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PURITY ALUMINUM SETTING-UP SAMPLES

typical analysis listed in mass % except * which is mg/kg

Number	Si	Ag	As	B*	Ba*	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe
AL RC11/08	0.028	0.010	0.0036	.	74	0.0015	0.010	0.0016	0.0049	0.0020	0.013	0.013	0.015	0.045
R A 10	<0.0050	<0.0005	.	<5	.	<0.0001	<0.0020	<0.0005	<0.0010	.	<0.0010	<0.0010	<0.0010	<0.0010
AL RC10/02	<0.002	<0.0002	.	<2	<1	<0.0001	<0.0002	<0.0001	<0.0002	.	<0.0002	<0.0002	<0.0002	<0.001
ARM 220H	0.002	<0.0005	.	<2	<1	<0.0001	<0.0010	<0.0005	<0.0005	<0.0015	<0.001	<0.0003	0.001	<0.0005
KUT Al 4N	0.0013	.	.	0.6	.	0.00001	0.00001	0.00002	0.0001	.	.	0.00006	0.0025	0.0018
V E10	<0.0010	<0.00005	.	<2	<3	<0.00002	<0.0003	<0.0001	<0.0001	.	<0.0001	<0.0001	<0.0004	<0.0005
V E1/0	<0.0005	<0.00001	.	<2	<1	<0.00001	<0.00005	<0.0001	<0.00002	.	<0.00001	<0.00005	<0.0004	<0.0003
V E0	<0.00008	<0.00001	.	<0.4	<0.1	<0.00001	<0.00002	<0.00004	<0.00002	.	<0.00001	<0.00003	<0.00004	<0.00005
AA SQ-10	.	.	.	.	.	.	.	.	.	.	.	.	.	.
C Fe 0	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Number	Ga	Hg	In	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc
AL RC11/08	0.021	0.0045	0.010	0.012	0.0004	0.017	0.016	0.033	0.0017	0.010	0.0020	0.014	0.013	0.0093
R A 10	<0.0010	.	.	.	<0.0010	<0.0010	<0.0010	.	<0.0001	<0.0020	.	<0.0010	<0.0020	.
AL RC10/02	<0.0002	.	<0.0002	.	<0.0001	<0.0003	<0.0002	.	<0.0001	0.0002	<0.0005	<0.0003	<0.0003	.
ARM 220H	<0.0005	<0.0010	<0.0003	<0.0003	<0.0001	<0.0005	<0.0003	<0.0005	<0.0001	<0.0010	<0.0005	<0.0003	<0.0003	<0.0005
KUT Al 4N	<0.0001	.	.	.	0.00002	0.0015	0.0002	.	0.0001	0.00004	.	0.0001	0.0002	.
V E10	<0.00002	.	<0.0002	.	<0.00002	<0.0003	<0.0001	.	<0.0001	<0.0001	.	<0.0002	<0.0003	.
V E1	<0.00001	.	<0.00001	.	<0.00001	<0.0003	<0.00005	.	<0.0001	<0.00005	.	<0.00005	<0.0001	.
V E0	.	.	<0.00001	.	<0.00001	<0.00006	<0.00002	.	<0.00002	<0.00001	.	<0.00001	<0.00002	.
AA SQ-10	.	.	.	.	.	.	.	.	.	.	.	.	.	.
C Al 0	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Number	Sn	Sr	Ti	V	W	Zn	Zr	Units
AL RC11/08	0.016	0.0050	0.016	0.016	0.0044	0.018	0.015	60 mm Ø x 25 mm
R A 10	<0.0010	<0.0010	<0.0010	<0.0010	.	<0.0010	<0.0010	50 mm Ø x 50 mm
AL RC10/02	<0.0002	<0.0001	0.0004	<0.0002	.	<0.0005	<0.0002	60 mm Ø x 25 mm
ARM 220H	<0.0005	<0.0001	<0.0002	<0.0010	.	<0.0010	<0.0005	57 mm Ø x 30 mm HE: <0.001, V: <0.0030
KUT Al 4N	0.00005	0.0001	0.00006	0.0001	.	0.0003	0.00005	50 mm Ø x 35 mm
V E10	<0.0003	<0.00005	<0.0001	<0.0002	.	<0.0003	<0.0001	60 mm Ø x 40 mm
V E1	<0.00002	<0.00005	<0.0001	<0.00003	.	<0.0002	<0.00005	60 mm Ø x 40 mm
V E0	<0.00002	<0.00002	<0.00005	<0.00003	.	<0.00005	<0.00003	60 mm Ø x 40 mm
AA SQ-10	.	.	.	.	.	.	.	64 mm Ø x 37 mm
C Al 0	.	.	.	.	.	.	.	50 mm Ø x 30-50 mm

POT METAL SETTING-UP SAMPLE typical analysis

Number	Base Metal	B	Li	Na	Units
AA SQ-18	P0506	0.02	0.02	0.02	64 mm Ø x 25 mm

SPECIALTY ALUMINUM SETTING-UP SAMPLES

typical analysis

Number	As	Bi	Cu	Fe	Mg	P	Pb	Sb	Sc	Si	Ti	Units
PY 10914	.	0.7	0.3	0.2	1.2	.	0.8	.	.	0.9	0.05	60 mm Ø x 41 mm
AA SQ-19	0.03	.	.	.	.	0.014	.	0.02	0.20	.	.	64 mm Ø x 37 mm

ALUMINUM SETTING-UP SAMPLES, chart 1 of 2

typical analysis

Table with columns: Number, Si, Cu, Fe, Mg, Mn, Ni, Zn, Be, Ca, Cr, Na, Pb, Sb, Sn, Sr, Ti. Rows include sample IDs like C Al 4, PY 9601, KUT ASC-1, AL RC40/02, PY 9327, PY 9326, R A 10, AL RC40/03, AA SQ-15, PY 9415, PY 2150, V E3, C Al 5, PY 9313, PY 2001, PY 9520, PY 9517, AL RC41/01, PY 9809, PY 20001, 58A AC19215b, AA SQ-16, 58A AC19214b, 58A AC19213b, AL RC60/02, R A 19, C Al 2, KUT AMS-1, PY 2006, 3.2315, AA SQ-12, PY 2004, 164X ALSUS 7, V E2.

Table with columns: Number, Ag, As, B, Bi, Cd, Co, Ga, In, Li, Mo, P, V, Zr, Al, Ø X H mm. Rows include sample IDs like C Al 4, PY 9601, KUT ASC-1, AL RC40/02, PY 9327, PY 9326, R A 10, AL RC40/03, AA SQ-15, PY 9415, PY 2150, V E3, C Al 5, PY 9313, PY 2001, PY 9520, PY 9517, AL RC41/01, PY 9809, PY 20001, 58A AC19215b, AA SQ-16, 58A AC19214b, 58A AC19213b, AL RC60/02, R A 19, C Al 2, KUT AMS-1, PY 2006, 3.2315, AA SQ-12, PY 2004, 164X ALSUS 7, V E2.

BRAMMER STANDARD ONLINE CATALOG-SETTING-UP SAMPLES

ALUMINUM SETTING-UP SAMPLES, chart 2 of 2 typical analysis

Number	Si	Cu	Fe	Mg	Mn	Ni	Zn	Be	Ca	Cr	Na	Pb	Sb	Sn	Sr	Ti
PY 9632	0.8	4.1	0.32	0.48	0.71	.	0.033	.	.	0.0181	.	0.0096	.	.	.	0.022
AA SQ-17	0.7	0.35	0.4	1.6	0.12	0.12	0.12	0.005	.	0.25	.	0.1	.	0.1	.	0.08
BS 6061	0.55	0.29	0.19	0.81	0.010	0.004	0.04	.	.	0.050	.	0.010	.	<0.001	.	0.024
3.1645	0.5	3.3	0.4	0.7	0.6	0.03	0.2	.	.	0.02	.	0.8	<0.01	.	.	0.07
AA SQ-13	0.5	0.04	0.6	0.04	0.04	0.04	0.04	0.005	.	0.04	.	0.04	.	0.04	.	0.04
AL RC50/02	0.5	0.003	0.85	4.5	0.005	0.5	0.02	0.005	0.02	0.5	0.004	.	0.05	0.3	0.02	.
PY 906	0.40	0.005	0.19	0.43	0.03	0.005	0.019	.	.	<0.004	<0.0001	.	.	.	.	0.011
BS 2017	0.30	4.05	0.25	0.51	0.51	0.006	0.065	.	.	0.015	.	0.010	.	0.002	.	0.020
IARM 221C	0.2	0.6	0.2	4.8	0.4	.	6.8	0.005	0.03	0.2	.	.	0.01	.	.	0.1
IARM 221D	0.2	0.6	0.2	4.7	0.4	.	6.7	0.005	0.03	0.2	.	.	0.02	.	.	0.1
IARM 221B	0.2	0.6	0.2	4.8	0.4	.	6.8	0.005	0.03	0.2	.	.	0.01	.	.	0.1
AA SQ-11	0.2	0.5	0.2	3.0	0.4	.	6.6	0.005	0.02	0.25	.	.	.	.	.	0.10
PY 9627	0.2	0.13	0.57	0.0004	1.06	0.01	0.057	.	.	0.0223	<0.00002	0.0065	.	.	.	0.022
PY 310	0.16	0.0037	0.58	0.0003	0.0078	0.004	0.017	.	.	0.0028	<0.00002	0.0019	.	.	.	0.004
3.4345	0.15	1.48	0.29	2.55	0.09	0.005	5.59	.	.	0.2	.	0.01	.	0.02	.	0.03
C Al 3	0.11	0.02	0.27	2.61	0.44	0.005	0.08	.	.	0.13	.	0.006	.	<0.0003	.	<0.001
PY 9325	0.11	0.0069	0.24	4.33	0.4	.	0.014	0.0001	0.0003	0.0007	<0.00002	0.007	.	.	.	0.005
PY 9324	0.11	0.0055	0.24	4.28	0.4	.	0.014	0.0001	0.0003	0.0007	<0.00002	0.007	.	.	.	0.005
BS 7075	0.10	1.40	0.13	2.26	0.03	0.005	5.6	.	.	0.19	.	0.003	.	0.001	.	0.028
3.4365	0.1	1.7	0.3	2.5	0.1	0.01	5.6	.	.	0.2	.	0.03	.	0.03	.	0.08
AA SQ-14	0.1	0.5	0.1	0.9	0.4	0.4	1.2	0.002	.	.	.	0.5	.	0.1	.	0.1
PY 9630	0.1	0.062	0.46	0.0006	0.0123	0.008	0.054	.	.	0.0216	0.00003	0.0035	.	.	.	0.018
PY 325	0.1	0.003	0.27	0.74	0.005	<0.001	0.021	.	0.0011	0.011	0.0001	0.001	.	.	.	0.01
PY 9806-1	0.08	6.9	1.3	0.08	1.9	0.05	0.05	.	.	0.3	.	.	0.4	.	.	.
BS 2024	0.08	4.7	0.20	1.30	0.57	0.006	0.07	.	.	0.03	.	0.006	.	0.001	.	0.030
3.3525	0.08	0.004	0.17	2.8	0.22	0.002	0.007	.	.	0.001	.	0.002	.	0.002	.	0.009
PY 9614	0.08	0.043	0.18	2.28	0.055	0.01	0.051	.	0.0009	0.21	0.00006	0.0057	.	.	.	0.019
PY 9321	0.07	4.2	0.013	0.27	0.02	0.01	0.04	.	.	<0.00002	0.001	.	.	.	.	0.21
BS 2011	0.052	5.2	0.32	0.016	0.010	0.004	0.024	.	.	0.001	.	0.56	.	0.001	.	0.006
PY 9401	0.04	1.58	0.12	2.29	0.01	0.007	5.84	.	.	0.006	<0.00002	.	.	.	.	0.032
AL RC20/02	0.029	6.0	0.061	0.29	0.24	1.45	0.24	.	.	.	.	0.41	0.20	0.051	.	.
V E8	0.012	0.020	0.013	0.005	0.006	0.004	0.005	0.001	0.004	0.005	.	0.003	0.010	0.004	0.002	0.004
R Al Mn 12	.	.	.	.	12	.	.	.	.	.	.	.	.	.	.	.
R Al Ce	Ce: 1	.	.	5	La: 0.4	.	Nd: 0.1	.	Pr: 0.05	.	Sm: 0.01	.	Y: 0.2	.	.	.
V E5	.	.	.	4.8	1.3	.	.	.	.	.	.	.	.	.	.	.
V E4	.	.	.	1.1	0.7	.	5.2	.	.	0.2	.	.	.	.	.	.
V E13	.	.	4.8	.	.	.	.	.	.	.	.	.	.	.	.	.

Number	Ag	B	Ba	Bi	Cd	Co	Ga	Hg	In	Li	V	Zr	Al	Ø X H mm
PY 9632	0.033	.	50 x 50
AA SQ-17	.	.	.	0.08	.	.	0.03	.	.	.	.	0.03	.	64 x 37
BS 6061	.	.	.	0.006	.	.	.	.	.	.	0.01	<0.002	.	62 x 50
3.1645	.	.	.	0.01	.	.	0.01	.	.	.	.	.	Rem	40 x 25
AA SQ-13	.	.	.	0.04	0.04	0.01	0.03	.	.	.	0.04	0.4	.	64 x 37
AL RC50/02	Ce:0.1	0.005	0.02	La:0.1	0.2	Mo:0.03	0.03	P:0.005	0.05	0.003	0.01	0.01	W:0.04	60 x 25
PY 906	.	.	.	0.002	.	.	.	.	.	.	0.007	0.002	.	50 x 50
BS 2017	62 x 50
IARM 221C	0.2	0.03	.	.	.	.	.	.	63 x 39
IARM 221D	0.2	0.03	.	.	.	.	.	.	63 x 39
IARM 221B	0.2	0.03	.	.	.	.	.	.	63 x 39
AA SQ-11	0.01	0.03	.	.	.	.	.	.	64 x 37
PY 9627	<0.0001	.	.	0.0001	.	0.00002	.	0.01	.	50 x 50
PY 310	<0.0002	.	.	<0.00002	.	0.00004	.	.	.	50 x 50
3.4345	Rem	40 x 25
C Al 3	0.008	.	.	.	.	.	96.1	~40-50 x 30-50
PY 9325	<0.0001	.	.	.	.	.	.	.	.	50 x 50
PY 9324	<0.0001	.	.	.	.	.	.	.	.	50 x 50
BS 7075	.	.	.	<0.001	.	.	.	.	.	.	0.006	0.006	.	62 x 50
3.4365	Rem	40 x 25
AA SQ-14	.	.	.	0.5	.	.	.	.	.	.	.	.	.	64 x 37
PY 9630	0.0002	.	.	0.0001	.	0.00007	.	.	.	50 x 50
PY 325	.	0.0007	.	.	.	.	.	.	.	.	0.006	0.0005	.	50 x 50
PY 9806-1	.	.	.	0.7	.	0.9	.	.	.	.	.	.	.	60 x 40
BS 2024	.	.	.	0.002	.	.	.	.	.	.	0.01	0.01	.	62 x 50
3.3525	Rem	40 x 25
PY 9614	0.0001	.	.	0.0004	.	.	.	0.02	.	50 x 50
PY 9321	50 x 50
BS 2011	.	.	.	0.44	.	.	.	.	.	.	0.007	<0.002	.	62 x 50
PY 9401	0.13	.	50 x 50
AL RC20/02	0.73	.	.	0.38	0.036	0.44	.	.	.	.	.	0.17	.	60 x 25
V E8	0.005	.	0.005	0.006	0.003	0.003	0.006	.	0.005	.	0.003	0.003	.	60 x 40
R Al Mn 12	50 x 50
R Al Ce	0.01	.	0.02	.	40 x 25
V E5	.	.	.	0.2	.	.	.	.	.	.	.	.	.	60 x 40
V E4	0.20	.	.	.	0.06	0.4	0.2	.	60 x 40
V E13	60 x 40

Number	Ag	B	Ba	Bi	Cd	Co	Ga	Hg	In	Li	V	Zr	Al	Ø X H mm
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CERAMIC SETTING-UP SAMPLE

Number	Al	C	Fe	O	Ti	W	Units
JK CE 650A	34	6	2.1	30	21	0.8	~25 mm Ø x 8 mm

COBALT BASE SETTING-UP SAMPLES

typical analysis T = trace, such as "<0.005" or "<0.01" ~35 mm Ø x ~25-35 mm

Number	Al	B	C	Cr	Cu	Fe	Mn	Mo	Nb	Ni	P	S	Si	Sn	Ta	Ti	V	W	Zr
R Co 16	0.13	0.03	0.31	0.03	0.92	21.3	0.02	2.76	1.82	<0.001	<0.001	<0.01	0.33	0.21	0.04	0.42	0.70	.	.
R Co 15	0.05	.	0.8	0.3	2	22	.	8	2	0.1	0.03	0.06	0.9	.	0.08	.	0.1	0.1	.
R Co 14	0.05	0.05	0.5	29	Co:51	0.9	0.3	.	.	10	<0.001	<0.01	0.7	.	.	.	<0.01	7	.
R Co 11	T	.	T	T	T	T	T	T	T	T	T	T	T	.	.	T	T	T	T

COPPER BASE SETTING-UP SAMPLES

typical analysis listed in mass %

Number	Cu	Sn	Zn	Al	Bi	Cr	Fe	Mn	Ni	Pb	Si	Ag	As	Au	Be
COPPER															
R C 11	Rem	<0.0010	<0.0005	.	<0.0030	<0.0005	<0.0005	<0.0010	<0.0005	<0.0030	<0.0005	<0.0010	<0.0010	.	.
2.0070	Rem	<0.001	<0.001	<0.001	.	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	.	.	.	.
R C 20	99.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.
R C 110	Rem	0.006	0.006	0.002	0.004	0.004	0.005	0.004	0.002	0.003	0.003	0.005	0.001	0.002	0.0002
R C 14	Rem	<0.0005	<0.001	<0.002	<0.002	0.7	<0.01	<0.005	<0.005	<0.005	0.03	.	.	.	.
C Cu 3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.0875
R C 38	67	0.01	0.01	<0.01	<0.01	<0.001	0.7	0.8	31	<0.01	0.02	<0.001	0.02	.	.
BRASS															
BS SU 464	[60.3]	0.73	38.8	.	.	.	0.05	.	0.007	0.04	0.004	.	.	0.001	.
R C 32	rem	0.03	35.7	1.7	0.02	<0.005	0.2	1.5	0.2	0.5	0.02	<0.001	<0.005	.	.
2.0401	Rem	0.2	39.9	.	.	.	0.2	<0.01	0.09	2.4	.	<0.01	<0.01	.	.
BRONZE															
R C 12	Rem	0.2	0.3	0.08	0.009	0.03	0.1	0.03	0.07	0.09	0.05	0.05	0.03	0.004	<0.001
165X PB10SUS	Rem	11	0.05	0.001	0.02	0.001	0.002	<0.001	0.06	0.04	0.001	.	0.02	.	.
BS SU 932A	83.5	6.88	2.29	.	0.003	.	0.008	0.002	0.19	6.9	0.011	0.0198	0.047	.	.
BS SU 932B	83.1	6.15	2.77	.	.	.	0.05	0.0005	0.52	7.1	0.004	0.0006	0.016	.	.
BS SU 936	82.5	7.0	0.25	0.001	.	.	0.003	0.001	0.36	9.6	0.004	.	0.002	.	.
BS SU 936A	82.5	7.0	0.24	0.0003	.	.	0.0007	0.0006	0.35	9.7	0.004	.	0.004	.	.
BS SU 932	82.1	7.28	2.80	.	0.002	.	0.03	0.002	0.19	7.4	0.015	0.0107	0.049	.	.
BS SU 936B	81.0	7.5	0.54	<0.005	.	<0.005	0.006	<0.001	0.51	10.2	0.003	.	0.01	.	.
R C 40	Rem	<0.01	<0.01	8	<0.01	8	1.5	5.5	2	0.02	0.02	.	<0.01	.	.
165X ALB1 SUS	82	0.03	0.06	9.0	0.015	0.01	2.8	0.08	5.3	0.20	0.10	.	0.005	.	.
R C 33	80	0.03	0.08	11	<0.006	0.03	3.8	0.2	4.6	<0.01	0.05	<0.001	0.02	.	.
R C 36	76	7.4	1.0	<0.005	0.01	<0.001	0.03	<0.005	1.6	14	<0.005	0.015	0.009	.	<0.001
BS SU 863	62.7	0.031	27.1	4.87	.	0.0005	2.3	2.85	0.06	0.040	0.025	.	<0.005	.	.
2.1052	Rem	11.3	0.10	0.002	<0.001	.	0.3	<0.001	0.40	0.4	<0.001	0.01	.	.	.
2.1090	Rem	6.86	3.81	.	0.005	.	0.09	<0.001	1.12	5.56	.	0.02	0.01	.	.
Number	Cu	Sn	Zn	Al	Bi	Cr	Fe	Mn	Ni	Pb	Si	Ag	As	Au	Be

Number	C	Ca	Cd	Co	Mg	O	P	S	Sb	Se	Te	Ti	Zr	Units
COPPER														
R C 11	.	.	<0.0001	<0.0010	<0.0001	(0.0010)	<0.0010	<0.0010	<0.0030	<0.0001	<0.0010	.	.	40 mm Ø x 40 mm
2.0070	.	.	.	.	.	.	<0.001	.	<0.001	.	.	.	.	40 mm Ø x 25 mm
R C 20	.	.	.	.	.	0.038	.	.	.	.	.	.	.	40 mm Ø x 40 mm
R C 110	.	.	0.003	0.003	0.003	.	0.003	0.004	0.006	0.005	0.007	0.001	<0.002	40 mm Ø x 40 mm
R C 14	.	.	.	.	.	.	<0.005	<0.001	.	.	.	.	0.1	40 mm Ø x 40 mm
C Cu 3	.	.	0.0096	0.0496	.	.	.	0.0229	.	0.0475	0.0194	.	last	40 mm Ø x 30 mm
R C 38	.	.	<0.01	<0.001	<0.001	.	<0.01	<0.01	0.01	.	.	.	<0.001	40 mm Ø x 40 mm
BRASS														
BS SU 464	0.0006	.	.	.	.	0.0009	0.005	0.001	0.006	.	.	.	.	38 mm Ø x 40 mm
R C 32	.	.	<0.001	.	.	.	<0.01	.	0.02	.	.	.	.	40 mm Ø x 40 mm
2.0401	.	.	.	.	.	.	<0.01	<0.001	.	.	.	.	.	40 mm Ø x 25 mm
BRONZE														
R C 12	.	.	0.05	0.04	0.003	.	0.1	0.05	0.04	0.01	0.01	0.003	<0.001	40 mm Ø x 40 mm
165X PB10SUS	.	.	.	0.01	.	.	0.002	0.03	0.15	0.01	.	.	.	~42 mm Ø x ~18 mm
BS SU 932A	0.001	.	.	.	.	.	0.007	0.053	0.15	.	.	.	.	38 mm Ø x 40+ mm
BS SU 932B	0.002	.	.	.	.	.	0.008	0.046	0.19	.	.	.	.	38 mm Ø x 40+ mm
BS SU 936	0.0008	.	.	0.009	.	0.003	0.07	0.007	0.10	.	.	.	.	50 mm Ø x 19 mm
BS SU 936A	0.009	.	.	0.008	.	0.0037	0.031	0.007	0.13	.	.	.	.	50 mm Ø x 19 mm
BS SU 932	0.002	.	.	.	.	.	0.008	0.051	0.13	.	.	.	.	38 mm Ø x 40+ mm
BS SU 936B	<0.05	.	0.01	.	.	0.01	0.03	0.03	0.14	.	.	.	.	38 mm Ø x 40+ mm
R C 40	.	.	.	.	<0.01	.	<0.01	.	.	.	.	.	.	40 mm Ø x 40 mm
165X ALB1 SUS	.	.	.	.	0.04	.	0.015	.	.	.	.	.	.	40 mm Ø x 18 mm
R C 33	.	.	<0.005	<0.01	<0.001	.	<0.01	<0.005	.	.	.	.	<0.001	40 mm Ø x 40 mm
R C 36	.	.	<0.001	<0.001	<0.001	.	<0.01	0.04	0.23	.	.	<0.001	<0.001	40 mm Ø x 40 mm
BS SU 863	0.002	.	.	<0.005	<0.005	.	0.0081	0.0003	0.009	.	.	.	<0.005	38 mm Ø x 40+ mm
2.1052	.	.	.	.	.	.	0.02	0.01	<0.001	.	.	.	.	40 mm Ø x 25 mm
2.1090	.	.	.	.	.	.	0.02	0.04	0.09	.	.	.	.	40 mm Ø x 25 mm
Number	C	Ca	Cd	Co	Mg	O	P	S	Sb	Se	Te	Ti	Zr	Units

LEAD BASE SETTING-UP SAMPLES

chill cast typical analysis listed in mass % except * which is mg/kg

Number	Sn	Sb	Ag	As	Bi	Cd	Cu	Fe	In	Ni	S	Te	Tl	Zn
R Pb 15	30	2.2	2.6	0.07	0.10	0.02	1.5	<0.001	<0.01	0.002	.	.	.	0.08
R Pb 17	3.8	10.2	1.6	0.09	0.1	0.001	1.8	0.002	<0.001	0.002	<0.001	0.003	.	<0.005
R Pb 13	0.14	0.15	0.05	0.05	0.29	0.06	0.14	.	.	.	.	0.03	(0.03)	0.06
R Pb 16	0.12	<0.001	0.002	<0.001	<0.01	<0.001	<0.001	<0.001	<0.0005	<0.001	0.002	.	<0.001	<0.001
R Pb 18	0.07	1.28	0.11	3.32	>3.34	0.02	0.05	<0.0001	0.02	<0.001	0.003	0.02	0.019	0.0001
R Pb 14	<0.005	12.6	0.008	1.4	0.02	<0.005	0.06	<0.001	<0.002	<0.001	0.01	<0.005	.	<0.001
R Pb 11	<0.0005	<0.0005	<0.0010	<0.0010	<0.0030	<0.0005	<0.0005	<0.0005	.	<0.0005	.	<0.0005	.	<0.0005
R Pb PM	.	.	0.0100	.	.	.	.	.	.	.	.	.	.	.

continued R Pb: 40 mm Ø x 30 mm 168X: ~45-50 mm Ø x ~20-40 mm

Number	Al	Au	Ba	Ca	Co*	Cr*	Ge	Hg	Ir*	Mg*	Mn*	Na	Pd	Pt	Rh*	Ru*	Se
R Pb 15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
R Pb 17	0.002	0.003	.	.	.	.	(0.001)	.	.	.	.	.	0.001	(0.001)	.	.	.
R Pb 13	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.003
R Pb 16	0.03	.	(0.01)	0.2	.	.	.	.	.	(10)	.	<0.001	.	.	.	.	.
R Pb 18	<0.0001	.	.	<0.0001	<1	1	.	.	.	.	<10	.	.	.	.	.	(0.01)
R Pb 14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
R Pb 11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
R Pb PM	.	0.0100	.	.	.	.	.	.	3	.	.	.	0.0050	0.0050	50	50	.

MAGNESIUM BASE SETTING-UP SAMPLES

cast typical analysis listed in mass %

Number	Al	Cd	Cu	Fe	Mg	Mn	Ni	Pb	Si	Sn	Zn	Zr
R Mg 17	7.5	<0.01	<0.01	0.009	Rem	0.2	0.001	.	0.04	0.03	0.4	<0.001
R Mg 13 *	5.7	0.0001	0.006	0.001	Rem	0.2	0.001	0.001	0.01	0.001	0.8	0.004
C Mg 2 *	5.7	0.0001	0.006	0.001	Rem	0.2	0.001	0.001	0.01	0.001	0.8	0.004
R Mg 11	0.022	.	<0.003	<0.004	99.9	0.022	<0.005	.	0.037	.	<0.005	.
58A ST7310	0.004	.	1.64	0.0098	Rem	0.967	0.002	.	0.025	.	7.2	.
R Mg 18	.	.	.	<0.001	Rem	.	.	.	.	.	.	0.4

continued * currently R Mg 13 and C Mg 2 have the same chemistry

Number	Ce	La	Na	Nd	Pr	Sm	Y	Units
R Mg 17	.	.	<0.001	.	.	.	.	50 mm Ø x 50 mm
R Mg 13 *	.	.	0.001	.	.	.	.	50 mm Ø x 50 mm
C Mg 2 *	.	.	0.001	.	.	.	.	50 mm Ø x 40-50 mm
R Mg 11	50 mm Ø x 50 mm
58A ST7310	45 mm Ø x 25 mm
R Mg 18	0.05	0.08	.	2.3	0.09	0.1	5.3	50 mm Ø x 50 mm

NICKEL BASE SETTING-UP SAMPLES

typical analysis

Number	Ni	Al	C	Co	Cr	Cu	Fe	Mn	Mo	Nb	P	S	Si	Ti	W
R Ni 10	>99.9	<0.001	<0.005	<0.001	.	<0.001	0.02	.	.	.	.	<0.001	<0.002	.	.
2.4068	Rem	0.03	<0.01	0.03	0.04	<0.01	0.17	0.11	.	.	<0.01	<0.01	0.1	0.04	.
R Ni 11	99.4	<0.01	0.02	0.05	<0.01	.	0.06	0.27	.	.	<0.01	<0.01	0.18	<0.01	.
BS SU 750	71.0	0.92	0.05	0.11	15.3	0.027	8.22	0.155	0.147	1.05	0.006	0.002	0.148	2.56	<0.5
R Ni 17	Rem	0.01	0.20	0.2	0.8	0.3	18	0.25	0.2	0.2	<0.01	<0.01	0.32	0.3	10
R Ni 12	65	3	0.1	<0.01	0.01	29	1.2	0.6	.	.	<0.01	<0.01	0.09	0.6	.
2.4360	.	0.05	0.12	<0.001	<0.005	30	1.9	1.25	.	.	.	.	0.23	0.04	.
BS SU 625	[60.8]	0.16	0.022	0.040	21.8	0.15	3.83	0.096	9.11	3.52	0.008	<0.005	0.11	0.23	0.036
BS SU C-22	[57.8]	0.19	0.002	0.11	21.3	0.057	3.45	0.32	13.6	0.016	0.008	<0.005	<0.05	0.004	3.09
R Ni 13	57	0.3	0.01	0.06	17	0.01	4.6	0.04	17	0.05	<0.01	<0.01	(0.01)	0.02	3.3
BS SU 617	[53.5]	1.04	0.07	12.3	21.4	0.007	1.6	0.15	9.2	0.03	0.004	<0.005	0.2	0.4	0.02
2.4663	Rem	1.0	0.06	11.2	22	<0.001	0.3	0.03	8.9	<0.001	<0.01	.	0.03	0.4	0.06
R Ni 15	Rem	0.6	0.01	0.2	18	0.06	18	0.10	3	5	<0.01	<0.01	0.09	1	0.09
R Ni 14	50.5	0.5	0.05	19.4	20.9	0.01	0.3	0.2	5.2	.	0.01	<0.01	0.05	2.2	0.1
2.4665	Rem	0.12	0.08	1.0	22	0.08	19	0.40	8.6	0.18	0.02	.	0.32	0.01	0.8
2.4858	Rem	0.1	0.02	0.06	23.8	1.6	27.6	0.5	3.1	<0.003	0.02	.	0.3	1.1	.

Number	As	B	Ca	Mg	N	O	Pb	Sn	Ta	V	Zr	Units
R Ni 10	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
2.4068	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm
R Ni 11	.	.	.	0.02	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BS SU 750	<0.005	0.005	.	0.003	0.005	<0.05	.	.	<0.05	0.04	0.035	38 mm Ø x 40+ mm
R Ni 17	.	0.02	.	.	.	.	.	.	0.02	0.06	.	40 mm Ø x 30 mm
R Ni 12	.	.	.	.	.	.	.	.	<0.01	.	.	40 mm Ø x 40 mm
2.4360	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS SU 625	<0.005	0.0025	.	0.005	0.028	0.001	.	0.001	<0.05	0.015	0.001	38 mm Ø x 40+ mm
BS SU C-22	<0.005	0.001	.	0.004	<0.05	<0.005	.	0.002	0.004	0.009	.	38 mm Ø x 40 mm
R Ni 13	.	<0.01	.	.	.	.	.	.	<0.01	0.2	.	40 mm Ø x 40 mm
BS SU 617	0.002	0.005	<0.005	<0.005	0.004	<0.005	<0.005	<0.005	0.004	0.005	0.02	38 mm Ø x 40+ mm
2.4663	.	.	.	.	.	.	.	.	.	0.04	.	40 mm Ø x 25 mm
R Ni 15	.	<0.01	.	.	.	.	.	.	<0.01	0.09	0.02	40 mm Ø x 40 mm
R Ni 14	0.5	0.003	.	.	.	.	.	.	.	<0.01	0.01	40 mm Ø x 40 mm
2.4665	.	<0.01	.	.	.	.	.	.	.	0.03	.	40 mm Ø x 25 mm
2.4858	.	.	.	.	.	.	.	.	.	0.1	.	40 mm Ø x 25 mm

NICKEL-PHOSPHORUS LAYER ON STEEL

Number	Ni	P%	Pb%	Layer	Intended For	Unit
JK SUS NiP-1	Rem	5.8	0.26	8.7µm	GD-OES	plate 102mm x 68mm x 0.5mm

ROHS/WEEE DIRECTIVE XRF DISCS

available individually or in SET/3 typical analysis 40 mm Ø x 5 mm

Number	Al ₂ O ₃	B ₂ O ₃	Br	CaO	CdO	Cl	Cr ₂ O ₃	MgO	Na ₂ O	PbO	Sb ₂ O ₃	SiO ₂
BR ROHS 1/3	7.0	5.5	0	10.0	0	0	0	6.5	17.0	0	1.0	53.0
BR ROHS 2/3	7.0	4.536	0.100	10.0	0.011	0.5	0.146	6.5	17.0	0.107	1.1	53.0
BR ROHS 3/3	7.0	2.118	0.5	10.0	0.114	1.0	0.73	6.5	17.0	0.538	1.5	53.0

TIN BASE SETTING-UP SAMPLES

typical analysis

Number	Sn	As	Bi	Cu	Fe	Pb	Sb	Ag	Al	Au	Cd	Co	Ge
R Sn 10	>99.99	<0.0010	<0.0005	<0.0005	<0.0005	<0.0010	<0.0020	<0.0001	<0.0005	.	<0.0001	.	.
R Sn 11	99.9	<0.002	0.002	0.002	0.001	0.02	0.005	.	.	.	.	.	.
1611X SAC305	.	.	.	0.47	.	0.11	.	2.9	.	.	0.35	.	.
R Sn 21	Rem	0.006	0.1	0.4	0.1	0.09	0.06	10	0.02	.	<0.001	0.1	0.1
R Sn 13	84.7	<0.01	0.05	0.2	0.13	1.3	13.4	<0.01	0.04	.	0.02	0.05	.
R Sn 15	Rem	.	0.3	7.0	0.04	.	8	2.5	0.04	0.01	.	.	0.8
R Sn 20	Rem	<0.001	10	<0.01	<0.01	0.07	0.02	<0.001	<0.001	.	<0.001	<0.001	.
R Sn 12	Rem	0.3	0.1	1	<0.01	34	2	0.2	<0.001	.	0.1	<0.001	.
R Sn 14	45	.	40	.	.	.	.	.	.	.	12	.	.

Number	In	Ni	P	Pt	S	Se	Te	Tl	Zn	Units
R Sn 10	<0.0005	<0.0005	<0.0003	.	<0.0003	.	.	<0.0005	<0.0001	40 mm Ø x 40 mm
R Sn 11	.	.	.	.	.	.	.	.	<0.001	40 mm Ø x 40 mm
1611X SAC305	.	.	.	.	.	.	.	.	.	40 mm Ø x 6-10 mm last
R Sn 21	0.08	0.4	<0.001	.	.	.	.	<0.001	0.3	40 mm Ø x 40 mm
R Sn 13	<0.01	0.23	.	.	.	.	.	<0.001	0.02	40 mm Ø x 40 mm
R Sn 15	.	0.03	.	.	.	.	.	.	0.06	40 mm Ø x 40 mm
R Sn 20	7.7	<0.01	<0.01	.	.	.	.	<0.001	25	40 mm Ø x 40 mm
R Sn 12	0.1	<0.001	.	.	.	.	.	(0.03)	0.03	40 mm Ø x 40 mm
R Sn 14	.	.	0.05	.	.	.	.	.	.	40 mm Ø x 40 mm last

TITANIUM BASE SETTING-UP SAMPLES

typical analysis

40 mm Ø x 40 mm

Number	Ti	Al	C	Fe	Mo	Pd	Sn	V	Zr
R Ti 11	99.9	.	0.01	0.05	.	.	.	.	.
R Ti 12	Rem.	.	0.02	0.2	.	0.2	.	.	.
R Ti 13	Rem.	6	<0.01	0.2	.	.	.	4	.
R Ti 14	Rem.	6	<0.01	0.02	2	.	2	.	4

ZINC BASE SETTING-UP SAMPLES

typical analysis

169X, 1690X: 50 mm Ø x 20 mm

C: 40 mm Ø x 30-40 mm

JK, R: 40 mm Ø x 30 mm

Number	Al	Cd	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Sn	Tl	Ag	Bi	Cr	Ga	In	Ti	Zn
R Zn 14	8	0.02	2	0.06	0.09	0.03	<0.001	0.09	<0.001	0.04	<0.001	<0.001	.	.	.	<0.001	0.009	90
C Zn 3/4	3.93	0.001	0.071	0.016	0.055	.	.	0.0056	.	0.001	.	.	.	.	.	.	.	.
C Zn 4/8	0.93	0.10	0.51	.	.	.	.	1.26	.	0.99	.	.	.	.	.	.	.	.
R Zn 13	0.4	0.3	0.3	0.01	<0.01	<0.01	0.04	0.6	0.2	0.3	0.05	0.05	.	.	.	0.2	<0.01	97
R Zn 15	0.2	0.4	0.2	0.2	.	0.005	.	0.1	0.04	0.05	.	.	.	.	.	.	.	Rem
R Zn 16	0.23	0.049	0.011	0.092	.	.	.	0.23	.	0.009	.	.	.	.	.	.	.	.
JK SUS Zn-1	0.2024	0.0014	0.0014	0.0273	.	0.0006	0.0043	0.0021	0.00001	0.00003	0.0008	0.0002	0.00002	0.0055	0.00004	.	.	.
JK SUS Zn-5	0.1992	0.0063	0.0015	0.0318	.	0.0009	0.0047	0.0108	0.0024	0.0099	0.0003	0.0002	0.0136	0.0081	0.0019	0.0029	.	.
JK SUS Zn-2	0.1394	0.0075	0.0019	0.0314	.	0.0007	0.0043	0.0077	0.0034	0.0061	0.0005	0.0002	0.0056	0.0063	0.00004	.	.	.
R Zn 12	0.006	0.008	0.009	0.024	0.005	0.002	0.008	0.009	(0.01)	0.007	0.007	0.004	0.006	.	.	0.009	0.006	99.9
R Zn 11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	.	<0.0005	.	.	.	.	.	.	<0.0010	99.99

CAST IRON SETTING-UP SAMPLES

chill cast		typical analysis															
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Nb	Sn	Ti	V	W	Mg	Ce
C Fe 5	4.12	0.2	0.09	0.03	0.36	0.08	0.08	0.11	0.11	0.05	<0.0015	0.003	0.02	0.13	.	.	.
NCS AH11355a	4.07	0.220	0.054	0.041	1.45	0.266	1.46	2.12	0.724	0.073	0.022	0.146	0.042	0.090	0.039	0.024	(0.0006)
SUS 5/58	3.8	0.60	.	0.006	2.1	0.006	1.02	0.02	0.073	0.04	.	0.07	0.004	0.49	.	0.09	0.03
SUS 2/50	3.6	0.71	0.28	0.10	1.8	0.41	0.48	0.04	0.09	0.01	.	0.13	0.05	0.54	.	.	.
SUS 5/59	3.5	0.66	.	0.008	1.9	0.006	1.06	0.01	.	0.04	.	0.07	0.004	0.46	.	0.10	0.03
SUS GGG	3.5	0.3	0.03	0.008	2.1	0.6	0.02	0.04	0.008	0.03	.	0.08	0.01	0.004	.	0.03	.
R G 13+Se	3.4	1.0	0.6	0.06	2.1	0.7	0.5	1.0	0.3	0.05	<0.01	0.3	0.03	0.3	0.01	.	.
SUS 3/21	3.4	0.90	1.0	0.10	2.2	0.01	0.01	0.25	<0.005	<0.005	.	<0.005	0.11	0.27	.	.	.
BS SU CCD	3.28	0.59	0.020	0.008	2.53	0.050	0.020	0.030	0.002	0.015	.	0.002	0.006	0.014	.	0.032	.
SUS 1/20	3.2	0.45	0.06	0.06	2.7	0.53	0.21	0.48	0.34	0.02	.	0.05	0.013	0.04	.	.	.
C Fe 8	3.2	0.42	0.025	0.02	1.3	0.062	0.11	0.05	<0.01	0.05	<0.001	0.01	0.05	0.04	<0.01	.	.
R G 16	3.2	0.2	0.2	<0.005	1.8	0.09	1.2	1.0	.	0.06	.	0.2	0.04	0.2	.	0.05	0.03
SUS 4/29	3.2	0.15	.	0.01	2.7	0.78	0.10	0.10	.	0.01	.	<0.005	0.06	0.51	.	0.02	.
R G 14	3.18	0.18	0.05	.	1.89	0.07	1.16	0.97	.	0.04	.	0.16	<0.01	0.15	.	0.06	0.04
R G 13	3.1	1.0	0.5	0.1	2.0	0.5	0.5	1.1	0.3	0.05	.	0.3	0.06	0.4	.	.	.
R N 15	2.9	1.6	0.008	0.07	<0.1	.	2.3	0.05	.	0.14	.	0.05	0.06	0.01	.	.	.
SUS 7/8	2.8	0.29	0.09	0.18	0.94	0.21	.	0.07	.	0.02	.	<0.01	0.06	0.06	.	.	.
BS DNR-2	2.72	0.85	0.031	0.006	2.52	0.02	18.9	1.62	0.007	<0.1	<0.05	<0.1	<0.05	<0.1	.	0.05	.
BS DNR-1	2.52	0.88	0.031	0.005	2.79	0.016	18.6	1.56	0.006	<0.1	<0.1	<0.1	<0.1	<0.1	.	0.04	.
NCS AH11354a	2.25	1.17	0.375	0.095	2.66	1.65	0.623	0.493	0.253	0.072	0.117	0.046	0.184	0.518	0.434	0.0056	(0.0033)
R G 15	2.1	0.8	0.3	0.1	4.4	<0.01	0.5	0.6	0.9	0.06	.	0.1	.	.	.	.	.
C Fe 4	1.53	0.40	0.012	0.012	0.31	0.06	0.27	11.4	0.75	<0.005	<0.02	<0.02	<0.02	0.90	<0.02	.	.

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Nb	Sn	Ti	V	W	Mg	Ce
C Fe 5
NCS AH11355a	.	0.013	.	.	.	0.027	(0.0003)	.	.	.	.	.	.	.	.	.	.
SUS 5/58	0.003	.	.	.	.	.	.	.	0.03	.	.	.	.	.	.	.	.
SUS 2/50
SUS 5/59	0.002	.	.	.	.	.	.	.	0.05	.	.	.	.	.	.	.	.
SUS GGG	0.003	.	.	.	.	.	.	.	.	.	.	.	.
R G 13+Se	<0.01	.	.	<0.001	.	~0.02	.	.	.	.	.	.	.
SUS 3/21
BS SU CCD	0.001	.	.	0.0027	0.009	.	.	.	.	.	.	.	.	.	.	.	.
SUS 1/20
C Fe 8	.	0.03	.	.	0.005	.	.	.	.	.	.	0.003	.	.	.	.	.
R G 16	.	0.01	.	.	.	0.01	.	.	.	.	.	.	.	.	.	.	.
SUS 4/29	<0.005	.	.	.	.	.	.	.	<0.005	.	.	.	.	.	.	.	.
R G 14	.	0.01	.	.	.	0.01	.	.	.	.	.	.	.	.	.	.	.
R G 13	.	0.006	.	.	0.01	.	.	.	.	.	.	.	.	.	.	.	.
R N 15	.	0.01	.	.	.	.	.	.	0.03	.	.	.	.	.	.	.	.
SUS 7/8	.	0.004	<0.001	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BS DNR-2	<0.1	Fe: [73.3]	.	<0.1	.	.	.	.	.	.	.	.	.
BS DNR-1	<0.1	Fe: [73.5]	.	<0.1	.	.	.	.	.	.	.	.	.
NCS AH11354a	.	0.055	.	.	0.094	(0.0013)	.	.	.	.	.	.	.	.	.	.	.
R G 15
C Fe 4	0.02	.	0.047	<0.02	.	.	.	.	.	.	.	.	.

CAST IRON SETTING-UP SET

Number	typical analysis		available in SET/6 only					34 mm Ø x 5 mm		
	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	
KTC-9 B1	2.40	0.04	0.005	0.11	3.03	0.04	1.03	0.99	0.049	
KTC-9 B2	2.61	0.23	0.024	0.082	2.69	0.20	0.81	0.81	0.20	
KTC-9 B3	3.05	0.37	0.049	0.059	2.28	0.40	0.60	0.62	0.43	
KTC-9 B4	3.36	0.55	0.069	0.039	1.91	0.61	0.41	0.42	0.62	
KTC-9 B5	3.70	0.83	0.094	0.021	1.49	0.82	0.21	0.21	0.83	
KTC-9 B6	4.08	0.99	0.12	0.003	0.94	1.01	0.05	0.06	1.06	

DUCTILE IRON SETTING-UP SET

Number	sold in set/5 only		typical analysis				45 mm Ø x 5 mm	
	Mg	C	Mn	P	S	Si		
KTC-10 M-1	0.05	3.4	0.1	0.015	0.002	2.5		
KTC-10 M-2	0.04	3.4	0.1	0.015	0.002	2.5		
KTC-10 M-3	0.03	3.4	0.1	0.015	0.002	2.5		
KTC-10 M-4	0.02	3.4	0.1	0.015	0.002	2.5		
KTC-10 M-5	0.01	3.4	0.1	0.015	0.002	2.5		

CARBON AND LOW ALLOY STEEL SETTING-UP SAMPLES

CONTINUED ON THE NEXT PAGE

typical analysis

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Al	Co	N	Ti	V	W
1.2080	2.15	0.24	0.03	0.004	0.34	.	0.16	11.52	0.03	.	0.02	.	<0.01	0.004	0.03	.
BS SU D2	1.52	0.29	0.024	0.0003	0.55	0.075	0.13	11.34	0.83	0.005	0.008	0.017	.	0.003	0.76	0.02
1.2379	1.5	0.17	0.02	0.005	0.30	0.19	0.34	11.4	0.61	.	<0.01	0.01	0.02	<0.001	0.87	.
R H 18	1.2	0.3	0.02	0.01	0.35	0.08	0.2	4.3	3.5	<0.01	0.04	9.2	.	<0.01	2.9	9.2
BR ST2	1.075	2.38	0.040	0.013	0.340	0.242	0.603	2.35	0.128	0.033	0.016	0.013	(0.0085)	0.013	0.156	0.194
KUT K3	1.03	0.46	(0.02)	0.010	0.32	0.09	0.18	1.63	.	.	.	.	.	.	.	.
1.2067	1.03	0.31	0.008	<0.005	0.28	0.10	0.07	1.44	0.02	.	0.02	0.007	<0.01	0.003	<0.001	.
BS SU E52100A	1.02	0.38	0.012	0.005	0.27	0.085	0.063	1.51	0.020	0.005	0.02	0.007	0.007	0.001	0.004	<0.05
BS SU E52100	1.00	0.40	0.016	0.012	0.24	0.090	0.046	1.47	0.011	0.006	0.017	0.005	0.0080	0.0014	0.0035	<0.005
R N 13	1	1.8	<0.005	<0.005	0.02	<0.005	3.1	<0.01	<0.01	0.05	0.4	<0.005	<0.01	<0.001	<0.005	0.07
R H 13	1	0.3	0.03	<0.01	0.4	0.10	0.3	3.8	4.7	<0.01	0.02	4	.	0.003	1.7	6
R N 16	0.99	1.79	<0.01	<0.01	0.01	<0.01	3.00	<0.01	<0.01	0.05	0.39	<0.01	<0.01	<0.001	<0.01	0.07
1.2842	0.95	2.11	0.014	<0.005	0.39	0.18	0.11	0.33	0.01	.	0.02	0.008	<0.01	0.001	0.09	.
BAM SUS-1 R	0.9	1.1	0.02	0.0174	0.8	0.7	2.9	1.7	0.9	.	.	0.3	.	.	0.5	0.7
1.3243	0.9	0.2	0.02	<0.005	0.38	0.1	0.3	3.9	4.8	.	0.02	4.5	.	<0.01	1.8	6.0
R Fe D	0.9	0.2	0.01	0.01	1.0	0.06	0.1	2.9	1.2	0.01	0.1	0.3	0.02	0.09	0.06	0.05
R N 19	0.89	1.45	0.11	0.09	1.16	0.75	3.09	3.06	0.92	0.09	0.28	0.80	(0.02)	0.16	0.51	0.40
NCS AH21311	0.856	0.312	0.017	0.005	0.33	0.261	0.048	3.93	4.83	.	0.36	4.86	.	0.17	1.90	6.25
SUS D	0.80	0.40	0.01	0.03	0.80	0.11	0.10	3.0	1.3	0.01	0.19	0.29	0.01	0.10	0.12	0.16
BS SU LAS 14-2	0.78	0.43	0.019	0.029	1.47	0.070	1.58	0.19	0.047	0.013	0.048	0.033	0.007	0.026	0.023	0.024
NCS AH21313	0.75	0.16	0.017	0.002	0.282	0.137	0.041	4.20	0.10	0.045	.	0.010	.	.	1.17	17.99
KUT K4	0.52	0.84	(0.02)	0.025	0.46	0.28	(0.1)	1.24	.	.	.	.	.	.	0.20	.
KUT K6	0.51	0.79	(0.02)	0.026	0.30	0.26	1.72	0.96	0.37	.	.	.	.	.	.	.
IMZ S-04	0.5	0.8	0.03	(0.2)	0.2	.	0.53	4.3	6.5	.	.	10.6	.	.	1.5	.
BS 02H	0.49	0.75	0.007	0.028	0.19	0.21	0.17	0.11	0.026	0.016	<0.001	0.007	.	<0.001	0.029	<0.001
BS SU 4340	0.411	0.75	0.008	0.0008	0.25	0.13	1.8	0.87	0.26	0.008	0.032	0.013	0.01	0.002	0.003	0.003
BS SU 8740	0.41	0.92	0.014	0.014	0.24	0.14	0.44	0.51	0.225	0.007	0.019	0.012	0.0085	.	.	.
1.7225	0.4	0.8	0.01	<0.01	0.3	0.02	<0.001	1.0	0.2	.	0.02	<0.01	0.01	<0.002	<0.005	.
BS SU41L40	0.39	0.90	0.01	0.02	0.26	0.13	0.25	0.97	0.20	0.01	0.02	0.008	<0.05	0.002	0.002	<0.05
BS SU 4942	0.39	0.61	0.009	0.002	0.25	0.06	0.13	0.94	0.59	0.006	0.014	0.007	0.006	0.002	0.27	0.002
C Fe 2 50mm	0.32	0.44	0.048	0.011	0.32	0.31	0.83	0.59	0.28	0.033	0.01	0.03	(0.02)	0.015	0.3	0.044
BS SU 4130A	0.301	0.539	0.0104	0.011	0.246	0.219	0.09	0.912	0.167	0.0096	0.024	0.008	.	<0.001	0.0038	0.005
C Fe 2	0.29	0.69	0.042	0.013	0.45	0.36	0.83	0.59	0.31	0.033	0.015	0.05	(0.02)	0.045	0.3	0.038
BS 210	0.28	0.56	0.021	0.018	0.42	0.084	1.86	0.70	0.23	(0.006)	0.016	.	.	.	0.005	.
BS SU LF-1a	0.234	0.74	0.013	0.020	0.21	0.032	0.022	0.012	0.013	0.002	<0.005	0.005	0.006	<0.005	0.002	.
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Al	Co	N	Ti	V	W
BS SU8620MOD	0.233	0.71	0.014	0.026	0.17	0.18	0.38	0.44	0.15	0.008	0.022	0.007	0.0092	<0.001	0.003	<0.005
BS SU LF-1	0.226	0.75	0.012	0.017	0.20	0.030	0.020	0.014	0.011	0.002	<0.005	0.006	0.006	<0.005	0.002	0.001
BS SU 8620A	0.22	0.81	0.008	0.028	0.26	0.16	0.62	0.54	0.20	0.009	0.022	0.006	0.009	0.0008	0.0053	.
BS SU LF-2B	0.21	1.05	0.007	0.010	0.23	0.19	0.088	0.16	0.029	0.007	0.022	0.006	0.008	0.0004	0.003	<0.05
BS SU 4620	0.21	0.58	0.010	0.023	0.23	0.14	1.69	0.15	0.26	0.008	0.022	0.009	0.0090	0.002	0.002	.
1.0580	0.2	1.3	0.01	<0.01	0.2	0.08	0.04	0.05	0.01	.	0.03	<0.01	.	<0.001	<0.005	.
1.7131	0.2	1.2	0.01	0.02	0.2	0.2	0.1	1.1	0.02	.	0.02	0.01	.	0.001	0.004	.
BS SU 4820	0.197	0.640	0.008	0.014	0.190	0.210	3.27	0.165	0.201	0.010	0.030	0.009	0.0078	0.002	0.001	0.004
BS 03D	0.18	1.15	0.025	0.10	0.28	0.27	0.11	0.18	0.04	0.017	<0.001	0.02	0.011	.	.	.
BS SU 1018D	0.18	0.87	0.004	0.026	0.24	0.20	0.066	0.088	0.015	0.010	<0.001	0.007	.	<0.001	0.002	<0.001
BS SU 1018F	0.18	0.80	0.017	0.017	0.31	0.27	0.12	0.17	0.040	0.011	0.004	0.008	<0.05	0.001	0.002	0.004
1.5415	0.18	0.7	0.006	0.003	0.32	0.06	0.13	0.2	0.25	.	0.04	0.004	.	<0.002	<0.01	.
IMZ S-07	0.18	0.23	0.06	0.1	1.7	0.17	2.0	2.1	0.12	.	.	0.02	.	0.02	0.15	2.3
BS SU 1018C	0.17	0.87	0.006	0.018	0.25	0.20	0.074	0.089	0.020	0.010	0.001	0.007	.	0.001	0.032	<0.001
BS SU LF-3	0.17	0.83	0.008	0.011	0.22	0.07	3.25	0.11	0.017	0.005	0.021	0.010	0.0067	0.002	0.0024	.
BS SU 11L17	0.169	1.14	0.011	0.116	0.009	0.032	0.046	0.081	0.018	.	0.002	.	.	0.003	0.002	0.001
BS 213	0.152	0.68	0.015	0.005	0.49	0.059	2.68	0.37	(0.008)	(0.002)	(0.04)	.	.	.	(0.004)	(0.006)
CZ CM-22A (RM)	0.154	1.443	0.086	0.084	0.248	0.419	3.10	0.167	0.132	0.069	(0.004)	0.130	0.0065	0.0038	0.653	0.59
BS 207	0.15	0.51	0.017	0.013	0.39	0.033	0.017	0.37	0.005	(0.003)	0.007	.	.	.	0.002	.
IMZ 501	0.15	0.32	0.019	.	0.40	.	0.11	13.24	.	.	.	.	.	.	.	.
IMZ 503	0.14	0.47	0.029	.	0.37	.	0.19	11.43	0.62	.	.	.	.	.	0.30	.
BS SU 9310	0.125	0.57	0.010	0.016	0.23	0.19	3.25	1.29	0.127	0.014	0.026	0.016	0.0102	0.002	0.005	.
R Fe C	0.12	1.37	0.05	0.06	0.33	0.67	3.10	0.4	0.09	0.04	0.005	0.06	<0.01	0.01	0.50	0.50
BS SU 9310A	0.12	0.57	0.009	0.016	0.22	0.19	3.2	1.3	0.13	0.014	0.026	0.015	0.0096	0.003	0.005	.
BS 214	0.10	0.65	0.019	0.012	0.34	0.10	3.70	0.21	0.02	(0.005)	0.025	.	.	.	(0.004)	<0.008
KUT K9	0.096	1.53	(0.01)	0.018	0.59	0.73	0.97	0.64	0.56	.	(0.01)	.	.	0.11	0.27	.
IMZ S-11	0.095	0.35	0.01	0.015	1.8	.	0.66	6.5	.	.	.	.	.	.	.	.
BS SU LAS13/3	0.092	1.64	0.069	0.007	0.15	0.46	0.17	1.13	0.81	0.067	0.27	0.23	0.023	0.13	0.41	0.12
1.0737	0.09	1.2	0.06	0.3	<0.01	0.006	0.01	0.01	0.005	.	<0.001	0.003	.	.	.	.
C Fe 9	0.09	1.2	0.06	0.3	0.001	0.006	0.01	0.01	0.005	.	0.0005	0.003	.	.	.	.
R N 14	0.05	0.7	0.09	0.08	1.7	0.7	.	2.9	0.5	<0.01	0.025	0.4	0.02	0.06	0.5	0.35
SUS A/8	0.03	0.16	<0.005	0.01	0.01	0.01	0.04	0.02	<0.005	<0.005	0.04	0.02	.	<0.005	<0.005	<0.005
SAG 0203	.	1.12	0.008	.	0.16	0.020	0.030	1.00	0.01	<0.001	0.030	0.004	.	<0.001	0.003	<0.001
SAG 0204	.	0.80	0.016	.	0.29	0.020	0.040	0.18	0.040	<0.001	0.030	0.003	.	<0.001	<0.001	<0.001
SAG 0202	.	0.51	0.007	.	0.22	0.010	0.020	0.020	.	0.001	.	0.003	.	.	.	.
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Al	Co	N	Ti	V	W

CARBON AND LOW ALLOY STEEL SETTING-UP SAMPLES - CONTINUED FROM PREVIOUS

typical analysis

Number	As	B	Bi	Ca	Nb	O	Pb	Sb	Ta	Te	Zn	Zr	Units
1.2080	.	.	.	.	0.004	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS SU D2	0.003	0.0002	.	.	0.004	.	0.0006	0.003	.	.	.	.	38 mm Ø x 40 mm
1.2379	.	.	.	.	<0.01	.	.	.	.	.	.	.	40 mm Ø x 25 mm
R H 18	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BR ST2	0.027	0.0018	.	.	0.086	.	(0.001)	(0.002)	.	.	.	0.005	45 mm Ø x 30 mm last
KUT K3	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
1.2067	.	.	.	.	0.005	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS SU E52100A	0.003	.	.	<0.005	0.001	<0.005	<0.005	<0.05	.	.	.	0.002	38 mm Ø x 40 mm Fe: [96.6]
BS SU E52100	0.004	0.0001	.	<0.0005	0.0008	0.001	<0.0005	.	.	.	.	0.0004	38 mm Ø x 40 mm Fe: [96.7]
R N 13	<0.001	<0.001	<0.001	<0.001	<0.005	.	<0.001	0.04	<0.001	<0.005	.	0.1	40 mm Ø x 40 mm
R H 13	.	.	.	.	0.02	.	.	.	.	.	.	.	40 mm Ø x 40 mm
R N 16	<0.01	<0.001	<0.001	<0.001	<0.01	.	<0.01	0.04	<0.01	<0.01	.	0.18	40 mm Ø x 40 mm
1.2842	.	.	.	.	<0.01	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BAM SUS-1 R	.	.	.	.	0.6	.	.	.	.	.	.	.	50 mm Ø x 42 mm
1.3243	.	.	.	.	<0.01	.	.	.	.	.	.	.	40 mm Ø x 25 mm
R Fe D	<0.01	<0.01	<0.005	0.001	0.3	.	<0.005	0.07	0.03	0.001	.	0.03	40 mm Ø x 40 mm
R N 19	0.06	0.006	0.008	.	0.42	.	0.01	0.02	0.28	0.01	0.01	0.05	40 mm Ø x 40 mm
NCS AH21311	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
SUS D	.	<0.001	.	.	0.05	.	.	.	.	.	.	.	44 mm Ø x 25, 75, or 150 mm
BS SU LAS 14-2	0.011	0.004	<0.05	0.002	0.016	0.004	0.014	0.021	0.007	.	0.003	0.008	37 mm Ø x 40 mm Fe: [95.1]
NCS AH21313	0.027	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
KUT K4	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
KUT K6	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
IMZ S-04	.	.	.	.	.	.	.	.	.	.	.	.	43 mm Ø x ~35 mm
BS 02H	0.006	0.0004	.	0.0012	<0.001	.	<0.001	<0.001	<0.001	.	.	<0.001	38 mm Ø x 150 mm
BS SU 4340	0.005	0.0002	.	0.0002	0.004	0.0007	0.0001	.	.	.	.	0.002	38 mm Ø x 40 mm Fe: 95.5
BS SU 8740	.	.	.	.	.	0.0016	.	.	.	.	.	.	38 mm Ø x 40 mm
1.7225	.	.	.	.	<0.002	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS SU41L40	<0.05	<0.005	.	<0.005	<0.05	<0.05	0.14	.	.	.	.	<0.05	41 mm Ø x 40+ mm Fe: 96.6
BS SU 4942	0.0009	<0.0005	.	<0.005	0.001	0.001	<0.005	.	.	.	.	<0.005	38 mm Ø x 40 mm Fe: [96.7]
C Fe 2 50mm	0.053	0.0032	.	0.0006	0.015	.	(0.0006)	0.02	0.02	.	.	.	40 mm Ø x 50 mm
BS SU 4130A	0.005	0.0015	.	<0.001	0.002	.	<0.0005	<0.01	0.009	.	.	0.001	38 mm Ø x 40 mm Fe: [97.4]
C Fe 2	0.045	0.0015	.	<0.001	0.018	.	(0.0009)	0.005	0.03	.	.	.	40 mm Ø x 40 mm
BS 210	.	.	.	.	0.016	.	.	.	.	.	.	.	32 mm Ø x 17 mm last
BS SU LF-1a	<0.005	<0.005	.	0.002	<0.005	0.012	0.001	.	.	.	.	<0.005	~36 mm Ø x ~40 mm Fe: [98.69]

Number	As	B	Bi	Ca	Nb	O	Pb	Sb	Ta	Te	Zn	Zr	Units
BS SU8620MOD	0.005	0.0002	.	0.0007	0.001	0.0009	Fe: [97.6]	Mg: 0.0002	.	.	.	<0.001	38 mm Ø x 40 or 150 mm
BS SU LF-1	<0.005	<0.005	.	0.002	<0.005	0.010	0.001	.	.	.	.	<0.005	~36 mm Ø x ~40 mm Fe: 98.71
BS SU 8620A	0.005	0.0003	.	0.0006	0.003	0.0019	0.0005	.	.	.	Mg: 0.0002	0.0007	38 mm Ø x 40 mm Fe: 97.1
BS SU LF-2B	0.003	0.0002	<0.05	0.0080	<0.005	0.002	<0.005	0.001	0.004	.	.	0.001	38 mm Ø x 40 or 150 mm Fe: 97.98
BS SU 4620	.	.	.	.	.	0.002	.	.	.	.	.	.	44 mm Ø x 40 mm
1.0580	.	.	.	.	0.03	.	.	.	.	.	.	.	40 mm Ø x 25 mm
1.7131	.	.	.	.	<0.002	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS SU 4820	0.006	<0.0005	.	0.0003	0.003	0.0016	<0.0005	0.003	0.006	Mg: 0.0004	.	<0.0005	38 mm Ø x 40 mm Fe: [95.2]
BS 03D	.	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x 150 mm
BS SU 1018D	0.005	0.0005	.	0.001	0.003	.	<0.002	<0.001	<0.001	.	.	<0.001	41 mm Ø x ~110 mm last
BS SU 1018F	0.004	0.0003	.	<0.005	0.001	<0.05	.	0.002	.	.	.	0.001	38 mm Ø x 150 mm Fe: [98.92]
1.5415	.	.	.	.	<0.01	.	.	.	.	.	.	.	40 mm Ø x 25 mm
IMZ S-07	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~30 mm
BS SU 1018C	0.006	0.0006	.	0.0012	0.002	.	<0.002	<0.001	<0.001	.	.	0.001	38 mm Ø x ~40 mm last
BS SU LF-3	.	.	.	.	.	0.002	.	.	.	.	.	.	44 mm Ø x 40 mm
BS SU 11L17	.	<0.0005	.	<0.0005	0.002	0.016	0.27	.	.	.	.	.	41 mm Ø x 40 mm Fe: [98.1]
BS 213	.	.	.	.	0.013	.	.	.	.	.	.	.	32 mm Ø x 17 mm Tl: (0.002)
CZ CM-22A (RM)	0.057	.	.	.	0.019	.	.	.	.	.	.	.	~39 mm Ø x ~25 mm
BS 207	.	.	.	.	0.024	.	.	.	.	.	.	.	32 mm Ø x 17 mm
IMZ 501	.	.	.	.	.	.	.	.	.	.	.	.	48 mm Ø x 25 mm
IMZ 503	.	.	.	.	.	.	.	.	.	.	.	.	48 mm Ø x 25 mm
BS SU 9310	.	.	.	.	0.006	0.002	.	.	.	.	.	.	38 mm Ø x 40 mm
R Fe C	0.05	<0.005	0.003	<0.001	0.01	0.001	0.001	0.01	0.19	0.002	0.001	<0.001	40 mm Ø x 40 mm
BS SU 9310A	0.004	<0.005	.	<0.005	0.008	0.0016	<0.005	.	.	.	.	<0.005	38 mm Ø x 40+ mm Fe: [94.1]
BS 214	.	.	.	.	(0.007)	.	.	.	.	.	.	.	32 mm Ø x 17 mm Tl: (0.002)
KUT K9	.	.	.	.	(0.04)	.	.	.	.	.	.	.	30-35 mm Ø x 18 mm
IMZ S-11	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~25 mm
BS SU LAS 13/3	0.045	0.003	0.020	0.0006	0.14	0.005	0.004	0.009	0.052	Ce: 0.009	0.010	0.021	37 mm Ø x 40 mm Mg: 0.0002
1.0737	.	.	.	.	.	.	0.3	.	.	.	.	.	40 mm Ø x 25 mm
C Fe 9	0.003	0.0001	.	.	.	.	0.3	0.0005	.	.	.	.	40 mm Ø x 30, 40, or 50 mm
R N 14	0.06	<0.01	<0.01	.	0.5	.	0.01	<0.01	0.1	<0.01	.	.	40 mm Ø x 40 mm
SUS A/8	.	.	.	.	<0.005	.	.	.	.	.	.	.	44 mm Ø x 75 mm
SAG 0203	0.002	<0.0005	.	<0.001	<0.001	.	<0.001	<0.001	<0.001	<0.001	.	.	32 mm Ø x 40 mm
SAG 0204	0.002	<0.0005	.	<0.001	<0.001	.	<0.001	<0.001	<0.001	<0.001	.	.	40 mm Ø x 40 mm
SAG 0202	0.001	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm

* NCS 28301 also contains Al(ins): 0.0049 and Al(sol): 0.0056.

LOW ALLOY STEEL SETTING-UP SETS WITH SOLUBLE/INSOLUBLE VALUES

available in SETS only, as grouped		Sol. = soluble										Ins. = insoluble				typical analysis				35 mm Ø x 20 mm			
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Sol.Al	Ins.Al	B	Ca	Sol.N	Ins.N							
KTC-1/5 01	0.0008	0.01	0.001	<0.001	<0.01	0.01	0.01	0.01	<0.001	.	<0.001	<0.001	0.0002	0.0001	.	.							
KTC-1/5 02	0.10	0.21	0.003	0.005	0.61	0.07	0.05	3.99	0.50	.	0.003	0.001							
KTC-1/5 03	0.16	0.76	0.002	0.009	0.40	0.70	0.10	3.24	0.40	.	0.012	<0.001							
KTC-1/5 04	0.20	2.01	0.010	0.016	0.05	0.10	0.52	2.51	0.32	.	0.083	<0.001							
KTC-1/5 05	0.24	1.63	0.013	<0.001	0.26	0.40	1.02	2.04	0.10	.	0.036	0.002	.	0.0002	.	.							
KTC-1/5 06	0.36	1.33	0.049	0.001	0.36	0.50	1.53	1.54	0.20	.	0.020	0.001	0.0005	0.0006	.	.							
KTC-1/5 07	0.51	1.02	0.040	0.029	0.30	0.20	2.05	1.02	0.62	.	0.029	0.001	0.0009	0.0018	.	.							
KTC-1/5 08	0.66	0.50	0.031	0.023	0.16	0.31	2.54	0.51	1.01	.	0.056	<0.001	0.0020	0.0030	.	.							
KTC-1/5 09	0.80	0.31	0.019	<0.001	0.20	0.15	3.26	0.10	0.84	.	0.064	<0.001	0.0038	0.0031	.	.							
KTC-1/5 10	1.05	0.10	0.006	0.022	0.10	0.07	4.06	0.07	0.050	.	0.090	0.001	0.0088	.	.	.							
KTC-15 N-1	0.015	0.10	0.002	0.003	0.10	.	.	0.21	.	0.050	.	.	.	.	0.0012	0.0001			
KTC-15 N-2	0.014	0.10	0.002	0.003	0.10	.	.	0.29	.	0.048	.	.	.	.	0.0048	0.0002			
KTC-15 N-3	0.012	0.10	0.002	0.003	0.10	.	.	0.19	.	0.048	.	.	.	.	0.0076	0.0003			
KTC-15 N-4	0.012	0.10	0.003	0.004	0.10	.	.	0.20	.	0.048	.	.	.	.	0.0110	0.0002			
KTC-15 N-5	0.012	0.11	0.003	0.004	0.10	.	.	0.41	.	0.050	.	.	.	.	0.0194	0.0008			

Number	As	Co	Nb	Sn	Ti	V	W
KTC-1/5 01	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.01
KTC-1/5 02	0.010	0.010	0.10	0.062	0.021	0.40	.
KTC-1/5 03	0.010	0.15	0.069	0.042	0.10	0.022	.
KTC-1/5 04	0.021	0.050	0.019	0.021	0.31	.	.
KTC-1/5 05	0.044	0.10	0.040	0.010	0.011	0.31	.
KTC-1/5 06	0.062	0.20	0.010	.	0.054	0.052	.
KTC-1/5 07	.	.	.	.	0.20	0.11	0.05
KTC-1/5 08	.	.	.	.	0.16	0.15	0.12
KTC-1/5 09	.	.	.	.	.	0.21	0.22
KTC-1/5 10	.	.	.	.	.	0.50	0.15
KTC-15 N-1	.	.	.	.	.	.	.
KTC-15 N-2	.	.	.	.	.	.	.
KTC-15 N-3	.	.	.	.	.	.	.
KTC-15 N-4	.	.	.	.	.	.	.
KTC-15 N-5	.	.	.	.	.	.	.

LOW ALLOY STEEL SETTING-UP SET

SOLD AS SET/3 ONLY		typical analysis										formerly known as set ST A-C				35 mm Ø x 20 mm				
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Sol.Al	Ins.Al	Nb	Ti	V	W	As	B	Ca	Co
KTC-2 A	1.00	0.01	0.002	0.001	0.05	0.11	4.09	.	.	.	0.086	<0.001	0.10	0.36	0.03	0.19	.	.	.	.
KTC-2 B	0.01	0.52	0.045	.	0.57	0.69	0.50	3.98	0.20	0.093	.	.	0.03	.	.	.	0.050	0.0085	0.0035	0.01
KTC-2 C	0.11	1.96	.	0.028	.	.	.	0.50	1.00	.	0.019	0.001	.	0.50	.	.	.	.	.	0.20

STAINLESS STEEL SETTING-UP SAMPLE SETS

available in SETS only, as grouped		Sol. = soluble										Ins. = insoluble				typical analysis				35 mm Ø x 20 mm			
Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sol.Al	Ins.Al	As	Co	Nb	Ti	Pb	Ta						
KTC-3/1 21	0.13	0.40	0.003	0.024	0.18	.	4.03	27.02	.	.	.	0.003	.	0.003	.	.	.						
KTC-3/1 22	0.058	0.62	0.029	0.005	0.43	.	19.73	24.90	.	0.073	0.003	0.001						
KTC-3/1 23	0.11	1.60	0.005	0.021	0.82	0.048	9.99	22.17	1.01	0.045	0.003	0.104	.	<0.01	.	0.005	.						
KTC-3/1 24	0.084	0.80	0.009	0.014	0.60	0.031	14.12	20.18	1.46	0.006	0.004	0.050	.	.	.	0.018	.						
KTC-3/1 25	0.027	1.42	0.010	0.021	1.43	0.011	8.05	18.32	2.49	0.001	0.001	0.012	0.050	.	.	0.044	.						
KTC-3/1 26	0.044	1.19	0.021	0.008	1.01	.	17.62	16.18	0.49	0.004	0.002	.	0.21	0.29	0.075	.	0.40						
KTC-3/1 27	0.057	1.00	0.019	0.011	1.19	.	15.74	13.39	0.008	0.016	0.002	.	0.014	1.53	0.24	.	0.24						
KTC-3/1 28	0.011	0.22	0.036	0.003	0.10	.	29.79	10.06	.	0.019	<0.001	.	.	0.072	0.45	.	0.054						
ST I	0.26	0.21	0.008	0.024	0.19	0.01	0.01	26.78	0.046	0.002	0.004	<0.001	0.003	0.013	0.010	CLEARANCE SALE							
ST H	0.088	0.47	0.009	0.010	0.50	0.04	0.57	17.95	0.49	0.031	0.005	0.011	0.054	0.094	0.094	CLEARANCE SALE							
ST G	0.031	1.37	0.029	0.005	1.26	0.19	3.87	11.85	1.14	0.086	0.005	0.075	0.19	0.98	0.30	CLEARANCE SALE							
KTC-5 31	0.068	0.51	0.023	0.005	1.24	0.19	3.91	11.23	0.71	0.10	0.003	0.10	0.19	0.90	0.31	.	.						
KTC-5 32	0.040	1.16	0.030	0.007	0.52	0.01	2.56	12.71	1.01	0.013	0.004	0.008	0.014	0.082	0.051	.	.						
KTC-5 33	0.044	0.30	0.008	0.022	0.32	0.10	1.03	15.12	1.19	0.031	0.004	0.001	0.10	0.30	0.007	.	.						
KTC-5 34	0.084	0.99	0.025	0.004	0.78	0.04	0.48	16.99	0.48	0.045	0.006	0.009	0.051	0.083	0.098	.	.						
KTC-5 35	0.22	1.35	0.002	0.029	0.58	<0.01	0.05	24.14	0.029	0.057	0.007	<0.001	0.005	0.007	0.005	.	.						
KTC-5 36	0.15	0.43	0.014	0.009	0.14	<0.01	0.11	22.31	0.043	0.001	0.008	<0.001	0.003	0.001	0.005	.	.						
KTC-5 37	0.11	0.74	0.007	0.019	0.99	<0.01	0.20	19.51	0.20	0.001	0.002	<0.001	0.002	<0.001	0.003	.	.						
KTC-5 38	0.30	0.19	0.010	0.013	0.40	<0.01	0.01	25.52	0.004	0.001	0.002	<0.001	0.002	<0.001	0.003	.	.						
JSM M205 1	0.054	0.43	0.031	0.011	0.27	0.09	0.26	15.9	0.13	.	.	.	0.022	.	N:0.0409	.	V:0.052						
JSM M205 2	0.049	1.64	0.042	0.26	0.36	0.35	8.46	17.0	0.29	Al: <0.005	.	.	0.17	.	N:0.077	.	V:0.049						
JSM M205 3	0.059	1.48	0.034	0.025	0.49	0.38	8.16	18.2	0.22	Al: <0.005	.	.	0.21	.	N:0.079	.	V:0.099						
JSM M205 4	0.028	1.85	0.035	0.010	0.27	0.52	9.09	19.4	0.31	Al: <0.005	.	.	1.9	.	N:0.076	.	V:0.10						
JSM M205 5	0.068	1.58	0.033	0.001	0.32	0.26	13.1	22.1	0.19	Al: <0.005	.	.	0.27	.	N:0.067	.	V:0.080						
JSM M205 6	0.020	1.08	0.029	<0.001	0.39	0.32	19.1	24.2	0.17	Al: 0.010	.	.	0.35	.	N:0.0281	.	V:0.074						
JSM M205 7	0.057	1.31	0.034	0.026	0.47	0.30	10.2	16.6	2.04	Al: <0.005	.	.	0.24	.	N:0.0472	.	V:0.079						
JSM M205 8	0.022	1.28	0.036	0.017	0.51	0.27	12.1	17.2	2.02	Al: <0.005	.	.	0.17	.	N:0.0432	.	V:0.046						

ALUMINUM IN XRF DISCS

typical analysis

30-40 mm Ø x 5 mm

Number	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	BaO	Bi ₂ O ₃	CaO	Fe ₂ O ₃	GeO ₂	K ₂ O	MgO	MoO ₃	Na ₂ O	P ₂ O ₅	PbO	Sb ₂ O ₃	SiO ₂	TiO ₂	V ₂ O ₅	WO ₃
BR CH1	28.0	0.8	20.0	1.0	1.0	.	7.0	0.3	8.0	.	.	6.5	14.0	.	.	9.11	0.1	0.3	1.2
SV C	27.15	0.78	19.23	1.0	0.5	0.03	5.4	0.27	6.9	.	2.0	7.9	15.6	.	.	9.9	0.1	0.26	0.9
BR PC 3	27.1	0.78	19.1	1.0	0.50	0.03	5.4	0.27	6.9	.	2.0	7.9	15.6	.	.	9.9	0.10	0.26	0.90
BR CS1	27.1	0.78	19.23	1.0	0.5	0.03	5.4	0.27	6.9	.	2.0	7.9	15.6	.	.	11.3	0.1	0.26	0.05
FLX CH2/1	24.83	2.68	8.76	.	0.82	15.57	0.79	1.86	0.30	7.99	1.03	10.11	4.87	3.20	2.16	8.40	.	1.54	0.45
BR ACEM	21.68	.	19.88	.	.	10.53	11.93	.	3.14	7.03	.	11.15	0.20	2.0	2.0	9.56	0.20	.	.
FLX PR3	17.68	.	.	.	.	3.16	.	.	.	6.76	.	.	9.72	.	.	41.28	3.32	.	.
FLX S7	15.46	.	.	.	.	10.1	11.52	.	3.14	4.71	.	3.38	0.28	.	.	48.06	2.36	.	.

Number	CdO	Ce ₂ O ₃	Cr ₂ O ₃	La ₂ O ₃	MnO	Mn ₂ O ₃	Nb ₂ O ₅	Nd ₂ O ₃	NiO	Pr ₂ O ₃	Rb ₂ O	SO ₃	SrO	U ₃ O ₈	ZrO ₂
BR CH1	0.15	.	.	.	0.5	.	0.7	0.5	0.3	0.4	0.04	.	.	0.1	.
SV C	0.66	.	.	.	0.47	.	0.6	0.46	0.29	0.2	.	.	.	.	last
BR PC 3	0.16	.	.	.	0.47	.	0.60	0.46	0.29	0.20	.	.	.	.	.
BR CS1	0.16	.	.	.	0.47	.	.	0.46	0.29	0.2	.	.	.	.	.
FLX CH2/1	.	1.23	.	0.87	.	.	.	0.44	Li2O:1.20	.	.	.	0.55	.	0.33
BR ACEM	.	.	.	.	0.20	.	.	.	.	.	.	0.50	.	.	.
FLX PR3	.	.	1.07	.	.	.	.	.	0.373	.	.	.	.	.	.
FLX S7	.	.	.	.	0.234	.	.	.	.	.	.	.	.	.	.

ANTIMONY AND ARSENIC IN XRF DISC

typical analysis

40 mm Ø x 6 mm

Number	As ₂ O ₃	CaO	Co ₃ O ₄	K ₂ O	MnO	MoO ₃	Na ₂ O	Sb ₂ O ₃	SiO ₂
FLX K04	2.12	14.8	0.52	2.18	6.81	2.9	5.22	2.12	29.9

BARIUM IN XRF DISCS

typical analysis

40 mm Ø x 5 mm

Number	BaO	SiO ₂	TiO ₂	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	CaO	CeO ₂	Cr ₂ O ₃	CuO	Fe ₂ O ₃	K ₂ O	MgO	Na ₂ O	PbO	Sb ₂ O ₃	SrO	ZnO	ZrO ₂
BR M 1	62.2	0.2	33.5	1.3	.	.	.	.	.	2.8	0.02	.	.	.	.	.	.	.	last
BR 4/L	24.70	35.00	2.33	0.70	0.31	4.25	4.77	0.0	.	.	0.02	1.85	0.0	1.08	18.70	0.20	0.22	4.98	0.0 last
BR BG18	11.5	78.4	.	.	.	3.5	.	.	.	3.6	.	1.0	.	.	.	.	.	1.0	.

BORON IN XRF DISCS

typical analysis

30-40 mm Ø x 5 mm

Number	B ₂ O ₃	Al ₂ O ₃	As ₂ O ₃	CaO	CdO	Cr ₂ O ₃	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	NiO	P ₂ O ₅	PbO	SO ₃	Sb ₂ O ₃	SiO ₂	SnO	SnO ₂	TiO ₂	ZnO	
BR AN1/1	61.43	22.6	.	0.03	1.04	0.68	0.1	0.83	0.6	.	1.7	0.78	0.4	0.92	0.5	.	3.0	.	.	0.6	1.2	
BR DSH2	45.0	21.80	.	0.71	.	0.68	0.70	0.83	0.60	.	17.82	0.78	0.57	0.92	0.50	.	3.0	.	.	0.60	0.80	
BR DSH1	41.82	21.82	.	0.71	2.0	0.68	0.70	0.83	0.60	2.0	17.0	0.78	0.57	0.92	0.50	.	3.0	.	0.79	0.60	0.80	
FLX PR2	41.0	.	.	.	.	.	9.02	19.45	.	.	.	.	.	2.79	.	.	23.57	.	1.05	.	.
BR WR2	40.0	0.1	.	1.1	.	0.1	9.0	5.0	15.0	0.5	10.0	.	0.5	.	0.5	0.5	15.8	.	.	0.5	.	
BR MM1	31.10	9.0	.	3.0	.	.	0.50	2.0	5.0	10.0	16.0	2.0	0.50	4.0	0.10	0.50	6.0	.	1.0	3.0	5.0	
BR WR1	30.0	13.0	.	30.0	.	1.5	0.1	2.0	5.0	0.2	5.0	0.1	.	0.1	0.1	0.5	12.5	.	.	.	.
BR OS1	26.68	15.11	2.0	14.0	.	.	.	13.43	.	.	10.78	.	.	5.0	.	2.0	5.0	.	.	.	6.0	
SV D	25.2	15.3	2.0	15.0	.	.	0.5	.	9.0	.	10.0	.	.	5.0	1.0	.	2.0	.	3.0	.	5.0	
BR DS1	23.62	20.0	.	14.40	.	.	0.58	0.09	7.4	.	9.6	.	.	5.8	1.7	.	1.85	.	.	0.03	3.7	
BR AX3	23.28	18.89	.	7.0	.	.	12.0	3.14	7.03	.	11.15	.	0.2	4.0	0.5	2.0	9.56	.	.	.	.
BR PD 3	22.2	20.6	1.86	14.4	.	.	0.58	0.09	7.4	.	9.6	.	.	5.8	1.7	.	1.85	.	.	0.03	3.7	
BR U 30	22.0	20.0	14.0	.	14.0
BR WIE3/II	21.77	.	.	8.0	.	.	.	10.0	.	.	15.0	12.73	.	10.77	.	.	2.0	.	7.28	.	12.45	
BR KAl	20.79	20.0	.	10.0	.	.	0.01	1.0	15.0	.	11.0	.	.	2.0	.	0.2	1.0	.	4.0	.	15.0	
BR WIE3/I	20.0	18.9	.	5.0	.	.	14.3	3.0	.	.	11.0	.	.	.	.	.	2.0	.	7.28	11.32	.
BR ARL2	20.0	12.0	0.5	0.5	2.0	.	.	.	3.0	25.0	12.0	.	1.0	.	0.5	.	19.4	.	0.5	.	2.0	

Number	Ag ₂ O	BaO	Bi ₂ O ₃	CuO	CeO ₂	Ce ₂ O ₃	Cl	Ga ₂ O ₃	GeO ₂	In ₂ O ₃	La ₂ O ₃	Nb ₂ O ₅	MoO	MoO ₃	Se	SrO	Ta ₂ O ₅	Te ₂ O ₃	V ₂ O ₅	WO ₃	ZrO ₂	
BR AN1/1	.	0.89	1.2	0.8	.	.	0.1	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	.
BR DSH2	.	0.89	1.20	0.80	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.60	.	.
BR DSH1	0.93	0.89	.	0.80	.	.	0.60	.	.	.	.	.	0.66	.	.	.	.	.	.	.	.	.
FLX PR2
BR WR2	3.76	.	1.5
BR MM1	.	.	0.30	.	.	.	.	.	.	.	.	.	.	.	1.0	.	.	.	.	.	.	.
BR WR1
BR OS1
SV D	.	.	1.0	.	1.0	.	.	.	1.5	.	1.0	.	.	1.0	.	.	.	.	1.0	.	0.5	
BR DS1	0.84	.	0.46	.	.	0.88	.	.	0.87	.	0.13	.	.	0.86	0.05	0.34	
BR AX3	.	.	1.25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BR PD 3	.	.	0.18	.	.	0.84	.	0.46	0.41	.	0.88	.	.	0.87	.	0.13	.	.	0.86	0.32	0.34	
BR U 30
BR WIE3/II
BR KAl
BR WIE3/I	1.21	.	1.43	.	1.43	.	.	.	.	1.8	1.26	.	.
BR ARL2	.	.	0.5	.	.	.	.	.	.	.	.	.	.	.	.	.	0.5	0.1	.	.	0.5	.

CARBONATE IN XRF DISC

typical analysis 38-40 mm Ø x 5-8 mm

Number	CO ₂	Al ₂ O ₃	BaO	CaO	Cl	F	Fe ₂ O ₃	MgO	Na ₂ O	P ₂ O ₅	SO ₃	SiO ₂	SrO	
FLX MB2	Rem	0.02	0.03	50.04	.	.	.	0.91	0.07	.	.	0.02	0.02	
ASO TUD	47.51	0.207	.	30.28	0.013	<0.01	0.023	21.76	0.046	0.012	0.023	0.093	0.004	last

CALCIUM AND FLUORITE IN XRF DISCS

typical analysis 38-40 mm Ø x 5-8 mm

Number	CaO	CaF ₂	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	Cr ₂ O ₃	F	Fe ₂ O ₃	K ₂ O	MgO	MnO	Mn ₂ O ₃	Na ₂ O	P ₂ O ₅	SO ₃	SiO ₂	TiO ₂
FLX C1	44.11	.	10.09	.	23.8	0.07	.	2.27	0.76	1.51	0.16	.	0.80	0.17	0.53	16.59	0.14
BR SP1/1	40.60	.	5.0	.	25.65	.	.	2.0	2.0	8.0	.	.	1.0	.	0.05	15.0	.
BR BF2	37.0	.	10.0	.	3.43	.	.	1.0	0.4	8.0	0.77	.	2.0	0.2	36.0	1.0	.
BR BCEM	35.00	.	4.88	.	2.40	.	.	2.25	0.99	2.37	.	0.01	2.12	0.01	0.50	49.15	0.01
BR U 33	34	.	0.06	.	.	.	.	0	.	22	.	.	.	.	.	0.046	.
FLX C2	33.69	.	2.75	.	18.1	0.18	1.63	1.6	0.51	1.27	0.07	.	0.3	0.45	0.18	36.16	0.12
FLX Z1	32.77	.	0.42	.	41.6	.	3.54	0.09	0.09	0.29	0.05	.	5.51	0.23	3.59	12.18	0.08
BR SP2	30.0	.	9.0	.	19.50	.	.	5.0	2.0	6.0	.	.	2.0	.	0.30	25.0	.
BR WR1	30.0	.	13.0	.	30.0	1.5	.	0.1	2.0	5.0	0.2	.	5.0	0.1	0.1	12.5	.
FLX C3	29.36	.	11.16	.	31.0	0.09	.	1.87	0.733	2.87	0.16	.	2.22	0.58	0.40	19.76	0.19
FLX SP1	28.61	.	.	3.53	.	.	.	2.72	.	.	.	.	14.84	.	.	.	45.57
FLX SLAG2	27.8	.	6.0	.	.	0.28	1.05	5.68	0.14	10.8	2.53	.	.	1.59	1.61	31.4	1.41
FLX D1	26.52	.	0.51	.	21.5	.	.	0.44	0.44	19.14	0.35	.	.	0.47	0.01	30.46	0.43
FLX Z4	24.93	.	16.07	0.147	.	0.37	0.179	0.249	0.701	.	.	.	.	.	.	56.94	0.253
BR SS3	24.0	.	17.6	.	16.6	0.2	.	10.5	0.4	4.1	3.5	.	.	0.9	.	21.4	0.8
FLX Z5	22.67	.	18.16	.	.	0.19	.	9.39	0.41	4.07	2.7	.	.	0.89	.	25.63	0.73
FLX SLAG1	19.12	.	1.02	.	Rem	0.09	0.91	0.46	0.55	2.04	0.07	.	0.57	0.54	0.51	41.95	0.49
BR VA2/2	15.0	.	10.0	.	8.7	.	.	12.0	5.0	15.0	4.0	.	14.0	3.0	0.1	13.2	.
FLX S10	12.15	.	4.25	.	.	.	.	0.285	0.223	2.29	.	.	9.09	0.104	.	65.94	0.116
BR U 29	.	71.0	.	.	.	48	.	.	.	.	.	.	.	.	.	.	.
BR WC	.	20.00	25.00	.	.	.	.	0.80	.	5.00	.	.	10.00	0.15	.	38.10	0.80

Number	BaO	Cl	Cr ₂ O ₃	CuO	FeO	GeO ₂	Li ₂ O	MoO ₃	Nb ₂ O ₅	NiO	PbO	Sb ₂ O ₃	SrO	V ₂ O ₅	ZnO	ZrO ₂
FLX C1	0.17	.	0.07	.
BR SP1/1	.	0.20	.	.	.	.	.	.	.	.	.	0.50	.	.	.	.
BR BF2
BR BCEM	0.31	.	.	.	.
BR U 33
FLX C2	.	0.15	.	.	.	3.9	.	.	.	.	.	.	0.1	.	0.08	.
FLX Z1	.	1.15	.	.	.	.	.	.	.	.	.	.	0.01	.	.	.
BR SP2	.	0.70	.	.	.	.	.	.	.	.	.	0.50	.	.	.	.
BR WR1	.	.	1.5	.	.	.	.	.	.	.	.	0.5	.	.	.	.
FLX C3	.	0.21	.	.	.	1.5	.	.	.	.	.	.	0.21	.	0.09	.
FLX SP1	5.37	.	.	.	.	.	3.76	.	.
FLX SLAG2	0.09	.	.	0.09	.	0.11	Rem	.	0.08	0.06	0.08	.	.	1.61	0.09	0.08
FLX D1
FLX Z4
BR SS3	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.
FLX Z5
FLX SLAG1	0.11	.	.	0.09	.	.	5.0	.	0.11	0.09	0.09	.	0.09	0.49	0.09	0.10
BR VA2/2
FLX S10
BR U 29
BR WC	0.15	.	.

CLASSIC XRF DISC SET

available in set/6 or individually

typical analysis

40 mm Ø x 5 mm

Number	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	BaO	CaO	CoO	CuO	F	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	NiO	P ₂ O ₅	PbO	Sb ₂ O ₃	SiO ₂	TiO ₂	V ₂ O ₅	WO ₃	ZnO
BR PA	15.8	.	4.2	2.0	0.83	.	.	0.17	1.16	2.16	3.2	20.3	0.13	.	0.58	.	.	36.52	3.9	0.01	.	7.4
BR PB	6.75	.	0.04	21.3	1.62	0.25	1.4	12.2	0.04	0.23	0.89	0.09	0.79	2.1	4.4	.	.	42.54	1.2	.	1.85	0.45
BR PC	27.18	0.78	19.1	1.0	0.03	.	.	5.4	6.9	.	0.47	7.9	0.29	15.6	.	.	.	9.9	0.10	0.26	0.90	.
BR PD	20.22	1.86	22.2	.	14.3	.	.	.	0.58	0.09	7.3	.	9.6	.	1.7	1.85	5.48	0.03	0.86	0.32	3.7	.
BR PE	8.5	0.44	4.0	4.6	0.60	0.74	0.82	1.3	0.03	0.95	.	6.5	15.3	1.85	0.45	0.43	50.07	0.02	.	.	0.92	.
BR PF	3.85	.	2.0	0.34	2.84	0.25	1.8	5.0	0.07	18.3	0.82	.	1.2	.	0.05	0.86	56.31	0.04	1.7	.	.	.

Number	Ag ₂ O	Ga ₂ O ₃	Bi ₂ O ₃	CdO	Ce ₂ O ₃	Cr ₂ O ₃	Cs ₂ O	GeO ₂	In ₂ O ₃	La ₂ O ₃	MoO ₃	Nb ₂ O ₅	Nd ₂ O ₃	Pr ₂ O ₃	Rb ₂ O	Sm ₂ O ₃	SnO ₂	SrO	Ta ₂ O ₅	TeO ₂	Y ₂ O ₃	ZrO ₂
BR PA	.	.	.	0.39	.	0.15	0.04	0.08	0.04	.	.	.	.	.	0.04	.	.	0.71	.	0.04	.	0.15
BR PB	0.92	0.008	0.85	0.08	.	.
BR PC	.	.	0.50	0.16	.	.	.	0.27	.	.	2.0	0.60	0.46	0.20	.	.	.	.	.	.	.	.
BR PD	.	0.46	0.18	.	0.84	.	.	0.41	.	0.88	0.87	.	.	.	.	.	.	0.13	.	.	.	0.34
BR PE	0.13	.	0.08	.	0.56	.	.	0.09	0.40	.	0.05	.	.	.	.	.	0.60	0.31	0.05	0.03	0.18	.
BR PF	.	0.09	.	0.96	0.39	0.27	0.13	.	0.26	.	0.38	.	.	.	0.16	0.18	0.20	.	0.36	.	0.45	0.74

LEAD IN XRF DISCS

typical analysis

40 mm Ø x 5 mm

Table with columns: Number, PbO, Al2O3, As2O3, B2O3, BaO, CaO, CdO, Fe2O3, K2O, MgO, MnO, Na2O, P2O5, SO3, SiO2, ZnO. Rows include BR SF6, BR SF1, BR AK2, BR VAI, BR H 1.

NEODYMIUM IN XRF DISCS

typical analysis

Table with columns: Number, Nd2O3, Al2O3, CaO, F, Fe2O3, K2O, MgO, Na2O, SO3, Sb2O3, SiO2, ZnO, Units. Row includes BR U 38.

PHOSPHORUS IN XRF DISCS

typical analysis

40 mm Ø x 5-6 mm

Table with columns: Number, P2O5, Al2O3, B2O3, BaO, CaO, Cl, Co, Cr2O3, F, Fe2O3, K2O, MgO, MnO, MoO3, Na2O, NiO, SO3, SiO2, SrO, TiO2, V2O5, ZnO. Rows include BR UG5, BR HP11, FLX R5, FLX PR3, FLX Z2.

ELEMENTS IN XRF DISCS

typical analysis

listed in mass %

all available individually

40 mm Ø x 6 mm

Table with columns: Number, Ag, Al, As, B2O3, Ba, Ca, Cd, Cl, Co, Cr, Cu, Fe, K, Li2O, Mg, Mn, Mo. Rows include FLX OME 5, FLX OME 10, FLX OME 25, FLX OME 50, FLX OME 60, FLX OME 100, FLX OME 250, FLX OME 500, FLX OME 900, FLX OME 1000, FLX OME 2500, FLX OME 5000, FLX O1, FLX L2.

Table with columns: Number, Na, Ni, P, Pb, S, Si, SiO2, Sn, Ti, V, W, Zn, Zr.

Table with columns: Number, Na, Ni, P, Pb, S, Si, SiO2, Sn, Ti, V, W, Zn, Zr. Rows include FLX OME 5, FLX OME 10, FLX OME 25, FLX OME 50, FLX OME 60, FLX OME 100, FLX OME 250, FLX OME 500, FLX OME 900, FLX OME 1000, FLX OME 2500, FLX OME 5000, FLX O1, FLX L2.

CRM GLASS XRF DISCS AND PLATES

analysis listed in mass %

typical analysis

Table with columns: Number, Type, SiO2, Al2O3, B2O3, BaO, CaO, FeO, Fe2O3, K2O, MgO, Na2O, SO3, SrO, TiO2, ZnO. Rows include SRM 93a, SRM 1831, SRM 1830, SRM 620, SRM 1411.

continued

Table with columns: Number, As2O3, Cl, ZrO2, Units.

Table with columns: Number, As2O3, Cl, ZrO2, Units. Rows include SRM 93a, SRM 1831, SRM 1830, SRM 620, SRM 1411.

HIGH SILICA IN XRF DISCS

typical analysis		40 mm Ø x 5-6 mm								
Number	SiO ₂	Al ₂ O ₃	CaO	Cl	Fe ₂ O ₃	K ₂ O	Na ₂ O	SO ₃	TiO ₂	
ASO TU1	99.99	0.005	0.005	.	<0.01	.	0.005	.	.	last
FLX Q0	99.99	.	.	.	.	.	.	.	.
BR K 1/3	99.5	0.17	0.02	0.05	0.02	0.07	0.10	0.04	0.02	

CRM URANIUM IN XRF DISCS

typical analysis listed in mg/kg		12 mm Ø x 5 mm	
Number	U		
IRMM 540R	15.0	last	

URANIUM IN XRF DISCS

typical analysis		30-40 mm Ø x 5 mm																					
Number	UO ₃	U ₃ O ₈	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	BaO	CaO	CdO	CoO	Cr ₂ O ₃	CuO	F	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	NiO	P ₂ O ₅	SiO ₂	Sb ₂ O ₃	TiO ₂	ZnO
SV F	1.0	.	2.0	.	3.0	0.3	3.0	.	0.5	.	.	4.0	.	29.3	1.0	.	1.0	.	.	58.23	1.0	1.0	0.2
SV E	0.5	.	1.5	0.5	6.0	3.0	5.0	.	1.0	4.0	1.0	0.8	.	2.5	.	5.0	15.0	0.5	.	50.9	.	.	2.0
BR AS1	0.01	.	15.8	0.44	3.22	.	0.83	0.39	.	0.15	.	0.17	1.16	2.16	3.20	20.3	0.13	.	0.58	38.9	.	3.9	7.4
BR U 26	.	1.0	1.5	.	.	0.1	6.5	.	.	.	.	1.0	0.07	3.0	.	.	13.3	.	.	69.98	0.25	.	1.0
BR U 21	.	0.40	2.0	.	10	.	6.5	1.5	0.25	0.6	1	.	0.05	5.8	0.05	0.15	10.0	0.15	.	60.0	0.25	.	.
BR EK01	.	0.10	.	0.13	0.74	2.24	4.96	0.02	0.38	1.17	0.63	.	.	6.82	.	.	8.54	0.64	.	67.05	0.44	.	3.73
BR U 25	.	0.10	3.0	.	.	.	6.9	.	.	0.27	0.10	.	0.34	2.9	0.15	6.0	0.3	.	.	69.3	0.20	.	0.0
BR CH1	.	0.1	28.0	0.8	20.0	1.0	.	0.15	.	.	.	.	7.0	8.0	.	0.5	6.5	0.3	14.0	9.11	.	0.1	.

Number	Bi ₂ O ₃	CeO ₂	Cs ₂ O	Ga ₂ O ₃	GeO ₂	In ₂ O ₃	La ₂ O ₃	MoO ₃	Nb ₂ O ₅	Nd ₂ O ₃	PbO	Pr ₂ O ₃	Rb ₂ O	SO ₃	SeO ₂	SnO	SrO	Ta ₂ O ₅	TeO ₂	ThO ₂	V ₂ O ₅	WO ₃	ZrO ₂	
SV F	.	0.5	.	0.1	.	.	0.5	.	0.5	0.6	.	0.15	.	.	.	.	1.0	0.12	.	.	.	.	1.0	last
SV E	0.5	0.3	.	.	.	.	.	last
BR AS1	.	.	0.04	.	0.08	0.04	.	.	.	.	0.5	.	0.04	.	.	.	0.71	.	0.04	0.04	0.01	.	0.15	
BR U 26	.	2.0	.	.	.	.	.	.	.	.	.	.	.	0.2	0.14	.	.	.	.	.	.	.	.
BR U 21	.	0.15	.	.	.	.	.	.	.	.	.	.	.	0.15	0.02	.	.	.	.	.	.	.	.
BR EK01	0.30	.	.	0.65	.	.	.	.	0.57	.	.	.	.	.	0.89	.	
BR U 25	0.12	.	.	.	.	.	.	.	.	.
BR CH1	1.0	.	.	.	0.3	.	.	.	0.7	0.5	.	0.4	0.04	.	.	.	.	.	.	.	.	0.3	1.2	

ZINC AND ZIRCONIUM IN XRF DISCS

typical analysis		40 mm Ø x 5-6 mm																	
Number	ZnO	ZrO ₂	SiO ₂	Al ₂ O ₃	B ₂ O ₃	BaO	Bi ₂ O ₃	CaO	Cr ₂ O ₃	CdO	Co ₂ O ₃	F	Fe ₂ O ₃	K ₂ O	Li ₂ O	MgO	MnO ₂	Na ₂ O	
BR TL2	.	30	10	0.5	9.3	.	.	.	.	.	.	.	0.1	15	5	.	.	.	15
BR N 1	80.2	.	0.2	.	.	.	4.5	.	1.6	.	1.9	.	.	.	.	.	.	0.7	.
FLX F1	12.92	.	65.81	2.14	.	.	.	1.62	.	0.181	.	2.57	0.116	0.781	.	.	.	.	13.53
FLX SP2	2.50	2.17	44.75	.	20.0	5.35	.	.	.	3.71	.	.	.	.	.	18.42	.	.	.

Number	NiO	P ₂ O ₅	PbO	Sb ₂ O ₃	SO ₃	TiO ₂
BR TL2	.	0.1	10	.	.	5
BR N 1	0.7	.	.	9.3	.	0.9
FLX F1	.	.	.	.	0.264	.
FLX SP2	.	.	4.65	.	.	.

last of stock

MULTI-ELEMENT XRF DISCS

typical analysis

40 mm Ø x 5-6 mm

Number	Ag ₂ O	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	BaO	Bi ₂ O ₃	Br	CaO	CdO	CeO ₂	Ce ₂ O ₃	Cl	CoO	Co ₃ O ₄	Cr ₂ O ₃	Cs ₂ O
BR AS1	.	15.8	0.05	3.22	.	.	.	0.83	0.39	.	.	.	.	.	0.15	0.04
BR CH3	0.5	15.0	0.5	5.0	5.0	0.08	.	0.6	.	.	.	.	1.0	.	0.6	0.05
FLX CH3	0.56	13.59	0.53	.	5.51	2.07	.	0.59	.	.	.	.	.	0.93	0.64	0.05
BR ES1	0.13	13.2	0.2	1.1	4.6	0.08	.	0.60	.	.	.	.	0.74	.	0.56	.
FLX B2	.	9.23	.	Rem	.	.	.	32.48	.	.	.	.	.	.	.	.
FLX B4	.	8.59	.	Rem	.	.	.	7.31	.	.	.	.	.	.	.	.
BR PE 3	0.13	8.5	0.44	4.0	4.6	0.08	.	0.60	.	.	.	.	0.74	.	0.56	.
FLX B1	.	7.34	0.57	.	0.10	.	.	17.37	.	.	.	.	.	.	1.72	.
FLX S6M	.	6.14	0.15	6.9	1.57	.	.	4.87	0.28	0.37	.	.	.	.	0.52	0.31
FLX MON-UT	0.16	5.75	0.19	Rem	0.19	0.18	0.23	9.32	0.17	0.43	.	0.24	.	0.17	0.13	.
FLX MON	0.15	5.07	0.17	Rem	0.21	0.19	0.19	8.53	0.16	0.36	.	0.24	.	0.17	0.14	.
FLX S5	.	4.11	.	.	0.84	2.26	.	4.6	0.339	0.409	.	.	.	0.418	0.427	.
FLX S13	0.27	3.95	0.18	8.8	1.20	2.17	0.21	5.21	0.42	0.46	.	0.42	.	0.45	0.47	.
BR PF 3	.	3.85	.	2.0	0.34	.	.	2.84	0.96	.	0.39	.	0.25	.	0.27	0.13
BR ES1	.	3.85	.	2.0	0.34	.	.	2.84	0.96	.	0.39	.	0.25	.	0.27	0.13
BR CH4	.	3.0	.	2.65	0.30	.	.	4.00	1.00	.	0.40	.	0.50	.	0.10	0.15
BR WIE2	0.54	1.89	0.66	5.0	2.0	0.56	.	3.0	0.57	.	.	.	1.27	.	1.46	.
FLX B3	.	0.37	.	Rem	.	.	.	5.73	.	.	.	0.09	.	.	0.29	.
BR WIE1/1	0.11	0.19	0.13	9.05	2.0	0.11	.	3.0	0.12	.	.	.	0.13	.	0.15	.
FLX B5	.	.	.	Rem	.	.	.	8.67	.	.	.	.	.	.	.	.

Number	CuO	Dy ₂ O ₃	Er ₂ O ₃	F	Fe ₂ O ₃	Ga ₂ O ₃	Gd ₂ O ₃	GeO ₂	HfO ₂	In ₂ O ₃	K ₂ O	La ₂ O ₃	MgO	MnO	MnO ₂	MoO ₃
BR AS1	.	.	.	0.17	1.16	.	.	0.08	.	0.04	2.16	.	3.20	20.3	.	.
BR CH3	0.3	.	.	.	.	1.0	.	.	.	0.1	2.0	0.3	0.1	12.0	.	.
FLX CH3	0.33	.	.	.	.	1.19	.	.	.	0.11	1.73	0.25	0.18	10.17	.	.
BR ES1	0.25	.	.	1.3	0.03	.	.	.	.	0.09	2.7	0.40	.	6.2	.	.
FLX B2	.	.	.	.	0.94	.	.	.	.	.	0.43	.	5.01	0.83	.	.
FLX B4	.	.	.	.	10.04	.	.	.	.	.	3.60	.	9.83	3.73	.	.
BR PE 3	0.82	.	.	1.3	0.03	.	.	.	0.09	.	0.95	0.40	.	6.5	.	.
FLX B1	0.10	.	.	1.16	9.48	.	.	.	.	.	0.40	.	10.32	0.88	.	.
FLX S6M	0.39	0.19	0.18	.	0.47	.	0.17	0.40	.	.	3.27	0.38	1.43	0.15	Li2O:1.5	0.47
FLX MON-UT	0.15	.	.	2.26	0.95	.	0.35	0.26	0.18	.	1.53	0.34	2.67	0.88	Li2O:3.4	0.22
FLX MON	0.16	.	.	1.47	1.20	.	0.36	0.26	0.19	.	1.91	0.41	2.51	0.69	Li2O:3.4	0.22
FLX S5	0.412	.	.	0.89	0.478	.	.	.	.	.	3.95	0.426	1.68	0.382	.	0.43
FLX S13	0.42	0.27	0.21	1.21	0.45	.	0.26	0.09	0.29	0.25	4.76	0.42	1.88	0.43	Li2O:1.8	0.25
BR PF 3	1.8	.	.	5.0	0.07	0.09	.	(0.01)	0.26	18.3	.	.	0.82	.	.	.
BR ES1	1.8	.	.	5.0	0.07	0.09	.	(0.01)	0.26	18.3	.	.	0.82	.	.	.
BR CH4	2.00	.	.	.	0.10	0.10	.	.	.	0.40	20.00	.	1.00	.	.	0.20
BR WIE2	2.5	.	.	.	2.86	.	.	.	.	.	5.0	.	1.66	.	3.16	.
FLX B3	0.27	.	.	.	0.30	.	.	.	.	.	7.11	.	.	.	.	.
BR WIE1/1	0.13	.	.	.	0.15	.	.	.	.	0.12	12.0	.	0.17	.	0.16	0.15
FLX B5	.	.	.	.	.	.	.	.	.	.	9.02	.	.	.	.	.

Number	Na ₂ O	Nb ₂ O ₅	Nd ₂ O ₃	NiO	P ₂ O ₅	PbO	Pr ₂ O ₃	Pr ₆ O ₁₁	Rb ₂ O	S	SO ₃	Sb ₂ O ₃	Sc ₂ O ₃	Se	SiO ₂	Sm ₂ O ₃
BR AS1	0.13	.	.	.	0.58	0.5	.	.	0.04	.	.	.	.	.	38.9	.
BR CH3	16.0	.	.	2.0	0.6	0.5	0.15	.	.	.	.	0.4	.	.	31.83	.
FLX CH3	17.39	.	.	2.04	0.60	0.48	.	0.18	.	.	.	0.42	.	.	36.76	.
BR ES1	14.6	0.05	.	1.85	.	0.3	.	.	.	.	.	0.43	.	.	48.03	.
FLX B2	.	.	.	.	2.17	.	.	.	.	.	0.21	.	.	.	42.33	.
FLX B4	15.40	.	.	.	2.81	.	.	.	.	.	0.12	.	.	.	34.60	.
BR PE 3	15.3	0.05	.	1.85	.	0.45	.	.	(0.01)	.	.	0.43	.	.	50.07	.
FLX B1	0.56	0.60	.	0.80	2.16	4.55	.	.	.	.	.	.	.	.	33.80	.
FLX S6M	9.16	0.90	0.29	0.48	0.70	1.83	.	0.22	.	.	.	0.22	.	.	47.26	0.12
FLX MON-UT	5.61	0.21	0.24	0.17	1.56	0.22	.	0.15	0.12	.	0.11	0.17	0.19	.	44.39	0.27
FLX MON	5.09	0.20	0.16	0.18	1.47	0.18	.	0.09	0.14	.	0.11	0.17	0.20	.	47.02	0.27
FLX S5	10.04	0.615	.	0.444	0.453	2.64	.	.	.	.	.	.	.	.	54.36	.
FLX S13	7.74	0.28	0.36	0.49	0.55	1.81	.	0.27	0.10	.	0.47	0.16	0.09	SeO2:0.01	45.13	0.26
BR PF 3	1.2	0.38	.	.	.	0.05	.	0.16	(0.01)	0.26	18.3	.	0.86	.	56.31	0.18
BR ES1	1.2	0.38	.	.	.	0.05	.	0.16	(0.01)	0.26	18.3	.	0.86	.	56.31	0.18
BR CH4	0.80	0.10	.	.	.	0.10	.	.	0.20	.	.	1.00	.	.	56.83	.
BR WIE2	14.0	.	.	2.55	1.15	2.15	.	.	.	.	1.25	0.6	.	0.5	38.95	.
FLX B3	9.66	.	.	0.24	0.47	0.25	.	.	.	.	0.48	0.58	.	.	64.18	.
BR WIE1/1	17.0	0.14	.	0.13	0.23	0.11	.	.	.	0.25	0.12	.	.	0.10	53.10	.
FLX B5	10.62	.	.	8.24	.	11.26	.	.	.	.	.	2.21	.	.	29.78	.

Number	SnO	SnO ₂	SrO	Ta ₂ O ₅	Te	TeO ₂	ThO ₂	TiO ₂	UO ₃	V ₂ O ₅	WO ₃	Y ₂ O ₃	Yb ₂ O ₃	ZnO	ZrO ₂
BR AS1	.	.	0.71	.	.	0.04	0.04	3.9	0.01	0.01	.	.	.	7.4	0.15
BR CH3	.	0.8	0.1	0.05*	.	0.44	1.0	.	.	.	.	0.20	.	1.8	.
FLX CH3	.	0.86	0.08	0.03	.	0.5	1.03	.	.	.	.	0.18	.	1.82	.
BR ES1	.	0.6	0.31	0.05	.	0.03	0.44	0.8	.	0.2	.	0.18	.	0.15	.
FLX B2	1.04	.	.	.	.	.	.	.	.
FLX B4
BR PE 3	.	0.60	0.31	0.05	.	0.03	0.02	.	.	.	0.18	.	.	0.92	.
FLX B1	.	0.21	0.11	.	0.11	.	1.15	.	.	.	1.97	.	.	0.11	.
FLX S6M	.	0.57	1.02	0.53	.	.	4.93	.	0.49	.	0.31	0.23	1.10	0.63	.
FLX MON-UT	.	0.18	0.20	0.18	.	0.17	0.19	1.16	0.19	0.18	0.18	0.25	0.19	0.15	0.18
FLX MON	.	0.17	0.20	0.21	.	0.13	.	1.13	.	0.19	0.17	0.17	0.31	0.20	0.17
FLX S5	.	0.451	0.783	0.431	.	.	0.476	.	0.451	0.414	.	.	.	0.908	0.453
FLX S13	.	0.41	0.99	0.46	.	0.42	0.48	.	0.46	0.42	0.19	0.19	0.94	0.47	.
BR PF 3	.	0.20	.	0.36	.	.	0.04	.	1.7	.	0.45	.	.	0.74	.
BR ES1	.	0.2	.	0.36	.	.	0.04	.	1.7	.	0.45	.	.	0.74	.
BR CH4	.	0.20	.	0.50*	.	.	2.00	.	0.70	0.10	0.60	.	.	0.80	1.00
BR WIE2	2.27	.	.	.	0.5	.	0.83	.	.	.	.	.	.	2.49	0.68
FLX B3	0.25	.
BR WIE1/1	0.11	.	.	.	0.10	.	.	0.17	.	0.18	0.13	.	.	0.12	0.14
FLX B5	13.70	.

* BR CH3 and BR CH4 list Ta203 as Ta205

AUSMON XRF DRIFT MONITORS (wavelength dispersive XRF)

The monitors listed below have been formulated so that they have appropriate count rates for different ores and products. The monitors contain little flux and most have been in use for many years and have given excellent stability.

The monitor discs are 32 or 40mm diameter and about 4mm high. The monitors are polished flat so that they can be mounted precisely and are easily cleaned. The following types for wavelength dispersive XRF are available:

AUSMON Bauxite

Suitable with bauxites and other materials with high Aluminum and contain **Fe, Si, Al, Ca, F, Na, Mg, P, S, Cl, K, Ti, V, Cr, Mn, Co, Ni, Cu, Zn, As, Br, Sn, and Ga.** (24 elements)

AUSMON Cement A

Suitable when making detailed analyses of cements or other materials with high Calcium and contain **Ca, Si, Al, Mg, Fe, Na, Cl, S, F, P, K, Ti, Cr, Mn, Zn, Sr, Br, Ba, and Pb.** (19 elements)

AUSMON Iron Ore

Suitable with iron ores and related materials, containing **Fe, Si, Al, Ca, F, Na, Mg, P, S, Cl, K, Ti, V, Cr, Mn, Co, Ni, Cu, Zn, As, Br, Sn, Cd, Sb, Bi, Mo, Ba, and Pb.** (28 elements)

AUSMON Manganese Ore

Suitable with manganese ores and contain: **Mn, Fe, Si, Na, Mg, Al, P, K, Ca, Ti, V, Sr, Br, Ba, and Pb.** (15 elements)

AUSMON Mineral Sands

Suitable with mineral sand products, including but not limited to ilmenite, rutile, zircon, monazite and xenotime. The following elements are present: **Ti, Fe, Zr, Si, Y, La, Ce, Nd, Pr, Yb, P, F, Na, Mg, Al, S, Cl, K, Ca, Sc, V, Mn, Cr, Co, Ni, Cu, Zn, Br, As, Sr, Nb, Mo, Cd, Sn, Ba, Hf, Pb, Th, and U.** (39 elements)

AUSMON Nickel Ore

Suitable with nickel ores and related materials, containing **Ni, Fe, S, Si, F, Na, Mg, Al, P, Cl, K, Ca, Ti, Mn, Cr, Co, Cu, Zn, As, Se, Br, Mo, Ag, Pb, and Bi.** (25 elements)

AUSMON Rare Earths

Suitable with monazite, xenotime and other rare earth minerals for the rare earth oxides. The following elements are present: **La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y, P, F, Na, Mg, Al, Si, S, Cl, K, Ca, Sc, Ti, Mn, Fe, Ni, Br, Sr, Zr, Nb, Ba, Hf, Pb, Th, and U.** (39 elements)

AUSMON Silicates

These monitors were designed for the analysis of rocks, soils and related materials. They can also be used as general purpose monitors for a wide range of materials, eg. vegetables, etc. They contain the following elements as majors: **Fe, Mn, Ti, Ca, K, Cl, S, P, Si, Al, Mg, Na and F.** In addition about 2000ppm of each of the following are present: **Sc** (1000ppm), **V, Cr, Co, Cu, Ni, Zn, Ga, Ge, Se, As, Rb, Sr, Br, Y, Zr, Nb, Mo, Ag, Cd, Sn, Sb, Te, Cs, Ba, La, Ce, Nd, Pr, Gd, Sm, Yb, Hf, Ta, W, Bi, Tl, Pb, Th, and U.** (53 elements)

AUSMON Sulfides

These monitors are for use with lead, zinc, iron and copper sulphides, as ores, concentrates and related products. They contain: **Pb, Zn, Fe, Cu, S, F, Na, Mg, Al, Si, P, K, Ca, Cl, Ti, Co, Ni, Cr, Mn, As, Sr, Se, Ag, Cd, Sn, Sb, Ba, Te, Tl, Mo, U, and Bi.** (32 elements)

AUSMON XRF DRIFT MONITORS (energy dispersive XRF)

The monitors listed below have been formulated so that they have appropriate count rates for different ores and products. The monitors contain little flux and most have been in use for many years and have given excellent stability.

The monitor discs (except AUSMON Cement B) are 32mm diameter and about 4mm high. The monitors are polished flat so that they can be mounted precisely and are easily cleaned. The following types for energy dispersive XRF are available:

AUSMON MCACAL

Intended for the energy dispersive XRF system, this monitor contains the following elements: **F, Na, Mg, Si, Cl, Ca, V, Zn, As, Fe, Y, Mo, Cd, Ba.** (14 elements)

AUSMON Mon A

This is intended as a drift monitor with the following elements: **Mg, Si, P, W, Pb, Sn.** (6 elements)

AUSMON Mon B

This is a drift monitor with the following elements: **Na, Al, Si, Ca, Ti, Cr, and Ni.** (7 elements)

AUSMON SPECIALS

Monitor discs can be made to suite needs not covered by the above. Very often this is for laboratories performing analysis on materials that do not have long term stability and so they cannot use a similar product as a monitor, eg aqueous liquids or liquids from the petroleum industry. Cl in brine, Ca in milk, Cl, Br, and trace elements in synthetic rubbers are some common examples for which custom monitors have been made.