD 5	43.06	0.0136	(0.0015)	0.0280	0.0510	0.00232	0.0535	0.0318	0.01514	0.00232	0.0821	0.0167	0.000546
IMN LD 33	42.81	0.00552	.	0.0237	0.0225	0.00144	0.0264	.	0.00633	0.00167	0.0460	0.00708	.
IMN LD 3	41.76	0.00587	.	0.02083	0.0272	0.00114	0.0212	0.00664	0.00554	0.00624	0.0453	0.00738	0.00143
IMN LD 6	40.81	0.0538	(0.0004)	0.0165	.	0.00313	.	.	0.0735	.	.	0.0757	0.00085

RM BISMUTH BASE and FUSIBLE SOLDER ALLOYS

95X: ~40 mm Ø x ~15 mm

NF: 37 mm Ø x 12 mm

Number	Bi	Cd	In	Pb	Sn	Ag	Al	As	Au	Co	Cu	Fe	Hg	Ni	Sb	Zn	Other
NF 64-7	Rem	.	0.003	0.076	45.0	1.25	.	0.006	0.011	0.026	0.004	.	.	0.005	0.26	.	
NF 64-6	Rem	.	0.007	0.26	43.1	0.70	.	0.018	0.035	0.039	0.11	.	.	0.042	0.11	.	
NF 64-5	Rem	.	0.098	0.006	42.6	0.99	.	.	.	.	0.076	.	.	.	0.078	.	
NF 64-4	Rem	.	0.075	0.052	42.0	0.40	.	0.010	<0.001	<0.001	0.006	.	.	0.025	0.053	.	
NF 64-3	Rem	.	0.049	0.025	41.4	0.20	.	0.005	.	.	0.049	.	.	0.072	0.026	.	
NF 64-1	Rem	.	0.010	0.098	41.0	0.006	.	0.0006	.	.	0.026	.	.	0.093	0.001	.	
NF 64-2	Rem	.	0.024	0.012	40.5	0.052	.	0.001	.	.	0.15	.	.	0.011	0.013	.	
95X 158	50.2	9.6	0.006	27.0	13.5	0.002	no uncertainties			0.048	.	.	.	0.057	0.044	Melt °C: 70	
95X PBS40P1A	13.8	0.0043	0.005	(43.6)	42.6	0.011	(0.0006)	0.005	.	.	0.025	(0.0006)	.	.	0.016	0.0010	

RM CADMIUM ALLOY

Number	Cd	Sn	Units
95X SC34A	(65.99)	34.05	40 mm Ø x 15 mm
95X SC36A	(63.98)	36.09	40 mm Ø x 15 mm

CRM CADMIUM SET

SET ONLY 40 mm Ø x 25 mm discs				
Number	As	Ni	Sb	Sn
IMN K1	(0.00030)	0.0086	0.0064	0.0061
IMN K2	0.0012	0.018	0.0038	0.0032
IMN K3	0.0010	0.063	0.0010	0.00065
IMN K4	0.0056	0.11	0.0011	0.00091
IMN K5	0.0014	0.0054	0.00017	.

COBALT BASE ALLOYS

= class, where 1 = CRM and 2 = rm analysis listed in mass % 17025, 17034

#	Number	Cr	Fe	Mn	Mo	Nb	Ni	W	Al	C	Cu	P	S	Si	Ti	Co
1	IARM CoR30016-22	30.9	0.84	1.50	0.97	0.037	2.86	4.01	0.054	1.10	0.015	0.0045	(0.0004)	0.65	0.0076	57.6
1	BS FSX414	29.7	0.05	0.78	<0.5	(0.009)	10.4	7.3	(0.011)	0.127	(0.007)	(0.003)	0.0010	0.78	(0.016)	50.6
1	ECRM 378-1D	28.22	0.606	0.0579	0.053	.	0.617	4.43	.	1.181	.	(0.0023)	0.0055	1.172	.	63.52
1	BS 173A	27.8	0.43	0.78	5.49	0.0026	(0.09)	0.0097	(0.06)	0.047	(0.014)	0.0024	0.0005	0.64	(0.012)	64.5
1	IMZ 188	26.44	1.14	0.68	0.42	0.045	10.76	7.46	(0.005)	0.526	0.025	0.011	(0.0002)	0.69	(0.007)	51.64
1	IMZ 186	23.14	0.10	.	.	.	10.22	7.17	0.28	0.59	.	.	.	.	0.19	Rem
1	BS 172B	22.8	2.46	0.97	0.28	0.042	22.5	15.2	0.21	0.055	(0.02)	(0.008)	(0.0009)	0.33	0.079	34.8
2	BS 172A	21.85	1.76	0.77	0.30	0.09	23.7	14.0	0.08	0.098	0.027	(0.011)	(<0.0005)	0.37	.	.
1	BS CoCrNi	21.9	24.6	2.24	3.1	1.38	20.7	2.6	0.026	0.172	(0.094)	0.022	<0.05	0.89	(0.067)	21.9
1	IARM CoElgiloy-18	20.4	12.6	2.36	8.6	(0.006)	15.9	(0.008)	(0.011)	0.008	(0.005)	0.0019	(0.0018)	0.05	(0.004)	40.4
1	BS MP35N	20.4	0.327	0.008	9.7	0.017	35.6	<0.05	0.047	0.009	(0.014)	<0.01	<0.01	<0.05	0.75	33.2
1	BS 171C	20.3	1.07	1.47	(0.08)	(0.006)	10.1	15.3	(0.04)	0.119	(0.02)	(0.008)	(0.0008)	(0.1)	(0.07)	51.2
1	BS 171D	20.2	1.07	1.47	(0.08)	(0.006)	10.1	15.3	(0.05)	0.120	(0.02)	(0.01)	(0.0009)	(0.1)	(0.05)	51.2
1	SRM 1242	20.0	1.80	1.58	.	(<0.005)	9.78	15.1	(<0.01)	0.126	0.0010	0.002	0.0007	0.016	.	51.5
1	IARM CoMP35N-18	19.9	0.031	0.002	10.1	.	36.53	.	0.060	0.0049	.	0.0022	0.0013	0.012	0.78	32.7
#	Number	Cr	Fe	Mn	Mo	Nb	Ni	W	Al	C	Cu	P	S	Si	Ti	Co

Number	B	La	Mg	N	O	Pb	Sn	Ta	V	Zr	Units
IARM CoR30016-22	0.0021	.	.	0.026	0.0012	.	.	(0.0151)	0.011	.	38 mm Ø x 3 or 19 mm
BS FSX414	(0.0018)	.	H:<0.005	0.0027	0.0008	.	.	<0.05	(0.006)	<0.05	41 mm Ø x ~7 or 19+ mm
ECRM 378-1D	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
BS 173A	(0.0006)	.	H:0.0002	0.169	(0.0017)	.	.	.	(0.008)	.	38 mm Ø x ~7 or 19+ mm
IMZ 188	0.0009	.	.	.	.	.	.	(0.011)	(0.011)	(0.0004)	1/4 of 75 mm Ø cylinder x 20 mm
IMZ 186	(0.007)	.	.	.	.	.	.	3.78	last	0.40	1/4 of 78 mm Ø cylinder x 30 mm
BS 172B	(0.004)	0.059	(0.001)	0.033	0.0011	As:(0.05)	.	(0.01)	0.0081	(0.008)	38 mm Ø x ~7 or 19+ mm
BS 172A	(0.003)	0.045	(0.001)	.	.	.	.	(0.024)	0.007	.	38 mm Ø x ~10 mm last
BS CoCrNi	0.0018	0.0013	H:(0.0010)	(0.19)	(0.009)	As:0.0018	<0.05	<0.5	0.059	<0.005	36 mm Ø x 25 mm
IARM CoElgiloy-18	(0.002)	.	.	0.0034	0.009	.	.	(0.01)	(0.009)	.	31 mm Ø x 2 or 18 mm
BS MP35N	0.0034	.	<0.01	0.0016	(0.0004)	.	<0.01	0.0021	0.0095	(0.002)	38 mm Ø x ~7 or 19+ mm
BS 171C	(0.004)	(0.03)	(0.001)	0.0045	(0.002)	.	.	(0.02)	(0.009)	(0.01)	38 mm Ø x ~7 or 19+ mm
BS 171D	(0.004)	(0.02)	(0.0008)	0.0046	(0.0008)	.	.	(0.02)	(0.01)	(0.01)	38 mm Ø x ~7 or 19+ mm
SRM 1242	(<0.0001)	.	(<0.001)	0.026	.	(<0.0001)	(<0.001)	(<0.01)	0.005	(<0.01)	43 mm Ø x 20 mm
IARM CoMP35N-18	0.009	.	.	0.0018	.	.	.	.	0.006	(0.002)	38 mm Ø x 2 or 19 mm
Number	B	La	Mg	N	O	Pb	Sn	Ta	V	Zr	Units

LEAD # = class, where 1 = CRM and 2 = RM analysis listed in mass %

#	Number	Ag	As	Bi	Cd	Cu	Ni	Sb	Se	Sn	Te	Zn
1	83X PR7C	0.287	0.050	0.497	0.450	0.148	0.0027	0.78	0.0069	0.218	0.0094	.
1	IMN PNA2	0.0591	.	0.0353	.	.	.	.	.	0.559	.	.
1	IMN PNA1	0.0357	.	0.0149	.	.	.	.	.	0.493	.	.
1	IMN PNA3	0.0214	.	0.0137	.	.	.	.	.	0.361	.	.
1	IMN PL 1	0.0193	0.00036	0.0729	.	0.00073	0.0136	0.00154	.	0.00030	0.0145	0.00060
1	IMN PL 7	0.0151	(0.00743)	0.00617	0.00532	0.00068	.	0.00777	.	0.00263	0.0270	0.00035
1	VS S3-02	0.0125	.	0.0100	0.00065	0.0238	0.00501	0.00080	.	0.00030	.	0.00051
1	83X PR4J	0.0104	.	0.0131	0.0073	0.038	0.0018	0.0040	0.0024	.	(0.020)	.
1	SRM C2417	0.010	0.011	0.010	(<0.0002)	0.010	(<0.0005)	0.010	.	(<0.010)	(<0.0005)	(<0.0005)
1	IMN PL 2	0.00970	0.00026	0.0460	0.0218	0.00149	0.0159	0.00072	0.00333	0.00026	0.0349	(0.00017)
1	BAM M113	0.00647	<0.0001	0.0194	<0.00005	0.00189	.	0.00054	<0.0001	1.047	.	.
1	IMN PL 6	0.00643	0.0318	0.00483	0.0623	0.00047	0.00055	0.0310	.	0.00076	0.00082	.
1	VS S3-05	0.00598	.	0.0145	0.00098	0.00223	0.00030	0.071	.	(0.00023)	.	0.000069
1	NCS HS52705-08	0.0058	.	0.0037	0.0014	0.0019	0.00028	0.0004	.	0.17	.	0.0010
1	BAM M109	0.0045	0.0113	0.0193	0.00353	0.00196	0.00035	0.0098	.	0.115	0.0030	0.0031
1	NCS HS52705-06	0.0037	0.0003	0.0071	0.0010	0.0028	.	0.0009	.	1.47	.	0.0020
1	VS S3-04	0.00326	0.0107	0.155	0.0485	0.0095	0.00020	0.0300	(0.00025)	0.0060	0.00118	0.0101
1	83X PR11A	0.0030	0.0095	0.0117	0.0008	0.0551	0.0011	0.497	(0.0001)	0.119	.	.
1	IMN PL 5	0.00273	0.0159	0.0296	.	0.00091	0.00067	0.0572	.	0.00137	0.00136	.
1	VS S3-09	0.00258	0.000097	0.0338	0.00433	0.065	.	0.0102	(0.00011)	0.0435	0.00042	0.00241
1	NCS HS52705-05	0.0023	(0.0001)	0.0061	0.0017	0.0027	.	0.0005	.	1.27	.	0.0062
1	IMN PR1	0.00219	0.000081	0.01192	0.0000503	.	.	.	.	.	0.000140	.
1	VS S3-06	0.00215	0.080	0.0758	0.0151	0.00064	0.00030	0.00405	.	0.0160	0.0129	0.0131
1	83X PR12B	0.0021	.	0.0116	0.00104	0.036	0.0009	.	.	0.0007	.	.
1	83X CU06A	0.0019	(0.0001)	0.0134	(0.00006)	0.0554	0.0003	(0.0008)	(0.0005)	(0.0004)	(0.0002)	(0.0003)
1	IMN PL 3	0.00170	0.00025	0.0101	0.00157	0.0105	0.00394	0.00080	0.00027	0.00021	0.0235	0.00018
1	NCS HS52705-10	0.0017	(0.00005)	0.0099	0.00083	0.00079	.	(0.00018)	.	1.63	.	0.00094
1	VS S3-01	0.00157	.	0.0050	0.000203	0.000125	.	0.000100	.	0.00097	.	0.00121
1	BCR 287A	0.00152	<0.0000003	0.00673	0.000036	0.000098	0.0000024	0.0000040	<0.000005	<0.000005	<0.00002	<0.00001
1	VS S3-07	0.00111	0.00022	0.0204	0.00169	0.00318	.	0.200	.	0.095	0.00030	0.069
1	IMN PL 4	0.00103	0.0345	0.00599	0.00051	0.0197	0.00085	0.00034	0.00027	.	0.00236	.
1	83X PR5-22	0.0010	0.00019	0.0043	0.00051	0.0009	0.0008	0.0007	0.0007	(0.0004)	0.0007	.
1	NCS HS52705-07	0.0010	.	0.0042	0.0011	0.0018	0.00014	0.0018	.	0.11	.	0.0042
1	NCS HS52705-04	0.00097	(0.0001)	0.0072	0.0010	0.0026	.	0.0030	.	1.18	.	0.0022
1	NCS HS52705-09	0.00096	.	0.0025	0.0013	0.0043	.	0.0003	.	0.091	.	0.00052
1	NCS HS52705-03	0.00096	(0.0001)	0.0072	0.00064	0.0020	.	0.0010	.	0.32	.	0.0018
1	NCS HS52705-01	0.00086	.	0.0013	0.00037	0.00095	.	0.0028	.	0.082	.	0.0052
1	NCS HS52705-02	0.00082	.	0.0069	0.00083	0.0025	.	0.0002	.	0.24	.	0.0022
1	VS S3-03	0.00082	0.0059	0.00548	0.00050	0.00041	0.00091	.	(0.00105)	.	.	0.000119
1	BAM M112	(0.0008)	.	(0.0070)	.	0.00082	0.00053	.	0.00052	.	0.00053	.
1	VS S3-08	0.00070	0.000098	0.0065	0.000207	0.000219	(0.00002)	0.00020	.	0.00245	.	0.0070
1	VS S3-11	0.00010	.	0.00101	0.000010	0.000025	.	.	.	0.000030	.	0.000034
2	BCS 210e *	0.0001	.	0.0008	.	0.0006	<0.001	<0.002	.	<0.002	.	<0.005
1	VS S3-10	(0.000003)	.	0.000106	(0.000002)	0.000019	.	.	.	.	.	.
1	ERM-EB107	.	.	.	0.00261	.	.	.	.	.	.	.
1	ERM-EB108	.	.	.	0.00260	.	.	.	.	.	.	.

Number	Al	Au	Ca	Fe	Hg	In	Mg	Mn	Na	Pt	S	Ti	Tl	Units
83X PR7C	.	.	.	.	.	0.55	.	.	.	0.0047	.	.	.	~40 mm Ø x ~15 mm
IMN PNA2	0.0186	.	0.0520	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~30 mm
IMN PNA1	.	.	0.0480	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~30 mm
IMN PNA3	0.0538	.	0.245	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~30 mm
IMN PL 1	.	.	.	0.00045	.	(0.00643)	.	(0.000020)	.	.	.	0.0569	.	40 mm Ø x ~27 mm
IMN PL 7	.	.	.	.	.	.	.	.	.	.	.	0.00992	.	40 mm Ø x ~27 mm
VS S3-02	.	0.00061	0.0082	.	.	.	.	.	0.0057	.	.	.	0.0055	45 mm Ø x ~25 mm
83X PR4J	.	0.0021	.	.	(0.02)	(0.0015)	.	.	.	.	.	.	0.0022	~40 mm Ø x ~15 mm
SRM C2417	(<0.0001)	.	(<0.001)	(<0.0003)	.	.	.	(<0.0003)	.	.	.	.	.	50 mm Ø x 16 mm
IMN PL 2	.	.	.	0.00044	.	(0.00064)	.	(0.000017)	.	.	.	0.0228	.	40 mm Ø x ~27 mm
BAM M113	0.0145	.	0.124	0.00010	.	.	.	<0.00005	.	.	.	.	.	38 mm Ø x 38 mm
IMN PL 6	.	.	(0.000811)	(0.00020)	.	0.0104	.	(0.000050)	.	.	.	.	0.0494	40 mm Ø x ~27 mm
VS S3-05	.	0.00020	0.00075	.	.	.	.	.	.	.	.	.	0.00038	45 mm Ø x ~25 mm
NCS HS52705-08	0.015	.	0.078	.	Ce:0.027	.	La:0.030	.	.	.	.	.	.	45 mm Ø x 25 mm
BAM M109	(<0.00021)	.	.	.	.	(<0.00005)	.	.	.	.	.	.	0.00030	40 mm Ø x 40 mm
NCS HS52705-06	0.026	.	0.092	0.0002	Ce:0.018	.	La:0.012	.	.	.	.	.	.	45 mm Ø x 25 mm
VS S3-04	0.000074	0.00061	0.00043	.	.	.	0.000095	.	0.000144	.	.	.	0.0048	45 mm Ø x ~25 mm
83X PR11A	.	.	.	(0.0003)	.	.	.	.	.	.	0.009	.	0.0042	~40 mm Ø x ~15 mm
IMN PL 5	.	.	.	.	.	0.0287	.	.	.	.	.	.	0.0135	40 mm Ø x ~27 mm
VS S3-09	0.000093	.	0.00104	.	.	.	0.00020	.	0.00040	.	.	.	0.0050	45 mm Ø x ~25 mm
NCS HS52705-05	0.015	.	0.077	.	Ce:0.0028	.	La:0.0040	.	.	.	.	.	.	45 mm Ø x 25 mm
IMN PR1	(0.000086)	.	.	.	.	.	.	.	.	.	.	0.00144	.	45 mm Ø x 20 mm
VS S3-06	.	.	0.00046	.	.	.	0.000059	.	.	.	.	0.00051	.	45 mm Ø x ~25 mm
83X PR12B	.	.	.	0.0007	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
83X CU06A	.	.	.	.	.	.	.	.	.	0.0011	.	.	.	~40 mm Ø x ~15 mm
IMN PL 3	.	.	(0.00034)	(0.00024)	.	0.00059	.	(0.000060)	.	.	.	.	0.00264	40 mm Ø x ~27 mm
NCS HS52705-10	0.016	.	0.076	.	Ce:0.012	.	La:0.052	.	.	.	.	.	.	45 mm Ø x 25 mm
VS S3-01	0.00043	.	0.0031	.	.	.	0.00112	.	0.00220	.	.	.	0.0050	45 mm Ø x ~25 mm
BCR 287A	.	.	.	.	.	.	.	.	.	.	.	.	0.000073	60 mm x 60 mm x 12 mm
VS S3-07	.	.	.	.	.	.	.	.	0.00114	.	.	.	0.0050	45 mm Ø x ~25 mm
IMN PL 4	.	.	.	.	.	.	.	.	.	.	.	.	0.00215	40 mm Ø x ~27 mm
83X PR5-22	.	.	.	(0.0005)	.	0.00012	.	.	.	.	.	.	0.0011	~38-40 mm Ø x ~15-19 mm
NCS HS52705-07	0.027	.	0.096	.	Ce:(0.041)	.	La:0.049	.	.	.	.	.	.	45 mm Ø x 25 mm
NCS HS52705-04	0.032	.	0.079	.	Ce:0.0066	.	La:0.0064	.	.	.	.	.	.	45 mm Ø x 25 mm
NCS HS52705-09	0.030	.	0.13	.	Ce:0.035	.	La:0.039	.	.	.	.	.	.	45 mm Ø x 25 mm
NCS HS52705-03	0.025	.	0.11	.	Ce:0.00066	.	La:0.00076	.	.	.	.	.	.	45 mm Ø x 25 mm
NCS HS52705-01	0.030	.	0.086	(0.0001)	Ce:0.00099	.	La:0.00080	.	.	.	.	.	.	45 mm Ø x 25 mm
NCS HS52705-02	0.039	.	0.068	.	Ce:0.0017	.	La:0.0012	.	.	.	.	.	.	45 mm Ø x 25 mm
VS S3-03	.	0.00101	.	.	.	.	.	.	0.0019	.	.	0.0050	.	45 mm Ø x ~25 mm
BAM M112	.	.	.	.	.	.	.	.	.	0.00054	(0.00037)	(0.0013)	.	38 mm Ø x 38 mm
VS S3-08	0.00102	.	0.0156	.	.	.	0.0120	.	0.0105	.	.	0.0049	.	45 mm Ø x ~25 mm
VS S3-11	.	.	.	.	.	.	.	.	.	.	.	0.000109	.	45 mm Ø x ~25 mm
BCS 210e *	<0.001	.	.	0.0005	.	.	.	<0.001	.	.	.	0.001	.	500 g(10.5 x 2 x 2 cms)
VS S3-10	.	.	.	.	.	.	.	.	.	.	.	.	0.000012	45 mm Ø x ~25 mm
ERM-EB107	.	.	.	.	0.00113	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
ERM-EB108	.	.	.	.	0.00083	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm

** BCS 210e has a certified melting point of 327.3 °C and Pb: 99.996

lable individually

typical analysis		40 mm Ø x 15 mm				
Class	Number	Sb	Ag	As	Bi	Mg
CRM	81X PA12.5D	12.72	.	.	.	.
CRM	81X PA3.5E	3.49	.	.	.	.
CRM	81X PA1.0C	0.989	.	.	.	.
CRM	81X PA0.5C	0.481	.	.	.	.
RM	81X PA1A	(0.02)	.	1.25	(0.03)	last
RM	81X PMg1A	.	.	.	.	1.15
RM	81X PMg2A	.	.	.	.	0.173
RM	81X PMg3A	.	.	.	.	0.023
CRM	81X PA1.0C	0.989	0.723	.	.	.

SET/4 ONLY analysis listed in mass % 40 mm Ø x 4 mm

RM	ALLOYED LEAD													37 mm Ø x 12 mm		
Number	Sn	Ag	Al	As	Au	Bi	Ca	Cd	Cu	Fe	In	Ni	Pb	Sb	Zn	
NF 30-1	40.00	0.005	.	0.007	.	0.03	.	.	0.005	.	.	<0.1	Rem	0.15	.	
NF 30-3	39.70	0.025	.	0.03	.	0.15	.	.	0.04	.	.	<0.1	Rem	0.75	.	
NF 30-2	39.30	0.01	.	0.01	.	0.06	.	.	0.011	.	.	<0.1	Rem	0.43	.	
NF 43-3	11.3	0.010	(0.004)	0.004	0.012	0.040	.	0.009	0.003	<0.1	0.036	<0.1	Rem	0.20	<0.1	
NF 31-3	10.7	1.10	.	.	.	0.032	.	.	0.0045	.	.	.	Rem	0.048	.	
NF 31-2	10.0	2.15	.	.	.	0.010	.	.	0.014	.	.	.	Rem	0.085	.	
NF 43-2	10.0	0.004	(0.002)	0.003	0.009	0.012	.	0.002	0.002	<0.1	0.011	<0.1	Rem	0.11	<0.1	
NF 43-1	9.5	0.002	(0.005)	0.0009	0.005	0.011	.	0.0007	0.001	<0.1	0.005	<0.1	Rem	0.015	<0.1	
NF 31-1	8.6	2.50	.	.	.	0.0079	.	.	0.02	.	.	.	Rem	0.20	.	
NF 32-3	1.40	0.50	.	(0.02)	.	0.27	.	.	0.068	.	.	.	Rem	0.11	(0.005)	
NF 44-6	1.05	0.7	.	.	.	0.8	.	0.53	0.064	.	<0.5	.	Rem	0.9	<0.01	
NF 32-2	0.97	1.50	.	(0.01)	.	0.10	.	.	0.14	.	.	.	Rem	0.25	(0.0025)	
NF 44-5	0.56	0.2	.	0.53	.	0.49	.	0.12	0.042	.	<0.01	.	Rem	0.60	<0.01	
NF 32-1	0.41	1.90	.	(0.005)	.	0.055	.	.	0.23	.	.	.	Rem	0.42	(0.001)	
NF 34-3	0.25	6.5	.	0.02	.	0.25	.	.	0.08	.	.	.	Rem	0.10	0.005	
NF 44-4	0.13	0.033	.	0.06	.	0.053	.	0.04	0.03	.	<0.01	.	Rem	0.06	.	
NF 34-2	0.10	5.5	.	0.01	.	0.10	.	.	0.15	.	.	.	Rem	0.25	0.0025	
NF 44-3	0.06	0.02	.	0.02	.	0.021	0.0090	0.02	0.02	<0.005	<0.01	<0.01	Rem	0.02	.	
NF 34-1	0.05	4.5	.	0.005	.	0.05	.	.	0.30	.	.	.	Rem	0.40	0.001	
NF 44-2	0.0030	0.005	.	0.006	.	0.0051	.	0.00070	0.006	<0.005	<0.01	<0.01	Rem	0.0054	.	
NF 44-1	<0.003	0.0013	.	0.0007	.	0.0009	0.0037	0.0021	0.0009	<0.005	<0.01	<0.01	Rem	<0.003	<0.01	

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LEAD AND TIN ALLOYS

CONTINUED ON THE NEXT PAGE

= class, where 1 = CRM and 2 = RM analysis listed in mass %

#	Number	Sn	Sb	Ag	As	Bi	Ca	Cd	Cu	Fe	Ni	Te	Zn
1	91X S63PR4-22	66.8	0.094	0.032	.	0.031	.	0.022	0.023	0.0020	0.0027	0.0056	(0.0003)
1	91X S63P-22	62.2	0.018	0.0046	.	0.0048	.	.	0.0016	0.0020	0.0006	.	.
1	91X S63Bi1A	61.9	0.470	0.0592	(<0.002)	0.597	.	0.0095	0.105	0.0204	0.0131	0.0012	(0.0022)
1	91X S63PR2-22	61.7	0.52	0.054	0.008	0.180	.	0.0103	0.085	0.007	0.0035	0.0039	0.0033
1	91X S62AG2-21	61.5	0.362	2.06	0.015	0.170	.	0.0019	0.070	0.0062	0.0031	.	0.0014
1	91X S63PR0C	60.0	0.024	0.020	0.017	0.0101	.	0.0124	0.0245	0.0016	0.0039	(0.0005)	(0.0004)
1	91X S40PR2-22	40.8	0.60	0.087	0.008	0.157	.	0.0033	0.083	0.0067	0.0042	.	0.023
1	SRM 1131	39.3	0.43	0.01	0.01	0.06	.	.	0.011	.	0.012	.	.
1	86X PSS4C	10.22	16.18	0.0279	0.202	0.119	.	0.0575	0.113	0.0012	0.0005	0.0071	0.0156
2	NF 66-4	10.15	0.50	2.00	0.013	0.046	.	.	0.043	.	.	.	.
1	91X S10PR1C	9.10	0.0278	0.0078	0.0045	0.0277	.	0.0029	0.0097	(0.0016)	0.0006	.	<0.001
1	86X PSS2C	6.46	9.0	0.0297	0.50	0.077	.	0.212	0.141	(0.0007)	0.0020	0.0033	<0.001
1	SRM 1132	5.84	10.26	0.057	0.052	0.052	.	.	0.054	<0.001	0.003	.	.
2	NF 66-3	4.91	1.01	2.46	0.033	.	.	.	.	.	.	.	.
1	86X PSS1C	4.49	11.84	0.0038	0.54	0.201	.	0.0054	0.031	.	0.0057	(0.0022)	(0.0013)
2	NF 66-2	3.43	2.14	0.52	0.0067	0.25	.	.	0.029	.	.	.	.
1	85X PSn2D	1.90	0.020	0.0034	(0.0022)	0.026	.	0.00057	0.031	(0.0010)	0.0011	.	(0.0007)
1	BAM EB106	1.72	.	(0.00323)	.	(0.0135)	0.0782	.	.	.	.	.	.
1	84X BA12-21	1.44	0.0029	0.0053	0.0003	0.017	0.062	0.0041	0.0020	.	.	.	0.0035
1	BAM EB105	1.43	.	0.00321	.	0.0133	0.0595	.	.	.	.	.	.
1	85X ANTHG	1.35	6.07	0.008	0.185	0.024	.	0.0045	0.013	.	0.0063	(0.009)	0.0008
1	84X BA11-21	1.28	0.0046	0.0026	(0.0003)	0.0166	0.052	0.0010	0.0015	.	.	.	0.0005
1	BAM EB104	1.27	.	(0.00293)	.	(0.0126)	0.0530	.	.	.	.	.	.
2	NF 66-1	1.15	.	1.52	0.0023	0.096	.	.	0.043	.	0.0031	.	.
1	84X BA14B	0.97	0.0008	0.0096	0.0003	0.0182	0.082	0.0025	0.0015	.	.	.	0.0048
1	84X BA1-23	0.96	.	0.010	.	0.017	0.102	0.0013	.	.	.	.	.
1	85X HRHJ	0.71	0.99	0.238	0.700	0.086	.	0.00035	0.070	.	0.0023	0.0022	.
1	84X BA7-21	0.58	0.0026	0.0020	0.0005	0.016	0.042	0.0008	0.0021	.	0.00012	.	0.0024
1	84X BA2E	0.515	0.0017	0.0061	.	0.0089	0.078	0.0058	0.0014	.	.	.	0.024
2	L21.04-2	0.47	0.0003	0.017	0.0002	0.027	0.084	0.003	0.005	.	<0.0005	.	0.007
1	85X MS2XA	0.392	1.367	0.0043	0.176	0.0188	.	0.0002	0.0277	(0.0001)	0.0004	.	0.0003
2	L21.03-2	0.38	<0.0005	0.010	<0.0005	0.023	0.089	0.003	<0.0005	.	<0.0005	.	0.002
1	84X BA20B	0.370	0.0038	0.0295	0.0144	0.368	0.051	0.0051	.	.	.	.	0.0435
1	SRM C2415a	0.3058	2.981	0.00762	0.1865	0.0507	.	0.00497	0.1022	.	0.00436	0.01034	.
1	84X BA8-23	0.29	.	0.005	.	0.017	0.13	.	.	.	.	.	.
#	Number	Sn	Sb	Ag	As	Bi	Ca	Cd	Cu	Fe	Ni	Te	Zn
2	L21.02-2	0.28	0.0013	0.007	0.0003	0.013	0.020	0.0010	0.002	.	<0.0005	.	0.004
1	85X PSb12B	0.270	11.50	0.0019	0.071	0.0310	.	0.00053	0.330	.	0.0033	0.0056	0.071
2	L21.02-1	0.27	0.0003	0.008	0.01	0.01	0.03	<0.0002	0.0013	.	<0.0002	.	0.0016
1	85X S744A	0.237	1.532	0.0046	0.125	0.0182	.	0.00033	0.0366	(0.0001)	0.00053	.	0.00020
1	85X PSb24A	0.235	2.31	0.0016	0.148	0.0110	.	.	0.0274	.	.	.	.
1	MBH PbSb2-22	0.22	5.5	0.0010	0.165	0.0063	.	.	0.062	.	0.0006	.	.
1	85X PSb33A	0.204	3.21	0.0014	0.144	0.0115	.	.	0.035	.	.	.	.
1	84X BA23C	0.194	0.0022	0.0032	.	0.020	1.03	0.00029	.	.	.	.	0.0021
1	84X BA21B	0.162	0.0028	0.0102	.	0.0173	0.552	0.0007	.	.	.	.	0.0155
1	85X PSb3L	0.144	2.17	0.0040	0.253	0.023	.	0.0023	0.0316	.	0.0018	0.0048	0.0006
1	85X PSb10C	0.134	10.0	0.0018	0.113	0.040	.	0.0015	0.147	.	0.0018	.	0.0122
1	BAM M110	0.131	3.08	0.0022	0.107	0.0126	(0.00002)	(0.00001)	0.00064	.	.	0.00038	(0.00001)
1	85X 0494 Pb2C	0.124	1.928	0.0279	0.102	0.0387	.	0.0227	.	(0.0001)	.	0.00382	.
2	L21.01-2	0.11	0.0006	<0.001	<0.0005	<0.001	0.051	0.0003	0.0003	.	<0.0005	.	0.002
1	85X CADHD	0.104	1.80	0.0072	0.176	0.013	.	1.84	0.0162	.	0.0011	0.0032	0.0011
1	83X PR2G	0.0948	0.0499	0.055	0.0233	0.0404	.	0.0020	0.0309	.	0.0006	0.0100	0.0005
1	84X BA22C	0.093	0.0009	0.0049	.	0.0168	0.82	0.0020	.	.	.	.	0.0049
1	SRM C2416	0.09	0.79	0.0044	0.056	0.10	(0.0001)	(0.00002)	0.065	(0.00005)	(0.00005)	(0.00005)	(0.00005)
1	MBH PbSb3-22	0.078	6.49	0.0008	0.127	0.0063	.	0.048	.	.	0.0006	.	.
1	85X M2A	0.071	1.847	0.0016	0.259	0.0141	.	0.0003	0.0281	(0.0002)	0.0005	.	(0.0001)
1	85X 2.5LAA	0.068	2.48	0.0017	0.334	0.0142	.	(0.0002)	0.0372	.	0.0005	0.0004	0.0002
1	85X PSb6A	0.065	6.51	0.0459	0.111	0.0270	.	0.00460	0.0651	.	0.00213	0.0108	(0.0002)
1	85X PSb28A	0.061	2.73	0.0015	0.247	0.0110	.	.	0.0097	.	.	.	.
1	85X N35A	0.044	3.42	0.0011	0.201	0.0130	.	0.00013	0.0246	(0.0001)	0.00058	.	0.00013
1	83X PR3-21	0.036	0.097	0.0031	0.0011	0.142	.	0.047	0.070	.	0.012	0.0038	0.0008
1	85X A16A	0.0356	1.57	0.0297	0.0503	0.0165	.	0.00014	0.0006	(0.0001)	0.0006	.	0.00011
1	85X PSb60A	0.025	5.88	0.0013	0.078	0.0088	.	.	0.0403	.	.	.	.
1	85X SM31-21	0.024	2.89	0.0011	0.057	0.0118	.	0.00027	0.0178	0.0002	0.00032	0.0006	0.00020
1	85X CADLB	0.0182	2.00	0.0132	0.102	0.0489	.	1.22	0.0384	0.0008	0.0002	(0.0001)	(0.011)
1	83X PR1-21	0.015	0.0116	0.093	0.040	0.049	0.00034	0.068	0.046	0.0003	0.0002	0.0062	0.0011
1	85X SASHA	0.0130	1.54	0.0016	0.683	0.0602	.	0.00024	0.0245	.	0.0005	0.0006	.
1	84X BA4D	0.0063	0.0149	0.0153	0.0005	0.0153	(0.0004)	0.0130	0.0270	.	(0.0003)	0.0395	0.0035
1	85X YUMA	0.0046	2.47	0.0018	0.306	0.0137	.	0.0002	0.0234	.	0.0007	0.0005	(0.0002)
1	85X 0616 Pb1D	(0.002)	1.53	0.0089	0.060	0.036	.	0.0018	0.0158	.	0.00071	0.0082	(0.001)
1	MBH PbSb1-22	.	5.9	0.0005	1.60	0.0063	.	.	0.0008	.	.	.	.
#	Number	Sn	Sb	Ag	As	Bi	Ca	Cd	Cu	Fe	Ni	Te	Zn

LEAD ALLOYS

CONTINUED FROM THE PREVIOUS PAGE

Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units
91X S63PR4-22	0.0007	0.047	.	0.014	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63P-22	.	.	.	0.0044	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~8 mm
91X S63Bi1A	(0.0015)	0.074	.	0.0067	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63PR2-22	0.0008	0.080	.	0.017	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S62AG2-21	.	0.0019	.	0.0016	Pb: (35.95)	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
91X S63PR0C	.	(0.0004)	0.0082	0.0098	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
91X S40PR2-22	.	.	.	0.0012	.	.	.	.	.	.	.	Disc 38 mm Ø x 19 mm
SRM 1131	.	.	.	.	.	.	.	.	.	.	.	Disc 32 mm Ø x 19 mm
86X PSS4C	.	.	.	0.0194	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
NF 66-4	.	.	.	0.068	.	.	.	.	.	.	.	Disc 37 mm Ø x 12 mm
91X S10PR1C	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
86X PSS2C	.	.	.	0.0144	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
SRM 1132	.	.	.	.	.	.	.	.	.	.	.	Disc 32 mm Ø x 19 mm
NF 66-3	.	0.10	.	0.094	.	.	.	.	.	.	.	Disc 37 mm Ø x 12 mm
86X PSS1C	.	.	.	0.0079	.	.	.	.	0.0054	.	.	Disc ~40 mm Ø x ~15 mm
NF 66-2	.	.	.	0.021	.	.	.	.	.	.	.	Disc 37 mm Ø x 12 mm
85X PSn2D	.	.	.	.	.	.	.	.	.	(0.0025)	.	Disc ~40 mm Ø x ~15 mm
BAM EB106	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
84X BA12-21	0.025	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
BAM EB105	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
85X ANTHG	.	.	.	.	.	Co:0.0005	.	.	(0.004)	0.014	.	Disc ~40 mm Ø x ~15 mm
84X BA11-21	0.028	.	.	0.0002	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
BAM EB104	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
NF 66-1	.	0.041	.	0.036	.	.	.	.	.	.	.	Disc 37 mm Ø x 12 mm
84X BA14B	0.020	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
84X BA1-23	0.031	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~20 mm Pb: (98.8)
85X HRHJ	.	.	.	.	.	.	.	.	0.0013	0.038	.	Disc ~40 mm Ø x ~15 mm
84X BA7-21	0.0105	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
84X BA2E	0.025	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
L21.04-2	<0.001	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
85X MS2XA	.	.	.	.	.	.	.	.	(0.0002)	0.0334	.	Disc ~38 mm Ø x ~15 mm
L21.03-2	0.011	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
84X BA20B	0.065	.	.	.	.	.	.	.	.	.	.	Disc ~38 mm Ø x ~15 mm last
SRM C2415a	Pb: (96)	.	.	.	.	.	.	.	(0.0061)	0.01005	.	Disc 40 mm Ø x 18 mm
84X BA8-23	0.04	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~20 mm Pb: (99.5)

Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units
L21.02-2	0.004	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
85X PSb12B	.	.	.	.	.	.	.	.	<0.001	0.0004	.	Disc 40 mm Ø x 15 mm
L21.02-1	.	.	.	.	.	.	.	.	.	last of batch	.	Block 50 mm x 50 mm x 20 mm
85X S744A	.	.	.	.	.	.	.	.	0.0028	0.0253	.	Disc ~40 mm Ø x ~15 mm
85X PSb24A	.	.	.	.	.	.	.	.	0.0007	0.029	.	Disc ~40 mm Ø x ~15 mm
MBH PbSb2-22	.	.	.	.	.	.	.	.	0.015	0.0076	.	disc
85X PSb33A	.	.	.	.	.	.	.	.	0.0009	0.020	.	Disc ~40 mm Ø x ~15 mm
84X BA23C	0.042	.	.	.	0.0034	<0.0005	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
84X BA21B	0.0125	.	.	.	.	.	.	.	.	.	.	Disc ~39 mm Ø x ~15 mm
85X PSb3L	.	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
85X PSb10C	.	.	.	.	.	.	.	.	.	0.0019	.	Disc ~40 mm Ø x ~15 mm
BAM M110	.	.	.	.	.	.	.	.	.	0.010	.	Disc 40 mm Ø x 30 mm
85X 0494 Pb2C	.	.	.	.	.	.	.	.	0.0052	0.0272	.	Disc ~40 mm Ø x ~15 mm
L21.01-2	0.012	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
85X CADHD	.	.	.	.	.	.	.	.	.	0.0012	.	Disc ~40 mm Ø x ~15 mm
83X PR2G	.	0.0005	0.003	0.0010	.	.	0.0013	.	(0.0006)	0.0005	(0.0017)	Disc ~40 mm Ø x ~15 mm
84X BA22C	0.055	.	.	.	0.0044	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
SRM C2416	(<0.0001)	.	.	.	.	(<0.0005)	.	.	0.0015	.	.	Disc 50 mm Ø x 16 mm
MBH PbSb3-22	.	.	.	.	.	.	.	.	.	0.016	.	disc
85X M2A	.	.	.	.	.	.	.	.	(0.0008)	0.0247	.	Disc ~38 mm Ø x ~15 mm
85X 2.5LAA	.	.	.	.	.	.	.	.	.	0.0006	.	Disc ~40 mm Ø x ~15 mm
85X PSb6A	.	.	.	.	.	.	.	.	.	0.0018	.	Disc ~40 mm Ø x ~15 mm
85X PSb28A	.	.	.	.	.	.	.	.	0.0014	0.009	.	Disc ~40 mm Ø x ~15 mm
85X N35A	.	.	.	.	.	.	.	.	0.007	0.0004	.	Disc ~38 mm Ø x ~15 mm
83X PR3-21	.	0.003	.	0.0062	.	.	.	.	.	0.022	.	Disc ~40 mm Ø x ~15 mm
85X A16A	.	.	.	.	.	.	.	.	(0.0003)	0.0218	.	Disc ~38 mm Ø x ~15 mm
85X PSb60A	.	.	.	.	.	.	.	.	0.0054	0.009	.	Disc ~40 mm Ø x ~15 mm
85X SM31-21	.	.	.	.	.	.	.	.	.	0.016	.	Disc ~40 mm Ø x ~15 mm
85X CADLB	.	.	.	.	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
83X PR1-21	0.00021	0.0015	.	0.0069	.	.	.	.	.	0.0010	.	Disc ~40 mm Ø x ~15 mm
85X SASHA	.	.	.	.	.	.	.	.	(0.0005)	.	.	Disc 40 mm Ø x ~15 mm
84X BA4D	.	.	.	0.0031	.	.	.	.	.	.	.	Disc ~40 mm Ø x ~15 mm
85X YUMA	.	.	.	.	.	.	.	.	0.0062	0.0008	.	Disc ~40 mm Ø x ~15 mm
85X 0616 Pb1D	.	.	(0.001)	.	.	.	.	.	.	0.0047	.	Disc ~40 mm Ø x ~15 mm
MBH PbSb1-22	.	.	.	.	.	.	.	.	.	0.0006	.	disc

Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units
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MAGNESIUM

= class, where 1 = CRM and 2 = RM

#	Number	Al	Cu	Fe	Mn	Ni	Pb	Si	Zn	Ag	Be
1	63X MgE1E	(0.088)	0.0503	0.0014	0.860	0.0162	0.011	0.052	0.083	0.0195	(0.0002)
1	NCS HS91712-2	0.063	0.037	0.012	0.062	0.012	0.0073	0.037	0.038	.	.
1	NCS HS91712-3	0.055	0.017	0.015	0.039	0.0070	0.0035	0.055	0.020	.	.
1	NCS HS91712-4	0.017	0.0054	0.0044	0.011	0.0007	0.0013	0.0027	0.0058	.	.
1	NCS HS91712-6	0.011	0.0016	0.0071	0.016	0.0004	0.0025	0.019	0.0040	.	.
1	NCS HS91712-5	0.0062	0.0003	0.0015	0.0054	(0.0001)	(0.0005)	0.0024	0.0046	.	.
1	NCS HS91712-1	0.0052	0.062	0.0054	0.092	0.0041	0.012	0.015	0.058	.	.

Number	Ca	Cd	Ce	La	Na	Sn	Zr	~mm Ø x ~mm H
63X MgE1E	.	0.0017	.	.	.	0.0053	.	50x20 or 40x15
NCS HS91712-2	.	(0.0023)	.	.	(0.0002)	.	.	40 x 30
NCS HS91712-3	.	(0.0027)	.	.	(0.0003)	.	.	40 x 30
NCS HS91712-4	.	(0.0015)	.	.	(0.0003)	.	.	40 x 30
NCS HS91712-6	.	(0.0018)	.	.	(0.0001)	.	.	40 x 30
NCS HS91712-5	.	(0.0011)	.	.	(0.0001)	.	.	40 x 30
NCS HS91712-1	.	(0.0018)	.	.	(0.0004)	.	.	40 x 30

MAGNESIUM with RARE EARTHS

= class, where 1 = CRM and 2 = RM analysis listed in mass % except * which is mg/kg

#	Number	Ag	Al	Be*	Ca	Cd*	Ce	Cu	Fe	Gd	La	Mn	Nd	Ni
1	64X MgQ9A	.	2.14	15	.	.	0.111	0.0104	0.0069	.	0.083	0.068	0.114	0.0020
1	66X MgD1B	.	0.147	.	.	.	0.065	0.066	0.0029	.	0.031	0.125	0.064	0.0162
1	61X MgP5A	0.0342	0.119	18	.	292	0.049	0.092	0.0048	.	0.0382	0.201	0.0446	0.0176
2	AA C7548	.	0.004	.	.	.	2.66	0.022	.	.	.	0.035	.	0.001
2	AA C7514	.	0.002	.	.	.	2.47	0.12	.	.	.	0.012	.	0.002
2	AA C7489	.	0.001	.	.	.	2.57	0.004	.	.	.	0.012	.	0.015
2	AA E1273	.	0	.	.	.	1.86	0.022	.	.	.	0.041	.	0.002
2	AA E1272	.	0	.	.	.	1.79	0.026	.	.	.	0.045	.	0.003
1	58A ST5260	.	.	.	.	.	2.79	.	.	.	.	.	.	.
1	58A ST5250	.	.	.	.	.	1.54	0.133	.	.	.	0.214	.	0.005
1	58A ST5240	.	.	.	.	.	1.47	0.051	.	.	.	0.062	.	0.084
1	58A ST5230	.	.	.	.	.	1.28	0.068	0.0041	.	.	0.067	.	0.0011
1	58A ST5220	.	.	.	.	.	0.826	0.054	0.0033	.	.	0.093	.	0.0009
1	58A ST5210	.	.	.	.	.	0.149	0.0092	0.0027	.	.	0.15	.	0.001
2	AA D1075	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1073	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1072	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1074	.	.	.	.	.	.	.	.	.	.	.	.	.

Number	Pb	Pr	R.E.	Si	Sn	Y	Zn	Zr	~mm Ø x ~mm H	
64X MgQ9A	0.0096	.	.	(0.37)	0.0076	.	0.243	.	40 x 15	
66X MgD1B	0.026	.	.	(0.073)	0.026	.	1.19	.	40 x 15	
61X MgP5A	0.0357	.	.	0.094	0.0352	0.0132	0.099	.	40 x 15	
AA C7548	.	.	(4.8)	0.002	.	.	.	0.16	62 x 6	
AA C7514	.	.	(4.7)	0.002	.	.	.	0.42	62 x 6	
AA C7489	.	.	(5.0)	0.002	.	.	.	0.46	62 x 6	
AA E1273	.	.	(3.6)	0.0	.	.	2.87	0.54	62 x 6	
AA E1272	.	.	(3.3)	0.0	.	.	2.58	0.54	62 x 6	
58A ST5260	.	.	.	.	.	.	4.36	(1.03)	45 x 25	
58A ST5250	.	.	.	.	.	.	1.46	.	45 x 25	
58A ST5240	.	.	.	.	.	.	2.69	.	45 x 25	
58A ST5230	.	.	.	(0.0047)	.	.	3.63	.	45 x 25	
58A ST5220	.	.	.	(0.0056)	.	.	4.58	.	45 x 25	
58A ST5210	.	.	.	.	.	.	5.59	.	45 x 25	
AA D1075	.	.	(3.7)	.	.	.	(2.7)	0.64	62 x 6	last of stock
AA D1073	.	.	(3.7)	.	.	.	3.23	(0.6)	62 x 6	
AA D1072	.	.	(3.4)	.	.	.	2.02	(0.5)	62 x 6	
AA D1074	.	.	(3.4)	.	.	.	(2.7)	0.42	62 x 6	

Number	Pb	Pr	R.E.	Si	Sn	Y	Zn	Zr	~mm Ø x ~mm H	
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MAGNESIUM with ALUMINUM

#	Number	Al	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn	Zn
1	65X MgA15A	10.67	0.0062	(0.0014)	0.0034	0.0273	0.010	0.067	0.0026	0.0051	0.034	0.0021	0.348
2	58A ZH2050M	10.4	0.0007	.	.	0.307	0.0081	(0.71)	0.019	.	0.41	.	0.201
1	64X MgQ3A	8.66	0.0041	.	.	0.0349	0.0090	0.206	0.0032	0.0022	(0.083)	0.0019	0.0039
1	58A ST1240	7.33	0.00015	.	.	0.02	0.015	0.182	(0.0015)	.	0.27	.	0.171
1	58A ST1260	4.56	0.0009	.	.	0.013	0.025	(0.65)	0.0025	.	0.241	.	0.106
1	65X MgA17A	4.20	.	0.021	0.0049	0.0215	0.0069	0.203	0.0141	0.009	0.33	0.0050	0.128
1	64X MgQ7A	4.02	0.00042	.	.	0.0167	0.0028	(0.434)	0.0053	0.0126	(1.05)	0.0096	0.0607
1	65X MgB4C	3.86	0.0033	0.0010	0.00016	0.0183	(0.009)	0.031	0.0003	0.0037	0.037	0.0050	0.333
1	58A ST3310	3.69	0.00011	.	.	0.0084	0.007	0.59	0.0012	.	0.54	.	0.102
1	NCS HS49724-1	3.69	0.00011	.	.	0.0084	0.0070	0.59	0.0012	.	0.54	.	0.102
1	58A ST3350	2.58	0.0012	.	.	0.039	0.033	0.23	0.014	.	1.83	.	0.152
1	NCS HS49724-5	2.58	0.0012	.	.	0.039	0.033	0.23	0.014	.	1.83	.	0.152
1	58A ST1220	2.55	0.0009	.	.	0.0081	0.0089	0.338	0.0008	.	0.173	.	0.237
2	AA C8209	2.55	.	.	.	0.012	(0.02)	0.15	0.001	.	0.058	.	0.18
1	64X MgQ6A	2.31	0.0007	.	.	0.0045	(0.004)	(0.260)	0.0026	0.0060	(0.97)	0.0055	0.072
1	58A ST3330	1.09	(0.0005)	.	.	0.016	(0.0034)	(0.50)	(0.0013)	.	0.68	.	0.339
1	NCS HS49724-3	1.09	(0.0005)	.	.	0.16	(0.0034)	(0.50)	(0.0013)	.	0.68	.	0.339
1	64X MgQ1A	1.083	0.00036	.	.	0.084	0.0034	0.377	0.0041	0.020	0.062	0.0195	0.235
1	64X MgQ8A	1.03	0.00015	.	.	0.0019	0.0018	0.700	0.0004	0.0008	0.045	0.0022	0.044

#	Number	Al	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn	Zn
Number	Ag	Ce	Hg	La	Sr	Ti	Zr	~mm Ø x ~mm H					
65X MgA15A	0.030	0.0069	0.011	0.0048	.	.	.	50x20 or 40x15					
58A ZH2050M	.	.	.	.	.	.	.	~49 x ~34					
64X MgQ3A	.	.	.	.	.	.	.	50x20 or 40x15					
58A ST1240	.	.	.	.	.	.	.	45 x 25					
58A ST1260	.	.	.	.	.	.	.	45 x 25					
65X MgA17A	0.0064	.	.	.	.	.	.	50x20 or 40x15					
64X MgQ7A	.	.	.	.	.	.	.	40 x 15					
65X MgB4C	0.0046	0.0003	.	(0.0001)	.	(0.0008)	<0.001	40 x 18					
58A ST3310	.	.	.	.	.	.	.	45 x 25					
NCS HS49724-1	.	.	.	.	.	.	.	45 x 25					
58A ST3350	.	.	.	.	.	.	.	45 x 25					
NCS HS49724-5	.	.	.	.	.	.	.	45 x 25 last					
58A ST1220	.	.	.	.	.	.	.	45 x 25					
AA C8209	.	.	.	.	.	.	.	62 x 6					
64X MgQ6A	.	.	.	.	.	.	.	50x20 or 40x15					
58A ST3330	.	.	.	.	.	.	.	45 x 25					
NCS HS49724-3	.	.	.	.	.	.	.	45 x 25					
64X MgQ1A	.	.	.	.	.	.	.	50x20 or 40x15					
64X MgQ8A	.	.	.	.	.	.	.	50x20 or 40x15					
Number	Ag	Ce	Hg	La	Sr	Ti	Zr	~mm Ø x ~mm H					

MAGNESIUM with ALUMINUM and ZINC

= class, where 1 = CRM and 2 = RM ##: not for Glow Discharge

#	Number	Al	Zn	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn
1	65X MgA21A	12.37	5.11	0.0006	.	.	0.0020	0.0140	0.0777	0.0010	0.0048	0.028	0.0063
2	58A ZH2040M	9.0	0.46	0.0013	.	.	0.222	0.01	0.57	0.015	.	0.285	.
1	65X MgA19A	8.97	2.17	0.00025	.	.	0.0426	0.0085	0.322	0.0065	0.049	0.196	0.049
2	AA SM183-B	(8.0)	(3.0)	.	.	.	.	.	(0.2)	0.005	.	.	.
2	AA SM183-C	(8.0)	(3.0)	.	.	.	.	.	(0.2)	0.005	.	.	.
1	65X MgA13A	7.45	0.925	(0.010)	0.0064	0.0055	0.125	(0.008)	0.092	0.0039	0.0085	0.022	0.043
2	58A ZH2030M	6.97	0.71	0.0017	.	.	0.151	0.018	0.374	0.0096	.	0.183	.
1	65X MgA16A	6.78	4.03	0.0011	0.0024	0.0066	0.099	0.0073	0.271	0.0057	0.050	0.023	0.028
1	65X MgA18A	6.75	0.502	0.00051	.	.	0.052	0.0081	0.192	0.0074	0.0244	0.043	0.0114
1	58A ST2120a	6.40	2.50	0.0004	.	.	0.080	0.008	0.35	0.0060	.	0.12	.
1	65X MgA20A	5.87	1.32	0.0018	.	.	0.013	0.008	0.067	0.0025	0.0075	0.052	0.032
1	65X MgA12A	5.68	3.18	(0.0036)	0.037	0.0121	0.266	0.0053	0.198	0.0148	0.010	0.0142	0.0021
2	58A ZH2020M	5.06	0.95	0.0022	.	.	0.085	0.028	0.256	0.0047	.	0.10	.
1	65X MgB3C	3.38	0.711	0.0019	(0.0033)	0.0025	0.022	0.0028	0.277	0.0027	0.0023	0.042	0.0017
2	58A ZH2010M	3.04	1.21	0.0032	.	.	0.0096	0.035	0.082	0.0006	.	0.037	.
2	AA C7641	(3.0)	1.36	.	.	.	.	.	.	.	.	.	.
1	65X MgB2D	2.81	1.047	0.0014	(0.010)	0.0103	0.065	0.0032	0.526	0.0043	0.0053	(0.088)	0.0052
1	65X MgB2C	2.67	0.95	0.0008	0.011	0.0114	0.113	(0.010)	0.333	0.0027	0.0036	0.069	0.0047
2	AA C7639	2.39	(1.0)	.	.	.	.	.	(0.4)	.	.	.	.
1	65X MgB1E	1.90	1.60	0.0008	(0.067)	0.076	0.051	0.0027	0.770	0.0020	0.0095	0.069	0.0098
1	58A ST1270	1.36	0.492	0.0033	.	.	0.01	0.0049	0.13	0.01	.	0.065	.

Number	Ag	Ce	Hg	La	Ti	Zr	~mm Ø x ~mm H
65X MgA21A	.	.	.	.	.	.	50x20 or 40x15
58A ZH2040M	.	.	.	.	.	.	~49 x ~34
65X MgA19A	.	.	.	.	.	.	50x20 or 40x15
AA SM183-B	.	.	.	.	.	.	62 x 6
AA SM183-C	.	.	.	.	.	.	62 x 6
65X MgA13A	0.0074	0.0024	(0.033)	0.0021	.	.	40 x 15
58A ZH2030M	.	.	.	.	.	.	~49 x ~34
65X MgA16A	0.0035	0.0017	0.005	0.0012	.	.	50x20 or 40x15
65X MgA18A	.	.	.	.	.	.	50x20 or 40x15
58A ST2120a	.	.	.	.	.	.	45 x 40
65X MgA20A	.	.	.	.	.	.	50x20 or 40x15
65X MgA12A	0.0128	0.0009	(0.016)	0.0007	.	.	50x20 or 40x15
58A ZH2020M	.	.	.	.	.	.	~49 x ~34
65X MgB3C	0.0028	.	.	.	.	.	50x20 or 40x15
58A ZH2010M	.	.	.	.	.	.	~49 x ~34
AA C7641	.	.	.	.	.	.	62 x 6
65X MgB2D	0.0099	.	.	.	.	.	50x20 or 40x15
65X MgB2C	0.0098	0.0009	.	0.0007	0.0003	<0.001	50x20 or 40x15
AA C7639	.	.	.	.	.	.	62 x 6
65X MgB1E	0.0300	.	.	.	.	.	50x20 or 40x15
58A ST1270	.	.	.	.	.	.	45 x 25

Number	Ag	Ce	Hg	La	Ti	Zr	~mm Ø x ~mm H
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MAGNESIUM with MANGANESE

= class, where 1 = CRM and 2 = RM

#	Number	Mn	Al	Cu	Fe	Ni	Pb	Si	Sn	Zn	Ag	Ca	Cd	~mm Ø x ~mm H
2	AA C8096	1.88	(0.1)	(0.04)	.	(0.003)	.	(0.05)	.	(0.1)	.	.	.	62 x 6
1	63X MgE2B	1.76	0.045	0.0203	0.0019	0.0035	0.0020	0.019	0.0026	0.0243	0.0089	(0.0016)	0.0009	40 x 15
2	AA SMD3A	1.69	0.08	0.032	.	0.002	.	0.034	.	0.058	.	.	.	62 x 6
1	63X MgE3C	1.62	(0.056)	0.0072	0.0005	0.0028	0.0046	0.014	0.006	0.0101	0.0041	.	0.0046	40 x 15
2	AA C8095	(1.6)	0.17	0.012	.	0.005	.	0.052	.	0.029	.	.	.	62 x 6
2	AA C8016	(1.3)	0.03	0.070	.	0.011	.	0.064	.	0.11	.	.	.	62 x 6
2	AA C7857	1.07	(0.1)	(0.03)	.	(0.001)	.	(0.05)	.	(0.1)	.	.	.	62 x 6

MAGNESIUM with ZINC

= class, where 1 = CRM and 2 = RM

#	Number	Zn	Ag	Al	Be	Ca	Cu	Fe	Mn	Ni	Pb	Si	Sn	Sr	Zr	~mm Ø x ~mm H
1	66X MgC4C	6.81	0.0074	0.039	(0.0001)	(<0.001)	0.0024	0.006	0.166	0.0009	0.0030	0.06	0.021	(0.00014)	<0.001	50 x 20
1	58A ST7320	6.68	.	(0.036)	.	.	3.45	0.0069	0.361	0.00024	.	0.066	.	.	.	45 x 25
1	66X MgC5A	6.61	.	0.072	.	.	0.0286	0.0008	1.17	0.0111	0.0281	0.026	0.0051	.	.	50x20 or 40x15
1	66X MgD5A	6.25	0.044	0.040	<0.0005	(0.030)	2.88	0.008	0.307	0.0120	0.097	0.134	0.104	.	.	50x20 or 40x15
1	58A ST7330	6.01	.	0.205	.	.	2.76	0.019	0.57	0.055	.	0.144	.	.	.	45 x 25
1	58A ST7340	5.52	.	0.148	.	.	3.71	(0.019)	0.25	0.018	.	0.332	.	.	.	45 x 25
1	58A ST7350	4.76	.	0.106	.	.	4.17	0.016	0.133	0.0022	.	0.215	.	.	.	45 x 25
2	AA C7510	3.04	.	.	0.11	.	0.019	.	.	0.001	.	.	.	.	.	62 x 6
2	AA SM176	(3.0)	.	0.19	.	.	(0.03)	.	(0.2)	.	.	(0.1)	.	.	.	62 x 6
2	AA SM175	(2.0)	.	0.21	.	.	(0.03)	.	(0.2)	.	.	(0.1)	.	.	.	62 x 6

RM JEWELRY INDIVIDUAL XRF SAMPLES

analysis listed in mass % FLX 0740: 2mm Ø mounted in 36mm Ø x 10mm others: 3mm Ø mounted in 36mm Ø x 10mm

Number	Ag	Au	Cu	Fe	Ir	Ni	Pd	Pt	Rh	Ru	W	Zn
FLX 0720	.	99.99	0.002	.	0.002	.	0.002	0.002	0.002	.	.	.
FLX 1404	.	99.69	0.31	.	.	.	.	.	.	.	.	Co: 0.310
FLX 0701A	5.82	91.73	2.45	.	.	.	.	.	.	.	.	last
FLX 0702	4.60	90.12	5.28	.	.	.	.	.	.	.	.	.
FLX 0702A	5.90	89.97	4.13	.	.	.	.	.	.	.	.	.
FLX 1405	.	81.89	.	.	.	18.11	.	.	.	.	.	.
FLX 0743	.	80.07	1.12	.	.	14.35	.	.	.	.	.	4.46 last
FLX 1402	5.16	76.37	10.29	.	.	.	.	.	.	.	.	0.10
FLX 0703	4.18	75.14	4.93	.	.	.	15.75	.	.	.	.	.
FLX 0708	.	75.12	17.47	.	.	5.81	.	.	.	.	.	1.60
FLX 0726	10.16	75.11	14.73	.	.	.	.	.	.	.	.	.
FLX 0728	4.79	75.1	20.11	.	.	.	.	.	.	.	.	.
FLX 0727	8.98	75.07	15.95	.	.	.	.	.	.	.	.	.
FLX 0724	15.07	75.05	9.88	.	.	.	.	.	.	.	.	.
FLX 0725	12.54	75.03	12.43	.	.	.	.	.	.	.	.	.
FLX 0705	10.09	75.03	4.83	.	.	.	10.05	.	.	.	.	last
FLX 0704	2.75	75.03	9.74	.	.	.	12.48	.	.	.	.	.
FLX 0707	2.75	75.02	15.13	.	.	5.04	.	.	.	.	.	2.06
FLX 0706	13.13	75.0	5.42	.	.	.	6.45	.	.	.	.	.
FLX 1302	15.16	59.13	17.31	.	.	.	.	.	.	.	.	8.40
FLX 0710	30.94	59.06	3.48	.	.	.	6.52	.	.	.	.	.
FLX 0709	21.93	59.02	4.05	.	.	.	15.0	.	.	.	.	.
FLX 0903	4.32	58.69	36.99	.	.	.	.	.	.	.	.	.
FLX 0738	19.7	58.65	19.22	.	.	.	.	.	.	.	.	2.43
FLX 0904	13.77	58.65	27.58	.	.	.	.	.	.	.	.	.
FLX 0905	25.06	58.64	14.92	.	.	.	.	.	.	.	.	1.38
FLX 0715	.	58.64	26.18	.	.	6.09	.	.	.	.	.	9.09
FLX 0736	33.01	58.61	7.89	.	.	.	.	.	.	.	.	0.49
FLX 0712	27.36	58.59	4.05	.	.	.	10.0	.	.	.	.	.
FLX 0735	6.65	58.58	31.08	.	.	.	.	.	.	.	.	3.69
FLX 0739	33.39	58.53	8.08	.	.	.	.	.	.	.	.	.
FLX 0729	29.42	58.52	12.06	.	.	.	.	.	.	.	.	last
FLX 0711	10.72	58.49	26.47	.	.	.	.	.	.	.	.	4.32
FLX 0713	4.84	58.47	24.91	.	.	8.39	.	.	.	.	.	3.39
FLX 0714	.	58.44	41.31	.	.	.	.	.	.	.	.	0.25
FLX 0744	26.84	55.37	10.09	.	.	.	6.49	.	.	.	.	1.21
FLX 0737	6.15	38.35	46.89	.	.	.	.	.	.	.	.	8.61
FLX 1301	45.83	37.63	12.67	.	.	.	.	.	.	.	.	3.87
FLX 0716	15.09	37.63	37.97	.	.	.	.	.	.	.	.	9.31
FLX 0731	54.31	37.52	8.17	.	.	.	.	.	.	.	.	.
FLX 0732	58.75	33.71	7.54	.	.	.	.	.	.	.	.	.
FLX 0734	6.3	33.65	50.28	.	.	.	.	.	.	.	.	9.77
FLX 1401	33.00	33.61	33.36	.	.	.	.	.	.	.	.	0.030
FLX 0718	6.21	33.56	49.69	.	.	.	.	.	.	.	.	10.54
FLX 0717	11.92	33.52	41.04	.	.	.	.	.	.	.	.	13.52 last
FLX 1403	5.90	29.36	53.80	0.010	.	0.200	0.030	0.010	.	.	.	10.68 Cd: 0.010
FLX 0721	99.97	.	0.008	.	0.005	.	0.005	0.007	0.005	.	.	last
FLX 0719	99.94	.	0.06	.	.	.	.	.	.	.	.	.
FLX 0730	93.56	.	6.44	.	.	.	.	.	.	.	.	last
FLX 1303	92.76	.	4.92	.	.	.	.	.	.	.	.	2.32
FLX 0733	83.75	.	16.25	.	.	.	.	.	.	.	.	last
FLX 1406	34.98	.	6.50	.	.	.	58.52	.	.	.	.	.
FLX 0742	0.005	.	99.99	0.005	.	.	.	.	.	.	.	.
FLX 0740	.	.	0.005	.	0.09	.	.	.	99.90	0.005	.	.
FLX 0723	.	.	0.01	0.01	.	.	99.96	0.01	0.01	.	.	last
FLX 0722	.	.	.	.	0.02	.	0.02	99.95	0.01	.	.	last
FLX 0741	.	.	4.16	.	.	.	.	95.84	.	.	.	.
FLX 0902	.	.	.	.	.	.	.	95.37	.	.	4.63	.
FLX 0901	.	.	.	.	.	.	.	95.23	.	4.77	.	.
FLX 1202	.	.	.	.	10.0	.	.	90.0	.	.	.	.
FLX 1201	.	.	.	.	25.0	.	.	75.0	.	.	.	.

Number	Ag	Au	Cu	Fe	Ir	Ni	Pd	Pt	Rh	Ru	W	Zn
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RM LARGER JEWELRY SAMPLES

16 mm Ø mounted in 36-40mm Ø holder

Number	Ag	Au	Cu	Ni	Pd	Zn
FLX 0720-16	.	99.99	0.002	.	.	.
FLX PM004	.	99.99	.	.	.	.
FLX PM002	.	96.41	.	.	3.63	.
FLX PM008	15.2	75.12	9.86	.	.	.
FLX 0704-16d	2.99	75.22	9.19	.	12.6	.
FLX PM009	4.03	75.08	20.7	.	.	0.29
FLX PM005	11.1	58.73	11.0	.	19.1	0.33
FLX PM006	4.03	58.58	37.8	.	.	.
FLX 0738-16	19.8	58.58	21.1	.	.	0.52
FLX PM003	25.9	58.57	15.1	.	.	0.43
FLX PM012	14.0	58.56	27.2	.	.	.
FLX 0744-16	26.8	55.68	9.43	.	6.57	1.52
FLX 0734-16a	7.09	33.41	48.82	.	10.68	last
FLX 0732-16a	57.23	33.31	9.46	.	.	.

CRM GOLD ALLOYS

analysis listed in mass % ~16 mm disc mounted in acrylic 40 mm Ø x 5 mm

Number	Alloy	Ag	Au	Cu	Ni	Zn
ERM-EB508	Yellow Gold	24.90	75.12	.	.	.
ERM-EB507	White Gold	3.02	75.10	14.69	4.99	2.107
ERM-EB506	Rose Gold	3.90	58.56	35.65	.	1.891

SILVER

analysis listed in mg/kg 131X PAG: RM, 34 Ø x 12mm 131X AGP: RM, 25 Ø x 3mm IMN SH: CRM 40 Ø x ~13-20mm IMN SJ: 40 mm Ø x ~15 mm

Number	Cu	Al	As	Au	Bi	Cd	Fe	Ga	In	Ir	Mn	Ni	P	Pb	Pd	Pt	Rh	Sb	Se	Si	Sn	Te	Tl	Zn
131X PAG2A	400	2	8	20	12	5	7	15	.	0.02	10	9	2	12	100	10	2	12	10	4	14	15	.	40
131X AGP2B	193	.	29	114	96	56	(20)	.	.	.	49	57	.	75	105	112	.	107	65	.	95	90	.	109
131X PAG1A	75	8	12	120	40	35	5	60	.	0.02	35	25	4	40	180	35	<1	50	35	30	40	120	.	50
131X AGP3B	66	.	6	26	12	6	(11)	.	.	.	3	12	.	12	16	23	.	21	16	.	22	18	.	34
IMN SH3	59.0	.	11.0	7.7	9.2	9.6	11.3	.	8.7	.	27.3	29.7	.	44.9	25.7	25.4	.	48.6	8.7	.	.	25.7	25.8	43.8
131X AGP4B	41	.	3	9	7	2	(23)	.	.	.	3	6	.	5	7	7	.	12	6	.	6	5	.	20

RM SILVER ALLOYS

analysis in mass %

Number	Ag	Au	Cu	Pb	Zn	Units	Status
132X ACB100B	99.84	.	0.012	.	.	~40 mm Ø x ~10 mm	last of stock
132X ACB88B	88.12	.	11.87	.	.	~40 mm Ø x ~10 mm	last of stock
132X ACB75B	75.20	.	24.75	.	.	~40 mm Ø x ~10 mm	last of stock
133X AGQ1C	rem	0.251	2.532	0.245	.	25 mm Ø x 3 mm	ok

TIN		# = class, where 1 = CRM and 2 = RM													analysis listed in mass %	
#	Number	Ag	Al	As	Au	Bi	C	Cd	Co	Cr	Cu	Fe	Ga	Ge	Hg	In
1	IMN LCA6	2.664	.	0.0622	.	0.216	.	0.0037	.	.	5.461	0.0221	.	.	.	.
1	IMN LCA7	1.679	.	0.0757	.	0.311	.	0.0083	.	.	7.069	0.0096	.	.	.	.
1	SRM 1728	0.4591	.	.	.	(0.0128)	.	0.00582	(0.0057)	(0.00012)	3.06	0.0111	.	.	0.011198	(0.0031)
1	71X SR2G	0.033	(0.005)	(0.005)	(0.005)	0.041	.	0.034	0.0017	(0.001)	0.062	0.011	0.019	0.021	0.046	0.048
1	71X SR0D	0.0101	0.0057	(0.0006)	0.0039	(0.0007)	.	0.0020	0.0006	.	0.0049	0.0011	0.0070	(0.0005)	0.0083	0.0119
1	71X SR3G	0.065	0.0011	0.033	0.015	0.105	.	0.102	0.0021	.	0.128	0.0111	0.056	0.053	0.09	0.098
1	SRM 1729	(<0.0075)	(0.0460)	.	.	0.01147	.	.	.	.	(0.0024)	(0.00141)	.	.	.	.
1	SRM 1727	.	.	(<0.0100)	.	(0.0008)	.	.	(0.0002)	.	(0.0004)	(0.0020)	.	.	.	(0.0020)
2	BCS 192	.	.	<0.0001	.	<0.0001	0.001	<0.0001	.	.	<0.0001	<0.0001	.	.	.	<0.0001

Number	Ni	P	Pb	S	Sb	Se	Si	Sn	Te	Tl	Zn	Melt °C	Units
IMN LCA6	0.0202	.	0.304	.	0.393	.	.	.	.	.	.	.	40 mm Ø x ~25 mm
IMN LCA7	0.0338	.	0.212	.	0.235	.	.	.	.	.	.	.	40 mm Ø x ~25 mm
SRM 1728	0.00817	(0.0010)	0.0544	0.00349	(0.0087)	.	(0.0045)	(96.3)	.	.	(0.0156)	.	39 mm Ø x 15 mm
71X SR2G	0.0127	(0.004)	0.147	.	0.069	0.002	.	.	0.020	(0.3)	0.0045	.	40 mm Ø x 15 mm
71X SR0D	0.0009	0.0007	0.038	(0.0047)	0.028	.	.	.	0.0019	.	0.0022	.	~40 mm Ø x ~15 mm
71X SR3G	0.039	.	0.31	.	0.16	0.0018	.	(98.71)	0.056	.	0.023	.	~40 mm Ø x ~15 mm
SRM 1729	(0.00022)	.	0.000311	.	(0.00964)	.	(0.0020)	(96.9)	.	.	0.0518	.	39 mm Ø x 15 mm
SRM 1727	(0.0003)	.	0.003326	.	(0.0040)	.	.	.	.	.	.	.	30 mm x 30 mm x 30 mm
BCS 192	<0.0001	.	<0.001	0.0002	<0.001	.	.	99.996	.	.	<0.0001	231.9	300 g block or 100 g chips

RM TIN - LOW ALLOY 37 mm Ø x 12 mm

Number	Ag	Al	As	Bi	Cd	Co	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn
NF 54-1	0.005	0.005	<0.1	0.002	0.0002	0.002	0.01	<0.1	0.005	0.002	0.03	0.005	Rem	<0.1
NF 54-2	0.01	0.01	<0.1	0.005	0.0005	0.005	0.05	<0.1	0.01	0.005	0.15	0.01	Rem	<0.1
NF 54-3	0.03	0.03	<0.5	0.01	0.001	0.01	0.15	<0.1	0.02	0.01	0.40	0.02	Rem	<0.1
NF 54-4	0.06	.	<0.5	0.02	0.005	0.02	0.30	<0.1	0.04	0.02	0.70	0.04	Rem	<0.1
NF 54-5	0.10	.	<0.75	0.035	0.01	.	0.50	.	0.08	.	1.0	0.08	Rem	<0.1

RM BISMUTH AND SULPHUR IN TIN

certified analysis in bold, rest is informational composition 37 mm Ø x 12 mm

Number	Bi	S	Ag	Al	As	Au	Cd	Cu	Fe	In	Ni	P	Pb	Sb	Sn	Zn
NF 60-2	2.39	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 60-1	2.01	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 13-1	0.005	0.0005	0.004	<0.001	<0.010	0.002	<0.001	0.021	0.003	<0.005	0.001	<0.010	Rem	0.013	63.01	<0.001
NF 13-2	0.005	0.001	0.004	<0.001	<0.010	0.002	<0.001	0.021	0.003	<0.005	0.001	<0.010	Rem	0.013	63.01	<0.001
NF 13-3	0.005	0.006	0.004	<0.001	<0.010	0.002	<0.001	0.021	0.003	<0.005	0.001	<0.010	Rem	0.013	63.01	<0.001
NF 13-4	0.005	0.0074	0.004	<0.001	<0.010	0.002	<0.001	0.021	0.003	<0.005	0.001	<0.010	Rem	0.013	63.01	<0.001
NF 13-5	0.005	0.021	0.004	<0.001	<0.010	0.002	<0.001	0.021	0.003	<0.005	0.001	<0.010	Rem	0.013	63.01	<0.001
NF 59-5	0.008	0.020	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-4	0.008	0.0085	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-3	0.008	0.0048	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-2	0.008	0.0007	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-1	0.008	<0.0006	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001

CRM SPECIALTY TIN BASE LOW-LEAD and LEAD-FREE SOLDERs analysis listed in mass % ~40 mm Ø x ~15 mm

Number	Ag	Al	As	Au	Bi	Cd	Co	Cu	Fe	Ge	Hg	In	Ni	P	Pb	S	Sb	Se	Zn
74X CA5-21	4.11	0.0004	0.011	0.008	0.0056	0.0019	.	1.22	0.0011	.	0.0084	0.0158	0.0159	0.0047	0.044	.	0.133	.	.
74X CA7B	4.02	Cr:0.0045	0.0085	.	0.0102	0.0059	(0.0018)	0.347	0.007	.	0.049	0.0053	0.0315	.	0.107	.	0.0194	.	0.0501
74X AB1A	3.58	.	0.0280	0.0010	0.997	0.0199	0.0032	0.0285	0.0435	.	.	0.0262	0.0036	.	0.0353	.	0.0111	.	.
74X CA4-21	3.13	0.0006	0.0035	0.0018	0.046	0.0024	0.00062	0.550	0.0098	.	0.0069	0.0116	0.055	.	0.085	.	0.058	.	0.0035
74X CA3C	3.02	0.0005	0.0022	0.0087	0.016	0.0023	0.0053	0.071	0.0036	(0.002)	.	0.0052	0.0053	0.025	0.033	.	0.033	.	(0.0008)
74X HAG	2.80	(0.002)	0.0032	.	0.0639	0.0018	.	0.629	0.0029	.	.	0.0090	0.0133	(0.0009)	0.077	.	2.10	(0.0008)	2.73
74X WS-21	1.12	.	0.017	0.0024	0.0362	0.0015	.	0.100	0.0022	.	.	0.017	0.0039	0.0026	0.036	.	0.078	.	.
74X EF	0.667	(0.0012)	0.0092	.	0.0099	0.0003	.	2.94	0.0008	.	.	0.0074	0.0069	(0.0012)	0.0248	.	0.0168	0.0008	(0.0054)
74X AMF	0.496	(0.0012)	0.0038	.	0.190	0.0061	.	3.07	(0.0006)	.	.	0.0082	0.0260	(0.0016)	0.126	.	1.064	(0.0013)	(0.0055)
74X CA1-21	0.44	0.032	.	0.0047	0.014	0.006	.	0.681	0.0026	.	.	0.0031	(0.0003)	.	0.079	.	0.0190	.	.
74X CA6-21	0.32	.	0.014	0.0046	0.011	(0.0007)	.	0.624	0.0098	.	0.0042	0.028	0.0242	.	0.026	.	0.012	.	0.0005
74X WS-21	0.309	.	0.010	.	0.007	0.0015	.	4.62	0.0015	.	.	0.007	0.0057	.	0.040	.	1.50	.	0.0007
74X HNF	0.160	0.0011	0.016	.	0.042	0.0046	.	4.12	0.020	.	.	0.0052	0.195	(0.001)	0.0050	.	0.038	0.0024	0.0068
74X HNG	0.160	(0.001)	0.016	.	0.043	0.0046	.	4.12	(0.014)	.	.	0.0052	0.195	(0.001)	0.0050	.	0.036	0.0024	(0.007)
74X OAA	0.100	(0.0007)	0.080	(0.0001)	1.065	0.00063	.	3.41	0.007	.	.	0.0034	0.0025	0.0072	0.128	.	0.0098	.	(0.002)
74X HBG	0.086	(0.0026)	0.045	.	0.038	0.0103	.	4.49	0.0138	.	.	0.0179	1.22	(0.002)	0.056	.	4.81	0.0038	(0.02)
74X GE2A	0.079	0.068	.	.	.	0.0086	.	0.713	.	0.479	.	0.031	.	.	0.0467	.	.	.	.
74X TCF	0.039	(0.001)	0.024	.	0.106	0.0150	.	4.99	0.0031	.	.	0.0215	0.0167	(0.002)	0.183	.	0.124	0.0473	0.004
74X B21A	0.004	0.0021	0.0119	.	3.03	0.0012	.	0.026	0.011	.	.	.	0.0097	.	0.0238	.	0.031	.	8.27

37 mm Ø x 12 mm

[illegible]

~40 mm Ø x ~15 mm

Number	Sb	Cu	Pb	Ag	Al	As	Bi	Cd	Co	Fe	In	Ni	P	S	Zn
73X SC7B	13.86	5.71	0.32	0.0059	(0.0009)	0.059	0.013	0.0019	0.0143	(0.043)	0.0194	0.0160	.	(0.0007)	0.0033
73X SC9B	8.31	8.03	0.305	0.0055	(0.0010)	0.117	0.0825	0.0506	0.0051	0.053	0.0059	0.0084	.	.	(0.003)
73X SC4B	5.94	2.63	0.429	0.0525	(0.0015)	0.0268	0.153	0.0085	0.0020	0.0014	0.0143	0.0130	0.005	.	(0.0010)
73X SC13A	4.21	4.19	0.259	.	(0.01)	0.054	0.0188	0.0021	.	0.053	.	.	(0.02)	.	0.0126
73X SC2B	3.05	1.028	0.0457	0.0318	.	0.0355	0.602	0.0282	0.0217	0.0037	0.0099	0.0156	.	.	(0.0007)
71X PB4A	0.0059	0.0014	4.00	0.0047	.	0.0045	(0.002)	0.0027	.	.	.	.	.	.	0.0063
71X PB3A	0.0024	0.0074	2.77	0.0011	.	0.0022	0.0103	0.0008	.	.	.	.	.	.	0.0011

37 mm Ø x 12 mm

[illegible]

RM TIN - SILVER ALLOYS

37 mm Ø x 12 mm

Number	Ag	Bi	Cu	Ge	Hg	In	Ni	P	Pb	Sb	Sn	Zn
NF 46-3	5.0 #	0.25	0.030	# = segregation in Ag noted				.	0.21	0.059	Rem	(0.017)
NF 56-5	4.49	0.029	0.54	.	0.0024	.	.	0.006	0.26	.	Rem	.
NF 56-6	4.24	0.096	0.80	.	0.009	.	.	0.012	0.024	.	Rem	.
NF 65-3	4.14	3.50	0.57	.	.	.	0.17	.	0.033	1.88	Rem	.
NF 46-2	4.1	0.095	0.096	.	.	.	.	.	0.059	0.11	Rem	(0.007)
NF 57-2	4.01	.	0.46	.	0.0002	.	.	0.006	<0.001	.	Rem	.
NF 65-1	3.81	3.09	0.72	.	.	.	0.12	.	0.038	1.61	Rem	.
NF 56-2	3.77	0.50	0.60	.	0.0004	.	.	0.009	0.051	.	Rem	.
NF 56-3	3.53	.	0.4	.	0.014	.	.	0.003	0.009	0.50	Rem	.
NF 65-2	3.49	2.50	0.84	.	.	.	0.088	.	0.11	1.26	Rem	.
NF 56-4	3.26	0.20	0.30	.	0.0045	.	.	0.021	0.22	.	Rem	.
NF 46-1	3.1	0.05	0.19	.	.	.	.	.	0.043	0.205	Rem	(0.015)
NF 57-1	3.00	0.004	0.49	.	0.0016	.	.	0.004	0.076	.	Rem	.
NF 9-1	3.00	0.048	0.073	.	.	.	.	.	Rem	0.51	59.90	.
NF 61-4	2.58	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 63-6	2.56	.	0.50	0.042	.	<0.001	0.0073	.	0.009	.	Rem	.
NF 61-3	2.33	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 61-2	1.81	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 61-1	1.54	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 63-4	1.50	.	0.194	0.025	.	0.027	0.12	.	0.012	.	Rem	.
NF 63-2	1.02	.	0.104	0.052	.	0.005	0.027	.	0.18	.	Rem	.
NF 63-5	1.01	.	0.51	0.010	.	0.11	0.065	.	0.018	.	Rem	.
NF 9-3	1.00	0.25	0.010	.	.	.	.	.	Rem	0.23	63.60	.
NF 63-1	0.74	.	0.077	0.079	.	0.200	0.068	.	0.009	.	Rem	.
NF 58-3	0.51	0.077	0.59	.	0.0043	.	.	0.010	0.040	.	Rem	.
NF 58-1	0.32	0.12	0.69	.	0.0003	.	.	0.001	0.085	.	Rem	.
NF 58-2	0.21	0.095	0.79	.	0.0024	.	.	0.006	0.008	.	Rem	.

CRM TIN BASE SETS

17034

Number	Ag	Al	As	Au	Bi	Cd	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn
available individually														
IMN L 1	.	.	0.051	.	0.17	0.0020	0.11	.	.	.	Rem	0.52	56.06	0.00093 40 mm Ø x 30 mm
IMN L 2	.	.	0.034	.	0.11	0.0043	0.075	(0.011)	.	.	Rem	0.35	59.09	0.0019
IMN L 3	.	.	0.092	.	0.22	0.0065	0.034	(0.023)	.	.	Rem	0.14	60.18	0.0064
IMN L 4	.	.	0.017	.	0.055	0.0080	0.013	(0.0085)	.	.	Rem	0.079	62.81	0.0011
IMN L 5	.	.	0.0035	.	0.014	0.0097	0.0037	.	.	.	Rem	0.011	64.96	0.0056
IMN LA 1	.	.	0.01150	.	0.0138	1.414	2.449	0.01181	.	0.01119	3.176	6.79	Rem	0.00163
IMN LA 2	.	.	0.0916	.	0.0330	0.879	3.836	0.0180	.	0.0943	2.166	7.81	Rem	.
IMN LA 3	.	.	0.2419	.	0.0587	0.498	8.13	0.0588	.	0.2763	1.191	10.22	Rem	0.0095
IMN LA 4	.	.	0.434	.	0.0848	0.096	6.95	0.0799	.	0.449	0.414	11.66	Rem	.
IMN LA 5	.	.	0.539	.	0.0994	0.0113	5.45	0.096	.	0.528	0.0699	13.58	Rem	0.0201
IMN LBA 1	0.632	.	0.0459	0.0115	0.230	0.00085	0.282	0.0195	0.208	0.0055	0.228	0.0517	Rem	0.0032 40 mm Ø x 25 mm
IMN LBA 2	0.697	(0.0029)	0.0314	0.0259	0.175	0.0052	0.487	0.0182	0.127	0.0107	0.319	0.0979	Rem	0.0047
IMN LBA 3	0.0971	0.0022	0.0239	0.0468	0.0989	0.0039	0.885	0.0057	0.0949	0.0224	0.141	0.142	Rem	0.0020
IMN LBA 4	0.0976	0.0061	(0.0086)	0.0632	0.0364	0.0058	1.21	0.0114	0.0503	0.0320	0.0862	0.457	Rem	0.0006
IMN LBA 5	0.214	.	(0.0090)	0.691	0.325	0.0053	0.763	0.0098	0.0228	0.0346	0.0579	0.286	Rem	(0.0009)
IMN LCA 1	0.210	<0.0012	0.0494	0.0677	0.269	0.0093	.	.	0.141	.	0.229	0.490	Rem	. 40 mm Ø x 25 mm
IMN LCA 2	0.158	.	0.0864	0.0542	0.146	0.0073	2.67	0.0155	0.0610	0.0210	0.0773	0.138	Rem	0.0016
IMN LCA 3	0.107	(0.0011)	0.0285	0.0260	0.100	0.0025	3.53	0.0143	0.0081	0.0102	0.137	0.101	Rem	0.0042
IMN LCA 4	0.0545	(0.0023)	0.0145	0.0100	0.0403	0.0115	4.51	0.0101	0.0442	0.0056	0.0890	0.0479	Rem	0.0103
IMN LCA 5	0.221	.	0.0386	0.0670	0.263	0.0006	1.52	0.0295	0.0533	0.0315	0.232	0.458	Rem	0.0011
available in sets only, as grouped														
IMN L89 1	.	.	0.019	.	0.012	0.19	3.20	0.18	.	0.010	0.072	5.66	Rem	0.099 10 mm Ø x 100 mm
IMN L89 2	.	.	0.037	.	0.026	0.091	4.15	0.086	.	0.031	0.13	6.39	Rem	0.059
IMN L89 3	.	.	0.065	.	0.052	0.041	3.49	0.058	.	0.090	0.29	7.41	Rem	0.042
IMN L89 4	.	.	0.12	.	0.099	0.021	2.81	0.028	.	0.16	0.52	8.14	Rem	0.020
IMN L89 5	.	.	0.18	.	0.20	0.011	2.12	0.013	.	0.33	1.11	8.86	Rem	.
IMN L89 6	.	.	0.029	.	0.014	0.19	4.51	0.17	.	0.014	0.20	8.03	Rem	0.096

Number	Ag	Al	As	Au	Bi	Cd	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn
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CRM TITANIUM

17034

= class, where 1 = CRM and 2 = RM

#	Number	Al	B	C	Co	Cr	Cu	Fe	H	Mn	Mo	N	Nb	Ni	O
1	BS T-4B	0.038	(0.0004)	(0.03)	(0.009)	0.0095	(0.005)	(0.16)	0.0020	(0.0007)	(0.002)	0.006	(0.012)	(0.010)	0.37
2	AA TiCP-100	0.036	0.012 Bi:	0.0052	0.011	0.015	0.015	0.049 Hf:	0.0101	0.011	0.0109	.	0.0120	0.016 Er:	0.0032
1	IARM TiG2-21	0.024	.	0.008	.	0.016	0.0018	0.140	0.0021	(0.0009)	0.0053	0.005	(0.002)	0.032	0.136
1	IARM 312B	0.018	(<0.001)	0.0092	(<0.002)	0.010	(0.003)	0.072	0.0004	(0.001)	(0.003)	0.007	(0.001)	0.019	0.128
1	IARM 303B	(0.015)	<0.001	0.035	<0.002	0.0018	(0.002)	0.120	(0.0008)	(0.001)	(0.002)	0.017	(0.006)	(0.0013)	0.176
1	IARM 361A	(0.013)	(0.0005)	(0.012)	(<0.002)	0.008	(0.003)	0.095	(0.0027)	(<0.05)	0.288	(0.006)	(0.004)	0.88	0.15
1	IARM TiG7-23	0.007	.	0.012	0.0016	0.007	.	0.085	0.0012	.	(0.003)	0.009	0.004	0.014	0.166
1	IARM TiG4-18	(0.0020)	.	0.053	(0.0006)	0.0017	(0.0012)	0.164	0.0019	0.0011	(0.0007)	(0.003)	(0.002)	0.0023	0.34
Number	P	Pd	Ru	S	Si	Sn	Ti	V	W	Y	Zr	Grade	mm Ø x H		
BS T-4B	17025, 17034	.	.	0.0005	(0.006)	(0.009)	99.5	0.009	.	<0.05	.	(0.0010)	Ti CP 4	38 x ~7 or 19+	mm
AA TiCP-100	.	0.012	0.010 Ta:	0.0124	0.013	0.014	.	0.011	.	0.0011	.	0.013	~38 x ~25	.	.
IARM TiG2-21	.	.	.	.	0.006	0.007	(99.72)	0.0094	.	(0.005)	.	0.0009	Ti CP 2	38 x ~3 or 18	.
IARM 312B	(<0.002)	(<0.005)	(<0.001)	(0.0008)	(0.006)	(0.004)	(99.7)	0.009	.	(<0.005)	(<0.001)	0.0014	Ti CP 4.1	31 x 2	.
IARM 303B	.	0.13	<0.01	<0.002	(0.006)	(0.006)	(99.6)	(0.0023)	.	<0.002	<0.001	(0.0028)	Ti Cp 7	31 x 2	.
IARM 361A	(<0.003)	(0.002)	(<0.006)	(<0.004)	(0.012)	(0.004)	(98.5)	(0.006)	.	(<0.03)	(0.0004)	(0.0016)	Ti CP 12	31 x 2 or 18	.
IARM TiG7-23	.	0.14	.	0.002	0.015	0.007	(99.6)	0.0021	.	.	.	0.0018	Ti CP 7	38 x ~3 or 18	.
IARM TiG4-18	0.0010	.	.	(0.0014)	.	0.019	(99.5)	(0.0005)	.	(0.0010)	.	0.0005	Ti CP 4	38 x 2 or 18	.

CRM

TITANIUM ROD SET

analysis listed in mass %

available in SET/6 only

6 rods 18 mm x 100 mm

Number	Al	C	Cr	Cu	Fe	Mn	Mo	Ni	Si	Sn	V	Zr
DSZU 103.1-92	0.275	(0.023)	0.024	0.064	0.014	0.0046	0.164	0.018	0.015	0.009	0.177	0.0094
DSZU 103.2-92	0.183	(0.017)	0.018	0.0064	0.157	0.045	0.095	0.014	0.0035	0.170	0.096	0.017
DSZU 103.3-92	0.165	(0.041)	0.169	0.014	0.100	0.020	(0.0088)	0.044	0.045	0.003	(0.044)	0.121
DSZU 103.4-92	0.083	(0.090)	0.050	0.040	0.375	0.058	0.013	0.210	0.0093	0.015	0.021	0.07
DSZU 103.5-92	0.039	(0.013)	0.103	0.182	0.092	0.011	0.037	0.126	0.129	0.078	0.019	0.047
DSZU 103.6-92	(0.012)	(0.094)	0.012	0.0017	0.016	0.0015	0.0024	0.023	0.0024	0.0017	0.0019	0.0056

TITANIUM ALLOYS, chart 1 of 2

= class, where 1 = CRM and 2 = RM

analysis listed in mass %

17025, 17034

#	Number	Al	V	C	Cr	Cu	Fe	H	N	O	Mn	Mo	Ni	Si	Sn	Zr
1	IARM 269B	7.86	1.03	(0.014)	(0.0014)	(0.0023)	0.071	0.007	(0.006)	0.090	0.0071	0.98	(0.001)	(0.025)	0.008	(0.002)
1	IARM Ti64-18	6.52	4.08	(0.034)	(0.013)	.	0.19	(0.0031)	(0.025)	0.181	.	(0.004)	0.011	(0.011)	(0.003)	.
1	TL 3001	6.471	4.330	0.0098	0.0024	.	0.1993	.	.	.	0.0025	.	.	.	.	.
1	SRM 654b	6.34	4.31	.	0.025	0.008	0.23	(0.002)	.	(0.17)	.	0.013	0.028	0.045	0.023	0.008
1	IARM Ti64-23	6.31	3.88	0.030	0.019	.	0.216	0.0023	0.0055	0.175	(0.0026)	0.007	0.0127	0.014	(0.005)	.
1	IARM Ti64ELI-22	6.26	3.88	0.016	0.0139	0.0020	0.183	(0.0012)	0.0061	0.119	(0.0004)	0.0050	0.017	0.017	(0.006)	0.0021
1	BS T-5B	6.25	4.19	0.053	0.018	(0.004)	0.23	0.0019	0.026	0.162	<0.05	(0.014)	0.025	(0.018)	0.010	(0.010)
1	NCS HSI1904	6.24	4.19	0.0093	.	.	0.191	.	.	.	.	.	.	0.018	.	.
1	BCR 089	5.97	3.976	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA Ti64-150	4.50	4.7	.	0.0221	0.019	0.16	.	Bi:0.0040	.	0.0148	0.0174	0.019	0.035	0.0189	0.029
1	IARM Ti662-18	5.61	5.35	0.007	0.046	0.46	0.510	0.0089	0.021	0.19	(0.005)	0.0031	0.039	0.011	2.01	(0.0011)
1	IARM Ti5553-21	5.60	5.04	0.010	2.98	0.0019	0.353	0.0020	0.0036	0.14	0.0008	4.99	0.0022	0.028	.	(0.0018)
1	IARM Ti662-19	5.58	5.53	0.0084	0.0050	0.47	0.52	0.0048	0.022	0.19	0.0013	0.0015	0.0032	(0.006)	2.03	(0.0008)
1	NCS HS93704-3	5.38	3.41	0.095	.	.	0.239	.	.	.	.	.	.	0.115	.	.
1	58A CP03003	5.21	4.89	0.014	0.997	.	1.01	.	.	.	.	4.87	.	0.038	.	0.02
1	IARM Ti42515-18	3.99	2.53	0.0067	0.015	(0.0022)	1.58	0.0018	0.0026	0.25	(0.006)	(0.0014)	0.009	0.011	(0.004)	(0.0019)
1	IARM Ti1023-22	3.38	10.1	0.010	0.014	0.0018	1.70	0.006	0.0058	0.091	0.0011	0.0066	0.013	0.029	.	.
1	BS 10-2-3	3.22	9.74	0.0332	0.023	0.0067	2.01	0.0047	0.0055	0.108	(0.004)	0.0027	0.022	(0.023)	(0.002)	<0.005
1	IARM 344A	3.15	15.3	0.011	3.09	(0.002)	0.20	(0.015)	0.005	0.107	(0.003)	0.004	0.011	(0.03)	3.09	(0.002)
1	58A SY03003	3.14	14.98	0.01	2.84	.	0.05	(0.001)	(0.02)	(0.013)	.	.	.	.	3.17	.
1	58A SY03004	3.13	2.82	0.01	.	.	0.042	(0.001)	(0.01)	(0.1)	.	.	.	.	.	.
1	SRM 1128	3.06	15.13	0.011	2.96	.	0.134	.	.	.	.	.	.	.	3.04	.
1	IARM 261E	3.05	2.51	0.012	0.016	0.0025	0.18	(0.0005)	0.006	0.084	(0.001)	0.003	0.018	0.007	0.005	(0.003)
1	IARM 261C	3.05	2.46	0.011	0.014	0.003	0.180	0.001	0.005	0.085	(0.003)	0.004	0.016	0.007	0.006	0.003
1	IARM 344B	3.03	14.7	0.0095	2.91	(0.0024)	0.118	(0.007)	(0.016)	0.118	(0.003)	(0.006)	0.021	(0.03)	3.01	(0.002)
1	IARM 261D	3.02	2.50	0.011	0.016	0.0028	0.185	(0.0005)	0.0051	0.083	(0.002)	0.003	0.018	0.008	0.005	0.003
1	IARM 261B	2.98	2.23	0.011	0.016	0.003	0.19	(0.001)	0.004	0.083	(0.003)	0.004	0.023	0.008	0.004	(0.002)

Number	B	Co	Nb	P	Pd	Ru	S	Ta	Ti	W	Y	Units
IARM 269B	(<0.001)	(<0.0005)	(0.004)	(0.003)	(<0.005)	(0.004)	(0.003)	(<0.005)	(89.9)	(0.001)	(<0.001)	31 mm Ø x 2 or 18 mm
IARM Ti64-18	.	.	.	.	.	.	.	.	(89.0)	.	.	31 mm Ø x 2 mm
TL 3001	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 20 mm
SRM 654b	.	.	.	.	.	.	(0.001)	.	.	.	.	31 mm Ø x 19 mm
IARM Ti64-23	.	.	.	.	.	.	.	.	(89.5)	.	.	40 mm Ø x ~3 or 19 mm
IARM Ti64ELI-22	.	.	(0.004)	.	.	.	(0.0007)	.	.	.	.	38 mm Ø x 3 or 19 mm
BS T-5B	.	(0.003)	.	.	.	.	0.0009	.	89.0	<0.005	17025	38 mm Ø x ~7 or 19+ mm
NCS HSI1904	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
BCR 089	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
AA Ti64-150	0.016	0.014	0.016	Er:0.0094	0.016	0.015	Hf:0.0153	0.016	Mg:(0.004)	.	0.005	~38 mm Ø x ~25 mm
IARM Ti662-18	.	.	.	.	.	.	.	.	85.8	.	.	31 mm Ø x 2 mm
IARM Ti5553-21	.	.	.	(0.002)	.	.	(0.0008)	.	.	0.002	.	disc
IARM Ti662-19	.	(0.00026)	.	(0.003)	.	.	(0.002)	.	(85.7)	.	.	31 mm Ø x 2 or 18 mm
NCS HS93704-3	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm
58A CP03003	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 35 mm
IARM Ti42515-18	.	(0.0020)	(0.0016)	.	.	.	.	.	(91.6)	.	.	31 mm Ø x 2 or 18 mm
IARM Ti1023-22	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 3 or 19 mm
BS 10-2-3	<0.005	(0.002)	.	(0.0017)	.	As:(0.002)	0.0012	17025	84.8	<0.005	Sb:(0.0003)	46 mm Ø x 19+ mm
IARM 344A	0.0011	(0.001)	(0.005)	(0.002)	(0.001)	.	(0.001)	(0.001)	(74.9)	(0.003)	<0.001	31 mm Ø x 2 mm
58A SY03003	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 30 mm
58A SY03004	.	.	.	.	.	.	.	.	.	.	<0.001	36 mm Ø x 30 mm
SRM 1128	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
IARM 261E	0.0003	(0.0004)	(0.005)	<0.003	(0.002)	(0.001)	(0.001)	.	(94.1)	(0.001)	(0.001)	31 mm Ø x 2 or 18 mm
IARM 261C	0.0004	(0.005)	(0.003)	(0.003)	(0.002)	(0.001)	(0.001)	.	(94.1)	(0.001)	(0.0004)	31 mm Ø x 2 or 18 mm
IARM 344B	<0.001	<0.004	(0.003)	<0.003	<0.03	<0.02	<0.003	<0.04	(76.0)	<0.03	<0.006	31 mm Ø x 2 or 18 mm
IARM 261D	0.0003	<0.001	(0.003)	<0.004	(0.002)	(0.0005)	(0.001)	(0.0005)	(94.2)	(0.001)	(0.0005)	31 mm Ø x 2 or 18 mm
IARM 261B	0.0004	<0.004	(0.002)	(0.004)	.	(0.001)	(0.0004)	.	(94.4)	(0.003)	(0.0004)	31 mm Ø x 2 or 18 mm

Number	B	Co	Nb	P	Pd	Ru	S	Ta	Ti	W	Y	Units
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TITANIUM ALLOYS, chart 2 of 2

= class, where 1 = CRM and 2 = RM analysis listed in mass % 17025, 17034

#	Number	Al	V	C	Cr	Fe	H	Mn	Mo	N	Nb	O	Si	Sn	Ti	Zr
1	58A SY03008-6	7.64	.	0.12	.	0.369	.	.	2.27	.	.	.	0.446	.	.	0.63
1	58A SY03001-6	7.15	.	0.0098	.	0.051	.	.	2.0	.	2.02	.	0.253	.	.	1.01
1	58A SY03008-5	7.05	.	0.093	.	0.325	.	.	2.54	.	.	.	0.389	.	.	0.83
1	NCS HS11903	6.74	.	0.012	.	0.097	.	.	3.37	.	.	.	0.261	.	.	1.52
1	58A SY03008-4	6.61	.	0.081	.	0.301	.	.	2.83	.	.	.	0.354	.	.	1.21
1	58A SY03001-5	6.45	.	0.02	.	0.122	.	.	1.49	.	2.46	.	0.202	.	.	1.54
1	IARM Ti62222-22	6.27	0.0033	0.009	1.57	0.021	0.0024	0.0043	2.86	0.005	1.92	(0.1213)	0.073	2.08	.	2.18
1	58A SY03008-3	6.25	.	0.069	.	0.288	.	.	3.46	.	.	.	0.298	.	.	1.6
1	IARM 300E	6.16	(0.03)	0.008	(0.007)	0.17	(0.001)	(<0.02)	(0.0028)	0.0059	6.85	0.180	(0.017)	(0.005)	(86.5)	(<0.02)
1	58A SY03007	6.14	.	0.061	.	0.253	.	.	3.25	.	.	.	0.298	.	.	1.64
1	IARM Ti6242-18	6.11	.	(0.007)	.	0.025	(0.0022)	.	2.02	(0.004)	.	0.121	0.077	2.06	(85.5)	4.05
1	IARM 300B	6.09	(0.004)	0.0081	0.0174	0.175	0.0025	(0.006)	0.0013	0.0030	6.84	0.171	0.016	(0.004)	(86.3)	(0.013)
1	IARM 300D	6.06	(0.03)	(0.010)	(0.006)	0.183	(0.001)	(<0.005)	0.0019	(0.005)	6.82	0.166	(0.021)	(0.005)	(86.7)	(0.005)
1	58A SY03001-4	6.03	.	0.049	.	0.187	.	.	1.02	.	2.76	.	0.149	.	.	1.93
1	58A SY03002	5.99	.	0.01	1.22	0.05	(0.001)	.	2.89	(0.01)	1.97	(0.13)	0.067	2.24	.	1.99
1	IARM 300C	5.97	0.030	(0.010)	0.008	0.181	(0.0006)	(0.003)	0.0023	0.0061	6.80	0.174	0.018	(0.006)	(86.7)	(0.005)
1	IARM 300A	5.96	(0.005)	0.007	0.0097	0.191	0.0018	0.0012	0.0009	0.0033	6.86	0.162	0.018	(0.007)	86.71	(0.003)
1	IARM Ti6246-22	5.95	0.005	0.006	0.005	0.021	0.0036	(0.0006)	6.04	0.0026	.	0.114	0.052	2.00	.	4.11
1	58A SY03008-2	5.59	.	0.049	.	0.233	.	.	3.79	.	.	.	0.242	.	.	1.96
1	58A SY03001-3	5.55	.	0.06	.	0.246	.	.	0.595	.	3.3	.	0.1	.	.	2.31
1	IARM 271A	5.28	0.09	0.026	0.016	0.31	0.013	(0.002)	0.011	0.012	.	0.16	0.021	2.49	.	0.015
1	IARM 271B	5.21	0.057	0.0128	0.010	0.196	0.0139	0.0036	0.0063	0.013	(0.005)	0.155	(0.010)	2.52	(91.9)	0.059
1	58A SY03001-2	5.1	.	0.084	.	0.313	.	.	0.297	.	3.63	.	0.043	.	.	2.74
1	IARM Ti52244-22	5.09	(0.0029)	0.008	3.97	(0.0240)	0.007	0.0028	4.03	0.0055	.	0.101	0.026	2.01	.	2.03
1	58A SY03001-1	4.62	.	0.124	.	0.347	.	.	0.103	.	3.94	.	0.007	.	.	2.94
1	58A SY03008-1	4.59	.	0.015	.	0.189	.	.	4.74	.	.	.	0.149	.	.	2.45
1	IARM 280A	4.11	0.023	0.005	0.0055	0.044	0.0015	(0.002)	4.01	0.0014	(0.001)	0.19	0.47	2.07	.	(0.002)
1	IARM 367A	2.02	(0.005)	(0.014)	0.012	0.064	0.0030	1.61	(0.0023)	0.0074	(<0.01)	0.105	(0.011)	0.0019	(96.1)	(0.003)
1	BS T-24A	0.0029	1.29	0.010	0.51	0.54	0.0077	4.7	0.51	0.0054	(0.003)	0.079	<0.03	0.020	91.7	(0.002)
1	SRM 642	.	.	.	.	.	.	9.0	.	.	.	.	.	.	.	.
#	Number	Al	V	C	Cr	Fe	H	Mn	Mo	N	Nb	O	Si	Sn	Ti	Zr
Number	B	Co	Cu	Mg	Ni	P	Pb	Pd	Ru	S	Sb	Ta	W	Y	Units	
58A SY03008-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03001-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03008-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
NCS HS11903	.	.	.	.	.	.	.	.	.	.	.	.	.	.	46 mm Ø x 30 mm	
58A SY03008-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03001-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM Ti62222-22	.	.	(0.0033)	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 3 or 19 mm	
58A SY03008-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM 300E	(<0.002)	(0.004)	(<0.02)	(<0.001)	(0.011)	(<0.001)	(<0.0001)	(<0.001)	(<0.01)	(<0.001)	(<0.001)	(0.006)	(<0.002)	(0.003)	31 mm Ø x 2 or 18 mm	
58A SY03007	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM Ti6242-18	.	.	.	.	0.0038	.	.	.	.	.	.	.	.	.	31 mm Ø x 2 or 18 mm	
IARM 300B	(0.0012)	(0.002)	(0.014)	.	0.012	.	.	(0.005)	.	(0.001)	.	(0.005)	.	.	31 mm Ø x 2 or 18 mm	
IARM 300D	(0.001)	(0.004)	(0.003)	(<0.001)	0.013	(<0.002)	(<0.0005)	(<0.005)	(<0.001)	(0.001)	(0.0004)	(0.005)	(<0.002)	(0.003)	31 mm Ø x 2 or 18 mm	
58A SY03001-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03002	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 30 mm last	
IARM 300C	(0.0006)	(0.001)	(0.003)	(<0.001)	(0.014)	(<0.001)	(<0.0001)	(<0.005)	.	(0.0005)	(0.0005)	(0.005)	(<0.002)	(0.002)	31 mm Ø x 2 or 18 mm	
IARM 300A	(0.0008)	(0.001)	0.0039	(0.0004)	0.0081	(0.001)	.	(0.002)	(<0.02)	0.0008	.	(0.004)	(<0.002)	(0.0004)	31 mm Ø x 18 mm	
IARM Ti6246-22	.	.	(0.0029)	.	0.007	.	.	.	.	.	.	.	.	.	40 mm Ø x 3 or 19 mm	
58A SY03008-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03001-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM 271A	.	.	0.004	.	0.035	(0.002)	.	.	.	(0.002)	.	.	.	.	31 mm Ø x 2 mm last	
IARM 271B	(0.0012)	(0.001)	0.0068	(0.001)	0.0089	(0.011)	.	(0.011)	(0.003)	(0.001)	.	(0.0104)	(0.0021)	(0.00018)	31 mm Ø x 2 or 18 mm	
58A SY03001-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM Ti52244-22	.	.	(0.0017)	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 3 or 19 mm	
58A SY03001-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
58A SY03008-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 25 mm	
IARM 280A	.	(0.002)	0.003	.	0.012	.	.	(0.002)	.	(0.001)	.	.	.	(0.0003)	31 mm Ø x 2 mm	
IARM 367A	(<0.001)	(<0.002)	(0.002)	(<0.001)	(0.013)	(<0.005)	(<0.001)	(<0.01)	(<0.01)	(0.0012)	(<0.0005)	(<0.005)	(<0.002)	(<0.001)	31 mm Ø x 2 or 18 mm	
BS T-24A	(0.0003)	(0.004)	(0.03)	(0.0006)	(0.005)	(0.0008)	.	.	.	0.0023	.	.	0.60	.	32 mm Ø x ~12 or 19+ mm	
SRM 642	.	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm last	
Number	B	Co	Cu	Mg	Ni	P	Pb	Pd	Ru	S	Sb	Ta	W	Y	Units	

ZINC

= class, where 1 = CRM and 2 = RM

analysis listed in mass %

Trace = informational values such as (<0.001) or lower

#	Number	Pb	Al	Cd	Cu	Fe	In	Mg	Mn	Ni	Sb	Sn	Tl
1	ERM-EB325	0.0142	.	0.00947	0.00475	0.00561	.	.	.	.	.	0.00461	0.00368
1	NCS HS52701c-5	0.012	0.0073	0.012	0.0036	0.011	.	.	.	.	.	0.0026	.
1	41X Z11A	0.0077	0.0261	0.0155	0.0116	0.0019	0.0345	.	.	.	0.0026	0.0072	(0.0010)
2	BS SP-5	0.005	0.0003	<0.0004	<0.001	<0.001	.	<0.002	.	.	<0.001	0.0010	.
1	NCS HS52701c-4	0.0058	0.0026	0.0041	0.0021	0.0037	.	.	.	.	.	0.0016	.
1	ERM-EB323	0.00486	.	0.000651	0.00189	0.00113	.	.	.	.	.	0.00187	0.00108
1	BCR 327	0.004094	.	0.03014	(0.000056)	0.01440	.	.	.	.	.	.	.
1	BCR 326	0.003070	Trace	0.02030	0.01048	0.02648	.	.	.	.	.	.	.
2	BS SP-A	0.003	0.051	.	<0.0005	0.011	.	.	.	.	0.099	<0.001	.
1	ERM-EB324	0.00261	.	0.00489	0.000987	0.00585	.	.	.	.	.	0.00098	0.00199
1	NCS HS52701c-3	0.0024	0.0011	0.0020	0.0011	0.0019	.	.	.	.	.	0.0010	.
2	BCS 194e	0.002	.	.	.	0.001	.	.	.	.	.	.	.
1	41X P2-19	0.00170	0.01260	(0.000008)	0.00180	0.00520	.	(0.00016)	(0.00006)	(0.0004)	(0.00003)	(0.00006)	0.00030
1	BAM M601	0.00157	<0.00005	0.000055	0.000189	0.000220	<0.000005	.	.	.	.	.	0.000225
1	ERM-EB322	0.00150	.	0.001508	0.000589	0.00191	.	.	.	.	.	0.00056	0.000528
1	NCS HS52701c-2	0.0012	0.00053	0.00081	0.00052	0.00080	.	.	.	.	.	0.00053	.
1	SRM 683	0.00111	.	0.00011	0.00059	0.00022	Trace	.	Trace	.	.	(0.000002)	(0.00002)
1	SRM 631	(0.001)	0.50	0.0002	0.0013	0.005	0.0023	Trace	0.00015	Trace	.	0.0001	.
1	NCS HS52701c-6	0.00089	0.00016	0.00029	0.00020	0.00046	.	.	.	.	.	0.00029	.
1	NCS HS52701c-1	0.00076	0.00032	0.00048	0.00012	0.00051	.	.	.	.	.	0.00028	.
1	BCR 321	0.000485	<0.00007	(0.000023)	(0.000097)	(0.000222)	<0.00002	.	.	.	.	<0.00005	0.000078
1	SRM 682 *	.	(<0.000003)	(0.00001)	0.0000042	(0.00001)	.	(<0.00001)	Trace	(<0.00001)	.	(0.000002)	(<0.00002)

Number	Ag	Bi	Cr	Ga	Ge	Hg	Si	Zn	Melt °C	Units
ERM-EB325	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
NCS HS52701c-5	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
41X Z11A	.	0.0189	.	.	.	(0.0009)	.	.	.	50 mm Ø x 20 mm
BS SP-5	.	.	.	.	.	.	.	.	.	37 mm Ø x 12 mm
NCS HS52701c-4	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
ERM-EB323	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
BCR 327	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
BCR 326	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
BS SP-A	.	.	.	.	.	.	.	.	.	38 mm Ø x 14 mm
ERM-EB324	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
NCS HS52701c-3	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
BCS 194e	.	.	.	.	.	.	.	99.99	419.5	300 g (4.5 x 3.5 x 3 cms)
41X P2-19	(0.0002)	(0.0003)	(0.00009)	.	.	0.0050	.	(99.96)	.	~40 mm Ø x ~15 mm
BAM M601	.	.	.	.	.	.	.	.	.	45 mm Ø x 30 mm
ERM-EB322	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
NCS HS52701c-2	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
SRM 683	0.00013	.	.	Trace	.	.	.	.	.	Cylinder segment 57mm Ø x 25mm x 19mm
SRM 631	Trace	.	0.0001	(0.002)	(0.0002)	.	.	.	.	45 mm x 45 mm x 19 mm
NCS HS52701c-6	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
NCS HS52701c-1	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
BCR 321	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
SRM 682 *	(0.000002)	.	(<0.000006)	.	.	.	(<0.00005)	.	.	Cylinder segment 57mm Ø x 25mm x 19mm

* SRM 682 has trace informational B, Be, C, Ca, Cl, F, K, Li, N, and Nb.

CRM**ZINC SETS**

available in sets only, as grouped

Number	Al	Cd	Cu	Fe	Pb	Sn	Ti	Zn	Units
IMN ZE 1	0.012	0.0019	0.011	0.020	0.018	0.0018	.	Rem	Discs 40 mm Ø x 25 mm
IMN ZE 2	0.0035	0.0031	(0.00037)	0.0052	0.0078	0.0074	.	Rem	
IMN ZE 3	0.025	0.0050	0.0032	.	0.0052	0.015	.	Rem	
IMN ZE 4	.	0.00023	0.013	(0.00035)	0.0012	0.0017	.	Rem	
IMN ZE 5	0.0011	0.0060	0.0049	0.011	0.0004	0.00045	.	Rem	
IMN ZL 1	0.0190	0.0365	0.342	0.00072	0.00498	0.0364	0.00745	Rem	Discs 40 mm Ø x 25 mm
IMN ZL 2	0.0119	0.0241	0.573	0.0174	0.00923	0.0420	0.114	Rem	
IMN ZL 3	0.00388	0.00492	0.201	0.00496	0.0247	0.00788	0.238	Rem	
IMN ZL 4	0.0497	0.0115	0.114	0.00879	0.0351	0.0114	0.394	Rem	
IMN ZL 5	0.0518	0.00085	0.0115	0.0299	0.0363	0.0011	0.598	Rem	
IMN ZA 1	.	0.0042	(0.0032)	0.00167	0.025	0.0038	.	Rem	Rods 10 mm Ø x 100 mm
IMN ZA 2	.	0.0029	0.0013	0.0061	0.011	0.0012	.	Rem	
IMN ZA 3	.	0.00092	0.00011	0.00078	0.0028	0.00036	.	Rem	
IMN ZA 4	.	0.00049	0.00032	0.00040	0.0016	0.00011	.	Rem	

CRM**ZINC RoHS MONITOR**

cast 50 mm Ø x 20 mm

Number	Cd	Cr	Hg	Pb
41X ZSC6A	0.215	<0.0002	0.029	0.0077
41X ZSC3A	0.119	0.0148	0.0021	0.0273
41X ZSC1A	0.0288	0.0039	0.026	0.0621
41X ZSC4A	0.0131	0.0299	0.050	0.156
41X ZSC2A	0.0016	0.0036	0.0053	0.111

CRM ZAMAK (MAZAK) SPECIFICATIONS AND SUGGESTED SAMPLES

42X, 43X: ~50 mm Ø x ~15-20 mm ERM: 39 mm Ø x 39 mm BCR: 80 mm Ø x 20 mm SRM: 44 mm x 44 mm x 19 mm

Number	Al	Cu	Mg	Ni	Cd	Cr	Fe	Mn	Pb	Sn
Zamak 2	3.9-4.3	2.6-2.9	0.025-0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
43X Z7A	3.68	3.14	0.062	0.0005	0.00092	0.0003	0.029	0.0025	0.0058	0.0031
43X Z4C	4.79	2.69	0.0480	0.0258	0.0033	.	0.0017	0.0153	0.0062	0.0030
Zamak 5	3.9-4.3	0.75-1.25	0.030-0.06	.	<0.003	.	<0.075	.	<0.004	<0.002
Zamak 6	3.9-4.3	0.75-1.25	<0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
43X Z3M	3.40	1.499	0.114	0.0062	0.0109	0.0046	(0.042)	0.0013	0.0077	0.0058
BCR 360	3.427	1.234	0.0705	0.0267	0.00595	.	.	.	0.00739	0.00330
SRM 630	4.30	0.976	0.030	0.0027	0.0048	0.0031	0.023	0.0106	0.0083	0.0040
ERM-EB602	4.08	0.812	0.0415	0.00025	0.00011	.	0.00073	.	0.00195	0.00010
BCR 361	4.068	0.798	.	.	(0.000080)	.	0.001034	.	0.000531	0.00463
43X Z1L	4.48	0.720	0.0345	0.0069	0.0004	.	0.0009	0.0075	0.0011	(0.0005)
SRM 628	4.59	0.611	0.0094	0.030	0.0040	0.0087	0.066	0.0091	0.0045	0.0017
BCR 357	4.227	0.5849	0.0273	0.000982	0.000283	.	0.00257	.	0.00138	0.000351
Zamak 3	3.9-4.3	<0.10	0.025-0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
Zamak 7	3.9-4.3	<0.10	0.010-0.020	0.005-0.02	<0.002	.	<0.075	.	<0.002	<0.001
BCR 356	4.434	0.3944	0.01323	0.000343	0.000073	.	0.00315	.	0.000987	(0.000032)
42X Z12A	4.717	0.156	0.0488	0.0413	0.00277	0.00063	0.0457	0.0483	0.0079	0.0022
SRM 627	3.88	0.132	0.031	0.0029	0.0051	0.0038	0.023	0.014	0.0082	0.0042
BCR 355	3.443	0.1035	0.0786	0.0268	0.00581	.	.	.	0.00569	0.00291
42X Z3K	3.53	0.100	0.060	0.0030	0.0023	.	0.014	0.0077	0.0033	<0.001
42X Z4J	3.55	0.063	0.058	0.0177	0.0076	.	0.012	0.0077	0.0113	0.0060
SRM 626	3.56	0.056	0.020	0.047	0.0016	0.0395	0.103	0.048	0.0022	0.0012
SRM 625	3.06	0.034	0.070	0.0184	0.0007	0.0128	0.036	0.031	0.0014	0.0006
BCR 354	3.726	0.03123	0.0602	0.00831	0.00297	.	.	.	0.00308	0.00141
BCR 352	4.150	0.003126	0.02830	0.000674	0.000288	.	.	.	(0.00064)	0.00030
BCR 351	4.355	0.001213	0.01310	(0.00019)	(0.000021)	.	.	.	0.000450	<0.0001
Zamak 8	7.8-9.0	0.70-1.40	0.015-0.030	<0.02	<0.005	.	<0.1	.	<0.005	<0.003
43X Z14F	7.98	1.238	0.0123	0.0058	0.00567	0.0037	0.0025	(0.0003)	0.0019	0.0005

Number	Be	Bi	Ce	In	La	Sb	Si	Ti	Tl
Zamak 2	.	.	.	.	.	.	.	.	.
43X Z7A	0.0194	(0.0009)	.	.	.	0.0016	.	0.067	.
43X Z4C	.	0.0113	.	.	.	(0.0023)	(0.0012)	.	.
Zamak 5	.	.	.	.	.	.	.	.	.
Zamak 6	.	.	.	.	.	.	.	.	.
43X Z3M	.	0.0092	.	.	.	0.0029	.	.	.
BCR 360	.	.	.	0.00298	.	.	.	.	0.00259
SRM 630	.	.	.	.	.	.	0.022	.	.
ERM-EB602	.	.	.	.	.	.	0.00114	0.00048	.
BCR 361	.	.	.	(<0.00002)	.	.	.	.	0.00374
43X Z1L Ag:0.0037	.	(0.0008)	.	.	.	(0.0006)	.	.	.
SRM 628	.	.	.	.	.	.	0.008	.	.
BCR 357	.	.	.	0.000330	.	.	.	.	0.000276
Zamak 3	.	.	.	.	.	.	.	.	.
Zamak 7	.	.	.	.	.	.	.	.	.
BCR 356	.	.	.	<0.00002	.	.	.	.	0.000079
42X Z12A	.	.	0.0116	0.0068	0.0084	0.0070	.	.	0.0076
SRM 627	.	.	.	.	.	.	0.021	.	.
BCR 355	.	.	.	0.00246	.	.	.	.	0.002325
42X Z3K	.	.	0.0067	.	0.0029	.	0.0011	.	.
42X Z4J	.	.	0.020	0.0016	0.020	(0.0029)	.	.	(0.0025)
SRM 626	.	.	.	.	.	.	0.042	.	.
SRM 625	.	.	.	.	.	.	0.017	.	.
BCR 354	.	.	.	0.00098	.	.	.	.	0.001101
BCR 352	.	.	.	0.000302	.	.	.	.	0.00032
BCR 351	.	.	.	<0.00002	.	.	.	.	0.000074
Zamak 8	.	.	.	.	.	.	<0.03	.	.
43X Z14F	.	0.0106	.	.	.	0.0105	(<0.001)	(0.0001)	.

CRM ISO 17034 ZAMAK SET

40 mm Ø x 25 mm

Number	Al	Cd	Cu	Fe	Mg	Ni	Pb	Si	Sn	Zn	Availability
IMN ZG 1	3.065	0.000484	1.336	0.00825	0.0742	0.00670	0.00902	(0.036)	0.00681	Rem	Individual or Set
IMN ZG 2	3.560	0.00488	0.718	.	0.0485	0.00253	0.00653	(0.024)	0.00483	Rem	Individual or Set
IMN ZG 3	4.003	0.002750	0.109	0.0110	0.0283	0.00105	0.00331	(0.010)	0.000668	Rem	Set Only
IMN ZG 4	4.643	0.0108	(0.0089)	0.0163	0.0055	0.00042	0.00126	(0.0047)	0.00206	Rem	Individual or Set

ZINC BINARY AND TERNARY SAMPLES

= class, where 1 = CRM and 2 = RM analysis in mass % cast

#	Number	Al	Fe	Mg	Pb	Units
1	BAM AlZn-G9	19.5	0.082	.	.	38 mm Ø x 30 mm
1	BAM AlZn-G8	4.85	0.0074	.	0.100	38 mm Ø x 30 mm
1	BAM AlZn-G7	3.91	0.0057	3.28	.	38 mm Ø x 30 mm
1	BAM AlZn-G6	0.894	0.146	1.83	.	38 mm Ø x 30 mm
1	SRM 1741	0.5242	.	.	0.1571	50 mm Ø x 12 mm
2	41X ZMA0.5	0.50	.	0.52	.	~40 mm Ø x ~15 mm
1	SRM 1740	0.4177	.	.	0.0691	50 mm Ø x 12 mm
1	BAM AlZn-G5	0.264	0.0907	0.43	0.053	38 mm Ø x 30 mm
1	BAM AlZn-G4	0.198	0.0732	.	0.00197	38 mm Ø x 30 mm
1	BAM AlZn-G3	0.151	0.0416	.	0.00214	38 mm Ø x 30 mm
1	BAM AlZn-G2	0.101	0.0222	.	0.00218	38 mm Ø x 30 mm
1	BAM AlZn-G1	0.0494	0.0071	.	0.0212	38 mm Ø x 30 mm

RM ZINC - ALUMINUM - ANTIMONY ALLOYS

cast some Sb segregation in below series, last of stock 40 mm Ø x 15 mm

Number	Al	Sb	Bi	Cd	Cu	Fe	Mg	Pb	Sn
44X Z4A	20.3	6.7	0.016	0.011	0.007	0.011	0.008	0.032	0.018

CRM ZINC ALLOY SETS AND SINGLES

~40 mm Ø x ~25 mm

Number	Al	Bi	Cd	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Sn	Ti	Zn	Availability
IMN ZK 1	11.789	0.200	0.0021	1.538	.	0.0009	.	.	0.0031	0.127	0.00085	.	.	set or single
IMN ZK 2	10.572	0.169	0.0031	3.119	.	0.0040	0.0137	.	0.0121	0.102	0.0015	.	.	set
IMN ZK 3	9.767	0.102	0.0071	3.996	.	0.0307	.	.	0.0226	0.0674	0.00267	.	.	set
IMN ZK 4	8.371	0.0188	0.0121	5.487	.	0.0640	.	.	0.0334	0.0121	0.00491	.	.	set
IMN ZK 5	6.476	0.0020	0.0207	6.663	.	0.0410	0.589	.	0.0507	0.0025	0.0065	.	.	set
IMN ZF 1	0.018	.	0.0041	0.013	0.020	.	.	.	0.0012	.	0.013	0.0014	Rem	set or single
IMN ZF 2	0.011	.	0.0055	0.46	0.011	.	.	.	0.0082	.	0.0077	0.11	Rem	set
IMN ZF 3	0.0033	.	.	0.098	0.0018	.	.	.	.	.	0.0022	0.021	Rem	set or single
IMN ZF 4	0.0058	.	0.00053	0.86	0.00045	.	.	.	0.0091	.	0.0017	0.20	Rem	set or single
IMN ZF 5	.	.	0.0088	0.011	0.0081	.	.	.	0.026	.	.	0.013	Rem	set or single

CRM ZINC ALLOYS, chart 2 of 2

41X CGL: 42 - 48 mm Ø x 20 mm other X: ~45--50 mm Ø x ~20 mm

Number	Al	Bi	Cd	Cr	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Si	Sn	Ti
IMN ZM 2	0.856	.	0.00649	.	0.0520	0.0084	0.0832	0.0500	0.850	0.0499	0.00636	.	0.0836	.
41X GLV9B	0.790	0.0038	0.0039	.	0.0194	0.0056	0.0029	0.0038	0.0059	0.0032	0.0016	.	0.0012	.
41X GLV6B	0.441	0.0254	0.0051	0.0007	0.0371	0.0020	.	0.00235	0.0007	0.097	0.0122	.	0.0155	.
IMN ZM 3	0.436	.	0.02532	.	0.474	0.0228	0.0401	0.460	0.455	0.438	0.0235	.	0.0432	.
41X GLV7B	0.397	0.0114	0.0006	.	0.0269	0.0051	0.0048	0.0008	0.0146	0.081	0.0036	.	0.0012	.
41X GLV2C	0.0905	0.0158	0.0037	0.0015	0.0057	0.0155	0.0006	0.0218	0.0053	0.0248	0.0049	.	0.0097	.
41X 2951 Zn3A	0.078	.	0.0062	0.184	1.89	0.0164	0.0018	0.0010	0.0065	.	.	.	(0.006)	0.133
IMN ZM 4	0.0489	.	0.04297	.	0.903	0.0541	0.0103	0.882	0.0534	0.817	0.0405	.	0.0150	.
41X 4380 Zn1D	0.039	0.0021	0.394	0.0007	0.178	0.0276	0.0032	0.0006	0.0058	0.0618	0.0019	.	0.0510	0.0004
IMN ZM 5	0.00348	.	0.0571	.	1.682	0.0819	0.000410	1.25	0.00651	1.137	0.0534	.	0.00147	.
41X 2951 Zn2A	0.032	.	0.0037	0.142	1.37	.	0.0123	0.0011	0.0027	0.0040	.	.	(0.0015)	0.209
41X 2951 Zn1A	0.029	.	0.0005	0.083	0.79	.	0.0029	0.0013	0.0038	0.0042	.	.	(0.0007)	0.278
41X 4380 Zn6D	0.0260	0.0047	0.0466	0.0064	0.0327	0.0307	0.0044	0.200	0.0073	0.427	(0.002)	.	0.101	0.0029
41X 0336 Zn1L	0.0177	.	0.0067	.	0.0088	0.0106	0.0062	0.0102	0.0009	1.007	.	.	0.0051	.
IMN ZM 55	.	.	0.0652	.	1.309	0.0855	.	1.102	0.00621	1.490	0.0880	.	0.00266	.

Number	Ag	As	Co	In	Tl	Units
IMN ZM 2	.	.	.	.	.	40 mm Ø x 25 mm
41X GLV9B	.	.	0.0058	.	.	~45--50 mm Ø x ~20 mm
41X GLV6B	.	.	0.0061	.	V:<0.0005	~45--50 mm Ø x ~20 mm
IMN ZM 3	.	.	.	.	.	40 mm Ø x 25 mm
41X GLV7B	0.0016	(0.0006)	0.0016	.	.	~45--50 mm Ø x ~20 mm
41X GLV2C	.	0.0017	0.0055	.	.	~45--50 mm Ø x ~20 mm
41X 2951 Zn3A	.	.	.	.	.	~45--50 mm Ø x ~20 mm
IMN ZM 4	.	.	.	.	.	40 mm Ø x 25 mm
41X 4380 Zn1D	0.0012	.	.	.	.	~45--50 mm Ø x ~20 mm
IMN ZM 5	.	.	.	.	.	40 mm Ø x 25 mm
41X 2951 Zn2A	.	.	.	.	.	~45--50 mm Ø x ~20 mm
41X 2951 Zn1A	.	.	.	.	.	~45--50 mm Ø x ~20 mm
41X 4380 Zn6D	0.0030	.	0.0091	.	.	~45--50 mm Ø x ~20 mm
41X 0336 Zn1L	.	0.0008	.	.	.	~45--50 mm Ø x ~20 mm
IMN ZM 55	.	.	.	.	.	40 mm Ø x 25 mm

CRM ZIRCONIUM ALLOYS

analysis listed in mass %

31 mm Ø x 2 or 18 mm

Number	Al	C	Cr	Cu	Fe	H	Hf	N	Nb	O	Sn	Ti
IARM Zr702-18	0.014	0.017	(0.009)	.	(0.09)	(0.0011)	0.84	(0.003)	.	0.141	(0.04)	(0.004)
IARM Zr705-18	.	0.009	0.007	(0.007)	{0.08}	{0.0012}	0.38	{0.005}	2.53	0.133	.	.