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PURE IRON

= class, where 1 = CRM and 2 = RM T = total

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Co	N	O
1	SRM 1265a	0.0067	0.0057	0.0011	0.0055	0.008	0.0058	0.041	0.007	0.0050	(0.0007)	0.007	.	.
1	**BS 50F**	0.0064	0.082	0.0066	0.0031	0.016	0.0088	0.016	0.022	0.0017	0.003	0.0023	0.0042	(0.0026)
2	CZ LA-0A	(0.006)	0.045	0.005	0.005	0.0015	0.012	0.028	0.022	(0.0044)	0.0015	0.002	0.0023	.
1	VS RG31	0.0035	0.0010	0.0015	.	0.009	0.010	0.0046	0.0016	0.0003	.	0.0007	.	.
1	IARM 27G	(0.003)	(0.003)	(0.003)	0.0011	(0.07)	0.040	0.045	0.043	(0.002)	(0.0013)	(0.0009)	(0.0003)	0.025
2	TL 1669 *	0.00226	0.0955	0.0137	0.0100	0.0093	0.0217	0.0160	0.0246	0.0011	0.03553T	0.0019	0.0024	.
2	TH 1045D	0.0023	.	.	0.0043	.	.	.	.	.	.	.	0.0046	.
1	VS RG24/1	0.0022	0.015	0.0027	0.0069	0.017	0.011	0.037	0.037	0.0013	.	0.012	.	.
1	**BS LC-6**	0.0020	0.469	0.0007	0.0009	0.050	0.0003	0.0057	0.0023	(0.0006)	0.034	0.0021	0.0003	0.0007
1	SRM 1768	0.0010	0.0014	0.0013	0.0003	.	0.0006	0.0014	.	.	0.0024	0.0025	0.002	0.036
1	ECRM 098-1D	0.00051	0.00008	(0.00006)	0.00031	0.00048	.	.	0.00571	0.00085	.	.	0.00024	.
1	ECRM 097-1D	(<0.002)	0.0064	0.0016	0.0022	(<0.01)	0.0020	0.0025	0.0016	(<0.001)	.	0.0037	0.0007	.
1	ECRM 097-2D	.	0.012	0.00538	0.00181	0.00285	0.00793	0.0241	0.0213	0.00370	.	0.0139	0.00294	.

Number	As	B	Mg	Nb	Pb	Sn	Ti	V	W	Units
SRM 1265a	(0.0002)	0.00013	.	.	0.00001	.	(0.0001)	0.0006	.	disc 32 mm Ø x 19 mm
BS 50F	0.0013	(<0.0002)	(<0.0001)	(<0.0002)	(<0.0003)	0.0010	0.0004	(0.0003)	(<0.0050)	disc 35 mm Ø x ~7 mm **17025**
CZ LA-0A	(0.0015)	.	.	Sb:(0.0007)	(0.001)	(0.001)	0.001	.	.	disc ~37 mm Ø x 25 mm
VS RG31	.	.	.	.	.	.	.	.	.	disc ~45 mm Ø x ~28mm
IARM 27G	(0.0016)	(0.0006)	(0.0002)	(0.002)	(0.002)	(0.001)	<0.005	(0.001)	<0.005	disc 31 mm Ø X 2 or 18 mm
TL 1669 *	0.0017	0.00038	.	0.00046	0.00013	0.0071	0.0504	(0.0006)	.	disc 38 mm Ø x 25 mm
TH 1045D	.	.	.	.	.	.	.	.	.	disc 40 mm Ø x 40 mm
VS RG24/1	.	.	.	.	.	.	0.0010	.	.	disc ~45 mm Ø x ~28mm
BS LC-6	(<0.0020)	(0.0004)	(0.00003)	(<0.0010)	(<0.0020)	(<0.0020)	0.0006	(<0.0010)	last	disc 39 mm Ø x ~7 or ~12 mm **17025**
SRM 1768	.	.	.	.	.	.	.	.	.	disc 31 mm Ø x 19 mm
ECRM 098-1D	.	.	.	.	.	.	.	.	.	octagon 35 mm Ø x 25 mm
ECRM 097-1D	0.0051	0.0003	.	.	.	(<0.0025)	.	(<0.001)	.	disc 38 mm Ø x 3, 25, or 30 mm
ECRM 097-2D	0.00281	0.00012	Sb:0.00012	Ta:0.00015	Zn:0.00014	0.00043	.	0.00011	0.00386	disc 38 mm Ø x 25 or 30 mm

* TL-1669 also contains in ppm Ca: 1.7, Sb: 4.9, Zn: 2.7

RM CARBON STEEL XRF SET

Part Number: BS CS-10 AVAILABLE INDIVIDUALLY **17025** ~7 mm discs

Grade	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	Co	N	Sn	V
Pure Iron	**BS 50F**	0.0064	0.082	0.0066	0.0031	0.016	0.0088	0.016	0.022	0.0017	0.003	0.0013	0.0023	0.0042	0.0010	(0.0003)
1008	BS XAAS	0.041	0.430	0.007	0.010	0.045	0.015	0.023	0.020	0.007	0.006	0.005	0.004	0.0037	<0.002	<0.005
1018	BS 2931	0.202	0.75	0.012	0.025	0.23	0.23	0.106	0.154	0.019	0.002	0.007	0.009	0.0119	0.010	0.002
1020	BS 57F	0.196	0.554	0.009	0.027	0.202	0.197	0.070	0.120	0.018	(0.002)	(0.006)	0.007	0.0077	0.008	0.063
1026	BS 4932	0.234	0.76	0.010	0.015	0.25	0.15	0.080	0.144	0.033	(0.001)	(0.005)	0.005	0.0080	0.008	0.060
1035	BS 4931	0.352	0.80	0.011	0.016	0.27	0.217	0.070	0.093	0.024	(0.001)	0.005	0.006	0.0080	0.009	0.058
1040	**BS 3941**	0.407	0.802	0.016	0.023	0.257	0.053	0.018	0.069	0.0061	0.0019	0.0036	0.0042	0.0069	0.0019	0.0025
1045	BS 56E	0.483	0.72	0.010	0.025	0.24	0.015	0.015	0.021	0.005	0.062	0.0035	0.005	0.0056	(0.0006)	(<0.002)
1095	BS 64C	0.920	0.22	0.015	0.0024	0.22	0.016	0.038	0.261	0.008	(0.005)	.	0.004	0.0084	(0.001)	0.005
1522 (LF2)	BS 2932	0.208	1.20	0.008	0.020	0.186	0.060	0.034	0.077	0.026	0.022	(0.003)	0.004	0.0080	0.005	0.001

CRM CARBON STEEL SET

AVAILABLE IN SET/6 ONLY 38 mm Ø x 30 mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Al.Sol	Ti	Ti.Sol	V
NCS HS11719-5	1.19	2.20	0.011	0.013	0.751	0.046	0.164	0.439	0.036	0.034	0.029	0.028	0.0082
NCS HS11719-1	0.963	0.586	0.022	0.010	0.241	0.111	0.206	0.131	0.019	0.017	0.016	0.015	0.035
NCS HS11719-3	0.435	1.14	0.045	0.020	0.163	0.160	0.114	0.086	0.019	0.016	0.024	0.023	0.099
NCS HS11719-4	0.140	1.30	0.084	0.020	0.526	0.276	0.344	0.198	0.160	0.155	0.132	0.128	0.153
NCS HS11719-2	0.042	0.048	0.105	0.0053	0.154	0.411	0.432	0.247	0.296	0.292	0.161	0.154	0.207
NCS HS11719-6	0.0060	0.163	0.0053	0.035	0.014	0.0032	0.013	0.021	0.0021	0.0016	0.0010	(0.0008)	0.363

CRM SOLUBLE ALUMINUM AND SOLUBLE BORON STEEL SET

available in set/6 only as grouped .T = total .S = soluble 37 mm Ø x 30 mm

Number	Al.T	Al.S	B.T	B.S	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo
NCS HS93703-1	0.387	0.381	0.025	0.023	1.08	2.35	0.0057	(0.008)	0.681	0.048	0.028	3.98	0.0047	0.0077
NCS HS93703-2	0.92	0.91	0.0083	0.0080	0.055	0.021	0.027	0.0033	0.827	0.422	1.09	3.09	0.262	1.56
NCS HS93703-3	0.107	0.103	0.0041	0.0037	0.792	1.34	0.013	0.038	1.09	0.532	0.533	2.11	0.488	0.397
NCS HS93703-4	0.083	0.078	0.0050	0.0048	0.475	0.612	0.015	0.015	2.57	0.687	2.01	1.31	0.403	0.977
NCS HS93703-5	(1.29)	(1.27)	0.0017	0.0015	0.651	1.53	0.036	0.0052	0.024	0.236	2.98	0.021	0.094	0.631
NCS HS93703-6	0.64	0.63	0.0033	0.0030	0.246	0.211	0.045	0.0058	0.274	0.092	3.83	0.505	0.145	0.203

Number	As	Bi	Ca	Nb	Pb	Sb	Sn	Ti	V	W	Zr
NCS HS93703-1	0.032	0.0011	0.0009	0.351	0.0016	(0.0001)	0.014	0.473	0.0090	0.293	0.0031
NCS HS93703-2	0.0034	0.0006	0.0010	0.254	0.0008	0.0020	0.0069	0.346	0.376	1.97	0.087
NCS HS93703-3	0.0019	0.0004	0.0010	0.506	0.0007	0.0040	0.054	0.016	0.071	0.755	0.014
NCS HS93703-4	0.056	(0.0002)	(0.0001)	0.167	0.0006	0.0095	0.012	0.035	0.709	1.48	0.069
NCS HS93703-5	0.0064	0.0015	0.0007	0.0057	0.0007	0.010	0.015	0.111	0.231	0.050	0.41
NCS HS93703-6	0.011	(0.0002)	(0.0001)	0.070	0.0011	0.0006	0.017	0.246	0.526	1.04	0.22

CARBON STEEL **CONTINUED ON THE NEXT PAGE** # = Class, where 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	B	Ca	Co	Mo
1	IRSID 1660	1.20	0.280	0.014	0.010	0.173	0.059	0.072	(0.026)	(0.009)	.	.	.	.	.	.
1	ECRM 090-1D	1.05	0.226	0.013	0.0095	0.281	.	0.053	0.121	.	.	.	.	.	.	0.009
1	SRM 1227	0.97	0.402	0.014	0.026	0.215	0.006	0.007	0.019	.	.	.	.	.	0.003	0.003
1	SS 602/2	0.94	0.66	0.023	0.031	0.057	(0.06)	(0.02)	(0.03)	0.096	.	.	.	.	(0.007)	(0.004)
2	BS 64C	0.920	0.22	0.015	0.0024	0.22	0.016	0.038	0.261	(0.005)	.	.	.	.	0.004	0.008
2	HRT FE2014-N	0.91	1.97	0.012	(0.004)	0.24	0.01	0.02	0.35	0.016	.	.	.	.	.	0.01
1	ECRM 056-2D	0.8181	0.5073	0.0103	0.0093	0.2006	0.0129	0.0218	0.0146	.	0.00024	.	.	.	.	.
1	SRM 1224	0.75	0.41	0.009	0.039	0.173	0.072	0.054	0.071	0.060	.	.	.	.	.	0.013
1	VS RG28	0.70	0.84	0.031	.	1.161	0.050	0.154	0.135	0.066	.	.	.	.	.	0.090
1	VS RG28/1	0.68	0.91	0.031	0.0071	2.36	0.040	0.168	0.194	0.068	.	.	.	.	0.072	0.104
1	IARM 373A	0.63	0.70	0.0123	0.031	0.22	0.107	0.048	0.096	0.002	.	0.0046	0.0003	0.0005	0.005	0.0176
1	VS UG20/6	0.58	0.473	(0.008)	(0.02)	0.229	0.249	0.360	0.396	.	.	.	.	.	.	.
1	NM 3405.01	0.57	0.80	0.037	0.048	0.19	.	0.031	0.081	.	.	.	.	.	.	.
1	SS 435/1	0.52	0.41	0.033	0.031	0.54	.	0.060	0.14	.	.	.	.	.	.	.
1	SS 435/2	0.49	0.39	0.04	0.042	0.32	.	0.13	0.18	.	.	.	.	.	0.011	.
2	BS 56E	0.483	0.72	0.010	0.025	0.24	0.015	0.015	0.021	0.062	.	0.0035	.	(<0.0005)	0.005	0.005
1	IRSID 1636	0.47	0.78	0.029	0.037	0.40	0.135	0.092	(0.060)	(0.007)	.	.	.	.	.	.
1	SS 459/2	0.467	0.909	0.0482	0.0481	0.640	.	.	.	0.015	(0.013)	.	0.0110	.	0.0890	.
1	**BS 56H**	0.457	0.772	0.0096	0.0234	0.210	0.299	0.154	0.098	0.0009	.	0.0056	0.0002	0.0012	0.0078	0.0419
1	IARM 200D	0.453	0.749	0.0103	0.024	0.225	0.232	0.097	0.109	(0.004)	.	0.0050	.	.	0.007	0.0217
1	VS UG123	0.45	0.552	0.016	0.026	0.216	0.196	0.084	0.111	0.024	.	.	.	.	.	.
1	IRSID 1657	0.445	0.724	0.028	(0.013)	0.274	.	0.048	(0.022)	0.004	.	0.0051	.	.	.	(0.008)
1	IRSID 1648	0.432	1.41	0.031	(0.070)	0.242	0.408	0.165	0.170	(0.004)	.	(0.038)	.	.	.	(0.028)
1	12X 10400A	0.420	0.754	0.0137	0.0305	0.220	0.140	0.0631	0.139	0.0323	.	0.0068	.	.	.	0.0169
1	NM EN-8	0.42	0.82	0.02	0.02	0.21	.	.	.	.	.	.	.	.	.	.
1	IRSID 1642	0.418	0.929	0.031	(0.031)	0.388	0.097	0.068	(0.035)	(0.020)	.	(0.042)	.	.	.	(0.009)
1	IRSID 1647	0.418	0.701	0.019	(0.027)	0.299	(0.104)	0.093	0.490	(0.060)	(0.0555)	.	.	.	.	.
1	IRSID 1646	0.414	0.701	0.020	0.027	0.293	0.104	0.093	0.493	0.056	.	.	.	.	.	.
1	IARM 210D	0.412	0.73	0.0052	0.030	0.230	0.273	0.122	0.096	(0.002)	.	0.0059	0.0004	0.0009	0.007	0.034
1	SS 434/1	0.41	1.49	0.050	0.027	0.31	.	0.044	0.055	.	.	.	.	.	.	.
1	IARM 349A	0.41	1.49	0.011	0.025	0.192	0.300	0.178	0.189	0.0020	.	0.005	0.0003	0.0015	0.0085	0.059
1	**BS 3941**	0.407	0.802	0.016	0.023	0.257	0.053	0.018	0.069	0.0019	.	0.0036	(0.0001)	0.0011	0.0042	0.0061
1	IRSID 1652	0.406	0.931	(0.017)	0.040	0.386	0.345	0.190	0.184	.	(0.0013)	0.038	.	.	.	(0.042)
1	IRSID 1637	0.401	0.940	0.030	0.030	0.378	0.097	0.068	(0.033)	0.022	.	0.042	.	.	.	(0.006)
1	SS 605/2	0.400	0.345	0.054	0.015	0.54	(0.06)	(0.05)	(0.06)	0.027	.	.	.	.	(0.008)	(0.01)
1	IRSID 1644	0.394	0.594	0.021	0.031	0.287	0.265	0.158	0.138	(0.017)	.	.	.	.	.	.
1	ECRM 084-1D	0.391	0.860	.	0.029	0.265	0.267	0.154	.	.	.	.	.	.	.	0.033
1	IRSID 1645	0.388	0.610	0.021	0.030	0.286	0.261	0.157	0.140	0.015	(0.0124)	.	.	.	.	.
1	IRSID 1649	0.384	0.930	0.045	(0.047)	0.250	0.418	0.226	0.321	0.004	.	0.037	.	.	.	0.043
1	SS 460/2	0.383	0.616	0.0374	0.0099	0.126	.	.	.	0.024	(0.019)	.	0.0027	.	0.0106	.
1	VS RG30	0.38	0.357	.	0.013	0.45	0.161	0.62	3.06	.	.	.	.	.	0.50	0.62
1	BS 1035 *	0.36	0.75	0.009	0.027	0.24	0.24	0.13	0.15	<0.005	.	<0.05	<0.005	<0.05	<0.05	0.047
1	IRSID 1655	0.355	1.018	(0.018)	(0.060)	0.443	0.415	0.188	0.157	(0.004)	.	(0.036)	.	.	.	(0.043)
1	IRSID 1663	0.353	0.967	0.0090	0.034	0.235	0.180	0.148	0.206	0.037	.	0.028	.	.	.	0.042
1	VS UG90	0.34	0.286	0.0079	0.012	0.221	0.200	0.265	0.261	0.037	0.032	0.0044	.	.	.	0.046
1	VS UG19/6	0.34	0.274	(0.03)	(0.03)	0.136	0.148	0.262	0.227	.	.	.	.	.	.	.
1	IARM 360A	0.331	0.733	0.008	0.023	0.260	0.235	0.078	0.113	0.0016	.	0.0060	0.0004	0.0017	0.0067	0.024
1	**BS 1030**	0.331	0.682	0.0101	0.0299	0.261	0.269	0.078	0.124	0.0014	.	0.0055	0.0003	0.0012	0.0069	0.0182
1	IARM 209D	0.322	0.68	0.0084	0.021	0.268	0.243	0.079	0.137	(0.003)	.	0.0060	0.0002	0.002	0.007	0.037
1	IRSID 1653	0.312	0.962	0.034	(0.039)	0.400	0.453	0.218	0.358	<0.004	.	(0.039)	.	.	.	(0.038)

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	B	Ca	Co	Mo
1	VS RG27	0.30	0.97	0.054	0.0032	0.42	0.188	0.135	1.53	0.88	.	.	.	.	0.071	0.222
1	IRSID 1654	0.270	0.979	0.036	(0.047)	0.354	0.441	0.241	0.328	.	.	0.040	.	.	.	(0.043)
1	SS 434/2	0.27	1.54	0.06	0.014	0.51	.	0.038	0.24	.	.	.	.	.	.	.
1	IARM 359A	0.267	0.686	0.0094	0.020	0.233	0.186	0.068	0.121	0.002	.	0.0073	0.0003	0.0013	0.0069	0.023
1	**BS 1026**	0.260	0.715	0.0171	0.0191	0.268	0.247	0.096	0.163	0.0330	.	0.0100	(0.0002)	0.0017	0.0072	0.0289
1	VS UG94	0.26	0.186	0.0037	0.0026	0.101	0.088	0.178	0.206	0.017	.	.	.	.	.	0.0005
1	VS UG18/6	0.242	0.213	(0.003)	(0.003)	0.20	0.063	0.273	0.237	.	.	.	.	.	.	.
2	HRT FE2016-N	0.23	0.85	0.015	0.011	0.32	0.02	0.15	0.21	0.033	.	.	.	.	.	.
1	**BS 1020**	0.210	0.568	0.0058	0.0249	0.250	0.184	0.059	0.109	0.0006	.	0.0074	(0.0001)	0.0022	0.0070	0.018
1	IARM 213C	0.201	0.922	0.007	0.025	0.25	0.149	0.068	0.099	0.0019	.	0.0058	0.0003	0.0014	0.0074	0.022
1	IRSID 1664	0.2008	0.472	0.0106	0.0259	0.0616	0.0820	0.0547	0.0707	.	0.0193	0.0115	(0.0002)	(0.0005)	(0.0084)	0.0157
1	VS RG25/1	0.196	0.29	0.019	0.0088	0.100	0.065	0.037	0.060	0.067	.	.	.	.	0.012	0.010
1	**BS 1018**	0.195	0.79	0.012	0.024	0.237	0.130	0.104	0.177	0.029	.	0.0041	(0.0002)	(0.0004)	0.0058	0.044
1	**BS LF2B**	0.176	1.05	0.007	0.0067	0.209	0.318	0.115	0.138	0.0287	.	0.0052	(0.0002)	0.0010	0.0071	0.0382
1	IARM 28K	0.174	0.80	0.012	0.027	0.291	0.171	0.0638	0.107	(0.0025)	.	(0.005)	0.0005	.	0.0060	0.0210
1	**BS 1016**	0.172	0.77	0.011	0.030	0.193	0.153	0.107	0.091	0.0200	.	0.0066	(0.0003)	(0.0004)	0.0193	0.040
1	12X 10180C	0.171	0.803	0.0150	0.0200	0.147	0.0500	0.0284	0.0793	0.0198	.	0.0029	.	.	.	0.0047
1	NM 3404.01	0.17	0.66	0.025	0.021	0.19	.	0.007	0.010	.	.	.	.	.	.	.
1	12X 10180B	0.169	0.722	0.0101	0.0056	0.114	0.0544	0.0333	0.0451	0.043	.	0.0059	.	.	.	0.0062
2	TL 1000	0.1692	1.4281	0.0142	0.0164	0.2258	0.0120	0.0312	0.0635	0.0226	.	(0.0016)	0.00018	0.00039	0.0042	0.0076
1	VS RG25	0.167	0.131	0.014	.	0.084	.	0.046	0.057	0.015	.	.	.	.	.	0.0028
1	VS UG124	0.165	1.41	0.019	0.032	0.384	0.020	0.015	0.035	0.039	.	.	.	.	.	.
1	VS UG109	0.161	0.353	0.020	0.0037	0.151	0.082	0.0053	0.048	0.0093	.	.	.	.	.	.
1	**BS 2931B**	0.159	0.788	0.0108	0.0292	0.207	0.098	0.083	0.080	0.0191	.	0.0033	0.0002	0.0002	0.0056	0.0329
1	IARM 213D	0.158	0.725	0.0120	0.031	0.226	0.207	0.076	0.093	(0.003)	.	(0.006)	(0.0004)	.	0.009	0.0131
1	SS 456/2	0.112	0.220	0.0212	0.0221	0.297	.	.	.	0.0017	(0.0013)	.	0.0015	.	0.0504	.
1	DSZU C041	0.107	1.35	0.0126	0.0055	0.63	0.059	0.040	0.067	0.017	.	0.0033	(0.0004)	0.0024	0.003	0.005
1	SS 432/1	0.102	1.34	0.024	0.039	0.043	.	0.14	0.31	.	.	.	.	.	.	.
1	SS 601/2	0.102	1.30	0.034	0.024	0.263	(0.04)	(0.03)	(0.14)	0.033	.	.	.	.	(0.09)	(0.006)
1	VS UG93	0.100	0.140	0.0033	0.0024	0.48	0.028	0.126	0.137	0.15	.	.	.	.	.	0.0008
1	VS UG17/6	0.097	0.106	(0.003)	(0.004)	0.37	(0.02)	0.105	0.127	.	.	.	.	.	.	.
1	SS 433/2	0.095	1.19	0.012	0.008	0.005	.	0.038	0.026	.	.	.	.	.	.	.
1	IRSID 1661	0.086	1.48	0.018	(0.006)	0.406	(0.013)	(0.029)	(0.021)	(0.028)	(0.025)	(0.003)	.	.	.	(0.006)
1	VS UG125	0.086	1.147	0.0044	0.0021	0.554	0.147	0.230	0.102	.	.	.	.	.	.	.
1	VS UG108	0.074	0.104	0.050	0.0082	.	0.0087	0.0092	.	.	.	.	.	.	.	.
1	SRM 1228	0.072	0.365	0.004	0.018	0.007	0.012	0.018	0.016	0.061	.	.	.	.	.	0.009
1	ECRM 057-2D	0.0507	0.246	0.0120	0.0127	.	0.0146	0.0096	0.0114	0.059	.	.	.	.	.	.
1	**BS XCCS-1**	0.0441	0.356	0.0068	0.0022	0.292	0.0143	0.0132	0.0288	0.061	.	0.0024	(0.0004)	0.0024	0.0017	0.0060
1	VS RG2671	0.034	0.058	0.006	0.0076	0.046	0.007	0.074	0.024	0.73	.	.	.	.	0.021	0.045
1	NM PC-1	0.033	0.26	0.01	0.007	0.031	.	.	0.025	.	.	.	.	.	.	.
1	ECRM 083-2D	0.0315	0.2160	0.0106	0.00561	0.00747	0.0127	0.0116	0.0219	0.0784	.	0.00177	.	.	0.00236	.
1	DSZU C03	0.029	0.089	0.0062	0.0081	0.145	0.206	0.146	(0.27)	0.014	.	0.008	0.0004	.	0.013	0.031
1	VS RG26	0.028	0.75	0.0037	.	0.173	0.011	.	0.025	0.30	.	.	.	.	.	0.015
1	SS 431/2	0.026	0.90	0.12	0.006	0.015	.	0.040	0.050	.	.	.	.	.	.	.
1	DSZU C040	0.015	0.011	0.0027	0.0029	0.061	0.009	0.006	0.009	0.041	.	(0.0002)	0.0004	0.0026	(0.001)	(0.001)
2	RM Fe 1/5	0.011	0.049	0.003	0.004	0.004	0.0099	0.022	0.013	0.003	.	0.002	<0.0005	<0.001	0.002	0.0019
1	VS UG2/5	0.010	0.008	(0.005)	(0.006)	(0.006)	0.012	0.075	0.039	(0.01)	.	.	.	.	.	0.022
1	SS 432/2	0.008	0.70	0.017	0.036	0.08	.	0.019	0.016	.	.	.	.	.	.	.
1	SS 111/1	0.0070	0.1623	0.0045	0.0049	0.0039	0.0089	0.0161	0.0055	.	.	0.0011	.	.	0.0053	0.0005
1	VS 005	0.007	0.0281	0.0028	0.0053	0.044	0.067	0.074	0.046	0.317	.	0.0027	.	.	0.008	0.005
1	VS UG2/10	0.0067	0.036	0.0036	0.0054	0.084	0.063	0.073	0.034	0.203	.	.	.	.	.	0.0055
1	VS 003	0.0064	0.036	0.0040	0.0052	0.084	0.062	0.074	0.034	0.201	.	0.0025	.	.	0.008	0.005
2	CZ_LA-1B	0.005	0.13	0.004	0.017	0.020	0.01	0.014	0.042	0.003	.	(0.002)	0.010	0.0016	(0.002)	0.007
1	IMZ 110A	0.0034	0.067	0.0051	0.0045	.	0.021	0.021	0.027	(0.001)	.	.	.	.	0.0031	0.0035
1	VS 004	0.0033	0.040	0.0033	0.0033	0.0116	0.078	0.119	0.087	0.257	.	0.0040	.	.	0.011	.
1	VS 002	0.0024	0.104	0.0052	0.0055	0.033	0.0074	0.0061	0.0147	0.054	.	0.0010	.	.	0.0011	0.00042
1	**BS LC-6**	0.0020	0.469	0.0007	0.0009	0.050	0.0003	0.0057	0.0023	0.0021	.	(<0.0020)	(0.0004)	(0.0001)	0.0021	(0.0006)

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	B	Ca	Co	Mo

CARBON STEEL CONTINUED FROM THE PREVIOUS PAGE

Number	N	Nb	O	Pb	Sb	Sn	Ti	V	W	Zn	Zr	Units
IRSID 1660	.	.	.	.	.	.	.	.	.	.	.	37 mm Ø x 30 mm
ECRM 090-1D	0.0146	0.00043	.	0.00239	0.00090	.	.	0.204	.	0.00209	.	38 mm Ø x 25 or 30 mm
SRM 1227	.	.	.	.	.	.	.	0.002	.	.	.	32 mm Ø x 19 mm
SS 602/2	.	.	.	.	.	.	.	(0.001)	.	.	(<0.005)	44 mm Ø x 19 mm
BS 64C	0.0084	(<0.003)	.	.	.	(0.001)	(0.002)	0.005	.	.	.	44 mm Ø x ~7 or 19+ mm
HRT FE2014-N	0.0052	.	.	.	.	.	.	0.066	.	.	.	~35mm Ø x 20 mm
ECRM 056-2D	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 25 or 30 mm
SRM 1224	.	.	.	.	.	.	.	0.002	.	.	.	32 mm Ø x 19 mm
VS RG28	.	0.029	.	.	.	.	0.0041	0.022	0.006	.	.	~45 mm Ø x ~28mm
VS RG28/1	.	0.041	.	.	.	.	0.022	0.035	0.0041	.	.	~45 mm Ø x ~28mm
IARM 373A	0.0088	0.001	0.002	(0.001)	(0.002)	0.0069	0.0017	0.023	(0.002)	(0.003)	(0.003)	31 mm Ø x 2 or 18 mm
VS UG20/6	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
NM 3405.01	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
SS 435/1	.	0.039	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SS 435/2	.	0.13	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
BS 56E	0.0056	(<0.002)	.	(0.0001)	0.0004	(0.0006)	(0.001)	(<0.002)	.	.	.	44 mm Ø x ~7 or 19+ mm
IRSID 1636	.	.	.	.	.	.	.	.	.	.	.	48 mm Ø x 30 mm
SS 459/2	.	0.0102	.	0.0044	0.0121	.	.	0.0585	.	.	(0.074)	38 mm Ø x 19 mm
BS 56H	0.0106	0.0009	0.0025	0.0004	0.0025	0.0124	0.0009	0.0295	0.0007	Ta:0.0011	0.0007	38 mmØ x ~7 or 19+mm **17025**
IARM 200D	0.009	0.0010	.	.	.	0.0079	(0.0013)	0.0244	(0.003)	.	.	31 mm Ø X 2 or 18 mm
VS UG123	0.0078	.	.	.	.	.	.	0.0019	.	.	.	~45 mm Ø x ~28mm
IRSID 1657	.	.	.	.	.	.	.	(0.001)	.	.	.	42 mm Ø x 30 mm
IRSID 1648	.	.	.	.	.	0.033	.	.	.	.	.	40 mm Ø x 28 mm
12X 10400A	0.0133	.	.	.	.	0.0127	.	.	.	0.0033	.	~40 mm Ø x ~15 mm
NM EN-8	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
IRSID 1642	.	.	.	.	.	.	.	(0.002)	.	.	.	45 mm Ø x 30 mm
IRSID 1647	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x 30 mm
IRSID 1646	.	.	.	.	.	.	.	.	.	.	.	42 mm Ø x 30 mm
IARM 210D	0.011	0.001	0.0034	0.001	0.002	0.010	0.0104	0.024	(0.002)	.	(0.001)	31 mm Ø x 2 or 18 mm
SS 434/1	.	0.078	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IARM 349A	0.0100	0.0012	0.003	(0.001)	(0.003)	0.015	0.0013	0.027	0.004	(0.003)	(0.002)	31 mm Ø x 2 or 18 mm
BS 3941	0.0069	0.033	0.0055	0.0010	0.0005	0.0019	0.0017	0.0025	(0.0004)	.	(0.0003)	41 mm Ø x ~7 or 19+ mm **17025**
IRSID 1652	.	.	.	.	.	0.030	.	.	.	.	.	45 mm Ø x 30 mm
IRSID 1637	.	.	.	.	.	.	.	(0.002)	.	.	.	45 mm Ø x 30 mm
SS 605/2	.	.	.	.	.	.	.	(0.001)	.	.	(0.12)	44 mm Ø x 19 mm
IRSID 1644	.	.	.	.	.	.	.	.	.	.	.	45 mm Ø x 30 mm
ECRM 084-1D	.	.	.	.	.	0.023	.	.	.	.	.	38 mm Ø x 25 or 30 mm
IRSID 1645	.	.	.	.	.	.	.	.	.	.	.	45 mm Ø x 30 mm
IRSID 1649	.	.	.	.	.	0.028	.	.	.	.	.	40 mm Ø x 28 mm
SS 460/2	.	0.068	.	0.0005	(0.0006)	.	.	0.0322	.	.	(<0.0005)	38 mm Ø x 19 mm
VS RG30	.	0.139	.	.	.	.	.	0.63	0.91	.	.	~45 mm Ø x ~28mm
BS 1035 *	<0.05	<0.005	<0.05	<0.005	.	<0.05	<0.005	0.028	* Provisional Analysis			40 mm Ø x ~7 or 19+ mm
IRSID 1655	.	.	.	.	.	0.046	.	.	.	.	.	40 mm Ø x 34 mm
IRSID 1663	.	.	.	.	.	0.0143	0.051	.	.	.	.	44 mm Ø x 30 mm
VS UG90	0.015	.	.	.	0.0011	.	0.039	.	.	.	.	~47 mm Ø x ~30 mm
VS UG19/6	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IARM 360A	0.0102	0.0015	0.004	(0.001)	0.0023	0.010	0.0010	0.039	(0.001)	(0.003)	(0.001)	31 mm Ø x 2 or 18 mm
BS 1030	0.0107	(0.0004)	0.005	0.0005	0.0024	0.0114	0.0005	0.031	0.0012	.	(0.0002)	38 mm Ø x ~7 or 19+ mm **17025**
IARM 209D	0.0107	0.0014	0.005	0.001	0.004	0.012	0.0011	0.042	(0.002)	(0.003)	.	31 mm Ø x 2 or 18 mm
IRSID 1653	.	.	.	.	.	0.066	.	.	.	.	.	40 mm Ø x 34 mm

Number	N	Nb	O	Pb	Sb	Sn	Ti	V	W	Zn	Zr	Units
VS RG27	.	.	.	.	.	.	.	0.064	0.170	.	.	~45 mm Ø x ~28mm
IRSID 1654	.	.	.	.	.	0.030	.	.	.	.	.	40 mm Ø x 34 mm
SS 434/2	0.010	0.038	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IARM 359A	0.0094	0.002	0.0044	(0.001)	(0.002)	0.0100	0.0009	0.027	(0.001)	.	(0.001)	31 mm Ø x 2 or 18 mm
BS 1026	0.0083	(0.0004)	0.0031	(0.0002)	0.0019	0.0112	(0.0004)	0.0016	0.0021	.	(0.0002)	38 mm Ø x ~7 or 19+ mm **17025**
VS UG94	.	.	.	.	.	.	0.053	(0.001)	.	.	.	~40 mm Ø x ~28 mm
VS UG18/6	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
HRT FE2016-N	0.0055	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 20 mm
BS 1020	0.0109	(0.0003)	0.0046	(0.0002)	(0.0018)	0.0090	(0.0005)	0.0363	(0.0004)	.	(0.0005)	44 mm Ø x ~7 or 19+ mm **17025**
IARM 213C	0.0116	0.0011	0.0042	0.0011	0.002	0.0081	0.0010	0.035	(0.002)	(0.006)	(0.0004)	31 mm Ø x 2 mm
IRSID 1664	0.0072	(0.0002)	.	0.0002	0.0012	0.0108	0.0013	(0.0005)	<0.002	(0.0007)	(0.0001)	37 mm Ø x 30 mm
VS RG25/1	.	0.016	.	.	.	.	0.055	0.0110	.	.	.	~45 mm Ø x ~28mm
BS 1018	0.0079	(0.0006)	0.0014	(0.0006)	(0.001)	0.0099	0.0009	0.0009	0.0014	Fe:98.2	(0.001)	38 mm Ø x ~7 or 19+ mm **17025**
BS LF2B	0.0078	(0.0003)	0.0024	(0.0001)	0.0018	0.0092	0.0009	0.0300	0.0027	**17025**	Fe:97.9	38 mm Ø x ~7 or 19+ mm
IARM 28K	(0.008)	0.0017	(0.005)	.	.	0.0075	(0.0015)	(0.0014)	.	.	.	31 mm Ø x 2 or 18
BS 1016	0.0113	(0.0009)	(0.003)	(0.004)	Fe:98.4	0.013	0.0010	0.0011	(0.0013)	**17025**	(0.001)	Hexagon ~60 mm Ø x 19+ mm
12X 10180C	0.0052	.	.	.	.	0.0024	.	.	.	0.0005	.	~40 mm Ø x ~15 mm
NM 3404.01	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm last
12X 10180B	0.0071	.	.	.	.	0.0065	.	.	.	0.0079	.	~40 mm Ø x ~15 mm
TL 1000	(0.0093)	0.0293	.	Mg:(0.00005)	.	(0.00106)	0.0011	(0.0033)	(0.0002)	.	.	36 mm Ø x 20 mm
VS RG25	.	.	.	.	.	.	0.039	.	.	.	.	~45 mm Ø x ~28mm
VS UG124	0.0072	.	.	.	.	.	.	0.0043	.	.	.	~45 mm Ø x ~28mm
VS UG109	.	.	.	.	.	.	0.071	.	.	.	.	~45 mm Ø x ~25 mm
BS 2931B	0.0076	0.0011	0.0021	(0.00004)	0.0012	0.0062	0.0008	0.0014	0.0007	Mg:0.0001	0.0005	38 mm Ø x ~2mm **17025** last
IARM 213D	(0.008)	(0.0012)	(0.01)	.	(0.0032)	0.0147	0.0011	0.0010	(0.003)	(0.002)	(0.0015)	31 mm Ø x 2 or 18
SS 456/2	.	0.0057	.	0.0189	0.0172	.	.	0.0221	.	.	(0.014)	38 mm Ø x 19 mm
DSZU C041	0.0046	0.0017	.	.	.	0.0038	0.0019	0.003	(0.003)	.	.	40 mm Ø x 25 mm
SS 432/1	.	<0.002	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SS 601/2	.	.	.	.	.	.	.	(0.002)	.	.	(<0.005)	44 mm Ø X 19 mm
VS UG93	.	.	.	.	.	.	0.075	0.0008	.	.	.	~40 mm Ø x ~28 mm
VS UG17/6	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
SS 433/2	.	0.06	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IRSID 1661	.	.	.	.	(0.0005)	(0.0085)	.	.	.	.	.	40 mm x 42 mm x 30 mm
VS UG125	0.0112	.	.	.	.	.	.	0.035	.	.	.	~45 mm Ø x ~28mm
VS UG108	.	.	.	.	.	.	0.071	.	0.074	.	.	~45 mm Ø x ~25 mm
SRM 1228	.	.	.	.	.	.	.	<0.001	.	.	.	32 mm Ø x 19 mm
ECRM 057-2D	0.0023	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
BS XCCS-1	0.0052	(0.001)	.	(0.0006)	(0.0005)	0.0002	0.0015	0.0012	(0.003)	.	0.0006	~40 mm Ø x ~30 mm **17025**
VS RG267	.	0.0056	.	.	.	.	0.100	0.0113	.	.	.	~45 mm Ø x ~28mm
NM PC-1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
ECRM 083-2D	0.00157	.	.	.	.	.	.	.	.	0.00439	.	39 mm Ø x 28 mm
DSZU C03	.	(0.002)	.	(0.009)	(0.003)	0.011	0.002	0.004	(0.009)	(0.0037)	(0.0006)	40 mm Ø x 30 mm
VS RG26	.	.	.	.	.	.	0.121	.	0.0058	.	.	~45 mm Ø x ~28mm
SS 431/2	0.005	0.004	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
DSZU C040	0.0071	(0.0004)	.	.	.	(0.0001)	0.0010	(0.001)	(0.002)	.	.	40 mm Ø x 25 mm
RM Fe 1/5	0.002	<0.005	.	<0.002	.	0.0008	<0.0005	<0.0005	0.002	.	<0.005	40 mm Ø x 40 mm
VS UG2/5	.	(0.002)	.	.	.	.	(0.01)	0.005	(0.02)	.	.	~45 mm Ø x ~28 mm
SS 432/2	0.007	0.018	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SS 111/1	0.0025	.	.	.	.	0.0006	0.0004	0.0002	.	.	.	44 mm Ø x 19 mm
VS 005	.	.	.	.	.	0.0021	0.0047	.	.	.	.	~45 mm Ø x ~25 mm
VS UG2/10	(0.006)	.	.	.	.	0.0017	0.0070	.	.	.	.	~45 mm Ø x ~28 mm
VS 003	.	.	.	.	.	0.0020	0.0063	.	.	.	.	~45 mm Ø x ~25 mm
CZ LA-1B	0.003	(0.001)	.	(0.0007)	(0.002)	(0.001)	(0.001)	0.004	0.010	.	(0.002)	~37 mm Ø x 25 mm
IMZ 110A	0.0037	.	.	.	.	.	(0.0006)	(0.0014)	.	.	.	43 mm Ø x 20 mm
VS 004	.	.	.	.	.	.	0.0013	.	.	.	.	~45 mm Ø x ~25 mm
VS 002	.	.	.	.	.	0.00040	0.0005	.	.	.	.	~45 mm Ø x ~25 mm
BS LC-6	0.0003	last	0.0007	(<0.0020)	(<0.0001)	(<0.0020)	0.0006	(<0.0010)	(<0.0050)	(0.00004)	(0.0004)	39 mm Ø x ~7 or ~12 mm **17025**

Number	N	Nb	O	Pb	Sb	Sn	Ti	V	W	Zn	Zr	Units

ARSENIC AND ANTIMONY IN STEEL

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

#	Number	As	Sb	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	Sn	Ti
1	VS UG87	0.116	0.0012	0.59	1.18	0.026	0.022	1.25	0.030	0.50	0.260	0.024	0.02	.	0.044	.	0.103
1	12X 12749W	0.071	.	0.132	1.250	0.0257	0.101	0.298	0.311	0.485	0.554	0.004	.	0.436	0.224	0.040	0.031
1	SS 454/1	0.070	.	0.376	0.80	0.061	0.047	0.31	0.051	0.069	0.062	.	.	.	0.20	0.054	0.010
1	IMZ 120	0.065	0.031	0.60	0.40	(0.049)	0.026	0.34	0.10	0.085	0.20	0.033	.	.	.	0.008	.
1	12X 15266V	0.0640	.	0.455	1.240	0.0344	0.0258	0.674	0.226	1.317	3.49	0.526	.	0.286	0.298	0.0082	.
1	IRSID 1656	0.055	.	0.477	0.730	0.027	0.013	0.277	.	(0.048)	(0.017)	(0.002)	.	.	(0.007)	.	.
1	12X 15260W	0.055	.	0.352	2.08	0.0275	0.074	0.485	0.152	0.453	2.98	0.191	.	0.0884	0.098	0.0094	.
1	12X 350B	0.053	.	0.138	0.706	0.029	0.0363	0.672	0.150	0.162	0.392	0.341	.	0.0206	0.149	0.0298	0.099
1	12X 350C *	0.05	.	0.16	0.76	0.03	0.04	0.45	0.20	0.16	0.34	0.29	.	0.032	0.15	0.035	0.075
1	12X 353G	0.0461	0.138	0.111	0.726	0.0099	0.0147	0.207	0.232	0.214	0.701	0.0485	.	0.0240	0.1063	0.113	0.0387
1	12X 12746U	0.049	.	0.0132	1.70	0.0247	0.064	0.183	0.368	0.161	0.182	0.021	.	0.115	0.654	0.202	0.0283
1	12X 358A	0.0393	0.128	0.129	0.709	0.0102	0.0142	0.199	0.250	0.212	0.625	0.0616	.	0.0355	0.108	0.117	0.0453
1	12X 355C	0.0331	0.0796	0.159	0.508	0.0214	0.0241	0.494	0.657	0.0710	0.113	0.1104	.	0.0495	0.1010	0.0564	0.153
1	12X 354B	0.023	.	0.252	5.03	0.0478	0.0105	0.200	0.0679	0.082	0.0487	0.0150	.	0.0237	0.0328	0.0154	0.0248
1	ECRM 055-2D	0.0187	0.00376	0.5199	0.687	0.0102	0.0205	0.3094	0.2089	0.3121	0.3217	.	.	0.0257	0.0960	0.0162	0.00104
1	12X 357C	0.0147	0.0140	0.270	0.220	0.0101	0.0590	0.153	0.265	0.0954	0.094	0.208	.	0.199	0.0105	0.0188	0.0569
1	**BS 1030**	0.0055	0.0024	0.331	0.682	0.0101	0.0299	0.261	0.269	0.078	0.124	0.0014	.	0.0069	0.0182	0.0114	0.0005
1	VS UG90	0.0044	0.0011	0.34	0.286	0.0079	0.012	0.221	0.200	0.265	0.261	0.037	0.032	.	0.046	.	0.039
1	VS UG89	0.0043	0.0011	0.92	0.76	0.0085	0.01	0.385	0.373	0.51	0.420	0.01	0.007	.	0.044	.	0.012
1	**BS 2931B**	0.0033	0.0012	0.159	0.788	0.0108	0.0292	0.207	0.098	0.083	0.080	0.0191	.	0.0056	0.0329	0.0062	0.0008
1	VS UG92	0.0027	0.0005	0.69	0.79	0.05	0.0029	1.98	0.111	0.155	0.200	0.091	0.08	.	0.119	.	0.022
1	IRSID 1670	0.0018	.	0.0011	0.3981	0.0128	0.0075	0.0046	0.0134	0.0142	0.0174	0.0479	.	0.0018	0.0009	0.0017	0.0078
1	VS UG88	0.0007	0.0003	0.62	1.26	0.0026	0.0043	1.22	0.171	0.52	0.474	0.01	0.009	.	0.104	.	0.107
1	VS UG91	0.0004	0.00009	0.49	.	0.0038	0.0021	2.23	0.057	0.039	0.064	0.048	0.048	.	0.058	.	0.038
1	SS 458/2	.	0.089	0.198	0.479	0.0281	0.0314	0.504	.	.	.	0.055	0.053	0.198	.	.	.
1	SS 457/2	.	0.050	0.307	0.327	0.0098	0.0448	0.105	.	.	.	0.088	0.084	0.0217	.	.	.

Number	B	Bi	Ca*	Ce*	Mg*	N	Nb	O*	Pb	Se	Ta	V	W	Zn	Zr	Units
VS UG87	.	.	.	.	.	0.010	.	.	0.00008	.	.	0.0038	.	.	~47 mm Ø x ~30 mm	
12X 12749W	.	.	.	.	.	.	.	.	.	.	.	0.069	0.034	.	.	~40 mm Ø x ~15 mm	
SS 454/1	.	.	.	.	.	.	.	.	(0.0001)	.	.	.	0.15	.	.	38 mm Ø x 19 mm	last
IMZ 120	.	.	.	.	.	0.0115	.	.	0.077	.	.	.	.	.	.	40 mm Ø x 40 mm	
12X 15266V	.	.	.	.	.	.	1.438	.	.	.	0.116	0.106	.	.	.	~40 mm Ø x ~15 mm	
IRSID 1656	.	.	.	.	.	.	.	.	.	.	.	(0.002)	.	.	.	40 mm Ø x 35 mm	
12X 15260W	.	.	.	.	.	.	0.254	.	.	.	(0.016)	0.442	.	.	.	~40 mm Ø x ~15 mm	
12X 350B	.	.	.	.	.	.	.	.	.	.	.	0.0286	0.275	.	.	40 mm Ø x 15 mm	
12X 350C *	* Provisional Analysis					.	.	.	.	.	.	0.012	0.25	.	.	~40 mm Ø x ~15 mm	
12X 353G	.	0.0246	.	.	.	0.0027	0.0641	.	0.0179	0.0192	.	0.0189	0.135	.	0.034	~40 mm Ø x ~15 mm	
12X 12746U	.	.	.	.	.	0.0218	.	.	.	.	.	0.0160	0.101	.	.	40 mm Ø x ~20 mm	last
12X 358A	.	0.0102	.	.	.	0.0029	0.104	.	0.0052	0.097	.	0.0261	0.123	.	0.0113	~40 mm Ø x ~15 mm	
12X 355C	(0.0012)	.	.	.	.	0.0023	0.023	.	.	0.0395	.	0.1265	0.037	.	0.0192	~40 mm Ø x ~15 mm	
12X 354B	.	.	.	.	.	0.0027	0.0802	.	.	.	.	0.0204	0.0248	.	.	~40 mm Ø x ~15 mm	
ECRM 055-2D	.	.	.	.	.	0.01069	.	.	.	.	.	0.00245	0.0166	.	.	38 mm Ø x 25 or 30 mm	
12X 357C	0.0102	0.0058	.	.	.	0.0079	0.0051	.	0.0315	(0.004)	.	0.166	0.0194	0.0094	.	~40 mm Ø x ~15 mm	
BS 1030	0.0003	.	12	.	(2)	0.0107	(0.0004)	50	0.0005	.	(0.001)	0.031	0.0012	.	(0.0002)	38 mm Ø x ~7 or 19+ mm	**17025**
VS UG90	.	.	.	.	.	0.015	.	.	.	.	.	.	.	.	.	~47 mm Ø x ~30 mm	
VS UG89	.	.	.	.	.	0.017	0.0043	.	0.0003	.	.	0.021	.	.	.	~47 mm Ø x ~30 mm	
BS 2931B	0.0002	.	2	.	1	0.0076	0.0011	21	(0.00004)	.	(0.0004)	0.0014	0.0007	last	0.0005	38 mm Ø x ~2 mm	**17025**
VS UG92	.	.	.	.	.	0.016	0.034	.	0.00017	.	.	0.024	.	.	.	~47 mm Ø x ~30 mm	
IRSID 1670	0.0007	.	.	(2)	.	0.0016	(0.0003)	.	.	.	.	(0.0005)	.	.	.	37 mm Ø x 30 mm	
VS UG88	.	.	.	.	.	0.020	0.059	.	0.00015	.	.	0.117	.	.	.	~47 mm Ø x ~30 mm	
VS UG91	.	.	.	.	.	0.010	0.097	.	0.00006	.	.	0.049	.	.	.	~47 mm Ø x ~30 mm	
SS 458/2	0.0069	.	.	.	.	.	0.0510	.	0.0140	.	.	0.105	.	.	(0.064)	38 mm Ø x 19 mm	
SS 457/2	0.0046	.	.	.	.	.	0.0174	.	0.0098	.	.	0.153	.	.	0.025	38 mm Ø x 19 mm	

BISMUTH AND SELENIUM STEEL

= Class, where 1 = CRM and 2 = RM BS: 38 mm Ø x ~7 or 19+ mm CZ: ~39 mm Ø x 25 mm

#	Number	Bi	Se	C	Mn	P	S	Si	Cu	Ni	Cr	Al	As	Co	Mo	N
2	BS 4140A	0.105	.	0.40	0.84	0.021	0.076	0.21	0.15	0.15	0.97	0.016	0.005	0.010	0.16	0.0098
2	BS 53MOD	0.102	.	1.01	0.36	0.011	0.012	0.26	0.070	0.072	1.37	0.019	0.004	0.007	0.024	0.0086
2	BS 4140B	0.087	.	0.43	0.76	0.027	0.037	0.20	0.006	0.012	0.84	0.036	(0.002)	0.005	0.16	0.0064
2	BS 4150MOD	0.070	.	0.47	0.90	0.024	0.079	0.21	0.19	0.15	1.01	0.012	0.005	0.012	0.21	0.0087
2	CZ CM-16A	0.039	.	0.355	0.92	0.043	0.033	0.77	0.293	0.72	0.70	0.125	0.058	0.056	0.405	0.015

Number	B	Ca	Nb	O	Pb	Sb	Sn	Ti	V	W	Zn	Zr
BS 4140A	.	(0.0003)	.	(0.0025)	(0.001)	.	0.011	(0.003)	0.004	.	.	.
BS 53MOD	.	(0.001)	.	(0.002)	0.0005	.	0.008	.	0.005	.	.	.
BS 4140B	.	(0.0002)	.	(0.002)	0.004	.	(0.002)	0.003	0.005	.	.	.
BS 4150MOD	.	0.0010	.	(0.003)	0.0010	.	0.013	(0.002)	0.008	.	.	.
CZ CM-16A	0.012	0.0006	0.066	.	0.053	0.027	0.025	0.099	0.319	0.141	0.021	0.062

CALCIUM IN STEEL

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

#	Number	Ca	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	V
1	**BS HiCal-1**	0.0140	0.271	1.00	(0.007)	0.0007	1.29	0.152	3.28	1.55	0.070	.	0.0024	0.379	.	0.0027
1	SS 115	0.0058	0.6224	0.682	0.0123	0.00093	0.2078	.	0.0196	0.0198	0.0527	.	.	.	0.0067	.
1	**BS 9325A**	0.0039	0.203	0.969	0.0079	0.0045	0.612	0.163	3.29	1.50	0.0056	.	0.0093	0.358	0.0076	(0.0024)
1	SS 116	0.0036	0.617	0.6756	0.0092	0.00176	0.201	.	0.0155	0.0141	0.0587	.	.	.	0.0069	.
1	ECRM 194-1D	0.0026	0.1532	1.188	0.0097	0.0006	0.431	0.0751	0.3417	0.733	0.0837	.	.	0.2857	0.0115	0.0243
1	**BS XCCS-1**	0.0024	0.0441	0.356	0.0068	0.0022	0.292	0.0143	0.0132	0.0288	0.061	.	0.0017	0.0060	0.0052	0.0012
1	**BS 1020**	0.0022	0.210	0.568	0.0058	0.0249	0.250	0.184	0.059	0.109	0.0006	.	0.0070	0.018	0.0109	0.0363
2	HRT FE2009-N	0.0020	0.12	0.55	0.010	0.003	0.32	0.08	0.25	2.56	0.030	.	.	1.02	.	0.015
1	IRSID 1665	0.0017	0.1209	0.446	0.0104	0.0135	0.187	0.0469	0.0308	0.0363	.	0.0379	0.0046	0.0047	0.0049	(0.0006)
1	**BS 3941**	0.0011	0.407	0.802	0.016	0.023	0.257	0.053	0.018	0.069	0.0019	.	0.0042	0.0061	0.0069	0.0025
1	IARM 254A	0.001	0.500	0.78	0.010	0.024	0.211	0.091	0.044	0.050	0.025	.	0.006	0.013	0.0096	0.002
2	BS 4150MOD	0.0010	0.47	0.90	0.024	0.079	0.21	0.19	0.15	1.01	0.012	.	0.012	0.21	0.0087	0.008
2	BS 4330V	0.0010	0.318	0.91	0.008	0.0009	0.240	0.181	1.91	0.91	0.021	.	0.011	0.475	0.0076	0.094
1	**BS 4130**	0.0007	0.303	0.541	0.0105	0.0113	0.245	0.221	0.088	0.924	0.0242	.	0.0065	0.168	0.0072	0.0037
2	BS 4942	0.0006	0.414	0.56	0.015	0.021	0.22	0.165	0.16	0.97	(0.004)	.	0.010	0.54	0.0080	0.28
2	BS 2952	0.0003	1.03	0.33	0.013	0.014	0.32	0.106	0.135	1.36	0.024	.	0.007	0.044	0.0084	0.005
1	**BS PP20**	0.0003	0.382	1.41	0.018	0.0070	0.262	0.119	1.00	1.94	0.0132	.	0.0145	0.212	0.0080	0.066
1	IMZ 111	0.0003	0.106	0.31	0.010	0.039	0.55	0.036	0.23	0.072	0.017	0.007	.	0.084	0.0133	0.022
2	TL 1669	0.00017	0.00226	0.0955	0.0137	0.0100	0.0093	0.0217	0.0160	0.0246	0.03553 (tot)		0.0019	0.0011	0.0024	(0.0006)

Number	As	B	Bi	Nb	O	Pb	Sb	Sn	Ti	W	Zr	Other
BS HiCal-1	0.0022	(0.0001)	.	(0.002)	.	(0.0005)	.	(0.0002)	0.0037	(0.0009)	(0.0008)	~38 mm Ø x ~30 mm **17025**
SS 115	.	.	.	.	.	.	.	.	0.0027	.	.	38 mm Ø x 19 mm
BS 9325A	0.0024	(0.0001)	.	0.0017	.	(0.0003)	Fe: 92.8	(0.0003)	0.0030	0.024	(0.001)	~40 mm Ø x ~30 mm **17025**
SS 116	.	.	.	.	.	0.00012	.	.	0.00171	.	.	44 mm Ø x 19 mm
ECRM 194-1D	0.0042	0.0020	.	.	.	.	.	.	.	.	.	Disc 33 mm Ø x 33 mm or Block ~38x34x32 mm
BS XCCS-1	0.0024	(0.0004)	.	(0.001)	Fe:99.2	(0.0006)	(0.0005)	0.0002	0.0015	(0.003)	0.0006	~40 mm Ø x ~30 mm **17025** Fe: 99.2
BS 1020	0.0074	(0.0001)	.	(0.0003)	0.0046	(0.0002)	(0.0018)	0.0090	(0.0005)	(0.0004)	(0.0005)	44 mm Ø x ~7 or 19+ mm **17025**
HRT FE2009-N	.	.	.	.	.	.	.	.	.	.	Zn: 0.004	40 mm Ø x 40 mm
IRSID 1665	0.0067	(0.00032)	.	.	.	(0.0014)	(0.0008)	0.0031	(0.0008)	.	.	37 mm Ø x 30 mm
BS 3941	0.0036	(0.0001)	.	0.033	0.0055	0.0010	0.0005	0.0019	0.0017	(0.0004)	(0.0003)	41 mm Ø x ~7 or 19+ mm **17025**
IARM 254A	0.005	0.0002	.	0.001	(0.003)	(0.0003)	.	0.005	0.001	(0.001)	(0.001)	31 mm Ø x 2 mm
BS 4150MOD	0.005	.	0.070	.	(0.003)	0.0010	.	0.013	(0.002)	.	.	38 mm Ø x ~7 or 19+ mm
BS 4330V	.	.	.	.	0.0018	.	.	0.010	.	.	.	37 mm Ø x ~7 or 19+ mm
BS 4130	0.0048	(0.0002)	.	0.0015	0.0015	(0.00003)	(0.0021)	0.0099	0.0009	0.0011	Mg:0.0002	38 mm Ø x ~7 or 19+ mm **17025**
BS 4942	0.005	.	.	.	(0.0021)	.	.	0.014	.	.	.	38 mm Ø x ~7 or 19+ mm last
BS 2952	0.004	.	.	.	(0.002)	.	0.003	0.006	0.003	.	.	44 mm Ø x ~7 or 19+ mm
BS PP20	0.0049	0.00011	.	0.0048	(0.0010)	.	0.0013	0.0069	0.0007	0.0058	.	38 mm Ø x ~7 or 19+ mm **17025**
IMZ 111	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
TL 1669	0.0017	0.00038	.	0.00046	.	0.00013	0.00049	0.0071	0.0504	.	(0.00021)	38 mm Ø x 25 mm Zn: 2.7*

CRM Al, Ca, AND N IN LOW ALLOY STEEL

Number	Al	Ca	**N**	Units
BS 9905	0.017	(0.0001)	**0.055**	38 mm Ø x ~7 mm **17025** last
IMZ 133	.	.	**0.0360**	40 mm Ø x 40 mm
IMZ 131	0.0043	.	**0.0333**	40 mm Ø x 40 mm
IMZ 135	0.0274	0.0008	**0.0238**	40 mm Ø x 40 mm
IMZ 169	0.075	.	**0.0193**	40 mm Ø x 40 mm
IMZ 141	0.0071	.	**0.0154**	40 mm Ø x 40 mm
IMZ 130	0.0046	0.0024	**0.0153**	40 mm Ø x 40 mm
IMZ 139	(0.029)	0.0031	**0.0113**	40 mm Ø x 40 mm
IMZ 132	0.0021	0.0002	**0.0097**	40 mm Ø x 40 mm
IMZ 137	0.0017	0.00025	**0.0083**	40 mm Ø x 40 mm
IMZ 140	0.0307	0.0015	**0.0083**	40 mm Ø x 40 mm
IMZ 138	0.0022	.	**0.0063**	40 mm Ø x 40 mm
IMZ 134	0.0124	0.0005	.	40 mm Ø x 40 mm
IMZ 136	0.0034	0.00031	.	40 mm Ø x 40 mm

C-Mo and Cr-Mo STEEL XRF SET

= class, where 1 = CRM ISO **17025** and 2 = RM, Set Part Number: BS MOLY-5 AVAILABLE INDIVIDUALLY ~7 mm discs

#	Grade	Alloy	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Co	N	Sn	V
2	C-.5Mo	4419	BS 3952	0.208	0.546	0.011	0.021	0.264	0.202	0.112	0.105	0.519	0.048	.	(0.0005)	.	.
1	1.25Cr-.5Mo	F-11	**BS 45B**	0.140	0.502	0.0068	0.017	0.583	0.101	0.136	1.14	0.60	0.030	0.0090	0.0066	0.0069	0.0083
2	2.25Cr-1Mo	F-22	BS 1982	0.128	0.441	0.012	0.026	0.255	0.177	0.197	2.09	0.89	0.021	0.010	0.0097	0.013	0.003
2	5Cr-.5Mo	F-5	BS 47A	0.130	0.44	0.017	0.015	0.27	0.11	0.12	4.22	0.47	0.015	0.011	0.018	0.008	0.016
1	9Cr-1Mo	F-9	**BS 48B**	0.110	0.365	0.0228	0.0068	0.75	0.070	0.165	8.78	0.949	0.0157	0.0165	0.0088	0.0049	0.033

CRM EPMA SETS

available in sets only, as grouped 4x10x15mm

Number	Cr	Number	Ni
NMIJ 1001-a	5.00	NMIJ 1006-a	5.04
NMIJ 1002-a	14.96	NMIJ 1007-a	10.05
NMIJ 1003-a	19.87	NMIJ 1008-a	20.02
NMIJ 1004-a	29.84	NMIJ 1009-a	39.92
NMIJ 1005-a	39.69	NMIJ 1010-a	60.07

Cr-Mo STEEL (Cr > 1, Mo > 0.1)

= Class, where 1 = CRM and 2 = RM * Provisional Analysis

#	Number	Cr	Mo	C	Mn	P	S	Si	Cu	Ni	Al	As	Co	N	Sn	V
1	**BS 48B**	8.78	0.949	0.110	0.36	0.0228	0.0068	0.75	0.070	0.165	0.0157	0.0048	0.0165	0.0088	0.0049	0.033
1	**BS 9905A**	8.75	0.95	0.113	0.465	0.0133	0.0040	0.34	0.091	0.152	0.0186	0.0065	0.0136	0.034	0.0060	0.216
1	**BS 9905**	8.22	0.90	0.107	0.333	0.008	0.008	0.327	0.115	0.123	0.017	0.007	0.016	0.055	0.009	0.236
1	**BS H-13**	5.14	1.24	0.402	0.386	0.0103	0.0202	0.99	0.197	0.109	0.0152	0.0066	0.0092	0.0108	0.0093	0.98
2	HRT FE2012-H	5.13	2.78	0.37	0.41	0.019	0.002	0.42	0.07	0.20	.	.	.	.	.	0.42
2	BS 47B	4.78	0.45	0.122	0.39	0.014	0.022	0.22	0.12	0.105	0.018	0.004	.	0.023	0.006	0.004
1	IARM 37C	4.34	0.500	0.096	0.408	0.014	(0.004)	0.31	0.121	0.148	(0.010)	(0.009)	0.015	0.008	0.009	0.017
2	BS 47A	4.22	0.47	0.130	0.44	0.017	0.015	0.27	0.11	0.12	0.015	.	0.011	0.018	0.008	0.016
1	12X 40CDV12A	3.29	0.946	0.401	0.604	0.0060	0.0013	0.250	0.0978	0.1062	0.0208	0.0040	0.0197	0.0155	0.0049	0.198
1	SRM 1772	3.10	1.39	0.477	0.61	0.008	0.0031	0.264	0.083	0.105	.	.	.	.	.	0.236
1	SS 407/2	3.03	0.83	0.490	0.195	0.038	0.0105	0.66	0.397	0.527	0.040	.	0.0068	(0.011)	.	0.19
2	RM Fe D/7	2.97	1.21	0.85	0.21	0.019	0.013	1.03	0.06	0.12	0.15	0.004	0.32	.	(0.0030)	0.05
2	RM Fe D/5	2.72	1.41	0.85	0.31	0.022	0.023	1.18	0.11	0.12	0.22	0.005	0.32	.	0.013	0.031
1	IMZ 160	2.64	0.98	0.077	0.38	0.023	0.004	0.34	0.42	0.30	0.031	.	.	.	.	0.10
1	IMZ 159	2.64	0.98	0.075	0.39	0.022	0.005	0.33	0.41	0.31	0.024	.	.	.	.	0.10
2	HRT FE2009-N	2.56	1.02	0.12	0.55	0.010	0.003	0.32	0.08	0.25	0.030	.	.	.	.	0.015
1	IARM 36C	2.43	0.98	0.14	0.49	0.009	0.014	0.25	0.142	0.085	(0.017)	(0.005)	(0.008)	0.008	(0.008)	0.0061
1	IARM 196A	2.35	0.129	1.08	2.40	0.040	0.014	0.35	0.25	0.61	0.015	0.025	0.013	0.0084	0.033	0.157
1	SRM 1270	2.34	0.956	0.077	0.626	0.0065	0.0065	0.247	0.114	0.174	.	.	0.038	.	.	0.013
1	**BS 46B**	2.28	1.00	0.126	0.472	0.0087	0.0187	0.219	0.128	0.081	0.020	0.0041	0.0074	0.0100	0.0073	0.0073
1	IMZ 169	2.20	1.03	0.099	0.54	0.015	0.0155	0.35	0.128	0.073	0.075	.	0.012	0.0193	0.062	(0.016)
1	ECRM 190-1D	2.18	0.410	0.395	1.28	0.0112	0.0044	0.278	.	0.934	.	.	0.034	.	.	.
1	SRM 1139a	2.1	0.51	0.79	0.92	0.012	0.013	0.80	0.47	0.98	.	.	.	.	.	0.26
1	**BS 1982**	2.09	0.89	0.128	0.441	0.012	0.026	0.255	0.177	0.197	0.021	0.007	0.010	0.0097	0.013	0.003
1	**BS PP20**	1.94	0.212	0.382	1.41	0.018	0.0070	0.262	0.119	1.00	0.0132	0.0049	0.0145	0.0080	0.0069	0.066
1	BS 55G *	1.8	0.42	0.38	0.85	0.011	0.003	0.57	0.11	0.13	0.012	0.006	0.009	0.008	0.008	0.006
1	IRSID 1749	1.734	0.257	0.411	0.733	0.0104	0.0157	0.193	0.188	0.190	1.034	0.0134	0.0141	0.0066	0.0148	(0.0036)
1	ECRM 129-3D	1.702	0.206	0.3684	0.371	0.0110	0.0165	0.2087	0.0804	1.022	1.016	0.0049	0.0148	0.0046	0.0067	.
1	ECRM 195-1D	1.56	0.77	0.757	0.571	0.017	0.012	0.467	0.036	0.33	.	.	.	0.010	.	0.31
1	SRM 1286	1.53	0.344	0.196	0.152	0.008	0.017	0.130	0.043	2.81	0.109	0.019	0.116	.	0.012	0.0057
2	BS 68B	1.51	0.309	0.39	0.52	0.010	0.020	0.26	0.163	0.165	1.08	.	0.010	0.0073	0.010	0.007
1	**BS 68E**	1.49	0.322	0.406	0.560	0.005	0.0004	0.296	0.134	0.147	1.09	(0.003)	0.007	0.0030	0.0097	0.0010
1	12X 24065A	1.412	0.1716	0.370	0.502	0.0129	0.0044	0.218	0.216	0.271	1.035	0.0074	.	0.0076	0.0120	0.0040
2	BS 58E	1.40	0.110	0.100	0.63	0.009	0.002	0.29	0.154	3.22	0.029	0.003	0.013	0.0033	0.003	0.006
1	12X 15CDV6A	1.397	0.875	0.171	0.839	0.0056	0.0086	0.152	0.0231	0.044	0.019	0.0041	.	0.0069	0.0011	0.242
1	IARM 35L	1.35	0.607	0.119	0.535	0.007	0.014	0.679	0.123	0.071	0.017	0.0045	0.0070	0.0072	0.0088	0.0037
1	SS 112	1.236	0.190	0.394	0.436	0.0043	0.0026	0.289	0.149	1.461	0.0148	0.0021	0.0175	0.0024	0.0086	.
1	12X 43400A	1.181	0.223	0.422	0.592	0.0164	0.0284	0.259	0.177	1.378	0.013	0.0084	.	0.0089	0.007	.
1	**BS 45B**	1.14	0.60	0.140	0.502	0.0068	0.017	0.583	0.101	0.136	0.030	0.0066	0.0090	0.0066	0.0069	0.0083
1	IRSID 1745	1.130	0.222	0.295	0.850	0.0077	0.081	0.220	0.202	0.188	0.0202	0.0262	.	.	0.0134	(0.004)
1	12X 11572A	1.107	0.499	0.111	0.498	0.0069	0.0025	0.649	0.0576	0.0977	0.0290	0.0030	.	0.0058	0.0049	.
1	12X 14072A	1.061	0.573	0.430	0.680	0.0151	0.0061	0.322	0.203	0.136	0.0039	.	0.0098	0.0103	(0.011)	0.301
2	**BS 1962**	1.05	0.229	0.41	0.94	0.007	0.011	0.242	0.224	0.16	0.018	0.007	0.008	0.0095	0.010	0.004
1	IPT 501	1.05	0.210	0.277	0.723	0.016	0.030	0.208	0.083	0.063	0.034	.	0.008	0.0076	0.008	.
1	IARM 299A	1.03	0.99	0.469	0.70	0.008	0.002	0.22	0.100	0.57	0.092	0.003	0.0054	0.0028	0.0055	0.120
2	BS 4150MOD	1.01	0.21	0.47	0.90	0.024	0.079	0.21	0.19	0.15	0.012	0.005	0.012	0.0087	0.013	0.008
1	12X 41400A	1.003	0.211	0.418	0.795	0.0138	0.0210	0.221	0.238	0.127	0.0195	0.0088	.	0.0101	0.0181	.

Number	B	Ca	Nb	O	Pb	Sb	Ta	Ti	W	Zr	Units
BS 48B	(0.0002)	(0.003)	(0.001)	0.0022	(0.0002)	(0.001)	.	0.0031	0.026	(0.002)	38 mm Ø x ~7 or 19+ mm **17025** Fe: 88.7
BS 9905A	(0.0005)	(0.0002)	0.074	0.0024	(0.002)	(0.003)	(0.01)	0.0023	0.0024	(0.002)	38 mm Ø x ~7 or 19+ mm **17025** Fe: 88.9
BS 9905	(0.0004)	(0.0001)	0.076	0.0021	(0.0002)	(0.002)	last	(0.002)	0.003	(0.001)	38 mm Ø x ~7 mm **25(pre-17025)**
BS H-13	(0.0002)	(0.0003)	(0.0004)	0.0018	(0.0003)	0.0020	(0.003)	(0.0019)	0.0022	(0.0014)	38 mm Ø x ~7 or 19+ mm **17025** Fe: [90.4]
HRT FE2012-H	.	.	(0.007)	.	.	.	.	.	.	.	40 mm Ø x 20 mm
BS 47B	.	.	.	(0.004)	.	.	.	.	.	.	38 mm Ø x ~7 or 19+ mm
IARM 37C	.	.	(0.004)	.	.	.	.	(0.0025)	(0.012)	.	31 mm Ø X 2 or 18 mm
BS 47A	.	.	0.002	(0.003)	.	.	.	0.003	.	.	38 mm Ø x ~7 or 19+ mm
12X 40CDV12A	.	.	.	.	.	.	.	.	.	.	38 mm Ø x ~15 mm
SRM 1772	.	.	.	.	.	.	.	.	.	.	34 mm Ø x 19 mm
SS 407/2	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
RM Fe D/7	.	.	0.28	.	(0.0106)	.	.	0.10	0.07	0.14	40 mm Ø x 40 mm
RM Fe D/5	.	.	0.31	.	.	.	.	0.18	0.082	0.071	40 mm Ø x 40 mm last
IMZ 160	.	.	.	.	.	.	.	.	0.26	.	40 mm Ø x 40 mm
IMZ 159	.	.	.	.	.	.	.	.	0.26	.	40 mm Ø x 40 mm
HRT FE2009-N	.	0.0020	.	.	.	.	.	.	.	Zn: 0.004	40 mm Ø x 40 mm
IARM 36C	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 2 or 18 mm
IARM 196A	0.0017	0.0002	0.087	0.0021	0.001	0.006	.	0.014	0.189	0.006	31 mm Ø x 18 mm
SRM 1270	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
BS 46B	(0.0006)	0.0009	(0.003)	0.0026	(0.001)	(0.002)	.	(0.001)	0.0008	(0.002)	38 mm Ø x ~7 or 19+ mm **17025** Fe: 95.7
IMZ 169	.	.	(0.0045)	.	(0.001)	.	.	0.001	.	.	40 mm Ø x 40 mm
ECRM 190-1D	.	.	.	.	.	.	.	.	.	.	35 mm x 35 mm x 30 mm
SRM 1139a	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 13 mm
BS 1982	.	.	(<0.003)	0.0017	(0.0003)	0.002	.	(0.001)	.	.	39 mm Ø x ~7 or 19+ mm **25(pre-17025)**
BS PP20	0.00011	0.0003	0.0048	(0.0010)	.	0.0013	.	0.0007	0.0058	.	38 mm Ø x ~7 or 19+ mm **17025**
BS 55G *	0.0002	0.0014	0.003	0.002	<0.005	<0.005	.	0.005	0.03	0.002	38 mm Ø x ~7 or 19+ mm Fe: [95.6]
IRSID 1749	.	(0.0002)	(<0.0005)	0.0002	(<0.0002)	0.0018	.	0.0031	(<0.0030)	(<0.0003)	41 mm Ø x 25 mm Mg: 9 ppm
ECRM 129-3D	.	.	.	.	.	0.00059	.	0.0030	.	.	39 mm Ø x 25 mm
ECRM 195-1D	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 28 to 35 mm
SRM 1286	(0.006)	.	(0.012)	.	(0.0002)	.	.	0.040	(0.013)	(0.021)	32 mm Ø x 19 mm
BS 68B	.	.	.	.	.	.	.	0.005	.	.	41 mm Ø x 15-19 mm last
BS 68E	0.0002	(0.0003)	(0.002)	0.0011	(0.0002)	0.0024	.	0.0012	(0.002)	.	38 mm Ø x ~7 or 19+ mm Mg:0.0004 **17025**
12X 24065A	.	.	.	.	.	.	.	0.0028	.	Zn:0.0034	~40 mm Ø x ~15 mm
BS 58E	(0.0002)	(0.0002)	.	0.0008	.	.	.	(0.002)	.	.	38 mm Ø x ~7 or 19+ mm
12X 15CDV6A	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IARM 35L	0.00044	.	(0.0026)	.	.	.	.	(0.0015)	(0.004)	.	31 mm Ø x 2 or 18 mm
SS 112	0.0007	.	0.0065	.	.	.	.	0.0100	.	.	44 mm Ø x 19 mm
12X 43400A	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm Zn: 0.0027
BS 45B	(0.0003)	0.0008	(0.002)	0.0015	(0.15)	(0.003)	.	0.0024	(0.0038)	(0.0009)	38 mm Ø x ~7 or 19+ mm **17025** Fe: 96.7
IRSID 1745	.	.	.	.	.	.	.	(0.003)	.	.	48 mm Ø x 30 mm
12X 11572A	.	.	.	.	.	.	.	.	.	Zn:0.0009	38 mm Ø x ~15 mm
12X 14072A	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
BS 1962	.	.	.	.	(0.001)	.	.	0.004	.	.	41 mm Ø x ~7 mm **25(pre-17025)**
IPT 501	.	.	.	.	.	.	.	0.0015	.	.	34 mm Ø x 18 mm
IARM 299A	0.0003	(0.001)	0.006	(0.002)	(0.001)	(0.002)	.	0.0038	0.010	(0.001)	31 mm Ø x 2 or 18 mm
BS 4150MOD	.	0.0010	.	(0.003)	0.0010	.	.	(0.002)	.	.	38 mm Ø x 19+ mm Bi: 0.070
12X 41400A	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~20 mm Zn: 0.0041

LEADED STEEL

= Class, where 1 = CRM and 2 = RM **OES regularly requires extension of preburn time**

#	Number	Pb	C	Mn	P	S	Si	Cu	Ni	Cr	Al	As	Co	Mo	N	Sn	V
1	**BS 74C**	0.328	0.077	0.94	0.082	0.294	(0.002)	0.005	0.011	0.019	(<0.002)	0.004	.	0.008	0.0040	(<0.002)	0.0016
1	14X 12144A	0.328	0.0800	1.227	0.0630	0.325	0.0093	0.0106	0.0162	0.0807	0.0034	0.0022	.	0.0089	0.0066	.	.
2	CZ CM-15C	0.29	0.075	1.13	0.063	0.32	0.006	0.141	0.072	0.052	.	.	(0.01)	0.021	.	.	.
1	**BS 75G**	0.247	0.161	1.08	0.0085	0.114	0.011	0.0300	0.045	0.079	0.0016	0.0028	0.0031	0.0174	0.0030	0.0014	0.0005
2	**BS 75F**	0.202	0.165	1.05	0.009	0.116	0.004	0.030	0.044	0.080	0.002	.	.	0.018	.	.	.
1	BS 73C *	0.21	0.21	0.84	0.012	0.03	0.28	0.026	0.59	0.58	0.03	0.004	0.003	0.18	0.004	0.004	0.003
1	IARM 182B	0.19	0.21	0.81	0.016	0.037	0.27	0.017	0.47	0.49	0.038	(0.003)	0.006	0.172	0.0040	0.0019	0.004
1	IARM 183C	0.18	0.079	1.06	0.078	0.31	0.004	0.016	0.019	0.055	0.0021	0.003	(0.002)	0.010	0.0049	0.003	0.002
2	**BS 72B**	0.174	0.497	0.87	0.029	0.029	0.26	0.21	0.169	0.985	0.020	(0.006)	0.012	0.187	0.0081	0.014	0.004
2	**BS 73B**	0.139	0.200	0.83	0.009	0.030	0.250	0.141	0.416	0.512	0.022	0.004	0.008	0.170	0.0113	0.008	(<0.002)
2	**BS 70B**	0.135	0.40	0.90	0.009	0.022	0.27	0.13	0.25	1.00	0.024	.	.	0.205	.	.	.
1	BS 70C *	0.13	0.39	0.90	0.01	0.02	0.27	0.12	0.25	0.97	0.02	<0.05	0.009	0.20	<0.05	0.01	0.002

Number	B	Ca	Nb	O	Sb	Ti	W	Zn	Grade	Units
BS 74C	.	.	(<0.005)	.	.	.	.	.	12L14	41 mm Ø x ~7 or 19+ mm **17025**
14X 12144A	.	.	.	.	.	.	.	.		~40 mm Ø x ~15 mm
CZ CM-15C	.	.	.	.	.	.	.	.		~39 mm Ø x 25 mm
BS 75G	(0.0002)	(0.0002)	(0.0003)	0.0155	.	(0.0004)	0.0004	.	11L17	41 mm Ø x ~7 or 19+ mm **17025** Fe:[98.2]
BS 75F	.	.	.	.	.	.	.	.	11L17	40 mm Ø x 12 mm **17025** last of stock
BS 73C *	<0.005	<0.005	0.005	0.001	0.003	0.002	0.007	.	86L20	38 mm Ø x ~7 or 19+ mm * Provisional Analysis
IARM 182B	(0.0003)	(0.0005)	(0.003)	(0.003)	(0.003)	(0.003)	(0.01)	(0.001)	86L20	31 mm Ø x 2 mm
IARM 183C	0.0011	.	0.0010	0.016	(0.001)	0.0009	(0.002)	0.001	12L14	31 mm Ø x 2 or 18 mm
BS 72B	.	.	(0.001)	.	.	(0.002)	.	.	41L50	37 mm Ø x ~7 or 19+ mm **17025**
BS 73B	.	.	.	.	.	.	.	.	86L20	41 mm Ø x ~7 or 19+ mm **25(pre-17025)**
BS 70B	.	.	.	.	.	.	.	.	41L40MOD	41 mm Ø x ~7 or 19+ mm **17025**
BS 70C *	<0.005	.	<0.05	<0.05	.	0.002	.	Zr:<0.05	41L40MOD	41 mm Ø x ~7 or 19+ mm * Provisional Analysis

RM LEADED AND BISMUTH STEEL XRF SET

Part Number: BS PB-BI-7 AVAILABLE INDIVIDUALLY ~7 mm discs **17025**

Grade	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Bi	Pb	Sn	V	N
11L17	**BS 75F**	0.165	1.05	0.009	0.116	0.004	0.030	0.044	0.080	0.018	0.002	.	0.202	.	.	.
12L14	BS 74B	0.08	0.91	0.087	0.316	0.002	0.006	0.012	0.019	0.008	(0.002)	.	0.34	.	.	.
41L40	**BS 70B**	0.40	0.90	0.009	0.022	0.27	0.13	0.25	1.00	0.205	0.024	.	0.135	.	.	.
41L50	**BS 72B**	0.497	0.87	0.029	0.029	0.26	0.21	0.169	0.985	0.187	0.020	.	0.174	0.014	0.004	0.0081
4140 + Bi & S	BS 4140A	0.40	0.84	0.021	0.076	0.21	0.15	0.15	0.97	0.16	0.016	0.105	(0.001)	0.011	0.004	0.0098
4150 + Bi & S	BS 4150 MOD	0.47	0.90	0.024	0.079	0.21	0.19	0.15	1.01	0.21	0.012	0.070	0.0010	0.013	0.008	0.0087
8620 + Bi & S	BS 8620A	0.184	0.80	0.008	0.079	0.21	0.15	0.44	0.48	0.16	0.016	0.073	(0.001)	0.009	0.004	0.0107

MANGANESE STEEL

14X:~400x~15-17mm BS:320x~15-17mm CZ:~390x25mm DSZU:390x20mm ECRM:350x25mm IMN:50-560x15mm SS 491:500x10mm other SS:48x42x12mm VS:~380x~18mm

#	Number	Mn	C	P	S	Si	Cu	Ni	Cr	Al	Mo	N	Nb	Sn	V	Other
1	DSZU C013	28.8	0.89	0.025	(0.002)	0.29	0.108	(0.20)	(0.14)	(8.6)	(0.44)	(0.002)	(0.46)	.	(0.1)	
1	VS LG68	28.8	0.39	(0.02)	0.003	.	0.11	0.20	0.13	8.6	0.46	.	0.46	.	.	
1	IMZ 199	28.74	0.90	0.022	(0.0006)	0.294	0.110	0.20	0.164	8.65	0.43	.	0.43	.	0.026	B:(0.001) Ti:(0.004)
2	CZ SP-2B	26.1	1.42	0.10	0.009	0.51	0.096	0.32	1.36	0.008	0.38	.	W:0.084	.	0.155	Co: 0.040 Ti: 0.025
1	IRSID 1833	22.57	0.605	0.0345	(0.0005)	0.193	0.030	0.0494	0.268	0.0025	0.0133	0.012	0.0026	0.0043	0.203	As, Co, Pb, and Ti **
1	14X MN1AL	22.08	0.597	0.053	0.0054	0.944	0.178	0.692	1.321	(0.23)	0.499	0.0585	0.096	0.0393	0.0226	Ta:(0.011) Ti: 0.0346
1	DSZU C012	20.9	0.39	0.021	0.0072	0.31	0.087	0.103	0.17	(2.9)	(0.03)	(0.013)	.	.	(1.14)	
1	VS LG67	20.9	0.39	0.020	0.007	0.31	0.090	0.11	0.19	2.88	.	.	.	.	1.09	
2	BS 17	19.59	0.63	0.047	0.007	0.21	0.075	0.03	1.46	(0.02)	0.46	.	.	(0.012)	(0.02)	~15mm height
2	BS 17A	19.38	0.588	0.043	0.005	0.22	0.135	0.060	1.37	0.052	0.52	0.038	0.06	0.012	0.016	Co: 0.013
1	DSZU C011a	17.4	0.45	0.042	0.008	0.43	0.089	0.11	0.36	(2.8)	(0.014)	.	.	.	.	
1	DSZU C024	16.95	0.88	0.068	0.0100	0.531	0.72	0.66	1.62	(0.004)	0.29	(0.021)	(0.10)	.	0.29	B:(0.003) Ti:(0.006)
1	IMZ 198	16.10	0.44	0.031	0.0090	0.423	0.104	0.058	0.30	2.80	(0.008)	.	.	.	.	Ti:(0.005)
1	VS LG66	16.1	0.44	0.031	0.010	0.41	0.104	0.059	0.30	2.6	.	.	.	.	.	
1	DSZU C011	16.09	0.44	0.031	0.0093	0.41	0.105	0.058	0.30	(2.6)	(0.01)	(0.010)	.	.	.	
1	14X MN4AC	13.62	0.938	0.073	0.0194	0.900	0.270	1.052	1.983	0.20	0.796	0.0450	0.153	0.0634	0.0332	Ti: 0.075
1	SS 495/4	13.11	0.796	0.093	0.0128	0.674	0.0222	1.620	2.223	0.0082	0.266	0.0416	.	.	0.0525	Co: 0.0120
1	DSZU C023	13.09	0.79	0.052	0.0062	0.291	0.111	3.15	0.313	(0.006)	(0.02)	(0.018)	(0.02)	.	(0.02)	B:(0.001) Ti:(0.004)
1	DSZU C022	12.89	1.15	0.087	0.0057	0.34	0.103	0.122	0.192	(0.007)	(0.03)	(0.013)	(0.01)	.	(0.03)	B:(0.001) Ti:(0.006)
1	DSZU C010	12.25	1.20	0.082	0.0035	0.49	0.120	0.108	0.187	(0.006)	(0.01)	(0.017)	.	.	.	
1	VS LG65	12.2	1.19	0.080	0.0033	0.49	0.119	0.11	0.19	0.006	.	.	.	.	.	
1	DSZU C021	11.23	1.32	0.035	0.010	0.105	0.32	0.36	0.62	(0.003)	0.096	(0.013)	(0.03)	.	0.124	B:(0.002) Ti:(0.005)
1	SS 493/3	11.15	0.819	0.12	0.009	0.861	0.017	3.24	0.259	0.035	1.04	0.025	.	.	0.025	
1	14X MN3T	11.03	0.994	0.0386	0.0091	1.00	0.153	0.497	0.749	(0.040)	0.259	0.034	0.407	0.0195	0.0198	
2	14X 15196S	10.16	1.08	0.037	0.012	1.64	0.22	0.25	0.26	0.13	0.22	.	.	0.10	0.21	last of stock
1	14X MN2R	9.65	0.701	0.0198	0.0098	1.48	0.081	0.530	0.355	0.120	1.546	0.0125	0.294	0.061	0.121	Ti: 0.179
2	BS 19A	8.76	1.57	0.092	0.009	1.46	0.51	1.48	3.75	0.057	1.97	0.039	0.040	0.037	0.10	Co: 0.014
1	DSZU C020	8.85	0.97	0.024	(0.015)	0.091	0.53	1.36	0.96	(0.004)	0.13	(0.020)	(0.02)	.	0.152	B:(0.002) Ti:(0.003)
1	14X MN5T	8.55	1.377	0.0270	0.0110	1.59	0.421	1.372	3.31	(0.26)	1.91	0.0155	0.021	0.0129	0.0397	Ta: 0.005 last
1	14X MN5U	8.78	1.36	0.0552	0.0273	1.47	0.691	2.10	3.18	0.0257	1.93	0.0231	0.102	0.0228	0.0490	Ti: 0.93
1	SS 492/3	8.33	1.18	0.0318	0.0093	0.299	0.0211	4.17	1.076	0.131	1.318	0.0225	.	.	(0.004)	Co: 0.0048
1	14X MN5V	8.02	1.42	0.057	0.0207	2.27	0.551	3.09	3.28	0.145	2.26	0.0146	0.041	0.0278	0.0810	Ta:(0.004) Ti: 0.51
2	CZ CM-9B	2.27	0.17	(0.008)	(0.010)	0.89	0.040	0.023	1.36	0.049	(0.002)	.	(0.06)	(0.003)	(0.006)	+7 informational

* Provisional Analysis ** IRSID 1833 also contains As: 0.0034, Co: 0.0089, Pb: 0.00007, and Ti: 0.0011. Sample size 35 mm Ø x 25 mm.

CRM MANGANESE STEEL SET

AVAILABLE IN SET/6 ONLY 30 mm Ø x 24 mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	B	Co	Mo	N	Ti	V
NCS HS11720-6	2.38	5.36	0.029	0.108	1.69	0.474	3.43	0.084	0.017	0.107	1.51	0.016	0.218	0.837
NCS HS11720-1	1.96	22.96	0.188	0.0063	0.348	0.025	0.045	3.01	0.0021	0.0094	(0.0095)	0.091	0.0041	0.034
NCS HS11720-2	1.61	10.66	0.052	0.054	0.652	0.221	0.328	0.467	0.0038	0.010	0.118	0.054	0.047	0.132
NCS HS11720-3	1.16	16.75	0.077	0.055	1.16	0.143	0.152	0.257	0.0013	0.091	0.589	0.033	(0.030)	0.530
NCS HS11720-4	1.06	15.04	0.044	0.059	1.47	0.089	1.66	1.45	0.0023	0.0093	0.881	0.072	0.013	0.567
NCS HS11720-5	0.750	12.20	0.118	0.037	1.01	0.449	0.838	0.680	0.0009	0.0070	0.302	0.026	(0.018)	0.273

CRM Co/Fe/V MAGNETIC ALLOY PERMENDUR 2V

analysis listed in mass %

Number	Co	Fe	V	Mn	P	S	Si	Ni	N	Nb	O	Zr	Units
IARM 326A	48.4	49.6	1.94	0.003	0.0013	0.0011	0.029	0.037	0.0004	0.038	0.0082	0.002	31 mm Ø x 2 or 18 mm

RESULFURIZED STEEL

= Class, where 1 = CRM and 2 = RM **OES regularly requires extension of preburn time to analyze correctly**

#	Number	S	C	Mn	P	Si	Cu	Ni	Cr	Al	Co	Mo	N	Sn	Ti	V
1	14X MSFM1L	0.414	0.143	1.155	0.0689	0.404	0.1073	0.147	0.89	(0.08)	0.0509	0.264	0.026	0.0289	.	0.0154
1	IMZ 123	0.38	0.25	1.57	0.030	0.23	0.093	0.057	0.16	0.032	.	.	0.0171	(0.007)	.	.
1	ECRM 085-1D	0.336	0.067	0.977	0.062	0.008	0.291	.	.	.	0.019	.	.	.	.	0.0021
1	**BS 66L**	0.315	0.065	0.844	0.061	0.002	0.007	0.015	0.026	0.0008	0.0035	0.0012	0.0031	(0.0010)	(<0.0010)	0.0006
1	14X 12130A	0.305	0.0871	1.219	0.061	0.022	0.0201	0.0345	0.0505	0.0024	.	0.0102	0.0097	0.0054	.	.
1	**IARM 206B**	0.293	0.074	1.01	0.050	0.012	0.113	0.053	0.038	0.0025	0.007	0.018	0.0075	0.0064	0.0008	0.0016
1	IARM 199C	0.281	0.469	1.55	0.0155	0.21	0.193	0.085	0.190	0.0019	0.007	0.0293	0.0070	0.0084	0.0016	(0.0037)
1	IMZ 124	0.28	0.10	0.60	0.082	(0.019)	0.060	0.046	0.11	0.005	.	.	0.0059	0.009	.	.
1	**BS 1144A**	0.271	0.468	1.43	0.0108	0.214	0.147	0.063	0.076	0.0020	0.0064	0.0154	0.0095	0.0079	(0.0008)	0.0015
1	14X MSFM 2K	0.248	0.272	1.568	0.0491	0.353	0.162	0.235	0.996	0.123	0.104	0.355	0.028	0.0218	.	0.0324
1	**BS 1144**	0.243	0.483	1.55	0.022	0.262	0.462	0.097	0.193	(0.002)	0.011	0.017	0.0093	0.0113	0.002	0.0039
1	14X MSFM 4A	0.224	0.226	1.141	0.0386	0.469	0.429	6.22	1.69	(0.007)	0.0253	0.974	0.0220	0.0141	.	0.0151
1	IMZ 122	0.21	0.27	1.33	0.073	0.43	0.25	0.25	0.19	(0.027)	.	.	0.0110	0.12	.	.
1	14X 606M36TA	0.196	0.378	1.574	0.0159	0.167	0.179	0.0931	0.163	0.0071	.	0.272	0.0096	0.0103	.	.
1	14X 11390A	0.190	0.420	1.040	0.0342	0.198	0.0395	0.0239	0.0609	0.0026	.	0.0067	0.0042	0.0022	.	.
1	ECRM 058-2D	0.1712	0.424	1.186	0.0098	0.1080	0.261	0.199	0.1211	.	.	0.0589	0.0107	.	.	.
1	14X MSFM3G	0.147	0.438	1.809	0.0297	0.292	0.205	0.161	0.454	(0.18)	0.0494	0.390	0.0206	0.0378	.	0.0199
1	IARM 29E	0.121	0.193	1.19	0.0157	0.239	0.253	0.082	0.105	0.0032	0.008	0.0269	0.0093	0.0109	0.0014	0.0255
1	14X 11170A	0.120	0.154	1.129	0.0133	0.151	0.1101	0.0877	0.1126	0.0023	.	0.0317	0.0112	0.0110	.	.
2	BS 65C	0.115	0.150	1.19	0.007	0.24	0.24	0.063	0.066	(0.002)	(0.007)	0.012	0.0084	.	.	0.002
2	BS 66B	0.112	0.418	1.56	0.018	0.017	0.028	0.032	0.093	(0.001)	0.005	0.019	0.0056	0.0016	(0.001)	0.0014
1	IARM 348A	0.102	0.384	1.46	0.0121	0.270	0.230	0.081	0.123	(0.002)	(0.010)	0.026	(0.010)	0.0112	0.0015	0.0029
1	IARM 307A	0.096	0.163	1.44	0.0113	0.281	0.190	0.197	0.104	0.032	(0.010)	0.045	0.0108	0.0090	0.0015	(0.0028)
1	**BS 3993**	0.094	0.152	1.16	0.012	0.260	0.111	0.045	0.072	0.002	0.006	0.010	0.0071	0.006	(0.0008)	0.002
1	IMZ 121	0.097	0.39	1.18	0.057	(0.056)	0.032	0.029	0.036	0.016	.	.	0.0125	0.059	.	.
2	BS 52D	0.088	0.436	0.97	0.068	0.18	0.060	0.18	0.16	0.028	0.012	0.09	0.0025	0.004	(0.004)	0.002
1	12X 15253T *	0.083	0.225	1.19	0.090	0.35	0.265	1.00	2.03	0.023	0.27	1.02	.	0.31	.	0.275
2	BS 4150MOD	0.079	0.47	0.90	0.024	0.21	0.19	0.15	1.01	0.012	0.012	0.21	0.0087	0.013	(0.002)	0.008
2	BS 42A	0.078	0.52	1.08	0.012	0.258	0.285	0.147	0.80	0.025	(0.007)	0.195	0.008	.	.	0.004
2	**BS 42**	0.073	0.516	1.24	0.021	0.235	0.252	0.183	0.67	0.020	0.012	0.190	0.0080	0.012	(0.003)	0.003
1	12X 15217Q	0.073	0.176	0.652	0.058	1.390	0.231	0.864	1.24	(0.021)	0.248	0.358	0.078	0.0737	.	0.662
1	12X 15255Q	0.070	0.351	1.191	0.104	1.02	0.279	0.296	1.509	0.073	0.0502	0.1193	0.027	0.101	0.0377	0.475
1	KUT B2/2	0.064	0.065	1.22	0.087	(0.38)	0.32	1.49	.	0.10	.	1.06	.	.	(0.25)	0.87
1	IMZ 125	(0.057)	0.029	0.95	(0.018)	0.15	0.044	0.023	0.18	(0.007)	.	.	.	0.002	.	.
1	KUT A14	0.052	0.12	0.75	0.041	0.73	0.20	1.32	0.59	(0.01)	0.070	0.25	.	0.10	0.12	0.67
1	KUT B16	0.051	0.16	2.05	0.068	1.95	0.09	3.74	0.26	(0.037)	.	0.11	.	.	0.075	0.53
1	KUT B12	0.048	0.43	0.76	0.028	0.34	0.41	1.62	1.32	0.007	0.011	0.21	.	0.032	0.011	0.026
1	KUT B4	0.043	0.55	1.07	0.047	1.72	0.49	.	.	.	.	.	.	.	.	.
1	IARM 381A	0.043	0.272	1.16	0.013	0.269	0.379	0.185	0.129	0.0023	0.011	0.0341	(0.014)	0.0137	(0.002)	0.0299
1	NM 304	0.033	0.19	0.29	0.093	0.082	.	(0.007)	.	.	.	.	.	.	.	.

Number	As	B	Bi	Ca	Nb	O	Pb	Sb	W	Zn	Zr	Units
14X MSFM1L	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IMZ 123	0.033	.	.	.	.	.	0.030	0.030	.	.	.	40 mm Ø x 40 mm
ECRM 085-1D	.	.	.	.	.	.	0.0010	0.0073	.	0.0025	.	38 mm Ø x 25 or 30 mm
BS 66L	0.0020	(<0.0003)	.	(<0.0010)	(0.0012)	.	0.0007	0.0021	(<0.0010)	.	.	44 mm Ø x ~7 or 19+ mm **17025**
14X 12130A	0.0016	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IARM 206B	0.0045	0.0006	.	.	0.002	0.016	(0.001)	(0.002)	(0.003)	.	(0.002)	**31 mm Ø x 2 or 18 mm**
IARM 199C	0.0059	0.0012	0.003)	(0.0011)	0.0016	0.0037	(0.001)	(0.003)	0.0023	(0.0006)	.	31 mm Ø x 2 or 18 mm
IMZ 124	0.004	.	.	.	.	.	(0.002)	0.002	.	.	.	40 mm Ø x 40 mm
BS 1144A	0.0052	(0.0003)	Fe:97.3	(0.0005)	(0.002)	0.0019	(0.0006)	(0.002)	(0.0009)	.	(0.0006)	38 mm Ø x ~7 or 19+ mm **17025**
14X MSFM 2K	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 1144	0.009	.	.	.	(0.004)	0.0016	(0.001)	.	(0.003)	.	last	38 mm Ø x ~16 or 19 mm **17025**
14X MSFM 4A	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
IMZ 122	0.007	.	.	.	.	.	(0.020)	0.019	.	.	.	40 mm Ø x 40 mm
14X 606M36TA	0.0085	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
14X 11390A	0.0028	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
ECRM 058-2D	0.0095	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
14X MSFM3G	.	0.0043	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IARM 29E	0.0085	0.0007	.	0.0012	0.0024	(0.005)	(0.001)	(0.003)	.	(0.004)	.	31 mm Ø x 2 or 18 mm
14X 11170A	0.0044	.	.	.	.	.	0.0011	.	.	.	.	~40 mm Ø x ~15 mm
BS 65C	.	.	.	.	.	.	.	.	.	.	.	37 mm Ø x ~7, 19, or ~32 mm
BS 66B	.	0.0003	.	.	.	.	.	.	.	.	.	41 mm Ø x ~7 or 19+ mm
IARM 348A	(0.007)	(0.0013)	<0.02	0.0010	0.027	(0.003)	(0.002)	(0.003)	(0.009)	<0.003	(0.003)	31 mm Ø X 2 or 18 mm
IARM 307A	0.008	<0.005	<0.02	<0.0005	(0.002)	(0.003)	(0.002)	<0.004	(0.005)	<0.002	(0.002)	31 mm Ø X 2 or 18 mm
BS 3993	0.004	.	.	(0.0002)	.	(0.0030)	.	.	.	.	.	38 mm Ø x ~7 or 19+ mm **25(pre-17025)**
IMZ 121	0.002	.	.	.	.	.	0.011	0.017	.	.	.	40 mm Ø x 40 mm
BS 52D	.	.	.	.	.	(0.002)	.	.	.	.	.	**44 mm Ø x ~7 or 19+ mm**
12X 15253T *	* Provisional Analysis			.	0.365	Ta:0.006	.	.	0.280	.	.	~40 mm Ø x ~15 mm
BS 4150MOD	0.005	.	0.070	0.0010	.	(0.003)	0.0010	.	.	.	.	38 mm Ø x ~7 or 19+ mm
BS 42A	.	.	.	.	.	.	.	.	.	.	.	37 mm Ø x ~7 or 19+ mm
BS 42	(0.004)	.	.	.	(0.002)	.	.	.	(0.002)	.	.	**44 mm Ø** x ~7 or 19+ mm **17025**
12X 15217Q	.	.	.	.	0.131	.	.	.	0.121	.	.	40 mm Ø x 15 mm
12X 15255Q	0.0193	.	.	.	0.152	.	.	.	0.150	.	.	~40 mm Ø x ~15 mm
KUT B2/2	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
IMZ 125	0.065	.	.	.	.	.	.	0.014	.	.	.	**40 mm Ø x 40 mm**
KUT A14	0.13	0.004	.	.	0.044	.	.	0.047	.	.	.	30-35 mm Ø x 39 mm
KUT B16	.	.	.	.	0.11	.	.	.	.	.	.	30-35 mm Ø x 39 mm
KUT B12	0.011	0.0035	.	.	0.022	.	.	.	.	.	(0.002)	30-35 mm Ø x 39 mm
KUT B4	.	.	.	.	.	.	.	.	.	.	0.09	30-35 mm Ø x 39 mm
IARM 381A	0.0055	.	.	.	0.0018	.	.	.	(0.003)	.	.	31 mm Ø X 2 or 18 mm
NM 304	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm

RM RESULFURIZED STEEL XRF SET

Part Number: BS RESUL-4 AVAILABLE INDIVIDUALLY ~7 mm discs

Grade	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Co	N	Sn	V	As
1117	BS 65C	0.150	1.19	0.007	0.115	0.24	0.24	0.063	0.066	0.012	(0.002)	(0.007)	0.0084	0.02	0.002	(0.008)
1140 + P	BS 52D	0.436	0.97	0.068	0.088	0.18	0.060	0.18	0.16	0.09	0.028	0.012	0.0025	0.004	0.002	.
1141	BS 66B	0.418	1.57	0.018	0.110	0.02	0.031	0.033	0.094	0.019	0.002	0.005	(0.006)	0.001	0.002	.
1215	BS 66K	0.051	0.86	0.062	0.322	(0.004)	0.013	0.012	0.006	0.003	0.002	0.005	(0.0074)	<0.001	0.001	.

SILICON STEEL

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	Si	C	Mn	P	S	Cu	Ni	Cr	Al	Als	Mo	N	Sn	Ti	
2	CZ SST-4A	4.73	0.062	0.376	0.031	0.020	0.111	0.082	0.105	0.514	.	0.019	0.0058	0.025	0.035	
3	CZ SP-6A	4.65	0.10	0.38	0.017	0.009	0.12	0.04	0.11	0.32	.	0.01	.	0.01	0.008	
1	DSZU C047	3.95	0.975	0.402	0.023	0.0052	0.117	0.78	4.44	0.051	.	0.96	0.0164	0.0090	0.059	
2	CZ SST-3A	3.27	0.035	0.221	0.007	0.0093	0.096	0.061	0.043	0.009	.	0.036	0.0088	0.015	0.009	
1	SRM 1218	(3.2)	0.0029	0.014	(0.002)	0.0011	0.003	(0.002)	0.006	0.005	.	(0.003)	.	.	(0.004)	
3	CZ CM-12A	3.21	0.031	0.172	0.0130	0.0106	0.173	0.030	0.067	0.098	.	0.008	0.0070	<0.01	0.005	
1	SRM 1135	3.19	0.027	0.094	0.006	0.026	0.056	0.050	0.022	0.0028	.	0.014	.	0.004	.	
2	BS 178	3.08	0.436	0.43	0.016	0.001	0.12	0.21	8.17	(0.007)	.	0.044	0.014	(0.007)	0.014	
3	CZ SP-5B	3.07	0.20	1.86	0.108	0.023	0.15	3.00	0.38	0.18	.	0.13	.	0.08	0.35	
2	CZ SST-2A	3.07	0.083	0.160	0.026	0.0089	0.205	0.066	0.138	0.010	.	0.054	0.0078	0.055	0.016	
1	SRM 1134	2.889	0.0261	0.2751	0.0276	0.0095	0.0707	0.0375	0.0198	(0.329)	.	0.0087	.	0.0034	.	
2	CZ SST-1A	2.57	0.072	0.062	0.041	0.0043	0.654	0.155	0.209	0.061	.	(0.002)	0.0059	0.110	0.004	
1	VS UG4/9	2.23	0.53	1.28	0.017	0.016	0.099	0.71	0.139	0.023	.	0.117	(0.004)	0.081	0.126	
1	VS UG91	2.23	0.49	.	0.0038	0.0021	0.057	0.039	0.064	0.048	0.048	0.058	0.010	.	0.038	
1	12X 15251U	2.05	1.017	0.910	0.0253	0.0215	0.1194	0.896	0.612	0.1085	.	0.205	0.0031	0.0108	.	
1	VS UG92	1.98	0.69	0.79	0.05	0.0029	0.111	0.155	0.200	0.091	0.08	0.119	0.016	.	0.022	
1	KUT T4/1	1.97	0.17	0.23	0.012	0.041	0.16	0.077	0.24	.	.	.	.	.	(<0.005)	
1	12X 15259Q	1.81	0.603	0.401	0.0401	0.0704	0.200	4.02	0.512	0.1488	.	0.407	0.0151	0.053	.	
1	ECRM 196-2D	1.808	0.0060	0.364	0.00369	0.00065	0.0057	0.0401	0.0282	0.2167	.	0.0142	0.00178	0.00047	0.00253	
1	VS UG4/5	1.80	0.56	1.26	(0.008)	(0.006)	0.098	0.68	0.17	0.010	.	0.087	.	.	0.17	
1	NCS HS11751a	1.76	0.574	0.792	0.020	0.014	0.011	0.019	0.024	.	.	.	.	.	.	
1	ECRM 186-1D	1.72	0.610	0.870	0.022	0.035	0.281	0.190	0.218	0.014	.	0.048	.	.	.	
1	**BS 300**	1.68	0.410	0.721	0.0046	0.0006	0.118	1.867	0.803	0.099	.	0.370	0.0023	0.0053	0.0096	**17025**
1	12X 44220A	1.662	0.417	0.874	0.0050	0.0009	0.031	1.89	0.846	0.029	.	0.401	0.0030	0.0019	.	
3	CZ CM-2A	1.66	0.20	0.97	0.10	0.012	1.01	1.20	1.50	0.03	.	0.33	.	0.08	0.34	
1	VS UG111	1.64	0.52	0.625	0.0028	0.0035	0.065	0.036	0.058	0.049	.	0.039	.	.	0.025	
1	VS UG1/9	1.63	0.63	0.84	0.030	0.017	0.020	0.105	0.046	0.027	.	0.135	(0.002)	(0.002)	0.069	
1	IARM 340A	1.63	0.414	0.755	0.011	0.001	0.103	1.80	0.84	0.062	.	0.39	0.0020	0.005	0.0098	
1	IARM 342A	1.63	0.257	1.37	0.006	0.0051	0.110	1.76	0.38	0.019	.	0.42	0.0102	0.021	0.0028	
1	VS UG4/10	1.61	0.695	0.834	0.031	0.0060	0.050	0.156	0.130	0.064	.	0.089	0.0192	.	0.0044	
1	KUT B1/1	1.58	0.97	0.205	0.017	0.032	0.14	3.96	1.66	.	.	.	.	.	.	
1	12X 15261X	1.513	0.546	0.483	0.090	0.0518	0.308	0.0985	0.496	1.648	.	1.594	.	0.0172	0.385	
1	VS UG1/10	1.51	0.51	0.659	0.0053	0.0042	0.096	0.190	0.067	0.015	.	0.051	0.0164	0.0030	0.016	
2	CZ LA-2D	1.48	0.065	0.26	0.011	0.052	0.53	2.00	0.135	0.18	.	0.57	0.008	0.085	0.30	
1	KUT A11/1	(1.46)	0.043	0.21	0.011	0.0137	0.047	0.04	0.02	0.02	.	1.20	.	0.002	0.17	
1	VS UG4/6	1.25	0.59	1.23	(0.003)	0.0008	0.169	0.47	0.400	0.032	.	0.083	(<0.0005)	0.017	0.131	
1	VS UG87	1.25	0.59	1.18	0.026	0.022	0.030	0.50	0.260	0.024	0.02	0.044	0.010	.	0.103	
1	VS UG1/5	1.23	0.62	0.79	(0.02)	(0.03)	(0.01)	0.048	0.069	0.022	.	0.061	.	.	0.045	
1	VS UG88	1.22	0.62	1.26	0.0026	0.0043	0.171	0.52	0.474	0.01	0.009	0.104	0.020	.	0.107	
1	DSZU C046	1.21	0.785	0.257	0.025	0.0153	0.211	1.47	2.67	0.47	.	0.69	0.0099	0.0033	0.115	
2	CZ LA-3E	1.19	0.60	0.70	0.044	0.026	0.22	1.01	0.94	0.061	.	0.32	0.010	0.026	0.135	
1	KUT A12	1.19	0.031	0.31	0.014	0.082	0.18	2.43	1.25	0.18	.	0.47	.	.	0.05	
2	CZ CM-14B	1.18	0.55	1.63	0.017	0.023	0.36	1.10	1.38	0.26	.	0.400	0.0072	0.040	0.36	
2	CZ CM-14A	1.15	0.523	1.58	0.051	0.028	0.30	1.14	1.13	0.063	.	0.395	0.0095	0.027	0.40	
1	12X 15258P *	1.01	0.40	1.21	0.067	0.032	0.11	0.50	0.61	0.090	.	0.38	.	0.070	.	
1	SS 603/2	0.97	0.79	0.236	0.020	0.056	(0.05)	(0.03)	(0.04)	0.076	.	(0.004)	.	.	.	
1	SS 405/2	0.947	0.044	0.903	0.0095	0.058	0.022	0.102	0.206	0.330	.	0.025	(0.011)	.	.	
1	SS 113	0.931	0.837	1.207	0.0595	0.0294	0.179	0.0784	1.248	0.0151	.	0.056	0.0109	0.0067	0.0390	
1	NCS HS11744	0.825	0.092	1.04	0.014	0.066	0.572	1.94	0.166	0.044	.	0.912	.	0.0041	0.049	
1	CKD 188A	0.775	0.332	0.169	0.006	0.033	0.057	0.445	5.11	0.093	0.083	1.28	0.0076	0.005	0.034	
1	SS 604/2	0.75	0.199	1.91	0.016	0.072	(0.07)	(0.09)	(0.06)	0.008	.	(0.02)	.	.	.	

#	Number	Si	C	Mn	P	S	Cu	Ni	Cr	Al	Als	Mo	N	Sn	Ti

Number	As	B	Ca	Co	Nb	O	Pb	Sb	Ta	V	W	Zr	Units
CZ SST-4A	0.004	0.0006	.	0.012	.	.	0.008	(0.003)	.	0.031	0.026	(0.003)	~37 mm Ø x 25 mm
CZ SP-6A	0.003	.	.	0.003	.	.	.	.	.	0.016	0.02	.	~39 mm Ø x 25 mm
DSZU C047	0.0077	0.0006	0.0013	0.066	0.021	.	.	.	.	1.84	1.88	.	40 mm Ø x 25 mm
CZ SST-3A	(0.003)	0.0019	.	0.038	.	Zn:0.011	0.013	.	.	0.041	0.016	.	~37 mm Ø x 25 mm
SRM 1218	.	.	.	(0.002)	.	.	.	.	.	(<0.001)	.	(0.002)	32 mm Ø x 19 mm
CZ CM-12A	0.003	.	.	0.003	.	.	.	.	.	<0.01	.	.	~39 mm Ø x 25 mm
SRM 1135	.	.	.	.	.	.	.	.	.	<0.01	.	.	31 mm Ø x 19 mm
BS 178	.	(0.0002)	.	0.018	(0.002)	(0.0020)	.	.	.	0.041	0.017	last	31 mm Ø x ~7 or 19 mm
CZ SP-5B	0.19	0.14	.	0.135	0.09	.	0.09	0.07	.	0.71	0.62	.	~39 mm Ø x 25 mm
CZ SST-2A	.	0.0089	.	0.022	.	Zn:0.011	0.015	0.008	.	0.024	0.019	0.017	~37 mm Ø x 25 mm
SRM 1134	.	.	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 19 mm
CZ SST-1A	(0.002)	0.0003	.	0.005	.	.	(0.002)	(0.002)	.	0.006	.	.	~37 mm Ø x 25 mm
VS UG4/9	(0.001)	(0.0003)	.	.	(<0.001)	.	0.008	.	.	0.054	0.061	.	~45 mm Ø x ~28 mm
VS UG91	0.0004	.	.	.	0.097	.	0.00006	0.00009	.	0.049	.	.	~47 mm Ø x ~30 mm
12X 15251U	.	.	.	0.228	0.266	.	.	.	.	0.391	0.0393	.	~40 mm Ø x ~15 mm
VS UG92	0.0027	.	.	.	0.034	.	0.00017	0.0005	.	0.024	.	.	~47 mm Ø x ~30 mm
KUT T4/1	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
12X 15259Q	.	.	.	0.141	0.249	.	.	.	.	0.139	0.49	.	~40 mm Ø x ~15 mm
ECRM 196-2D	0.00033	0.00014	0.00071	0.0138	Mg:0.00075	.	.	.	.	0.00368	.	Zn:0.00019	38 mm Ø x 25 mm
VS UG4/5	.	.	.	.	0.053	.	.	.	.	0.054	0.14	.	~45 mm Ø x ~28 mm
NCS HS11751a	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
ECRM 186-1D	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
BS 300	0.0030	0.0003	0.0008	0.0079	0.0031	(0.0004)	(0.000026)	0.0007	(0.0012)	0.070	0.0009	(0.0002)	38mm Ø x ~7 or 19+mm Fe:93.8
12X 44220A	0.0026	.	.	.	.	.	.	.	.	0.0764	.	.	~38 mm Ø x ~15 mm
CZ CM-2A	0.11	0.0005	.	0.43	0.48	.	0.06	0.008	0.027	0.10	0.23	0.03	~39 mm Ø x 25 mm
VS UG111	.	.	.	.	.	.	.	.	.	0.058	0.056	.	~45 mm Ø x ~28 mm
VS UG1/9	(0.001)	(0.0003)	.	.	0.124	.	(0.002)	.	.	0.024	0.063	.	~45 mm Ø x ~28 mm
IARM 340A	(0.004)	0.0004	(0.0004)	0.006	0.015	(0.001)	(0.001)	0.0021	.	0.064	(0.005)	(0.002)	31 mm Ø x 2 or 18 mm
IARM 342A	(0.006)	0.0004	(0.0001)	0.008	(0.002)	0.0006	0.0008	0.0021	.	0.023	(0.005)	(0.002)	31 mm Ø x 2 or 18 mm
VS UG4/10	.	.	.	.	0.030	.	.	.	.	0.0239	0.006	.	~45 mm Ø x ~28 mm
KUT B1/1	.	.	.	.	.	.	.	.	.	.	.	0.001	30-35 mm Ø x 39 mm
12X 15261X	0.0051	.	.	0.333	0.601	.	.	.	.	0.122	0.269	0.0297	~40 mm Ø x ~15 mm
VS UG1/10	.	.	.	.	0.091	.	.	.	.	0.042	0.074	.	~45 mm Ø x ~28 mm
CZ LA-2D	0.095	0.007	(0.0004)	0.26	0.24	.	0.050	0.040	.	0.30	0.29	0.003	~37 mm Ø x 25 mm
KUT A11/1	.	.	.	.	0.16	.	.	< 0.001	.	0.46	.	.	30-35 mm Ø x 39 mm
VS UG4/6	(0.001)	.	.	(0.004)	(0.03)	.	(0.005)	(<0.0005)	.	0.051	0.111	.	~45 mm Ø x ~28 mm
VS UG87	0.116	.	.	.	.	.	0.00008	0.0012	.	0.0038	.	.	~47 mm Ø x ~30 mm
VS UG1/5	.	.	.	.	0.078	.	.	.	.	0.070	(0.01)	.	~45 mm Ø x ~28 mm
VS UG88	0.0007	.	.	.	0.059	.	0.00015	0.0003	.	0.117	.	.	~47 mm Ø x ~30 mm
DSZU C046	0.0020	(0.0004)	0.0007	0.006	(0.005)	.	.	.	.	0.72	0.47	.	40 mm Ø x 25 mm
CZ LA-3E	0.056	0.005	(0.001)	0.11	0.077	.	0.009	0.024	.	0.22	0.10	0.13	~37 mm Ø x 25 mm
KUT A12	0.007	.	.	0.012	(0.03)	.	.	0.013	.	0.042	.	.	30-35 mm Ø x 39 mm
CZ CM-14B	0.015	0.0205	.	0.026	0.165	.	0.007	0.010	.	0.36	0.03	0.040	~39 mm Ø x 25 mm
CZ CM-14A	0.016	0.0062	(0.004)	0.015	0.115	.	0.013	0.006	0.015	0.345	0.021	0.044	~39 mm Ø x 25 mm
12X 15258P *	.	0.010	.	0.31	0.13	* Provisional Analysis			.	0.38	0.125	.	~40 mm Ø x ~15 mm
SS 603/2	.	.	.	(0.01)	.	.	.	.	.	(0.001)	.	(<0.005)	44 mm Ø X 19 mm
SS 405/2	.	.	.	.	.	.	.	.	.	0.411	.	.	38 mm Ø x 19 mm
SS 113	0.0020	0.0066	.	0.0415	0.0487	.	.	.	.	0.201	0.012	0.0029	44 mm Ø x 19 mm
NCS HS11744	0.019	0.0007	.	0.397	0.050	.	.	.	.	0.131	.	0.0025	38 mm Ø x 35 mm
CKD 188A	(0.005)	0.0047	.	0.006	0.122	.	0.001	0.006	0.022	0.802	0.091	0.052	44 mm Ø x 13 or 25 mm
SS 604/2	.	.	.	(0.01)	.	.	.	.	.	(0.001)	.	(<0.005)	44 mm Ø X 19 mm

Number	As	B	Ca	Co	Nb	O	Pb	Sb	Ta	V	W	Zr	Units

LOW ALLOY STEEL WITH C > 0.3%

CONTINUED ON THE NEXT PAGE

= Class, where 1=CRM, 2=RM, 3=RM no uncertainties

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	Nb	Ti
1	VS UG0/6	1.40	0.329	(0.006)	(0.003)	0.221	0.286	0.55	0.73	0.129	(0.002)	(0.01)	0.079	.	.	0.0052
1	CKD 182B	1.39	0.370	0.008	0.006	0.126	0.293	2.82	0.122	0.023	0.017	0.171	0.011	0.0049	0.001	0.004
1	CKD 182C	1.36	0.363	0.009	0.006	0.111	0.294	2.80	0.123	0.028	.	0.171	0.012	0.0049	(0.001)	(0.002)
1	VS UG0/7	1.33	0.208	0.0090	0.0045	0.177	0.307	0.36	0.55	0.110	(0.001)	.	0.052	0.0122	0.041	0.029
1	VS UG0/10	1.321	0.268	0.0090	0.0044	0.244	0.265	0.353	0.596	0.101	.	.	0.052	0.0120	0.0033	0.017
1	VS UG0/5	1.32	(0.2)	(0.01)	(0.007)	(0.2)	0.265	0.351	0.60	0.108	.	.	(0.05)	.	(0.01)	(0.01)
1	SS 402/2	1.311	0.288	0.0161	0.0138	0.111	0.302	0.808	0.652	0.161	.	.	0.140	0.0069	.	.
1	ECRM 035-2D	1.277	0.305	0.0038	0.011	0.216	0.0085	0.0190	0.0104	0.0193	.	.	0.0056	0.0230	.	0.0030
1	IMZ 65/2	1.19	0.27	0.013	0.007	0.13	0.059	0.067	0.079	0.030	.	.	.	.	.	.
1	DSZU C049	1.17	0.237	0.0166	0.0147	0.227	0.069	0.044	0.131	(0.005)	.	(0.003)	(0.002)	(0.007)	.	(0.003)
1	KUT A18	1.16	(1.99)	0.014	0.007	0.15	0.066	0.125	0.90	(0.02)	.	.	.	.	0.035	0.011
1	VS UG9/5	1.10	0.25	(0.01)	(0.007)	0.31	0.125	0.183	0.36	0.017	.	.	0.29	.	(0.002)	0.109
3	CZ CM-5B	1.09	1.28	0.021	0.012	0.39	0.13	0.23	2.07	0.083	.	0.022	0.10	0.0135	0.06	0.05
1	14X 72305A	1.085	0.349	0.0128	0.0028	0.206	0.149	0.089	0.425	0.0049	.	.	0.0231	0.0068	.	.
1	SRM 1761a	(1.05)	0.679	0.042	0.037	0.182	0.298	1.981	0.222	0.055	.	(0.027)	0.103	(0.0042)	0.021	0.173
2	CZ CM-5C	1.04	1.17	0.029	0.021	0.54	0.151	0.42	2.45	0.063	.	0.022	0.132	0.014	0.014	0.031
1	VS UG9/9	1.04	0.310	0.0053	0.021	0.319	0.163	0.242	0.310	0.073	(0.003)	.	0.308	0.0027	0.0046	0.130
1	IMZ 172	1.03	0.71	0.018	0.047	0.21	0.128	0.12	4.47	0.062	.	0.012	0.96	0.0192	.	(0.002)
1	NM PC-5	1.03	0.52	0.073	0.073	0.22	.	.	1.19	.	.	.	.	.	.	.
1	IARM 49E	1.03	0.364	(0.006)	(0.002)	0.248	0.076	0.043	1.43	0.024	.	(0.006)	0.017	(0.003)	(0.003)	0.0060
2	BS 2952	1.03	0.33	0.013	0.014	0.32	0.106	0.135	1.36	0.024	.	0.007	0.044	0.0084	.	0.003
1	12X 52986A	1.023	0.372	0.0049	0.0011	0.246	0.077	0.0411	1.418	0.0258	(0.002)	.	0.0169	(0.002)	.	.
2	BS 53G	1.02	0.35	0.014	0.015	0.23	0.160	0.090	1.53	0.019	.	0.008	0.034	0.0084	.	(0.002)
1	CKD 184A	1.013	2.23	0.028	(0.01)	0.348	0.089	0.250	2.33	0.022	0.016	0.007	0.016	0.0104	0.013	0.010
1	NILAB 100LA D	1.002	0.333	0.012	0.018	.	0.019	0.027	1.517	0.005	.	0.007	0.012	0.0046	.	0.0007
1	IRSID 1747	0.990	0.333	0.0078	0.0068	0.222	0.1243	0.0850	1.501	.	0.0392	0.0110	0.0141	0.0084	(0.00025)	0.0041
1	IARM 324A	0.99	1.01	0.009	0.028	0.163	0.22	0.081	0.42	0.002	.	0.007	0.022	0.0082	0.014	0.0016
1	IARM 49D	0.99	0.39	0.0173	0.0059	0.24	0.120	0.061	1.53	0.018	.	(0.006)	0.016	0.0102	0.0009	0.0020
2	BS A485-1	0.98	1.10	0.019	0.004	0.61	0.16	0.13	1.07	0.017	.	0.010	0.029	0.0060	.	0.003
1	KUT B15	0.98	0.69	0.030	0.031	0.80	0.14	0.15	3.70	0.13	.	0.21	1.20	.	.	(0.32)
1	VS UG75	0.98	0.286	0.0127	0.0089	0.248	0.111	0.201	1.43	(0.03)	.	.	(0.01)	.	(0.01)	(0.001)
2	CZ LA-4C	0.95	1.63	0.021	0.012	0.07	0.056	0.045	1.78	0.048	.	(0.006)	0.008	0.012	0.053	(0.002)
1	12X 19965A	0.936	0.600	0.0196	0.0081	0.247	0.148	0.141	1.713	0.0256	.	.	0.210	0.0087	.	.
1	SS 401/2	0.935	1.197	0.0265	0.0078	0.602	0.101	0.019	0.138	0.074	.	0.042	0.495	(0.015)	.	.
1	IMZ 119	0.93	1.15	0.018	0.006	0.16	0.042	0.049	0.062	0.010	0.007	.	.	0.0086	.	(0.0007)
1	VS UG3/5	0.93	0.98	(0.03)	(0.005)	0.79	0.10	0.97	0.77	0.10	.	.	0.048	.	0.21	0.29
1	VS UG89	0.92	0.76	0.0085	0.01	0.385	0.373	0.51	0.420	0.01	0.007	.	0.044	0.017	0.0043	0.012
1	VS UG110	0.91	0.86	0.0063	0.0050	0.342	0.377	0.491	0.47	0.006	.	.	0.0052	.	.	0.0015
1	VS UG21/6	0.83	0.74	(0.02)	(0.02)	0.312	0.346	0.47	0.50	.	.	.	.	.	.	.
1	12X LA5C	0.783	0.726	0.0577	0.0261	0.493	0.158	0.484	0.678	0.10	.	0.166	0.305	.	.	.
2	IARM 172A	0.78	0.010	0.007	0.004	1.29	0.40	0.025	3.52	0.39	.	0.006	0.014	0.0004	0.004	0.003
1	SS 403/2	0.750	1.677	0.055	0.0381	0.209	0.221	0.223	0.463	0.0485	.	.	0.088	(0.010)	.	.
1	IMZ 64/2	0.75	0.47	0.012	(0.005)	0.22	0.12	0.081	0.090	0.020	.	.	.	.	.	.
1	ECRM 059-2D	0.721	0.495	0.0046	0.0084	0.188	0.0074	0.0198	0.0090	0.00045	0.00020	.	0.0018	0.0051	.	.
2	CZ CM-1C	0.72	1.73	0.023	0.025	0.31	0.18	0.52	0.47	0.034	.	0.026	0.084	0.009	0.054	0.066
2	CZ CM-4B	0.72	0.50	0.023	0.012	0.80	0.40	1.40	2.23	0.025	.	0.115	0.33	0.013	0.071	0.12
1	SS 404/2	0.696	0.532	0.0479	0.0228	1.121	0.427	0.393	0.774	0.017	.	.	0.307	0.0089	.	.
1	IMZ 118	0.69	1.72	0.026	(0.049)	0.30	0.18	0.19	0.14	(0.014)	(0.004)	.	0.058	0.0120	.	.
1	IMZ 116	0.64	0.94	0.025	0.035	0.25	0.33	0.022	0.72	0.025	0.012	.	0.074	0.0130	.	(0.0008)
1	VS UG96	0.60	0.52	0.0046	0.0029	0.290	0.256	0.396	0.399	0.031	.	.	0.0042	.	.	0.0025
1	SRM 1764a	0.592	1.193	0.0210	0.0118	0.0595	0.5178	0.2006	1.468	0.0098	.	(0.012)	0.2007	(0.0023)	0.0416	0.0286
1	DSZU C07	0.589	0.903	0.033	0.037	1.00	0.130	0.263	0.201	0.039	.	0.165	0.377	.	0.091	0.059
1	VS UG119	0.55	0.70	0.012	(0.027)	1.63	0.207	0.142	0.195	0.039	.	.	0.313	0.0047	.	0.0030
1	12X 10150	0.549	0.685	0.0184	0.0055	0.281	0.0790	0.1247	0.338	0.0325	.	.	0.0086	0.0051	.	.
1	12X LA4B	0.537	0.303	0.0363	0.039	0.335	0.334	0.521	0.499	0.057	.	0.105	0.489	0.0222	.	.
1	12X 61500A	0.530	0.912	0.0104	0.0102	0.240	0.157	0.0976	1.023	(0.007)	0.0067	.	0.0195	.	.	.
2	CZ CM-6A	0.52	0.37	0.016	0.058	0.27	0.05	0.19	0.37	0.02	.	0.03	0.04	0.009	0.028	0.03
2	CZ BO-2B	0.515	0.745	0.0093	0.0016	0.309	0.100	0.057	0.212	0.0196	.	0.0055	0.006	0.004	.	0.0017
1	12X LA3C	0.500	1.693	0.0274	0.0442	0.163	0.213	0.280	0.375	0.0410	.	0.0475	0.303	0.0039	.	.
1	IARM 34C	0.50	0.739	0.0090	0.0011	0.30	0.078	0.085	0.914	0.068	.	0.005	0.022	0.0030	0.004	0.0045
2	BS 43A	0.491	0.811	0.008	0.026	0.252	0.184	0.242	0.93	0.003	.	0.008	0.059	0.0074	.	0.002
2	BS 4941	0.490	0.79	0.012	0.017	0.27	0.106	0.074	0.96	0.024	.	0.008	0.039	0.0076	.	.
1	IMZ 103A	0.49	0.78	0.066	0.051	0.42	0.27	0.57	0.58	0.026	.	0.002	0.18	.	0.040	0.17
1	IMZ 117	0.49	0.77	0.038	0.015	0.34	0.41	0.29	0.94	0.023	0.013	.	0.024	0.0154	0.041	(0.0014)
1	**BS 1144**	0.483	1.55	0.022	0.243	0.262	0.462	0.097	0.193	(0.002)	.	0.011	0.017	0.0093	(0.004)	0.002

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	Nb	Ti
1	IPT 503	0.456	0.682	0.027	0.027	0.218	0.129	0.063	0.160	0.018	.	0.006	0.020	0.0082	.	0.0011
1	SRM C1173	0.453	0.174	0.031	0.092	1.38	0.204	4.04	2.63	.	.	.	1.46	.	.	0.037
1	12X 41450A	0.446	1.011	0.0093	0.0031	0.261	0.1318	0.187	1.194	0.0220	.	.	0.340	0.0080	.	.
2	BS XCCV	0.44	1.75	0.012	0.024	0.28	0.015	0.019	0.041	0.033	.	0.006	0.007	0.0056	(<0.002)	(0.002)
1	12X LA3B	0.439	1.176	0.0215	0.0379	0.16	0.173	0.300	0.357	0.0300	.	0.0300	0.302	0.0080	.	.
1	NM PC-4	0.43	0.80	0.043	0.045	0.34	.	.	0.26	.	.	.	.	.	.	.
1	IARM 30H	0.425	0.937	0.015	0.022	0.253	0.131	0.063	0.97	0.020	.	0.0071	0.199	0.0081	(0.003)	(0.0024)
1	IARM 305B	0.425	0.58	0.011	0.014	0.349	0.214	0.156	1.63	0.92	.	0.007	0.32	0.0044	0.002	0.0044
1	IARM 252D	0.423	0.842	0.0075	0.0128	0.256	0.270	0.424	0.468	0.024	.	0.0078	0.204	0.0068	0.0013	0.0012
1	**BS 4340A**	0.423	0.766	0.0062	(0.0008)	0.253	0.128	1.80	0.879	0.031	.	0.0111	0.259	0.0102	(0.002)	(0.0011)
1	SRM 1173	0.423	0.19	0.033	0.092	1.28	0.204	4.06	2.70	.	.	.	1.50	.	.	.
2	HRT FE2015-N	0.42	0.83	0.007	0.028	0.24	0.15	0.32	1.03	0.023	.	.	0.21	0.0057	.	.
1	**BS 4340**	0.418	0.695	0.0119	0.0187	0.279	0.149	1.79	0.807	0.028	.	0.0068	0.231	0.0080	(0.001)	0.0014
1	IARM 252C	0.416	0.92	0.025	0.008	0.248	0.109	0.505	0.501	0.017	.	0.008	0.205	0.0083	0.002	0.001
2	BS 4942	0.414	0.56	0.015	0.021	0.22	0.165	0.16	0.97	(0.004)	.	0.010	0.54	0.0080	.	.
1	IARM 252E	0.413	0.87	(0.009)	(0.012)	0.257	0.164	0.407	0.486	0.028	.	0.0093	0.204	0.0064	.	0.0010
2	**BS 1962**	0.41	0.94	0.007	0.011	0.242	0.224	0.16	1.05	0.018	.	0.008	0.229	0.0095	.	0.004
1	VS UG116	0.41	0.59	0.012	0.027	0.246	0.221	1.13	0.89	0.026	.	.	0.044	0.0089	.	0.0022
1	IARM 252F	0.406	0.88	0.011	0.009	0.247	0.182	0.412	0.463	0.026	.	0.0086	0.210	0.0059	0.0016	0.0010
1	IARM 30J	0.405	0.884	0.010	0.036	0.256	0.173	0.187	0.972	0.023	.	0.0098	0.205	(0.010)	0.0016	0.0013
1	**BS 67C**	0.404	0.91	0.015	0.009	0.239	0.173	0.61	0.511	0.024	.	0.010	0.221	0.0075	.	(0.002)
1	SS 114	0.403	0.416	0.0044	0.0046	0.295	0.358	1.502	0.187	0.078	.	0.0171	0.184	0.0043	0.0042	0.0096
1	IMZ 55/1A	0.401	0.490	0.009	0.0053	0.406	0.112	0.570	0.998	0.006	.	0.0039	0.247	0.0023	0.010	0.012
1	IARM 31G	0.40	0.689	0.0136	(0.013)	0.262	0.183	1.814	0.820	0.0214	.	0.0083	0.223	0.0069	(0.0023)	0.0015
1	IMZ 63/2	0.40	0.63	0.017	0.009	0.16	0.14	0.13	0.16	(0.010)	.	.	.	.	.	.
1	SS 225/2	0.40	0.56	0.019	0.012	0.23	.	1.43	1.08	.	.	.	0.34	.	.	.
1	IPT 504	0.395	1.474	0.019	0.031	0.232	0.096	0.048	0.098	0.032	0.028	0.0077	0.009	0.0078	(0.012)	0.0011
1	12X 826M40A	0.395	0.529	0.0094	0.0025	0.248	0.1294	2.408	0.649	0.0404	.	.	0.510	0.0089	.	.
1	DSZU C06	0.395	0.416	0.035	0.039	0.097	0.040	0.459	0.315	0.029	.	0.034	0.016	.	(0.029)	(0.002)
1	**BS 4942A**	0.393	0.64	(0.007)	0.0013	0.275	0.067	0.058	0.976	0.011	.	0.0077	0.538	0.0072	(0.0015)	0.0031
1	CKD 186D	0.392	1.312	0.013	0.007	1.41	0.226	1.58	1.51	0.042	.	(0.006)	0.254	(0.005)	(0.004)	0.047
1	VS RG30/1	0.388	0.425	.	0.022	0.61	0.090	0.74	3.13	0.089	.	0.355	0.58	.	0.103	0.037
1	VS UG79	0.387	0.65	0.0102	0.0077	0.451	0.230	0.24	1.82	(0.8)	.	.	(0.04)	.	(0.01)	(0.2)
1	IRSID 1731	0.386	0.458	0.017	(0.008)	0.263	0.060	2.88	0.734	(0.012)	.	.	(0.036)	.	.	(0.047)
1	DSZU C045	0.382	0.394	0.0080	0.0144	0.262	0.097	0.093	1.41	0.93	.	0.007	0.219	0.0080	0.004	0.0112
2	CZ LA-5B	0.38	1.75	0.017	0.010	0.39	0.12	2.43	3.60	0.073	.	0.075	0.75	0.02	0.060	0.05
1	VS UG3/10	0.38	0.644	0.0104	0.0077	0.453	0.230	0.243	1.83	0.84	.	.	0.042	0.012	.	0.161
1	12X 605M36A	0.373	1.504	(0.009)	0.0317	0.0283	0.199	0.146	0.243	0.0105	.	0.0151	0.292	0.0095	.	.
1	12X 12700A	0.364	0.636	0.0205	0.0116	0.238	0.0342	0.0197	0.070	0.055	.	0.0047	0.0345	0.0073	.	.
1	IMZ 115	0.36	0.65	0.045	0.024	0.043	0.25	0.35	0.27	(0.015)	(0.0058)	.	0.070	0.0087	0.09	.
1	IRSID 1750	0.359	1.801	0.0128	0.075	0.246	0.320	0.187	0.227	0.0175	.	(0.0120)	0.0433	0.0107	(<0.0010)	(0.0016)
1	IRSID 1730	0.355	0.403	0.010	(0.018)	0.325	0.096	3.64	1.65	(0.038)	.	.	0.072	.	.	.
1	SRM 1762a	0.341	1.912	0.0346	0.0295	0.351	0.1186	0.923	1.156	0.0706	.	0.0616	0.353	(0.002)	0.0692	0.0952
1	12X 12701A	0.330	0.636	0.0218	0.0124	0.308	0.0346	0.0557	0.235	0.0426	.	0.0058	0.0163	0.0072	.	.
1	VS UG7/10	0.33	0.71	(0.003)	0.0075	0.217	0.0184	2.28	0.99	0.072	.	.	0.248	0.0172	0.123	0.0018
1	IMZ 174	0.33	0.32	0.029	0.023	0.93	0.17	0.13	5.10	0.080	.	0.011	1.24	0.0288	.	(0.001)
1	DSZU C05a	0.32	1.68	0.018	0.006	0.34	0.45	1.33	1.08	0.028	.	0.11	0.20	.	0.15	0.050
1	12X 15254AA *	0.32	1.10	0.065	0.05	0.82	0.082	0.32	1.80	0.62	.	0.52	0.73	.	0.33	0.29
1	12X 41300A	0.319	0.551	0.0082	0.0156	0.183	0.131	0.084	0.996	0.027	.	.	0.217	0.0095	.	.
2	BS 4330V	0.318	0.91	0.008	0.0009	0.240	0.181	1.91	0.91	0.021	.	0.011	0.475	0.0076	.	.
1	SS 219/4	0.314	0.81	0.011	0.027	0.079	0.088	2.55	0.66	.	.	.	0.58	.	.	.
2	HRT FE2010-N	0.31	0.56	0.015	0.034	0.28	0.05	0.25	2.45	0.049	.	0.012	0.17	.	.	.
1	SS 222/1	0.3095	0.618	0.0175	0.0089	0.227	0.150	3.536	0.0535	.	.	0.0379	0.0287	0.0100	.	.
1	IARM 143F	0.308	0.573	(0.011)	0.0177	0.23	0.221	0.088	0.865	0.026	.	0.010	0.163	0.0098	(0.0015)	(0.0012)
1	DSZU C044	0.303	1.05	0.0117	0.0044	1.06	0.115	1.56	1.04	0.020	.	0.019	0.012	0.0108	0.0026	0.0058
1	**BS 4130**	0.303	0.541	0.0105	0.0113	0.245	0.221	0.088	0.924	0.0242	.	0.0065	0.168	0.0072	0.0015	0.0009
1	IARM 330B	0.302	0.82	0.0075	(0.003)	0.227	0.084	1.856	0.807	0.023	.	0.013	0.406	.	(0.002)	.
1	VS UG35/2	0.301	0.109	.	.	0.94	0.174	0.84	2.63	.	.	.	0.65	.	.	.
1	SS 615/1	0.30	1.68	.	(0.02)	0.17	(0.05)	4.01	0.49	.	.	.	0.21	.	.	.
1	IMZ 173	0.30	0.43	0.029	0.020	1.15	0.32	0.42	5.52	0.060	.	(0.013)	1.50	0.0342	.	(0.002)
1	VS UG7/5	(0.3)	0.68	(0.005)	(0.01)	(0.2)	(0.03)	2.27	0.99	(0.07)	.	.	0.25	.	(0.1)	(0.002)

LOW ALLOY STEEL WITH C > 0.3% CONTINUED FROM THE PREVIOUS PAGE

Number	As	B	Ca	Fe	Mg	O	Pb	Sb	Sn	Ta	V	W	Zr	Units
VS UG0/6	.	.	.	.	.	.	(<0.0005)	(<0.0005)	0.0032	.	0.0046	.	.	~45 mm Ø x ~28 mm last
CKD 182B	0.005	0.0003	.	.	.	.	(0.000)	0.001	0.004	0.000	0.027	0.016	0.001	44 mm Ø x 13 or 25 mm
CKD 182C	(0.005)	0.0003	.	.	.	.	(0.001)	(0.001)	(0.004)	(0.001)	0.028	0.018	(0.001)	44 mm Ø x 13 or 25 mm
VS UG0/9	.	(0.0002)	.	.	.	.	(0.002)	.	(0.0008)	.	0.0087	0.074	.	~45 mm Ø x ~28 mm
VS UG0/10	.	.	.	.	.	.	.	.	0.0043	.	0.0037	(0.006)	.	~45 mm Ø x ~28 mm
VS UG0/5	.	.	.	.	.	.	.	.	.	.	(0.01)	(0.01)	.	~45 mm Ø x ~28 mm
SS 402/2	.	.	.	.	.	.	.	.	.	.	0.194	.	.	38 mm Ø x 19 mm
ECRM 035-2D	0.0017	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
IMZ 65/2	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
DSZU C049	(0.004)	(0.0002)	(0.003)	.	.	.	.	.	(0.004)	.	(0.003)	.	.	40 mm Ø x 25 mm
KUT A18	0.003	(0.011)	.	.	.	.	.	0.005	0.016	.	0.10	.	.	30-35mm Ø x 39 mm
VS UG9/5	.	.	.	.	.	.	.	.	.	.	0.19	1.63	.	~45 mm Ø x ~28 mm
CZ CM-5B	0.018	0.002	.	.	.	.	0.01	0.006	0.012	.	0.06	0.03	0.09	~37 mm Ø x 25 mm
14X 72305A	.	.	.	.	.	.	.	.	0.0101	.	0.0045	.	.	~40 mm Ø x ~15 mm
SRM 1761a	(0.011)	0.0023	.	(95)	.	.	.	(0.0052)	(0.050)	(0.050)	0.054	.	0.012	34 mm Ø x 19 mm
CZ CM-5C	0.020	0.0012	(0.0006)	.	.	.	0.009	0.005	0.018	.	0.106	0.034	(0.07)	~39 mm Ø x 25 mm
VS UG9/9	.	(0.0002)	.	.	.	.	(0.002)	.	(0.001)	.	0.215	1.60	.	~45 mm Ø x ~28 mm
IMZ 172	.	.	.	.	.	.	.	.	0.010	.	0.20	0.011	.	40 mm Ø x 40 mm
NM PC-5	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
IARM 49E	0.0029	.	.	.	.	(0.002)	.	.	0.0065	.	0.066	.	.	31 mm Ø X 2 or 18 mm
BS 2952	0.004	.	0.0003	.	.	(0.002)	.	0.003	0.006	.	0.005	.	.	44 mm Ø x ~7 or 19+ mm
12X 52986A	.	.	.	.	.	.	.	.	0.0063	.	0.0615	.	.	~38 mm Ø x ~15 mm
BS 53G	0.004	(0.0001)	(0.0001)	.	.	0.001	.	.	0.007	.	0.006	(0.13)	.	44 mm Ø X ~7 or 19+ mm
CKD 184A	0.006	0.0005	.	.	.	.	(0.000)	0.002	0.008	0.000	0.017	(0.001)	(0.002)	44 mm Ø x 13 or 25 mm
NILAB 100LA D	0.004	.	.	.	.	.	.	.	.	.	0.004	.	.	34 mm Ø x 20 mm
IRSID 1747	0.0170	(0.00015)	(0.00030)	.	(0.00022)	.	(0.00025)	(0.0034)	0.0105	.	0.0046	.	(0.0001)	37 mm Ø x 30 mm
IARM 324A	0.006	0.0004	0.0009	.	.	0.003	.	(0.002)	0.011	.	0.0017	(0.003)	(0.001)	31 mm Ø x 2 or 18 mm
IARM 49D	0.004	(0.0004)	.	.	.	0.0008	(0.0004)	0.0016	0.0076	(0.001)	0.0034	(0.004)	.	31 mm Ø x 2 mm
BS A485-1	0.006	.	.	.	.	(0.0008)	.	.	0.011	.	0.003	.	.	39 mm Ø x ~7 or 19+ mm
KUT B15	.	.	.	.	.	.	.	.	.	.	(0.33)	.	.	30-35mm Ø x 39 mm
VS UG75	.	.	.	.	.	.	.	.	.	.	(0.006)	(0.02)	.	~40 mm Ø x ~26 mm
CZ LA-4C	(0.003)	0.0005	.	.	.	.	.	.	(0.006)	.	(0.010)	0.008	.	~37 mm Ø x 25 mm
12X 19965A	.	.	.	.	.	.	.	.	0.0070	.	0.0087	.	Zn:0.0008	~41 mm Ø x ~15 mm
SS 401/2	.	.	.	.	.	.	.	.	.	.	0.496	.	.	38 mm Ø x 19 mm
IMZ 119	.	.	(0.0002)	.	.	.	.	.	.	.	0.006	.	.	40 mm Ø x 40 mm
VS UG3/5	.	.	.	.	.	.	.	.	.	.	0.54	0.81	.	~45 mm Ø x ~28 mm
VS UG89	0.0043	.	.	.	.	.	0.0003	0.0011	.	.	0.021	.	.	~47 mm Ø x ~30 mm
VS UG110	.	.	.	.	.	.	.	.	.	.	.	0.004	.	~45 mm Ø x ~25 mm
VS UG21/6	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
12X LA5C	0.0085	.	.	.	.	.	0.0085	.	0.0100	.	0.579	.	Zn:0.0091	~40 mm Ø x ~15 mm
IARM 172A	(0.005)	0.0003	.	.	.	0.0006	(<0.01)	.	0.003	.	0.003	0.038	.	31 mm Ø x 2 or 18 mm
SS 403/2	.	.	.	.	.	.	.	.	.	.	0.341	.	.	38 mm Ø x 19 mm
IMZ 64/2	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
ECRM 059-2D	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
CZ CM-1C	0.036	0.0020	0.0007	.	.	.	0.005	0.01	0.012	.	0.073	0.064	0.051	~39 mm Ø x 25 mm
CZ CM-4B	0.015	0.017	.	.	.	.	0.022	0.052	0.028	.	0.18	0.116	Zn:0.007	~39 mm Ø x 25 mm
SS 404/2	.	.	.	.	.	.	.	.	.	.	0.107	.	.	38 mm Ø x 19 mm
IMZ 118	.	.	(0.0002)	.	.	.	.	.	0.22	.	0.059	.	.	40 mm Ø x 40 mm
IMZ 116	.	.	.	.	.	.	.	.	.	.	0.076	.	.	40 mm Ø x 40 mm
VS UG96	.	.	.	.	.	.	.	.	.	.	0.0030	.	.	~40 mm Ø x ~28 mm
SRM 1764a	0.0100	(0.0010)	.	(95.1)	.	.	.	.	(0.024)	0.0297	0.1063	(0.0016)	(0.0012)	34 mm Ø x 19 mm
DSZU C07	(0.0005)	0.005	.	.	.	.	(0.0003)	(0.0005)	(0.0026)	.	0.988	0.140	.	40 mm Ø x 30 mm last
VS UG119	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~25 mm
12X 10550	0.0059	.	.	.	.	.	.	.	0.0018	.	.	.	Zn:(0.0016)	~40 mm Ø x ~15 mm
12X LA4B	.	.	.	.	.	.	.	.	.	.	0.328	0.091	.	42 mm Ø x 15 mm
12X 61500A	.	.	.	.	.	.	.	.	0.0114	.	0.110	.	Zn: 0.0055	~38 mm Ø x ~15 mm
CZ CM-6A	0.025	0.015	.	.	.	.	0.017	0.03	0.017	.	0.05	0.04	0.04	~39 mm Ø x 25 mm
CZ BO-2B	0.0057	.	(0.0008)	.	.	.	.	.	0.0062	.	(0.001)	(0.005)	.	~37 mm Ø x ~25 mm
12X LA3C	0.0301	Zn:(0.004)	.	.	.	.	(0.004)	.	.	.	0.157	.	0.0197	~40 mm Ø x ~15 mm
IARM 34C	0.0024	0.0003	(0.0004)	.	.	0.0008	(0.0003)	(0.001)	0.0058	.	0.206	(0.003)	(0.001)	31 mm Ø x 2 or 18 mm
BS 43A	.	.	.	.	.	.	.	.	0.011	.	0.148	.	.	41 mm Ø x ~7 or 19+ mm
BS 4941	(0.004)	.	(0.0002)	.	.	0.0017	.	.	0.006	.	0.164	.	.	41 mm Ø x ~7 or 19+ mm
IMZ 103A	.	0.006	.	.	.	.	.	.	(0.005)	.	0.17	.	.	40 mm Ø x 40 mm
IMZ 117	.	.	(0.0002)	.	.	.	.	.	.	.	0.087	.	.	40 mm Ø x 40 mm
BS 1144	0.009	.	.	.	.	0.0016	(0.001)	.	0.0113	.	0.0039	(0.003)	last	38 mm Ø x ~16 or 19 mm **17025**

Number	As	B	Ca	Fe	Mg	O	Pb	Sb	Sn	Ta	V	W	Zr	Units
IPT 503	.	.	.	.	.	.	0.008	.	.	.	.	.	.	35 mm Ø x 20 mm
SRM C1173	.	.	.	.	.	.	.	.	.	.	0.42	.	.	32 mm Ø x 19 mm
12X 41450A	0.0053	.	.	.	.	.	.	.	0.0090	.	0.0385	.	.	~38 mm Ø ~15 mm
BS XCCV	0.002	.	.	.	.	(0.0018)	(<0.0006)	(0.0003)	(0.0004)	.	(<0.003)	.	(<0.0002)	36 mm Ø x ~7 or 19+ mm
12X LA3B	.	0.0015	.	.	.	.	0.0149	.	.	Zn:0.0098	0.157	.	(0.027)	~40 mm Ø x ~15 mm
NM PC-4	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
IARM 30H	0.0046	(0.0007)	(0.0009)	.	(0.001)	(0.0016)	(0.0005)	0.0013	0.008	.	(0.0040)	(0.007)	(0.002)	31 mm Ø X 2 or 18 mm
IARM 305B	(0.006)	0.0006	0.0007	.	(0.002)	0.0006	(0.0003)	(0.004)	0.011	.	0.004	(0.004)	0.0011	31 mm Ø X 2 or 18 mm
IARM 252D	0.0053	(0.0002)	(0.001)	.	(0.0002)	(0.0013)	(0.0004)	0.0024	0.012	.	0.0022	(0.004)	(0.0013)	31 mm Ø x 2 or 18 mm
BS 4340A	0.0059	(0.0002)	(0.0002)	95.4	0.0004	0.0007	(0.0003)	(0.0018)	0.0081	.	0.0024	0.0005	0.0016	38 mm Ø x ~7 or 19+ mm **17025**
SRM 1173	.	.	.	.	.	.	.	.	.	.	0.42	.	.	32 mm Ø x 19 mm
HRT FE2015-N	.	.	.	.	.	.	.	.	.	.	0.006	.	.	35 mm Ø x 20 mm
BS 4340	0.0043	(0.0002)	0.0005	95.5	(0.0002)	0.0012	(0.0002)	(0.0013)	0.0063	.	0.0033	0.0012	0.0005	38 mm Ø x ~7 or 19+ mm **17025**
IARM 252C	0.004	(0.0001)	(0.0003)	.	.	(0.002)	0.001	<0.005	0.007	.	0.005	<0.005	<0.002	31 mm Ø x 2 mm
BS 4942	0.005	.	0.0006	.	.	(0.0021)	.	.	0.014	.	0.28	.	.	38 mm Ø x ~7 or 19+ mm last
IARM 252E	0.0046	.	.	.	.	.	.	.	0.0075	.	(0.0028)	.	.	31 mm Ø X 2 or 18 mm
BS 1962	0.007	.	**25(pre-17025)**	.	(0.0001)	.	(0.001)	.	0.010	.	0.004	.	.	41 mm Ø x ~7 mm
VS UG116	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~25 mm
IARM 252F	(0.006)	.	.	.	.	.	.	.	0.006	.	(0.003)	(0.003)	.	31 mm Ø X 2 or 18 mm
IARM 30J	(0.002)	.	.	.	.	.	.	.	0.0109	.	0.0045	(0.005)	.	31 mm Ø X 2 or 18 mm
BS 67C	.	.	.	.	.	(0.0014)	.	.	0.010	.	0.0022	.	**17025**	38 mm Ø x ~7 or 19+ mm
SS 114	0.0025	0.0008	.	.	.	.	.	.	0.041	.	0.0086	.	0.0051	44 mm Ø x 16 mm
IMZ 55/1A	.	0.0018	.	.	.	.	.	0.0051	0.017	.	0.107	.	.	38 mm Ø x 20 mm
IARM 31G	(0.004)	0.0004	.	.	.	.	.	.	0.0077	.	0.0036	(0.004)	(0.0012)	31 mm Ø X 2 or 18 mm
IMZ 63/2	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
SS 225/2	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IPT 504	.	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 20 mm
12X 826M40A	0.0056	.	.	.	.	.	.	.	0.0085	.	.	.	.	~38 mm Ø x ~15 mm
DSZU C06	(0.003)	0.003	.	.	.	.	(0.002)	.	(0.006)	.	0.072	0.026	(0.0001)	40 mm Ø x 30 mm
BS 4942A	0.0031	(0.0001)	0.0012	96.8	0.0004	0.0020	(0.0007)	(0.001)	0.0044	.	0.280	(0.0009)	(0.001)	38 mm Ø x ~7 or 19+ mm **17025**
CKD 186D	0.007	0.0009	.	.	.	.	.	(0.002)	0.018	0.008	0.021	0.054	(0.002)	44 mm Ø x 13 or 25 mm
VS RG30/1	.	.	.	.	.	.	.	.	.	.	0.70	0.89	.	~45 mm Ø x ~28 mm
VS UG79	.	.	.	.	.	.	.	.	.	.	(0.02)	(0.01)	.	~40 mm Ø x ~26 mm
IRSID 1731	.	.	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 30 mm
DSZU C045	0.0052	(0.0004)	0.0005	.	.	.	.	.	0.0050	.	0.004	(0.011)	.	40 mm Ø x 25 mm
CZ LA-5B	0.016	0.0009	.	.	.	.	0.015	0.011	0.028	.	0.47	0.59	0.017	~39 mm Ø x 25 mm
VS UG3/10	.	.	.	.	.	.	.	.	0.0057	.	0.0053	0.006	.	~45 mm Ø x ~28 mm
12X 605M36A	0.0102	.	0.0033	.	.	.	.	.	0.0101	.	.	.	.	~38 mm Ø x ~15 mm
12X 12700A	0.0060	0.0014	.	.	.	.	.	.	.	.	0.0033	.	Zn:0.0120	~50 mm Ø x ~20 mm
IMZ 115	.	.	.	.	.	.	.	.	.	.	(0.063)	.	.	40 mm Ø x 40 mm
IRSID 1750	0.0188	(0.0002)	(0.0002)	.	(<0.0002)	.	(<0.001)	0.0031	0.0137	(<0.0010)	0.114	(0.004)	(0.0002)	38 mm Ø x 25 mm
IRSID 1730	.	.	.	.	.	.	.	.	(0.010)	.	(0.010)	.	.	32 mm Ø x 30 mm
SRM 1762a	0.0173	0.0042	.	(94.2)	.	.	.	.	0.0479	0.0203	0.2010	.	0.0285	44 mm Ø x 19 mm last
12X 12701A	0.0060	0.0010	.	.	.	.	.	.	.	.	0.0040	.	Zn:0.0014	~50 mm Ø x ~20 mm
VS UG7/10	.	.	.	.	.	.	.	.	0.0006	.	0.234	0.34	.	~45 mm Ø x ~28 mm
IMZ 174	.	.	.	.	.	.	.	.	0.010	.	0.98	0.021	.	40 mm Ø x 40 mm
DSZU C05a	(0.005)	0.010	.	.	.	.	(0.003)	(0.0005)	0.010	.	0.20	0.27	.	40 mm Ø x 25 mm
12X 15254AA *	* Provisional Analysis								0.05	.	0.29	0.32	.	~40 mm Ø x ~15 mm
12X 41300A	0.0043	.	.	.	.	.	.	.	0.0060	.	.	.	Zn:0.0012	~38 mm Ø x ~15 mm
BS 4330V	.	.	0.0010	.	.	0.0018	.	.	0.010	.	0.094	.	.	37 mm Ø x ~7 or 19+ mm
SS 219/4	.	.	.	.	.	.	.	.	0.011	.	.	.	.	38 mm Ø x 19 mm
HRT FE2010-N	.	.	.	.	.	.	.	.	.	.	0.117	(0.014)	.	40 mm Ø x 20 mm
SS 222/1	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IARM 143F	0.0051	.	.	.	.	(0.003)	.	.	0.010	.	0.0046	(0.003)	.	31 mm Ø X 2 or 18 mm
DSZU C044	0.0063	(0.0004)	0.0005	.	.	.	.	.	0.0046	.	0.004	(0.005)	.	40 mm Ø x 25 mm
BS 4130	0.0048	(0.0002)	0.0007	[97.5]	0.0002	0.0015	(0.00003)	(0.0021)	0.0099	(0.0025)	0.0037	0.0011	**17025**	38 mm Ø x ~7 or 19+ mm
IARM 330B	.	.	.	.	.	.	.	.	0.0047	.	0.076	0.024	.	31 mm Ø X 2 or 18 mm
VS UG35/2	.	.	.	.	.	.	.	.	.	.	0.108	.	.	~40 mm Ø x ~28 mm
SS 615/1	.	.	.	.	.	.	.	.	.	.	0.10	.	.	44 mm Ø x 19 mm
IMZ 173	.	.	.	.	.	.	.	.	0.012	.	0.47	0.10	.	40 mm Ø x 40 mm
VS UG7/5	.	.	.	.	.	.	.	.	.	.	0.23	0.35	.	~45 mm Ø x ~28 mm

Number	As	B	Ca	Fe	Mg	O	Pb	Sb	Sn	Ta	V	W	Zr	Units

LOW ALLOY STEEL WITH 0.13 % < C < 0.3 % - CONTINUED ON THE NEXT PAGE

#=Class, where 1=CRM and 2=RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	Co	Mo	N	Sn	V
1	IARM 330A	0.299	1.00	(0.005)	(0.001)	0.273	0.074	1.80	0.90	0.045	.	(0.003)	0.0063	0.404	0.0024	0.0039	0.071
1	SRM 1269	0.298	1.35	0.012	0.0061	0.189	0.095	0.108	0.201	0.016	.	.	.	0.036	.	.	0.004
1	12X 352D	0.298	0.627	0.066	0.125	0.338	0.144	0.334	0.423	0.146	.	0.0095	0.0504	0.257	.	0.105	0.0584
1	ECRM 086-1D	0.297	0.879	0.024	0.037	0.206	0.320	0.168	0.150	.	.	0.023	.	.	.	0.026	.
1	12X 16604A *	0.295	0.455	0.006	0.002	0.240	0.135	1.88	1.92	0.013	.	.	0.040	0.34	0.004	0.006	0.007
2	CZ CM-3A	0.295	0.37	0.016	0.0013	0.27	0.16	1.82	1.87	0.05	.	0.005	0.012	0.33	0.007	0.007	0.007
1	VS UG9/10	0.294	0.616	.	(0.003)	0.235	0.169	0.144	0.170	0.280	.	.	.	0.282	0.015	0.0017	1.25
2	HRT FE2000-N	0.294	0.49	0.014	0.007	0.30	0.07	1.96	1.99	0.025	.	.	0.012	0.34	.	.	0.017
1	VS RG27/1	0.290	0.74	0.044	0.0043	0.28	0.208	0.142	1.83	1.07	.	.	0.025	0.191	.	.	0.072
1	IMZ 178	0.29	0.65	0.016	0.003	0.28	0.140	2.09	1.26	0.051	.	.	0.015	0.20	0.0160	0.011	0.011
1	SRM 1225	0.274	0.48	0.007	0.014	0.221	.	0.018	0.91	.	.	.	.	0.166	.	.	0.004
1	**BS HiCal-1**	0.271	1.00	(0.007)	0.0007	1.29	0.152	3.28	1.55	0.070	.	0.0022	0.0024	0.379	.	(0.0002)	0.0027
1	IARM 380A	0.268	1.24	0.021	0.025	0.181	0.265	0.114	0.192	0.0029	.	(0.007)	(0.010)	0.059	(0.012)	0.0117	0.0475
2	RM Fe 2/4	0.26	0.61	0.039	0.016	0.30	0.30	0.68	0.70	(0.001)	.	0.04	0.29	0.47	0.020	0.04	0.46
2	BS 69B	0.258	1.28	0.008	0.013	1.27	0.086	1.71	0.28	0.024	.	.	0.035	0.39	0.0057	0.006	(0.002)
1	12X 12750U	0.258	0.510	0.0078	0.0053	0.599	0.106	0.786	0.792	0.253	.	.	0.581	0.088	.	0.110	0.102
1	12X 32550A	0.257	1.350	0.0061	0.0054	1.59	0.108	1.750	0.377	0.0178	.	0.0054	.	0.417	0.0101	0.0206	0.0222
1	IARM 195B	0.255	1.84	0.018	0.005	1.16	0.52	1.00	0.216	0.029	.	0.021	0.101	0.052	0.0070	0.084	0.082
2	BS 6418	0.255	1.42	0.010	0.004	1.54	0.11	1.74	0.34	0.027	.	0.0044	0.010	0.42	0.0066	0.006	0.003
1	IARM 380B	0.243	1.27	0.016	0.027	0.238	0.307	0.182	0.153	(0.0021)	.	0.0058	0.014	0.055	(0.013)	0.0132	0.049
1	CKD 181B	0.240	0.988	0.042	0.008	0.445	0.095	0.737	0.669	0.016	0.014	0.029	0.050	0.395	(0.005)	0.122	0.307
1	IMZ 113	0.24	0.50	0.022	0.025	0.10	0.11	0.13	1.25	0.007	0.004	.	.	0.050	0.0154	.	0.039
1	DSZU C043	0.239	2.18	0.054	0.070	0.114	0.50	2.93	0.44	0.071	.	0.0017	0.005	0.146	0.0100	0.0023	0.366
1	12X 722M24A	0.236	0.510	0.0135	0.0199	0.262	0.200	0.208	3.094	0.0187	.	0.0075	.	0.497	.	0.0116	0.0080
1	VS UG6/5	0.232	0.39	(0.006)	(0.008)	0.51	0.257	(0.2)	1.85	(0.4)	.	.	.	(0.2)	.	.	0.34
1	IARM 229B	0.220	0.858	0.0073	0.0106	0.329	0.0153	0.030	0.017	0.025	.	(0.002)	0.0116	0.495	0.0072	0.0012	0.0059
1	ECRM 197-1D	0.219	0.792	0.0073	0.0232	0.275	0.152	0.148	0.451	0.0313	.	0.0083	0.0135	0.402	0.0114	0.0097	.
2	BS 3961	0.215	0.565	0.016	0.022	0.236	0.133	1.67	0.510	0.022	.	.	(0.010)	0.27	0.0079	(0.008)	(0.002)
2	TL 1668	0.2146	1.643	0.0137	0.0012	1.645	0.0108	0.0164	0.0173	0.0371	.	0.0016	0.0031	(0.0014)	0.0043	0.0047	0.0016
1	DSZU C048	0.212	0.467	0.0102	0.0059	0.273	0.262	0.105	0.175	0.0293	.	0.0085	0.015	0.016	(0.011)	0.016	.
1	IPT 502	0.210	0.823	0.018	0.026	0.198	0.121	0.408	0.485	0.024	.	.	0.0083	0.155	0.0069	.	.
1	**BS 8620E**	0.210	0.800	0.011	0.0238	0.255	0.186	0.564	0.541	0.027	.	0.0044	0.0068	0.223	0.0080	0.011	0.0024
1	BS 8620F *	0.21	0.84	0.009	0.032	0.24	0.23	0.43	0.54	0.04	.	<0.05	<0.05	0.2	<0.05	<0.05	<0.05
1	IARM 33D	0.209	0.593	0.009	0.023	0.207	0.072	1.78	0.139	0.026	.	0.0035	0.008	0.229	0.0053	0.005	0.002
2	BS 3952	0.208	0.546	0.011	0.021	0.264	0.202	0.112	0.105	0.048	.	.	.	0.519	(0.0005)	.	.
1	ECRM 187-2D	0.2038	1.257	0.0066	(0.0300)	0.2111	0.1288	0.1755	1.132	0.0223	.	0.0057	0.0112	0.0623	0.0105	0.0237	0.0122
1	**BS 9325A**	0.203	0.969	0.0079	0.0045	0.612	0.163	3.29	1.50	0.0056	.	0.0024	0.0093	0.358	0.0076	(0.0003)	(0.0024)
1	**BS 4820A**	0.203	0.64	0.008	0.014	0.185	0.212	3.28	0.116	0.029	.	0.006	0.008	0.203	0.0076	0.0097	0.0010
1	SRM 1763a	0.202	1.584	0.0123	0.022	0.633	0.042	0.513	0.498	0.0435	.	0.055	0.093	0.490	(0.0045)	(0.011)	0.307
1	VS RG29/1	0.202	0.29	.	0.0090	0.22	1.25	4.71	0.89	0.0050	.	.	0.115	1.01	.	.	0.40

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	Co	Mo	N	Sn	V
1	VS RG31/1	0.200	0.191	0.0039	0.0058	0.28	0.39	2.12	1.28	0.30	.	.	0.273	0.30	.	.	0.200
1	KUT B3	0.20	0.14	(0.012)	0.025	0.53	0.25	.	5.94	.	.	.	.	.	.	.	1.16
1	VS UG5/5	(0.2)	0.52	(0.005)	(0.03)	0.145	0.37	0.42	1.42	0.19	.	.	.	0.44	.	.	0.29
1	IARM 155F	0.199	0.617	0.008	(0.013)	0.223	0.219	3.36	0.144	0.0356	.	(0.006)	0.012	0.244	(0.005)	0.0084	0.0015
1	12X 86200A	0.198	0.849	0.0110	0.0104	0.299	0.213	0.598	0.602	0.0305	.	0.0051	.	0.224	0.0091	0.0100	0.0045
1	12X LA2E	0.195	0.57	0.0241	0.0263	0.678	0.786	0.783	0.813	1.381	.	0.282	0.0306	0.136	0.0173	0.0066	0.0990
1	IMZ 112	0.195	0.43	0.022	0.016	0.27	0.055	0.046	0.034	0.034	0.024	.	.	0.043	0.010	0.15	0.045
1	12X 349D	0.194	0.498	0.0162	0.0232	0.201	0.106	0.289	0.268	0.149	.	0.0096	0.021	0.123	.	0.153	0.0172
1	VS UG8/10	0.192	1.81	0.0064	(0.005)	0.61	0.198	0.348	0.729	0.082	.	.	.	0.030	0.0185	0.0052	.
1	VS UG114	0.190	1.65	0.010	0.0074	0.59	0.173	0.345	1.03	0.146	.	.	.	0.016	.	.	0.0031
2	BS 51F	0.190	0.52	0.016	0.018	0.24	0.231	1.68	0.157	0.021	.	(0.0024)	0.009	0.224	0.0060	0.009	0.003
1	IMZ 162	0.19	1.31	0.021	0.014	0.59	0.077	1.64	0.91	(0.040)	.	.	.	0.52	.	.	0.045
1	VS UG113	0.189	1.55	0.0087	0.0070	0.59	0.185	0.186	1.12	0.263	.	.	.	0.010	.	.	0.0040
2	BS 4620	0.189	0.57	0.006	0.018	0.25	0.216	1.75	0.072	0.032	.	0.0084	0.012	0.24	0.0078	0.013	(0.0008)
1	ECRM 192-1D	0.1875	1.377	0.0029	0.0010	0.219	0.0453	0.755	0.0717	0.0306	0.0285	.	0.0055	0.482	0.0118	.	.
1	VS UG112	0.186	1.63	0.0065	0.0050	0.60	0.157	0.185	0.98	0.026	.	.	.	0.021	.	.	0.014
1	DSZU C08	0.184	0.756	0.019	0.008	0.389	0.550	(6.6)	2.34	0.011	.	(0.011)	0.062	0.514	.	(0.014)	0.216
2	BS LF3	0.183	0.52	0.006	0.018	0.206	0.080	3.36	0.098	0.017	.	0.006	0.056	0.056	0.0054	0.006	(0.002)
2	HRT FE2012-N	0.18	0.70	0.010	0.008	0.31	0.14	0.13	0.25	0.030	.	.	.	0.26	.	.	.
1	IMZ 74A	0.179	1.19	0.008	0.010	0.34	0.209	0.130	0.197	0.012	.	.	0.0043	0.047	0.0118	.	0.072
1	12X 19MNVS6A	0.174	1.563	0.0114	0.0245	0.357	0.203	0.110	0.1087	0.0101	.	.	.	0.0270	0.0210	0.0214	0.0939
1	ECRM 087-1D	0.174	0.671	0.010	0.046	0.263	0.171	0.118	0.078	.	.	0.024	0.015	0.021	.	0.017	.
1	12X 15180A	0.170	1.196	0.0110	0.0022	0.212	0.141	0.1030	0.118	0.018	.	0.0117	.	0.0231	0.0051	0.0115	.
2	HRT FE2013-N	0.17	0.57	0.013	0.010	0.33	0.09	1.45	1.52	0.026	.	.	.	0.26	.	.	.
1	ECRM 194-2D	0.1694	1.282	0.0137	0.00049	0.2974	0.0313	0.3316	0.760	0.0669	.	0.00208	0.00328	0.402	0.00319	.	0.00161
2	BS 3962	0.168	0.58	0.007	0.018	0.244	0.146	1.83	0.138	0.023	.	0.005	0.007	0.219	0.0072	0.007	(0.001)
2	CZ CM-8A	0.16	2.13	0.007	0.011	0.18	0.03	0.03	1.38	0.02	.	(0.002)	0.004	(0.001)	.	(0.003)	0.008
2	HRT FE1999-N	0.16	0.59	0.011	0.005	0.22	0.11	0.09	0.87	0.027	.	.	.	0.46	0.0091	.	0.021
2	BS XCCT	0.158	0.52	0.005	0.011	0.28	0.027	1.27	0.65	0.006	.	0.004	0.017	0.020	0.0076	(0.002)	0.031
1	IMZ 176A	0.15	0.75	0.018	0.003	0.35	0.103	3.62	0.41	(0.058)	.	.	(0.010)	0.027	0.0129	0.009	(0.061)
1	12X 12747U	0.149	2.02	0.029	0.041	0.337	0.437	0.391	0.443	0.015	.	0.0114	0.200	0.500	.	0.167	0.0375
2	BS 15A	0.142	1.12	0.016	0.008	0.058	0.030	0.029	0.044	0.041	.	0.003	0.005	0.008	.	0.002	0.012
2	RM Fe C/2	0.14	1.29	0.087	0.072	0.53	0.68	0.41	0.38	0.005	.	0.052	0.11	0.21	.	0.049	0.073
1	ECRM 193-1D	0.14	0.97	0.007	0.009	0.40	0.60	1.18	0.18	0.025	.	0.0062	0.007	0.35	0.0108	.	(0.002)
2	BS 1972	0.130	0.51	0.012	0.017	0.24	0.089	3.28	1.53	0.014	.	0.004	0.012	0.052	0.0096	0.006	0.003
2	BS 47A	0.130	0.44	0.017	0.015	0.27	0.11	0.12	4.22	0.015	.	.	0.011	0.47	0.018	0.008	0.016

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	Co	Mo	N	Sn	V

CRM LOW ALLOY STEEL WITH EXTENSIVE ANALYSIS

analysis listed in mass % — 31-34 mm Ø x 19 mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	As	Co	Mo	Nb	Pb	Sn	Ta	Ti	V	W	Zr
SRM 1264a	0.87	0.25	0.010	0.025	0.067	0.25	0.14	0.06	(0.008)	0.010	0.15	0.49	0.15	0.0022	(0.008)	0.11	0.24	0.10	0.10	0.069

continued — analysis listed in mass % — analysis listed in mg/kg

Number	B	Bi	Fe.diff	Ge	Sb	Te	Zn	Ag	Au	Ca	Ce	H	Hf	La	Mg	N	Nd	O	Pd	Se	Sr
SRM 1264a	(0.011)	(0.0009)	[96.7]	(0.003)	0.034	0.00018	(0.001)	(0.2)	1	0.4	2	(<5)	(13)	0.7	1.5	(32)	0.7	(10)	(0.3)	(2.1)	(5)

LOW ALLOY STEEL WITH 0.13 % < C < 0.3 %

CONTINUED FROM THE PREVIOUS PAGE

Number	B	Ca	Fe	Mg	Nb	O	Pb	Sb	Ta	Ti	W	Zn	Zr	Units
IARM 330A	0.0003	0.0010	.	.	(0.003)	(0.0009)	(0.0004)	(0.001)	.	0.006	(0.004)	.	0.0015	31 mm Ø x 2 mm
SRM 1269	.	.	.	.	.	.	0.005	.	.	.	.	.	.	32 mm Ø x 19 mm
12X 352D	.	.	.	.	.	.	.	.	.	0.285	0.223	.	.	~40 mm Ø x ~15 mm
ECRM 086-1D	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
12X 16604A *	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø X ~15 mm
CZ CM-3A	0.0002	.	.	.	0.006	.	.	.	.	0.006	0.015	.	.	~39 mm Ø x 25 mm
VS UG9/10	.	.	.	.	.	.	.	.	.	0.163	1.34	.	.	~45 mm Ø x ~28 mm
HRT FE2000-N	.	0.0015	.	.	.	.	.	.	.	.	0.025	.	.	40 mm Ø x 20 mm
VS RG27/1	.	.	.	.	.	.	.	.	.	0.110	0.170	.	.	~45 mm Ø x ~28 mm
IMZ 178	.	.	.	.	0.105	.	.	.	.	.	0.017	.	.	40 mm Ø x 40 mm
SRM 1225	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
BS HiCal-1	(0.0001)	0.0140	[91.9]	(0.0003)	(0.002)	.	(0.0005)	.	.	0.0037	(0.0009)	.	(0.0008)	~38 mm Ø x ~30 mm **17025**
IARM 380A	.	.	.	.	(0.0020)	.	.	.	.	.	(0.009)	.	.	31 mm Ø X 2 or 18 mm
RM Fe 2/4	(0.0027)	<0.001	.	.	(0.011)	.	<0.02	<0.03	.	(0.0065)	0.19	.	<0.02	40 mm Ø x 40 mm
BS 69B	.	.	.	.	.	.	.	.	.	(0.002)	.	.	.	38 mm Ø x ~7 or 19+ mm
12X 12750U	.	.	.	.	0.111	.	.	.	.	0.159	0.100	.	.	~40 mm Ø x ~15 mm
12X 32550A	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
IARM 195B	0.0039	0.0002	.	.	0.007	0.0017	0.002	0.011	.	0.002	0.38	.	0.002	31 mm Ø x 18 mm last
BS 6418	.	.	.	.	.	0.0012	.	.	.	0.003	.	.	.	57 mm Ø x ~7 or 19+ mm
IARM 380B	.	.	.	.	(0.0016)	.	.	.	.	0.0011	(0.003)	.	.	31 mm Ø X 2 or 18 mm
CKD 181B	0.0076	.	(95.37)	.	0.062	.	0.0005	0.017	0.042	0.155	0.188	.	0.001	44 mm Ø x 13 mm last
IMZ 113	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
DSZU C043	(0.0005)	0.0005	.	.	0.004	.	.	.	.	0.046	0.082	.	.	40 mm Ø x 25 mm
12X 722M24A	.	.	.	.	.	.	.	.	.	.	.	0.0028	.	~38 mm Ø x ~15 mm
VS UG6/5	.	.	.	.	(0.01)	.	.	.	.	(0.01)	0.16	.	.	~45 mm Ø x ~28 mm
IARM 229B	(0.0006)	(0.0003)	.	.	(0.0019)	(0.0017)	(0.0005)	(0.0006)	(0.003)	0.0019	(0.003)	.	(0.0008)	31 mm Ø x 2 or 18 mm
ECRM 197-1D	.	.	.	.	.	.	.	.	.	0.0005	.	.	.	38 mm Ø x 25 mm
BS 3961	.	.	.	.	.	.	.	.	.	(<0.003)	.	.	.	44 mm Ø X ~7 or 19+ mm
TL 1668	(0.00024)	0.0019	.	(0.0003)	(0.0002)	.	(0.0007)	(0.0003)	.	0.0032	.	0.0008	(0.0003)	37 mm Ø x 25 mm
DSZU C048	.	(0.0017)	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm
IPT 502	.	.	.	.	.	.	.	.	.	0.0016	.	.	.	36 mm Ø x 20 mm
BS 8620E	(0.0003)	0.0010	97.2	(0.0003)	(0.002)	0.0016	(0.0008)	0.0015	(0.0004)	0.0016	0.0008	**17025**	(0.0008)	38 mm Ø x ~7 or 19+ mm
BS 8620F *	* Provisional Analysis			<0.0005	<0.05	<0.05	<0.005	.	.	<0.05	<0.05	.	<0.005	38 mm Ø x ~7 or 19+ mm
IARM 33D	0.0002	(0.0003)	.	.	0.002	0.0013	<0.001	(0.002)	.	0.003	<0.005	.	<0.002	31 mm Ø x 2 or 18 mm
BS 3952	.	.	.	.	.	.	.	.	.	.	.	.	.	39 mm Ø x ~7 or 19+ mm
ECRM 187-2D	0.00048	.	.	.	.	.	.	.	.	.	.	.	.	39 mm Ø x 28 mm
BS 9325A	(0.0001)	0.0039	92.8	(0.0002)	0.0017	.	(0.0003)	.	(0.010)	0.0030	0.024	**17025**	(0.001)	~40 mm Ø x ~30 mm
BS 4820A	0.0002	0.0003	.	0.0003	(0.002)	0.0011	(0.0002)	0.0024	.	0.0012	(0.002)	**17025**	.	38 mm Ø x ~7 or 19+ mm
SRM 1763a	0.0054	.	(95.3)	.	0.100	.	.	(0.011)	(0.012)	0.308	(0.002)	.	0.044	34 mm Ø x 19 mm
VS RG29/1	.	.	.	.	0.044	.	.	.	.	0.020	0.62	.	.	~45 mm Ø x ~28 mm

Number	B	Ca	Fe	Mg	Nb	O	Pb	Sb	Ta	Ti	W	Zn	Zr	Units
VS RG31/1	.	.	.	.	.	.	.	.	.	0.21	0.39	.	.	~45 mm Ø x ~28 mm
KUT B3	.	.	.	.	.	.	.	.	.	.	1.19	.	.	30-35mm Ø x 39 mm
VS UG5/5	.	.	.	.	(0.01)	.	.	.	.	(0.003)	0.38	.	.	~45 mm Ø x ~28 mm
IARM 155F	.	.	.	.	0.0016	(0.003)	.	.	.	0.0020	(0.004)	.	.	31 mm Ø X 2 or 18 mm
12X 86200A	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
12X LA2E	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IMZ 112	.	.	.	.	0.013	.	.	.	.	0.010	.	.	.	40 mm Ø x 40 mm
12X 349D	.	.	.	.	.	.	.	.	.	0.101	0.049	.	.	~40 mm Ø x ~15 mm last
VS UG8/10	.	.	.	.	(0.003)	.	.	.	.	0.0034	.	.	.	~45 mm Ø x ~28 mm
VS UG114	.	.	.	.	.	.	.	.	.	0.006	.	.	0.065	~45 mm Ø x ~25 mm
BS 51F	(0.0001)	(0.0005)	.	(0.0001)	(0.0005)	0.0020	(0.00007)	(0.0011)	.	(0.0012)	(0.0030)	(0.0002)	.	38 mm Ø x ~7 or 19+ mm
IMZ 162	.	.	.	.	.	.	.	.	.	0.12	.	.	.	40 mm Ø x 40 mm
VS UG113	.	.	.	.	.	.	.	.	.	0.006	0.007	.	0.169	~45 mm Ø x ~25 mm
BS 4620	0.00006	0.0001	.	0.0001	0.0001	0.0009	0.0002	0.0024	.	0.0026	0.0009	0.0002	.	38 mm Ø x ~7 or 19+ mm
ECRM 192-1D	.	.	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x ~30 mm
VS UG112	.	.	.	.	.	.	.	.	.	0.0028	0.005	.	0.0047	~45 mm Ø x ~25 mm
DSZU C08	0.011	.	.	.	0.122	.	.	.	.	0.060	0.966	(0.003)	(0.006)	40 mm Ø x 30 mm last
BS LF3	0.0001	(0.0001)	.	.	.	0.004	.	.	.	.	.	.	.	38 mm Ø x ~7 or 19+ mm
HRT FE2012-N	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm
IMZ 74A	(0.002)	(0.0004)	.	.	0.041	.	.	.	.	0.022	.	.	.	43 mm Ø x 20 mm
12X 19MNVS6A	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
ECRM 087-1D	.	.	.	.	.	.	.	0.0046	.	.	.	.	.	38 mm Ø x 25 or 30 mm
12X 15180A	.	.	.	.	.	.	.	.	.	.	.	0.0016	.	~40 mm Ø x ~20 mm
HRT FE2013-N	.	.	.	.	.	.	.	.	.	.	.	.	.	34 mm Ø x 20 mm
ECRM 194-2D	0.00155	.	.	.	0.0290	.	.	.	.	0.00322	.	.	.	39 mm Ø x 28 mm
BS 3962	.	.	.	.	.	.	.	.	.	.	.	.	.	37 mm Ø x ~7 or 19+ mm
CZ CM-8A	0.004	.	.	.	0.034	.	.	.	.	(0.001)	0.01	.	.	~39 mm Ø x 25 mm
HRT FE1999-N	0.0002	.	.	.	0.002	.	.	.	.	0.001	.	.	.	40 mm Ø x 20 mm
BS XCCT	.	.	.	.	(0.001)	(0.005)	(<0.001)	(0.0004)	.	(0.002)	.	.	(<0.002)	36 mm Ø x ~7 or 19+ mm
IMZ 176A	.	.	.	.	.	.	.	.	.	.	(0.015)	.	.	40 mm Ø x 40 mm
12X 12747U	.	.	.	.	.	.	.	.	.	0.072	0.030	.	.	42 mm Ø x 15 mm
BS 15A	(0.0002)	(0.0005)	.	.	0.041	.	(0.0003)	(0.003)	.	0.008	(0.004)	.	0.022	32 mm Ø x 17 mm last
RM Fe C/2	0.0030	(0.0013)	.	.	0.0073	.	.	0.0190	.	0.0074	0.34	.	0.010	40 mm Ø x 40 mm
ECRM 193-1D	.	.	.	.	0.0232	.	.	.	.	(0.0013)	.	.	.	36-41 mm Ø x 28-35 mm
BS 1972	(0.0001)	(0.0002)	.	.	(0.001)	(0.0026)	(0.001)	(0.004)	.	(0.003)	(0.004)	.	.	39 mm Ø x ~7 or 19+ mm
BS 47A	.	.	.	.	0.002	(0.003)	.	.	.	0.003	.	.	.	38 mm Ø x ~7 or 19+ mm

Number	B	Ca	Fe	Mg	Nb	O	Pb	Sb	Ta	Ti	W	Zn	Zr	Units

LOW ALLOY STEEL WITH C < 0.13 %

= Class, where 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	Sn	V
1	IMZ 76	0.129	1.37	0.022	0.011	0.24	0.057	0.33	0.12	0.011	.	.	0.101	.	.	(0.006)
1	VS UG86	0.129	0.217	(0.005)	(0.007)	(0.3)	0.62	1.94	1.52	.	.	.	0.311	.	.	0.327
1	**BS 1982**	0.128	0.441	0.012	0.026	0.255	0.177	0.197	2.09	0.021	.	0.010	0.89	0.0097	0.013	0.003
1	12X 15256Q	0.123	0.492	0.0125	0.0163	0.190	0.0550	5.33	0.362	0.1300	.	0.493	0.0740	0.0056	0.107	0.619
1	12X 93106A	0.122	0.605	0.0071	0.0103	0.206	0.199	3.255	1.107	0.0246	.	.	0.0879	0.0098	0.0094	0.0029
2	BS 47B	0.122	0.39	0.014	0.022	0.22	0.12	0.105	4.78	0.018	.	.	0.45	0.023	0.006	0.004
1	DSZU C042	0.120	0.562	0.0123	0.0058	0.319	0.131	0.203	0.962	0.023	.	0.009	0.286	0.0100	0.0064	0.178
1	CKD 187C	0.118	0.530	0.035	0.013	0.588	0.041	0.085	3.50	0.038	.	0.071	0.563	(0.0153)	0.014	0.559
1	VS UG115	0.115	0.43	0.0084	0.012	0.227	0.173	1.63	0.81	0.024	.	.	0.0126	0.013	.	.
1	IMZ 71	0.114	0.54	0.018	0.011	0.49	0.88	0.041	0.46	0.014	.	.	0.008	.	.	0.045
1	IMZ 75	0.114	0.37	0.081	0.016	0.58	0.45	0.039	0.41	0.020	.	.	0.015	.	.	(0.007)
1	IMZ 75A	0.112	0.394	0.080	0.016	0.618	0.428	0.041	0.401	0.009	.	0.0037	0.018	0.0024	0.023	0.013
1	SRM 1138a	0.11	0.35	0.035	0.056	0.25	0.09	0.10	0.13	.	.	.	0.05	.	.	0.02
1	**BS 9905**	0.107	0.333	0.008	0.008	0.327	0.115	0.123	8.22	0.017	.	0.016	0.90	0.055	0.009	0.236
1	VS UG6710	0.107	0.225	0.0068	0.0067	0.342	0.626	2.04	1.41	0.46	.	.	0.339	0.0156	0.0023	0.194
1	12X 12748U	0.106	0.902	0.0309	0.050	0.221	0.347	0.376	0.401	0.111	.	0.323	0.329	.	0.080	0.0499
1	IPT 500	0.106	0.844	0.016	0.0048	0.282	0.270	0.018	0.612	0.046	.	0.0046	0.0013	0.0092	0.002	0.003
1	12X LA1B	0.104	1.262	0.0090	0.060	0.777	0.0572	0.210	1.026	0.0104	.	0.0144	0.068	0.0144	.	0.448
1	KUT A13	0.104	0.49	0.053	0.073	0.81	0.166	1.93	0.14	0.042	.	0.011	0.91	.	0.060	0.23
1	VS UG6/6	0.104	0.227	(0.007)	(0.007)	0.337	0.616	2.05	1.40	0.47	.	(0.008)	0.34	.	0.0023	0.193
2	BS 58E	0.100	0.63	0.009	0.002	0.29	0.154	3.22	1.40	0.029	.	0.013	0.110	0.0033	0.003	0.006
1	IMZ 175	0.099	0.25	0.016	0.0040	0.22	0.130	3.12	0.515	0.043	.	(0.013)	0.025	0.0099	0.011	0.014
2	BS 58C	0.098	0.57	0.011	0.014	0.29	0.14	3.20	1.29	(0.055)	.	.	0.11	.	(0.012)	.
1	IMZ 73	0.097	0.68	0.019	0.013	0.12	0.17	0.13	0.079	0.010	.	.	0.013	.	.	0.022
1	KUT T3/2	0.09	0.60	0.058	0.033	0.66	0.10	0.11	0.40	.	.	.	.	.	.	.
1	VS UG5/10	0.088	0.177	0.0067	0.0055	0.135	0.490	1.87	1.51	0.47	.	.	0.049	0.0059	0.0036	0.121
1	IARM 268B	0.087	0.58	0.011	0.035	0.21	0.31	0.127	0.094	0.002	.	0.003	0.033	0.0015	0.010	0.047
1	IMZ 204	0.085	0.36	0.014	0.008	0.40	0.075	0.034	0.111	4.21	.	.	(0.007)	(0.0052)	.	.
1	SRM 1226	0.085	0.274	0.0022	0.0044	0.231	0.125	5.42	0.467	0.054	.	0.029	0.446	.	(0.003)	0.0018
1	NCS HS20747	0.083	0.967	0.02	0.015	0.472	.	.	.	.	.	.	.	.	.	.
1	DSZU C050	0.082	1.21	0.040	0.065	0.287	0.304	0.118	0.075	(0.008)	.	.	0.48	.	(0.004)	0.007
1	IMZ 72	0.081	0.31	0.092	0.012	0.34	0.27	0.039	0.52	0.013	.	.	0.006	.	.	(0.002)
1	NCS HS20745	0.068	0.813	0.1	0.024	0.33	0.297	.	.	.	.	.	.	.	.	0.022
1	VS UG117	0.064	1.41	0.012	0.021	0.60	0.214	0.072	0.129	0.018	.	.	(0.005)	0.0085	.	.
1	SRM 1271	0.064	0.73	0.005	0.0013	0.334	1.48	3.34	0.552	0.020	.	.	0.543	.	.	0.003
1	SRM C1285	0.058	0.332	0.072	0.020	0.36	0.37	1.17	0.80	.	.	0.036	0.164	.	0.035	0.150
1	SRM 1767	0.052	0.022	0.0031	0.0090	0.026	0.0014	0.002	0.0015	0.004	.	0.0050	0.020	0.0008	0.006	0.033
2	CZ CM-7A	0.05	1.17	0.011	0.016	0.56	0.09	0.05	0.10	0.13	.	0.007	0.015	0.01	0.008	0.012
1	CKD 183E	0.049	1.76	0.009	0.013	1.03	0.575	1.10	0.205	0.149	.	0.119	0.036	0.0040	0.053	(0.004)
1	SS 421	(0.049)	(0.11)	(0.012)	(0.027)	(0.07)	.	.	.	.	.	.	(0.028)	.	.	(<0.02)
1	12X 15252Q	0.0478	0.818	0.0213	0.0580	0.265	0.154	2.03	0.887	0.074	.	0.154	0.248	.	0.0448	0.330
1	VS UG82	0.046	1.83	(0.003)	(0.004)	0.334	0.056	0.201	0.59	.	.	.	0.93	.	.	0.56
1	VS UG97	0.041	0.59	0.0036	0.0025	0.194	0.0040	0.0048	0.0080	0.51	.	.	0.019	.	.	(0.001)
1	SRM 1766	0.015	0.067	0.002	0.0024	0.010	0.015	0.021	0.024	0.012	.	0.0020	0.0035	0.0033	0.0010	0.009
1	KUT B20	0.008	0.09	0.012	0.013	0.005	0.034	0.038	0.03	(0.01)	.	(<0.01)	(<0.01)	.	(0.003)	(<0.005)
1	SRM 1765	0.006	0.144	0.0052	0.0038	(0.004)	0.0013	0.154	0.051	(0.006)	.	0.0012	0.005	0.0010	0.002	0.0040
1	NCS HS15749	0.0045	0.247	0.010	0.0054	1.54	.	.	.	0.050	0.048	.	.	.	.	.
1	DSZU C01	0.004	0.049	0.002	0.002	0.014	0.008	0.530	0.040	0.004	.	0.217	0.124	.	(0.0008)	(0.003)
2	IARM 168A	0.003	0.12	0.030	0.064	0.46	0.009	2.32	0.004	0.19	.	0.003	0.69	0.0002	0.003	0.004
1	CKD 180B	(0.003)	0.047	0.004	0.0038	0.001	0.006	0.018	0.013	(0.001)	.	0.003	0.001	(0.0028)	0.0011	0.000
1	ECRM 064-2D	0.0026	0.1641	.	.	0.0065	0.0077	0.0115	.	.	.	0.0027	0.00077	0.0026	0.00051	0.00015

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	Sn	V

Number	As	B	Ca	Ce	Fe	Nb	O	Pb	Sb	Ti	W	Zr	Units
IMZ 76	.	(0.001)	.	.	.	0.068	.	.	.	(0.003)	.	.	40 mm Ø x 40 mm
VS UG86	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~28 mm
BS 1982	0.007	.	.	.	.	(<0.003)	0.0017	(0.0003)	0.002	(0.001)	.	**25(pre-17025)**	39 mm Ø x ~7 or 19+mm
12X 15256Q	.	.	.	.	.	0.0509	.	.	.	.	0.101	.	~40 mm Ø x ~15 mm
12X 93106A	0.0050	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
BS 47B	0.004	.	.	.	.	.	(0.004)	.	.	.	.	.	38 mm Ø x ~7 or 19+mm
DSZU C042	0.0073	0.00023	0.0010	.	.	0.0025	.	.	.	0.0018	(0.006)	.	40 mm Ø x 25 mm
CKD 187C	(0.007)	0.0006	.	Ta: 0.016	.	0.028	.	(0.003)	0.023	0.110	0.67	0.011	44 mm Ø x 13 or 25 mm
VS UG115	.	.	.	.	.	.	.	.	.	0.0014	.	.	~45 mm Ø x ~25 mm
IMZ 71	.	(0.002)	.	.	.	(0.005)	.	.	.	(0.002)	.	(0.002)	40 mm Ø x 40 mm
IMZ 75	.	.	.	.	.	.	.	.	.	0.024	.	last	**40 mm Ø x 40 mm**
IMZ 75A	.	0.0021	.	.	.	0.024	.	.	.	0.023	.	.	**38 mm Ø x 20 mm**
SRM 1138a	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 13 mm
BS 9905	0.007	(0.0004)	(0.0001)	**25(pre-17025)**	0.076	0.0021	(0.0002)	(0.002)	(0.002)	0.003	.	38 mm Ø x ~7 mm last
VS UG6710	.	.	.	.	.	.	.	.	.	0.128	0.41	.	~45 mm Ø x ~28 mm
12X 12748U	0.129	.	.	.	.	.	.	.	.	0.105	0.0464	.	**~40 mm Ø x ~15 mm**
IPT 500	0.0020	.	.	.	.	0.008	.	.	.	0.0014	.	.	34 mm Ø x 18 mm
12X LA1B	0.0212	.	.	.	.	.	.	.	.	.	.	.	**~40 mm Ø x ~15 mm**
KUT A13	0.070	(0.002)	.	.	.	.	.	.	0.024	0.11	.	.	**30-35mm Ø x 39 mm**
VS UG6/6	(0.002)	.	.	.	.	.	.	(<0.0005)	.	0.125	0.39	.	~45 mm Ø x ~28 mm
BS 58E	0.003	(0.0002)	(0.0002)	.	.	.	0.0008	.	.	(0.002)	.	.	38 mm Ø x ~7 or 19+mm
IMZ 175	.	.	.	.	.	.	.	.	.	.	(0.019)	.	40 mm Ø x 40 mm
BS 58C	low supply		.	.	.	.	.	.	.	no uncertainties			39 mm Ø x ~17 mm
IMZ 73	.	.	.	.	.	(0.01)	.	.	.	(0.002)	.	(0.0025)	40 mm Ø x 40 mm
KUT T3/2	.	.	.	.	.	.	.	.	.	(<0.01)	.	.	**30-35mm Ø x 39 mm**
VS UG5/10	.	.	.	.	.	(0.003)	.	.	.	0.027	0.43	.	**~45 mm Ø x ~28 mm**
IARM 268B	<0.005	0.0011	.	.	.	0.006	(0.015)	<0.003	.	<0.001	0.01	<0.001	31 mm Ø x 2 mm
IMZ 204	.	.	.	.	.	.	.	.	.	0.035	.	.	36 mm Ø x 30 mm
SRM 1226	.	.	.	.	.	(0.005)	.	(0.0001)	.	0.0021	(0.005)	(0.010)	32 mm Ø x 19 mm
NCS HS20747	.	.	.	.	.	0.052	.	.	.	.	.	.	35 mm Ø x 40 mm
DSZU C050	(0.002)	(0.002)	.	.	.	.	.	.	.	(0.002)	.	.	40 mm Ø x 25 mm
IMZ 72	.	.	.	.	.	(0.001)	.	.	.	0.021	.	.	40 mm Ø x 40 mm
NCS HS20745	.	.	.	0.014	.	.	La: 0.0076	.	.	.	.	.	35 mm Ø x 40 mm
VS UG117	.	.	.	.	.	.	.	.	.	0.018	.	.	~45 mm Ø x ~25 mm
SRM 1271	.	.	.	.	.	0.025	.	.	.	.	.	.	32 mm Ø x 19 mm
SRM C1285	.	.	.	0.021	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
SRM 1767	0.0005	0.0010	(0.0003)	Ag: 8 ppm	.	0.010	.	.	0.0020	0.011	.	(0.004)	34 mm Ø x 19 mm
CZ CM-7A	0.005	0.0003	.	.	.	0.004	.	(0.0014)	(0.0003)	0.14	0.01	0.042	**~39 mm Ø x 25 mm**
CKD 183E	(0.005)	0.0005	.	.	.	(0.006)	.	.	(0.001)	(0.003)	0.351	0.080	44 mm Ø x 13 or 25 mm
SS 421	.	.	.	.	.	.	.	.	.	.	0.52	.	38 mm Ø x 19 mm
12X 15252Q	.	.	.	.	.	0.10	.	.	.	.	.	.	40 mm Ø x 15 mm
VS UG82	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~28 mm
VS UG97	.	.	.	.	.	.	.	.	.	0.154	.	.	~40 mm Ø x ~28 mm
SRM 1766	0.0035	0.00012	.	Ag: 5 ppm	.	0.005	.	0.003	0.0005	0.0005	.	(0.0004)	34 mm Ø x 19 mm
KUT B20	(0.003)	.	.	.	.	.	.	(0.002)	.	(<0.002)	.	last	**30-35mm Ø x 39 mm**
SRM 1765	0.0010	0.0009	.	Ag: 2 ppm	.	0.0004	.	0.0003	0.0010	0.0055	.	(0.0002)	34 mm Ø x 19 mm
NCS HS15749	.	0.0026	Sol.B: 0.0018	.	.	.	.	.	.	0.002	.	.	35 mm Ø x 32 mm
DSZU C01	(0.002)	(0.0004)	.	.	.	(0.001)	.	(0.003)	.	0.002	(0.026)	(0.0004)	40 mm Ø x 30 mm
IARM 168A	(0.003)	0.0004	.	.	.	0.003	0.0008	(<0.01)	.	0.004	0.52	.	31 mm Ø x 2 or 18 mm
CKD 180B	0.001	0.0000	.	.	(99.9)	(0.0001)	.	(0.0002)	0.0004	0.000	(0.0001)	0.000	44 mm Ø x 13 or 25 mm
ECRM 064-2D	0.0036	.	.	.	.	0.0146	.	0.00018	.	.	.	.	38 mm Ø x 25 or 30 mm

Number	As	B	Ca	Ce	Fe	Nb	O	Pb	Sb	Ti	W	Zr	Units

RM LOW ALLOY STEEL XRF SET

Part Number: BS LAS-24 Set of 24 samples, each 35 - 45 mm Ø x 7 mm discs **17025**

Alloy	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	Ca	Co	N	Sn	V
300M	BS 4340M	0.414	0.74	0.004	<0.001	1.65	0.134	1.78	0.78	0.35	0.076	0.007	.	0.013	0.0020	0.009	0.056
1345	BS XCCV	0.44	1.75	0.012	0.024	0.28	0.015	0.019	0.041	0.007	0.033	0.0023	.	0.006	0.0056	(0.0004)	(<0.003)
3115	BS XCCT	0.158	0.52	0.005	0.011	0.28	0.027	1.27	0.65	0.020	0.006	0.004	.	0.017	0.0076	(0.002)	0.031
4130	BS 3932	0.321	0.54	0.016	0.018	0.33	0.200	0.19	1.00	0.229	0.020	0.004	0.0043	0.011	0.0070	0.012	0.005
4140	BS 1962	0.41	0.94	0.007	0.011	0.242	0.224	0.16	1.05	0.229	0.018	0.007	.	0.008	0.0095	0.010	0.004
4150 + S	**BS 42**	0.516	1.24	0.021	0.073	0.235	0.252	0.183	0.67	0.190	0.020	(0.004)	.	0.012	0.0080	0.012	0.003
4330	BS 4330V	0.318	0.91	0.008	0.0009	0.240	0.181	1.91	0.91	0.475	0.021	.	0.0010	0.011	0.0076	0.010	0.094
4340	BS 60E	0.408	0.70	0.012	0.024	0.26	0.153	1.73	0.86	0.249	0.024	0.007	0.0010	0.009	0.0087	0.009	0.004
4615	BS 51E	0.15	0.59	0.010	0.021	0.28	0.22	1.75	0.14	0.21	0.028	.	.	0.035	0.0086	0.010	(0.0011)
4620	BS 4620	0.189	0.57	0.006	0.018	0.25	0.216	1.75	0.072	0.24	0.032	(0.0084)	(0.0001)	0.012	0.0078	0.013	(0.0008)
4820	BS 4820	0.188	0.57	0.010	0.025	0.25	0.11	3.29	0.12	0.21	0.020	0.005	0.0046	0.008	0.0079	(0.008)	(0.002)
6150	BS 43A	0.491	0.811	0.008	0.026	0.252	0.184	0.242	0.93	0.059	0.003	.	.	0.008	0.0074	0.011	0.148
8620	BS 1931	0.194	0.84	0.007	0.018	0.235	0.116	0.42	0.50	0.168	0.021	0.007	(0.0008)	0.012	0.0079	0.007	0.002
8822	BS 8822	0.228	0.92	0.011	0.025	0.26	0.17	0.47	0.52	0.34	0.022	0.007	(0.0004)	0.019	0.0085	0.011	0.003
8740	BS 67B	0.40	0.94	0.007	0.020	0.23	0.19	0.53	0.51	0.22	0.024	.	.	0.011	0.0078	0.009	(0.002)
9310	BS 58D	0.127	0.45	0.010	0.005	0.32	0.156	3.02	1.35	0.14	0.042	.	.	0.009	0.0147	0.012	0.005
9325	BS 9325	0.25	0.91	0.008	0.007	0.32	0.13	3.29	1.48	0.31	0.030	(0.004)	0.0049	0.010	0.0089	0.009	0.004
P-20	BS 55E	0.307	0.72	0.014	0.024	0.60	0.032	0.053	1.66	0.40	(0.004)	.	.	(0.005)	0.0096	0.002	0.019
AMS 6418	BS 69B	0.2258	1.28	0.008	0.013	1.27	0.086	1.71	0.28	0.39	0.024	.	.	0.035	0.0057	0.006	(0.002)
A193	BS 4942	0.414	0.56	0.015	0.021	0.22	0.165	0.16	0.97	0.54	(0.004)	0.005	0.0006	0.010	0.0080	0.014	0.28
A485-1	BS A485-1	0.98	1.10	0.019	0.004	0.62	0.16	0.13	1.07	0.029	0.017	0.006	.	0.010	0.0060	0.011	0.003
E52100	BS 53E	1.08	0.37	0.007	0.012	0.24	0.11	0.26	1.45	0.10	0.003	.	.	0.011	0.0086	0.005	0.004
Nitriding	BS 68C	0.38	0.60	0.018	0.008	0.305	0.178	0.166	1.77	0.36	1.06	(0.004)	(0.0002)	0.011	0.0045	0.008	0.007
LF 3	BS LF 3	0.183	0.52	0.006	0.018	0.206	0.080	3.36	0.098	0.056	0.017	0.006	(0.0001)	0.056	0.0054	0.006	(0.002)

| Alloy | Number | C | Mn | P | S | Si | Cu | Ni | Cr | Mo | Al | As | Ca | Co | N | Sn | V |

RM TOOL STEEL XRF SET

Part Number: BS TS-18 AVAILABLE INDIVIDUALLY **17025** ~7 mm discs

Grade	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	W	V	Co	N
A-2	BS 36C	0.96	0.46	0.023	0.027	0.31	0.18	0.19	5.01	0.99	.	(0.04)	0.11	0.03	.
A-10	BS A-10	1.41	1.75	0.016	0.022	1.15	0.16	1.82	0.24	1.53	0.006	<0.005	(0.004)	(0.010)	.
D-2	BS 37D	1.54	0.28	0.021	0.015	0.29	0.063	0.21	11.07	1.09	.	0.16	0.80	0.07	0.016
H-10	BS 49	0.36	0.33	0.014	0.015	0.92	0.072	0.20	3.51	2.41	0.004	0.31	0.62	2.00	0.0186
H-11	BS TH11	0.423	0.31	0.016	0.005	0.88	0.041	0.11	5.04	1.27	.	(0.01)	0.46	(0.008)	.
H-12	BS TH12	0.372	0.40	0.020	0.005	0.92	0.064	0.16	5.02	1.41	.	1.06	0.62	0.07	.
H-13	BS 34D	0.395	0.38	0.017	0.005	1.06	0.049	0.10	5.15	1.24	.	0.10	0.94	0.031	.
L-6	**BS 39B**	0.67	0.62	0.009	0.019	0.214	0.163	1.45	0.79	0.17	(0.011)	.	(0.01)	(0.02)	.
M-1	BS TM1	0.86	0.23	0.007	0.012	0.46	0.054	0.057	3.72	8.4	.	1.7	1.05	0.45	.
M-2	BS 32C	0.84	0.29	(0.018)	0.0010	0.29	0.13	0.35	3.98	4.85	(0.02)	6.3	2.03	0.31	.
O-1	**BS 35D**	0.879	1.13	0.021	0.024	0.22	0.141	0.132	0.495	0.035	(0.005)	0.46	0.181	0.012	.
O-6	**BS 41**	1.41	0.89	0.013	0.011	1.02	0.038	0.15	0.22	0.23	(0.007)	0.035	0.046	.	.
S-1	BS 33E	0.49	0.29	0.022	0.005	0.20	0.038	0.08	1.25	0.045	.	2.75	0.19	0.006	.
S-5	BS 38C	0.60	0.81	0.011	0.012	2.08	0.26	0.24	0.28	0.41	0.015	0.004	0.214	0.036	0.0081
S-7	BS TS7	0.529	0.70	0.016	0.010	0.27	0.05	0.10	3.18	1.34	.	0.19	0.35	0.043	.
T-1	**BS 30D**	0.745	0.348	0.029	0.0010	0.301	0.116	0.191	3.93	0.342	0.0123	17.73	1.077	0.101	0.0168
	BS 10V	2.46	0.52	0.019	0.079	0.89	0.076	0.08	5.41	1.30	<0.002	0.013	9.50	0.009	0.064
HP9-4-30	BS 9-4-30	0.30	0.22	0.008	<0.001	0.06	0.09	7.25	1.00	1.00	0.004	0.01	0.085	4.40	0.0015

| Grade | Number | C | Mn | P | S | Si | Cu | Ni | Cr | Mo | Al | W | V | Co | N |

TOOL STEEL

CONTINUED ON THE NEXT PAGE

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Ti	V	W	Al
1	**BS PM15**	3.54	0.416	0.0198	0.0127	0.912	0.142	0.203	5.33	0.0330	1.22	0.111	0.0029	14.79	0.109	0.0025
2	BS 10V	2.46	0.52	0.019	0.079	0.89	0.076	0.08	5.41	0.009	1.30	0.064	.	9.50	0.013	(<0.002)
1	DSZU C070	2.43	0.38	0.021	0.054	0.79	0.130	0.153	5.57	0.053	1.28	.	.	9.39	0.29	.
1	**BS A-11**	2.42	0.507	0.023	0.123	0.98	0.092	0.25	5.21	0.044	1.25	0.110	0.0019	9.24	(0.080)	0.0054
1	DSZU C082	2.32	0.33	0.029	0.014	0.36	0.118	0.239	12.24	0.035	1.11	.	.	4.02	0.17	.
1	ECRM 288-1D	2.08	0.292	0.024	(0.0012)	0.260	0.060	0.298	12.00	0.018	0.103	0.0151	.	0.055	(0.68)	0.012
1	DSZU C080	1.68	0.31	0.025	0.020	1.89	0.120	0.162	5.06	0.028	0.39	.	.	5.12	3.40	.
1	BS 37G	1.663	0.326	0.021	0.0007	0.352	0.044	0.152	11.77	0.0166	0.78	0.0310	0.0025	0.70	0.034	0.0060
1	**BS TS15**	1.64	0.27	(0.017)	0.067	0.357	0.065	(0.18)	4.12	4.87	0.48	0.045	0.0016	4.81	11.6	0.0032
1	ECRM 274-1D	1.563	0.397	0.0148	0.0096	1.057	0.0281	0.077	8.036	(0.0230)	1.4551	0.0769	(0.0011)	4.010	0.0087	(0.0025T)
2	CT D2	1.53	0.48	0.013	0.005	0.40	0.04	0.10	11.46	0.02	0.75	.	.	0.89	<0.01	.
1	IARM 41D	1.519	0.256	0.021	0.012	0.256	0.047	0.114	11.5	(0.020)	0.74	0.0152	(0.003)	0.77	0.034	0.014
2	**BS 41A**	1.50	0.93	0.004	0.001	0.97	0.034	0.17	0.20	0.006	0.19	0.0077	0.004	(0.003)	(<0.003)	0.010
1	IARM 45B	1.42	0.90	0.010	0.008	0.92	0.018	0.024	0.061	0.004	0.24	0.0080	0.002	(0.003)	(0.004)	0.010
2	**BS 41**	1.41	0.89	0.013	0.011	1.02	0.038	0.15	0.22	.	0.23	.	.	0.046	0.035	(0.007)
2	BS A-10	1.41	1.75	0.016	0.022	1.15	0.016	1.82	0.24	(0.010)	1.53	.	.	(0.004)	<0.005	0.006
1	IARM 251A	1.398	0.33	0.014	0.058	0.58	0.13	0.131	4.1	0.129	5.16	0.044	0.003	3.9	5.5	0.01
2	IARM 45A	1.39	0.88	0.014	0.012	1.02	0.049	0.11	0.13	0.004	0.25	0.0079	0.003	0.005	.	0.011
1	DSZU C073	1.32	0.23	0.019	0.013	0.27	0.112	0.198	3.97	8.31	4.97	.	.	2.82	6.40	.
2	CT X27081	1.32	0.20	0.004	0.001	0.24	0.026	0.031	0.052	.	0.008	.	.	.	3.39	.
1	DSZU C072	1.30	0.29	0.024	0.019	0.55	0.106	0.192	4.25	0.011	5.39	.	.	3.59	6.33	.
3	CZ HS-2A	1.24	0.27	0.024	0.017	0.24	0.08	0.21	4.15	9.9	3.75	.	0.003	3.4	9.3	0.035
1	DSZU C077	1.16	0.19	0.030	0.024	0.40	0.142	0.271	4.07	7.73	3.05	.	.	2.04	12.17	.
1	DSZU C075	1.16	0.16	0.021	0.015	0.47	0.120	0.202	3.10	8.03	4.06	.	.	2.10	9.27	.
1	**BS M-47**	1.14	0.20	0.020	0.002	0.464	0.080	0.17	3.72	4.99	9.24	0.0219	(0.004)	1.23	1.36	(0.002)
1	IMZ 102/3	1.11	0.15	0.014	(0.0045)	1.06	0.13	0.021	1.59	.	0.43	.	.	(0.012)	.	0.017
1	DSZU C074	1.10	0.16	0.023	0.020	0.16	0.141	0.158	3.93	5.08	5.21	.	.	1.94	6.47	.
1	DSZU C071	1.06	0.20	0.020	0.028	0.38	0.162	0.149	3.77	8.10	9.67	.	.	1.07	1.74	.
1	SS 487/1	1.02	0.26	0.022	0.029	0.18	.	(0.14)	3.91	7.95	9.41	.	.	1.14	1.80	0.006
1	DSZU C081	1.01	0.32	0.017	0.011	1.10	0.124	0.207	7.78	0.029	2.13	.	.	0.25	0.05	.
2	CT M7	1.00	0.29	0.012	0.003	0.34	0.066	0.10	3.60	0.015	8.49	.	.	2.02	1.78	.
1	JK 49D	(1)	(0.4)	(0.02)	(0.01)	(0.5)	(0.1)	(0.2)	(5)	(0.3)	(3)	1.89	.	(9)	(4)	.
1	IARM 39B	0.99	0.54	0.017	0.003	0.35	0.10	0.14	4.79	0.014	1.01	0.0096	0.003	0.22	(0.026)	0.006
1	IARM 39C	0.99	0.45	0.019	0.007	0.28	0.077	0.144	4.99	0.013	0.97	0.011	0.0029	0.21	0.011	0.017
2	BS 36D	0.97	0.68	0.021	0.007	0.27	0.060	0.089	5.25	0.010	0.96	0.0108	.	0.29	0.028	0.010
2	CT A2	0.95	0.72	0.010	0.004	0.40	0.06	0.10	5.13	.	1.05	.	.	0.22	.	.
1	SS 485/1	0.94	0.41	0.043	0.039	0.30	.	(0.14)	4.02	4.97	0.66	.	.	1.02	17.8	(0.006)
1	IARM 320A	0.93	0.33	0.021	(0.0015)	0.36	0.091	0.204	4.22	4.90	4.79	(0.014)	0.0032	1.76	6.01	0.023
2	CT O1	0.91	1.27	0.009	0.004	0.36	0.05	0.06	0.49	.	0.07	.	.	0.25	0.51	.
1	ECRM 290-1D	0.91	0.24	0.016	0.016	0.08	0.081	0.33	4.18	5.12	4.81	0.0325	.	1.92	6.24	.
2	CT M10	0.88	0.27	0.016	0.004	0.30	0.061	0.14	3.97	0.012	7.89	.	.	1.99	0.008	.
2	**BS 35D**	0.879	1.13	0.021	0.024	0.22	0.141	0.132	0.495	0.012	0.035	.	(0.003)	0.181	0.46	(0.005)
1	IARM 304A	0.857	0.260	0.019	0.0016	0.36	0.14	0.133	3.55	0.278	8.04	0.034	0.002	1.23	1.65	0.009
2	14X 14946D	0.85	0.53	0.051	0.048	0.46	0.25	1.06	5.06	0.44	0.21	.	.	1.03	16.9	.
2	BS 32D	0.85	0.30	0.027	0.0022	0.25	0.039	0.053	4.14	0.010	4.92	0.018	.	1.82	6.15	0.018
1	IARM 306B	0.84	0.24	0.006	(0.001)	0.21	0.058	0.095	4.12	0.010	4.2	0.0049	(0.002)	0.98	(0.01)	0.08
1	SRM 1157	0.836	0.34	0.011	0.004	0.18	0.088	0.228	4.36	0.028	4.86	.	.	1.82	6.28	.
1	**BS M-50**	0.834	0.244	0.0066	0.0009	(0.205)	0.064	0.074	4.28	0.0151	4.29	0.0057	(0.0018)	0.99	0.0052	0.073
2	14X 14948C	0.83	0.65	0.011	0.017	0.26	0.04	0.29	4.04	0.16	0.14	.	.	0.65	18.8	.
2	CT M2	0.82	0.33	0.012	0.004	0.27	0.06	0.25	4.03	0.05	4.96	.	.	1.81	6.47	.
1	IARM 44C	0.82	0.301	0.027	0.004	0.31	0.12	0.132	4.04	0.247	5.02	0.033	0.004	1.91	6.0	0.05
2	14X 14890K	0.81	0.58	(0.012)	0.028	0.69	0.09	0.08	3.60	0.32	5.59	.	.	1.99	5.30	.
2	CT M1	0.80	0.30	0.012	0.005	0.22	0.087	0.12	3.91	.	8.22	.	.	1.05	1.58	.
1	IARM 48C	0.77	0.39	0.029	0.018	0.45	0.13	0.204	4.24	0.22	0.17	0.0165	(0.006)	1.27	17.5	0.017
1	**BS 30D**	0.745	0.348	0.029	0.0010	0.301	0.116	0.191	3.93	0.101	0.342	0.0168	0.0189	1.077	17.73	0.0123
1	IARM 281A	0.74	0.30	0.015	0.019	0.29	0.096	0.15	3.89	4.8	0.49	0.0064	0.004	0.90	17.6	0.007
1	SS 486/1	0.74	0.21	0.029	0.021	0.27	.	(0.06)	4.54	0.08	5.20	.	.	1.82	5.80	(0.005)
1	IARM 40C	0.72	1.91	0.014	0.012	0.32	0.142	0.255	0.99	0.010	1.27	0.0083	0.008	0.010	0.009	0.019
1	14X HS1C	0.72	0.29	0.018	0.020	0.23	0.07	0.28	4.00	0.25	0.36	0.023	.	1.04	17.2	.
3	CZ HS-1A	0.72	0.28	0.023	0.011	0.28	0.08	0.14	4.15	4.7	0.06	.	0.003	1.33	17.5	0.03

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Ti	V	W	Al
1	IARM 43B	0.711	0.56	0.008	0.013	0.251	0.180	1.39	0.651	0.012	0.206	0.0093	0.0047	0.0035	<0.005	0.021
2	BS 40B	0.71	2.28	0.020	0.006	0.35	0.076	0.089	1.18	0.020	1.07	0.0076	0.002	0.10	0.11	0.002
3	CZ CM-10A	0.694	1.00	0.040	0.022	0.817	0.31	2.38	5.48	0.114	1.234	.	0.0189	0.908	0.96	0.086
1	DSZU C076	0.69	0.18	0.024	0.022	0.58	0.120	0.213	5.75	13.88	4.29	.	.	2.03	9.81	.
1	SS 481/1	0.68	0.25	0.023	0.022	0.15	.	(0.09)	3.40	0.31	0.28	.	.	0.56	14.0	.
1	IARM 40B	0.68	1.98	0.012	0.003	0.39	0.050	0.096	1.04	0.015	1.22	0.0107	0.003	0.014	0.013	(0.006)
2	**BS 39B**	0.67	0.62	0.009	0.019	0.214	0.163	1.45	0.79	(0.02)	0.17	.	.	(0.01)	.	(0.011)
1	SS 482/1	0.67	0.26	0.027	0.027	0.14	.	(0.16)	3.95	0.29	0.40	.	.	1.04	17.8	.
1	DSZU C078	0.67	0.22	0.022	0.019	0.117	0.116	0.121	3.98	0.022	0.14	.	.	1.04	18.30	.
1	SS 483/1	0.65	0.22	0.023	0.023	0.16	.	(0.08)	2.90	2.06	0.18	.	.	0.22	9.28	.
2	BS 38C	0.60	0.81	0.011	0.012	2.08	0.26	0.24	0.28	0.036	0.41	0.0081	0.007	0.214	0.004	0.015
1	ECRM 179-2D	0.598	0.539	0.027	(0.0006)	0.578	0.111	0.078	1.081	(0.0153)	0.070	0.0068	0.0014	0.188	1.87	.
1	IARM 47B	0.59	0.79	0.017	0.006	1.96	0.17	0.090	0.23	0.007	0.20	0.0092	0.010	0.17	(0.016)	0.014
1	DSZU C079	0.59	0.38	0.024	0.012	0.43	0.154	0.541	4.00	0.039	4.10	.	.	0.90	0.06	.
2	BS 33D	0.515	0.31	0.016	0.020	0.312	0.040	0.059	1.28	0.045	0.050	.	.	0.22	2.65	0.008
2	BS 33E	0.49	0.29	0.022	0.005	0.20	0.038	0.08	1.25	0.006	0.045	.	(0.002)	0.19	2.75	.
2	CT X67975	0.48	0.56	0.009	0.005	0.28	0.060	0.13	1.00	.	0.53	.	.	0.30	.	.
1	IARM 259A	0.479	0.399	0.020	0.0007	0.44	0.081	0.194	3.27	0.011	1.43	0.0077	0.0026	0.256	0.035	0.016
1	**BS D-6**	0.472	0.78	0.007	0.0008	0.228	0.130	0.602	0.99	0.012	1.01	0.0031	0.0025	0.122	0.0018	0.037
1	IMZ 57/1	0.46	1.05	0.028	0.012	0.58	0.14	0.15	1.67	.	0.48	.	.	0.34	.	.
1	IARM 46B	0.45	0.27	0.019	0.0040	0.89	0.147	0.108	1.09	0.013	0.222	0.0069	0.007	0.170	1.96	0.011
1	IMZ 53/1	0.41	0.60	0.018	0.011	0.104	0.17	0.28	2.85	.	0.13	.	.	0.28	.	.
1	IMZ 56/1	0.41	0.25	0.011	0.007	1.69	0.41	0.69	0.43	.	0.66	.	.	0.19	.	.
1	**BS H-19**	0.404	0.318	0.014	0.011	0.29	0.055	0.114	4.27	4.17	0.356	0.0190	(0.002)	2.05	4.02	<0.001
1	IARM 255A	0.403	0.27	0.013	0.0012	0.93	0.049	0.083	4.84	0.009	1.33	0.0067	0.002	0.43	0.007	0.01
1	**BS H-13**	0.402	0.386	0.0103	0.0202	0.99	0.197	0.109	5.14	0.0092	1.24	0.0108	(0.0019)	0.98	0.0022	0.0152
1	IMZ 58/1	0.40	1.81	0.026	0.012	0.35	0.31	1.44	0.20	.	0.21	.	.	0.079	.	.
1	IMZ 51/1	0.40	1.53	0.023	(0.009)	0.39	0.45	1.15	0.22	.	1.50	.	.	(0.013)	.	.
1	ECRM 276-2D	0.399	0.365	0.0093	0.0189	1.034	0.183	0.203	4.975	.	1.134	0.0116	.	0.296	.	.
2	CT H13	0.39	0.30	0.015	0.005	1.05	0.061	0.10	5.23	.	1.36	.	.	1.02	.	.
1	IARM 255B	0.389	0.317	0.010	(0.002)	0.91	0.073	0.062	4.82	0.0090	1.30	(0.005)	.	0.515	.	0.032
1	IARM 42C	0.382	0.40	0.022	0.0037	0.85	0.066	0.051	4.86	0.022	1.29	0.0201	0.0125	0.84	0.32	0.018
1	ECRM 271-1D	0.3698	0.437	0.0120	0.00045	0.923	0.1371	0.1552	5.002	0.0139	1.247	0.0137	0.0020	0.850	0.0054	0.0234
2	BS 49	0.36	0.33	0.014	0.015	0.92	0.072	0.20	3.51	2.00	2.41	0.0186	0.003	0.62	0.31	0.004
2	BS 9-4-30	0.316	0.22	0.008	<0.002	0.06	0.088	7.25	1.00	4.46	1.01	0.0014	.	0.09	.	0.004
1	IARM 341A	0.298	0.226	0.0038	0.0008	0.10	0.143	7.16	0.99	4.4	1.01	0.0025	0.003	0.086	(0.01)	0.032
1	IMZ 196	0.179	0.42	0.018	0.012	0.46	0.080	0.44	11.04	1.55	0.65	0.058	.	0.34	1.54	0.029
1	IMZ 170	0.155	0.50	0.018	0.014	0.32	0.285	0.63	8.82	(0.022)	0.88	0.065	(0.002)	0.24	(0.19)	0.11
2	CZ CM-17A	0.142	0.524	0.0310	0.0175	0.612	0.201	0.520	9.58	0.0329	1.116	0.0743	0.0236	0.247	0.099	0.0089
1	VS LG43/1	0.132	0.44	(0.01)	(0.01)	0.57	(0.11)	0.44	7.46	.	0.023	.	.	0.49	.	.
1	IMZ 197	0.130	0.45	0.021	0.007	0.47	0.11	0.053	0.20	.	(0.011)	.	0.025	0.025	.	8.45
1	NCS HS20741	0.125	0.957	0.017	0.0045	0.431	.	.	12.91	.	0.41	.	.	.	.	.
1	VS LG42/1	0.124	0.41	(0.02)	(0.008)	0.46	(0.16)	0.37	5.08	.	0.52	.	.	0.020	.	.
1	VS LG37/1	0.121	0.444	(0.02)	(0.01)	0.360	(0.13)	0.704	10.10	.	0.66	.	.	0.385	.	.
1	IMZ 179	0.114	0.83	0.016	0.003	0.375	0.164	9.98	0.20	0.016	0.12	0.0108	.	0.023	(0.023)	0.061
1	IMZ 157	0.095	0.63	0.015	0.010	0.59	0.066	0.50	9.51	.	0.71	0.051	0.044	0.26	.	0.26
1	NCS HS20742	0.083	1.02	0.015	0.0035	0.636	.	.	16.58	.	.	.	.	.	.	.
1	IMZ 177	0.076	0.32	0.013	0.003	0.24	0.110	8.33	0.18	(0.017)	0.022	0.0089	.	0.010	.	0.043
1	13X 14713A	0.0446	0.495	0.0203	0.0080	0.911	0.0368	0.122	7.17	0.0110	0.0266	0.0065	0.0056	0.0411	.	0.551
1	SS 422	(0.036)	(0.09)	(0.015)	(0.025)	(0.06)	.	.	.	.	(0.033)	.	.	(<0.02)	1.28	.
1	IMZ 101/2	0.033	1.97	0.010	0.007	(0.092)	0.46	2.06	0.035	.	0.010	.	.	0.30	.	0.036
1	SS 423	(0.030)	(0.07)	(0.017)	(0.027)	(0.05)	.	.	.	.	(0.027)	.	.	(<0.02)	2.06	.
1	SS 424	(0.024)	(0.09)	(0.02)	(0.024)	(0.05)	.	.	.	.	(0.036)	.	.	(<0.02)	3.02	.
1	NCS HS20743	0.015	0.949	0.038	0.0055	0.97	.	.	11.88	.	.	0.0155	0.411	.	.	0.022
2	IARM 180A	0.007	0.41	0.004	0.046	0.023	0.89	1.29	0.037	0.004	0.006	0.0096	0.002	0.76	1.48	0.76
2	IARM 164A	0.004	1.57	0.004	0.070	0.019	0.88	1.29	0.032	0.006	0.009	0.0003	0.002	0.78	1.44	0.72

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Ti	V	W	Al

TOOL STEEL CONTINUED FROM THE PREVIOUS PAGE

Number	Als	As	B	Ca	Nb	O	Pb	Sb	Sn	Ta	Zr	Units
BS PM15	.	0.0040	(0.0002)	(0.0001)	0.014	0.0129	(0.00001)	(0.0010)	0.0034	(0.0003)	(0.0005)	38 mm Ø x 19+ mm **17025**
BS 10V	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x ~7, ~12, or 19 mm last
DSZU C070	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS A-11 Fe:79.5	.	0.0057	0.0008	(0.0002)	(0.0070)	0.028	(0.00006)	(0.001)	0.0055	.	(0.001)	38 mm Ø x ~7 or 19+ mm **17025**
DSZU C082	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x 25 mm
ECRM 288-1D	.	(0.0065)	.	.	.	.	.	.	.	.	.	36-41 mm Ø x 28-35 mm
DSZU C080	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x 25 mm
BS 37G	.	0.0026	0.0003	0.0014	0.0026	.	0.0005	0.0009	0.0010	.	.	34 mm Ø x ~7 or 19+ mm
BS TS15	.	(0.006)	(0.0005)	(0.001)	0.009	(0.018)	.	Fe:71.4	0.0074	.	(0.003)	38 mm Ø x ~7 or 19+ mm **17025**
ECRM 274-1D	.	(0.0013)	(0.0005)	.	.	(0.0026)	(0.000064)	(0.0002)	(0.0010)	.	.	38 mm Ø x 25 mm
CT D2	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
IARM 41D	.	(0.01)	(0.0006)	(0.0008)	(0.004)	(0.003)	(0.0008)	.	(0.005)	.	(0.002)	31 mm Ø x 2 or 18 mm
BS 41A	.	0.002	.	0.0006	.	0.002	.	.	0.002	.	.	38 mm Ø x ~7 or 19+mm **25(pre-17025)**
IARM 45B	.	(0.002)	(0.0001)	(0.001)	(0.002)	(0.0005)	(0.001)	0.008	.	.	(0.001)	31 mm Ø x 2 or 18 mm
BS 41	.	.	.	.	.	.	.	.	(0.008)	.	.	42 mm Ø x 19+ mm **17025** last
BS A-10	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~7 or 19+ mm
IARM 251A	.	0.016	(0.002)	(0.0005)	0.016	(0.01)	(0.002)	.	0.011	.	(0.002)	31 mm Ø x 2 or 18 mm
IARM 45A	.	(0.003)	(0.0001)	.	0.002	(0.0017)	(<0.005)	.	0.005	.	.	31 mm Ø x 2 mm
DSZU C073	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
CT X27081	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm last
DSZU C072	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
CZ HS-2A	.	.	.	.	.	.	.	.	0.01	.	.	~39 mm Ø x 25 mm
DSZU C077	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
DSZU C075	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS M-47	.	0.006	.	(0.002)	(0.004)	0.0037	.	.	0.006	.	.	38 mm Ø x ~7 or 19+ mm **17025**
IMZ 102/3	.	.	(0.0007)	.	.	.	.	.	.	.	(0.007)	40 mm Ø x 40 mm
DSZU C074	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
DSZU C071	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
SS 487/1	.	(0.012)	.	.	.	.	.	.	(0.006)	.	.	38 mm Ø x 19 mm
DSZU C081	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x 25 mm
CT M7	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
JK 49D	.	.	.	.	.	.	.	.	.	.	.	47 mm Ø x 15 mm
IARM 39B	.	.	.	.	0.006	.	.	.	0.004	.	.	31 mm Ø x 2 or 18 mm
IARM 39C	.	(0.005)	0.001	(0.001)	0.0040	0.001	(0.0001)	(0.002)	0.005	.	(0.002)	31 mm Ø x 2 or 18 mm
BS 36D	.	0.002	.	.	.	.	.	.	0.016	.	.	38 mm Ø x ~7 or 19+ mm
CT A2	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
SS 485/1	.	(0.022)	.	.	.	.	.	.	0.019	.	.	38 mm Ø x 19 mm
IARM 320A	.	0.013	0.0011	.	(0.015)	(0.0021)	.	.	0.008	.	(0.003)	31 mm Ø x 2 or 18 mm
CT O1	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
ECRM 290-1D	.	.	.	.	.	.	.	.	.	.	.	36-41 mm Ø x 28-35 mm
CT M10	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
BS 35D	.	.	.	.	(0.001)	.	.	.	0.006	.	.	38 mm Ø x ~7 or 19+ mm **17025**
IARM 304A	.	(0.01)	0.002	(0.002)	0.021	0.002	.	(0.001)	0.006	(0.002)	(0.002)	31 mm Ø x 2 or 18 mm
14X 14946	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 32D	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x ~7 or 19+ mm
IARM 306B	.	(0.003)	(0.001)	.	0.007	(0.001)	(0.001)	0.0025	0.004	.	(0.002)	31 mm Ø x 2 or 18 mm
SRM 1157	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
BS M-50	.	0.0035	(0.0001)	(0.001)	0.0008	0.0010	(0.0001)	(0.0006)	0.0045	Fe:88.8	(0.0006)	38 mm Ø x ~7 or 19+ mm **17025**
14X 14948C	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm last of stock
CT M2	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
IARM 44C	.	(0.01)	(0.002)	.	0.012	(0.003)	(0.002)	(0.004)	0.010	(0.004)	.	31 mm Ø x 2 or 18 mm
14X 14890K	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm last of stock
CT M1	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~19 mm
IARM 48C	.	0.012	(0.001)	.	(0.005)	(0.003)	(0.0004)	(0.002)	0.012	(0.01)	(0.003)	31 mm Ø x 2 or 18 mm
BS 30D	.	0.0128	(0.0002)	0.0004	0.0071	0.0019	(0.0002)	0.0032	0.0246	(0.02)	(0.0001)	38 mm Ø x ~7 or 19+ mm **17025**
IARM 281A	.	(0.02)	(0.003)	.	0.094	(0.003)	.	.	0.02	.	(0.002)	31 mm Ø x 2 or 18 mm
SS 486/1	.	(0.016)	.	.	.	.	.	.	0.014	.	.	38 mm Ø x 19 mm
IARM 40C	.	0.008	0.0009	(0.001)	0.003	0.0013	.	.	0.008	.	(0.002)	31 mm Ø x 2 or 18 mm
14X HS1C	.	.	.	.	.	.	.	.	(0.035)	.	.	40 mm Ø x 15 mm
CZ HS-1A	.	.	.	.	.	.	.	.	0.02	.	.	~39 mm Ø x 25 mm

Number	Als	As	B	Ca	Nb	O	Pb	Sb	Sn	Ta	Zr	Units
IARM 43B	.	0.005	0.0002	.	0.004	0.0016	<0.0005	.	0.013	.	.	31 mm Ø x 2 or 18 mm
BS 40B	.	0.004	0.0006	.	.	.	.	.	0.005	.	.	41 mm Ø x ~7 or 19+ mm
CZ CM-10A	.	0.03	0.05	.	.	.	.	.	0.062	.	.	~39 mm Ø x 25 mm
DSZU C076	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
SS 481/1	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm last of stock
IARM 40B	.	.	(0.0010)	.	0.005	(0.0014)	.	.	0.004	.	.	31 mm Ø x 2 or 18 mm
BS 39B	.	.	.	.	.	.	.	.	(0.011)	.	.	41 mm Ø x ~7 or 19+ mm **17025**
SS 482/1	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
DSZU C078	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
SS 483/1	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
BS 38C	.	0.011	.	.	(0.002)	.	0.022	.	0.022	.	.	38 mm Ø x ~7 or 19+ mm
ECRM 179-2D	.	.	.	.	.	.	.	.	.	.	.	30 to 35 mm Ø x 20 mm
IARM 47B	.	.	(<0.001)	.	(0.002)	(0.0014)	(0.0003)	.	0.008	.	.	31 mm Ø x 2 or 18 mm
DSZU C079	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x 25 mm
BS 33D	.	.	.	.	.	.	.	.	0.005	.	.	41 mm Ø x 12 mm
BS 33E	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 12 mm
CT X67975	.	.	.	.	.	.	<0.001	.	0.003	.	.	30-35 mm Ø x ~16 mm
IARM 259A	.	0.006	0.0003	.	0.003	0.0014	<0.0005	.	0.004	.	0.001	31 mm Ø x 2 or 18 mm
BS D-6	.	0.011	(0.0003)	0.0011	(0.002)	(0.0008)	(0.0003)	0.0012	0.0104	Mg: 0.0002	.	38 mm Ø x ~7 or 19 mm **17025**
IMZ 57/1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
IARM 46B	.	(0.01)	0.0003	.	0.003	0.002	<0.002	.	0.016	.	.	31 mm Ø x 2 or 18 mm
IMZ 53/1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
IMZ 56/1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BS H-19	.	0.0056	.	.	0.008	0.0071	.	.	0.0056	.	.	38 mm Ø x ~7 or 19+ mm **17025**
IARM 255A	.	(0.002)	0.0004	(0.0004)	0.004	0.0011	<0.001	.	0.006	.	<0.005	31 mm Ø x 2 or 18 mm
BS H-13	.	0.0066	(0.0002)	(0.0003)	(0.0004)	0.0018	(0.0003)	0.0020	0.0093	(0.003)	(0.0014)	38 mm Ø x ~7 or 19+ mm **17025**
IMZ 587/1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
IMZ 51/1	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
ECRM 276-2D	.	.	.	.	.	.	.	.	0.0133	.	.	38 mm Ø x 25 or 30 mm
CT H13	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
IARM 255B	.	.	.	.	(0.006)	.	.	.	(0.006)	.	.	31 mm Ø x 2 or 18 mm
IARM 42C	.	(0.01)	0.0011	(0.0005)	(0.004)	0.003	0.0007	(0.004)	(0.006)	(0.004)	(0.002)	31 mm Ø x 2 or 18 mm
ECRM 271-1D	.	0.0057	.	0.0009	.	0.0020	.	.	0.0084	.	.	35 mm Ø x 25 mm
BS 49	.	.	.	.	.	.	.	.	(0.004)	.	.	49 mm Ø x ~7 or 19+ mm
BS 9-4-30	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x ~7 or 19+ mm
IARM 341A	.	(0.003)	0.0005	0.0011	(0.005)	0.0008	(0.001)	(0.001)	(0.005)	.	(0.003)	31 mm Ø x 2 or 18 mm
IMZ 196	.	.	0.065	.	0.073	.	.	.	.	.	.	37 mm Ø x 30 mm
IMZ 170	.	.	.	.	0.087	.	.	(0.002)	0.007	.	.	40 mm Ø x 40 mm
CZ CM-17A	0.0105	0.0060	.	.	.	.	0.0177	.	0.0109	.	.	~37 mm Ø x ~25 mm
VS LG43/1	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IMZ 197	.	.	(0.007)	.	(0.011)	.	.	.	0.015	.	.	37 mm Ø x 30 mm
NCS HS20741	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 40 mm
VS LG42/1	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
VS LG37/1	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IMZ 179	.	(0.007)	.	.	(0.004)	.	.	.	0.010	.	.	40 mm Ø x 40 mm
IMZ 157	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
NCS HS20742	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 40 mm
IMZ 177	.	.	.	.	.	.	.	.	0.008	.	.	40 mm Ø x 40 mm
13X 14713A	.	.	.	Mg:0.0016	.	.	.	.	0.0034	.	.	~40 mm Ø x ~15 mm
SS 422	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
IMZ 101/2	.	.	(0.0005)	.	.	.	.	.	.	.	(0.002)	40 mm Ø x 40 mm
SS 423	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SS 424	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
NCS HS20743	0.021	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 40 mm
IARM 180A	.	(0.004)	0.0004	.	(0.005)	0.0006	(0.002)	.	0.002	.	.	31 mm Ø x 2 or 18 mm
IARM 164A	.	(0.002)	(0.0001)	.	0.006	0.0005	(0.004)	.	0.002	.	.	31 mm Ø x 2 or 18 mm

Number	Als	As	B	Ca	Nb	O	Pb	Sb	Sn	Ta	Zr	Units

ALUMINUM IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM

#	Number	Al	Ni	Cr	C	Mn	P	S	Si	Cu	Co	Mo	N	Nb	Ti	V
1	ECRM 299-1D	5.33	0.172	22.32	0.0154	0.2678	0.0152	0.00022	0.299	0.0382	0.0187	0.0186	0.0198	.	0.1289	0.0329
1	IMZ 158	1.56	0.24	25.51	0.091	1.34	0.015	0.007	2.23	0.097	.	0.025	.	.	0.12	0.078
1	13X PH17700A	1.172	6.98	16.88	0.0732	0.496	0.0181	0.0008	0.551	0.146	0.0464	0.340	0.0192	0.0201	0.051	0.0390
1	**BS 192**	1.17	7.11	16.44	0.074	0.835	0.025	0.0005	0.387	0.412	0.104	0.430	0.0290	0.168	0.076	0.124
2	CT X92834	1.14	8.32	12.57	0.035	0.044	0.003	0.003	0.019	0.030	0.030	2.20	.	0.001	0.019	<0.004
1	13X PH13800A	1.075	8.04	12.53	0.0386	0.0332	0.0064	0.0030	0.081	0.0449	0.0220	2.10	0.0041	.	0.0122	0.0188
2	BS 184A	1.00	8.34	12.66	0.035	0.06	0.007	0.001	0.080	0.041	0.036	2.20	0.0045	(0.006)	0.051	0.014
1	**BS 192A**	0.98	7.01	16.44	0.066	0.768	0.021	<0.002	0.300	0.334	0.114	0.28	0.029	0.208	0.083	0.077
1	IARM 152C	0.94	7.30	16.99	0.072	0.74	0.024	0.0006	0.263	0.316	0.113	0.36	0.0172	0.012	0.098	0.072

Number	As	B	Ca	O	Sn	Ta	W	Zr	Units	
ECRM 299-1D	0.0054	0.0002	.	.	.	.	.	0.1775	40 mm Ø x 25 mm	
IMZ 158	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm	
13X PH17700A	.	0.0033	.	.	0.0055	.	0.009	.	~38 mm Ø x ~15 mm	
BS 192	(0.005)	(0.0003)	0.0007	0.0014	0.008	(0.001)	0.05	.	38 mm Ø x ~7 or 19+ mm	**25(pre-17025)**
CT X92834	.	0.0009	.	.	0.002	.	.	<0.001	30-35 mm Ø x x ~19 mm	
13X PH13800A	.	.	.	.	0.0051	.	.	.	~38 mm Ø x ~15 mm	
BS 184A	.	(0.0004)	(0.0003)	(0.0003)	(0.002)	.	0.032	.	38 mm Ø x ~7 or 19+ mm	
BS 192A	(0.0035)	(0.0003)	(0.0006)	(0.0006)	0.008	.	0.048	.	38 mm Ø x ~7 or 19+ mm	**25(pre-17025)**
IARM 152C	(0.004)	0.0029	(0.0005)	(0.001)	0.007	(0.005)	0.026	.	31 mm Ø x 2 or 18 mm	

CRM BORON IN STAINLESS STEEL

35 mm x 45 mm x 16 mm

Number	B	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Ti	V	W
DSZU C61	2.14	(0.073)	(0.38)	(0.003)	(0.005)	(0.41)	(0.09)	(0.95)	(17.8)	(0.04)	(0.24)	(0.75)	(0.19)	(0.22)
DSZU C60	1.42	(0.058)	(0.50)	(0.002)	(0.006)	(0.35)	(0.01)	(0.51)	(11.9)	(0.11)	(0.37)	(2.70)	(0.41)	(0.20)
DSZU C62	1.15	(0.065)	(0.31)	(0.010)	(0.024)	(0.32)	(0.24)	(0.84)	(14.4)	(0.59)	(0.16)	(3.36)	(0.18)	(0.14)
DSZU C63	1.05	(0.070)	(0.27)	(0.014)	(0.006)	(0.30)	(0.39)	(0.48)	(11.3)	(0.25)	(0.09)	(0.70)	(0.08)	(0.10)

CALCIUM IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM

#	Number	Ca	Ni	Cr	C	Mn	P	S	Si	Cu	Co	Mo	N	Nb	V	W
1	BS Ca304-4 *	0.008	8.8	18.3	0.092	0.80	0.021	0.007	0.91	0.14	0.001	0.004	0.06	0.06	0.07	<0.05
2	BS CA304-1	0.0045	8.57	18.30	0.045	1.06	0.026	0.016	0.71	0.34	0.20	0.34	0.083	0.026	0.09	0.04
1	13X 14923A	0.0044	0.452	11.26	0.205	0.501	0.0197	0.0031	0.330	0.0563	0.0207	0.819	0.0321	0.005	0.295	.
1	ECRM 379-1D	0.0033	30.83	26.79	0.0121	1.804	0.0166	0.0006	0.393	0.984	0.0390	3.290	0.0550	(0.0028)	0.0663	(0.0091)
1	13X 31603C	0.0029	10.03	16.83	0.023	1.879	0.0263	0.0245	0.350	0.306	0.148	2.02	0.080	0.0197	0.0895	0.0427
2	BS 193	0.0020	1.82	18.48	0.104	12.11	0.018	0.002	0.66	0.088	0.028	0.21	0.37	0.014	0.107	(0.007)
2	BS SS4952	0.0019	0.23	13.15	0.347	0.41	0.016	0.003	0.66	0.045	0.030	0.049	0.027	0.004	0.089	(0.007)
2	BS 82E	0.0014	12.49	22.38	0.062	1.61	0.027	0.001	0.58	0.26	0.12	0.31	0.072	0.062	0.064	0.041
1	**BS 9942**	0.0014	13.55	18.21	0.021	1.84	0.025	0.006	0.49	0.305	0.086	3.30	0.071	0.005	0.072	0.032
1	**BS 9842**	0.0010	20.02	24.19	0.059	1.50	0.025	0.0016	0.99	0.147	0.237	0.111	0.037	0.026	0.075	0.011
1	ECRM 272-1D	0.00090	0.2445	11.927	0.2815	0.600	0.0156	0.0196	0.420	0.0192	0.0145	0.0030	0.0508	0.0028	0.0167	.
2	BS 94C	0.0008	0.43	25.90	0.057	0.45	0.024	0.002	0.62	0.056	0.042	0.20	0.065	0.032	0.12	(0.03)
2	BS 82D	0.0007	14.12	22.40	0.058	1.85	0.020	0.009	0.63	0.16	0.042	0.144	0.070	0.053	0.087	0.028
2	BS 87F	0.0007	10.12	17.30	0.055	1.64	0.024	0.025	0.67	0.28	0.17	0.29	0.037	0.57	0.13	0.050
2	BS SS3951	0.0005	9.18	18.17	0.014	1.56	0.023	0.031	0.61	0.22	0.16	0.303	0.077	0.085	0.067	0.040

Number	Al	As	B	O	Pb	Sb	Sn	Ti	Zn	Units	
BS Ca304-4 *	<0.05	<0.05	0.004	0.01	* Provisional Analysis		.	.	.	~38 mm Ø x ~38mm	
BS CA304-1	0.003	(0.003)	0.0006	0.0041	.	(0.0020)	0.010	0.028	.	38 mm Ø x ~5 mm	last, sides not parallel
13X 14923A	0.003	.	.	.	.	.	0.004	.	.	~40 mm Ø x ~15 mm	
ECRM 379-1D	(0.00246)	(0.0018)	0.00190	(0.0027)	(0.000038)	0.00057	0.0021	(0.0014)	.	38 or 45 mm Ø x 25 mm	
13X 31603C	(0.005)	.	.	.	.	.	0.0053	.	.	~30 mm Ø x ~20 mm	
BS 193	(0.003)	.	0.0007	(0.004)	.	.	0.004	0.003	.	32 mm Ø x ~7 or 19+ mm	
BS SS4952	0.003	0.002	(0.0004)	0.005	.	.	0.004	0.002	.	38 mm Ø x ~7 or 19+ mm	
BS 82E	0.006	.	0.0024	.	.	.	0.006	0.003	.	38 mm Ø x ~7 or 19+ mm	
BS 9942	0.004	(0.004)	0.0014	(0.0023)	.	.	0.006	(0.002)	.	44 mm Ø x ~7 or 19+ mm	**25(pre-17025)**
BS 9842	0.014	(0.002)	0.0025	(0.0044)	.	.	0.005	0.003	.	38 mm Ø x ~7 or 19+ mm	**25(pre-17025)**
ECRM 272-1D	0.0046	0.0116	0.0018	.	.	0.0007	.	0.00096	0.0031	38 mm Ø x 25 or 30 mm	
BS 94C	0.004	.	(0.0005)	0.0061	.	.	0.006	.	.	44 mm Ø x ~7 or 19+ mm	
BS 82D	(0.002)	.	0.0040	0.007	.	.	0.004	0.005	.	38 mm Ø x ~7 or ~11 mm	last
BS 87F	0.004	0.005	(0.0006)	0.005	.	.	0.004	0.004	.	41 mm Ø x ~7 or 19+ mm	
BS SS3951	0.002	.	(0.0006)	0.0075	.	.	0.007	(0.002)	.	41 mm Ø x ~7 or 19+ mm	

COPPER IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM * Provisional Analysis

#	Number	Cu	Ni	Cr	C	Mn	P	S	Si	Co	Mo	N	Nb	Ti	V	W
1	13X PH 3M	5.99	3.08	15.86	0.184	0.395	0.0188	0.0208	1.60	0.420	0.751	0.070	0.394	.	0.176	.
1	13X PH 2M	4.03	3.56	16.80	0.0598	1.184	0.0201	0.0419	0.502	0.0927	1.009	0.052	0.143	0.049	0.1028	.
2	BS 9621	3.42	4.61	14.93	0.035	0.31	0.017	0.0011	0.468	0.029	0.063	0.013	0.27	(0.001)	0.096	(0.01)
2	BS 185A	3.41	4.43	14.46	0.033	0.49	0.022	0.002	0.38	0.026	0.30	0.027	0.32	(0.001)	0.048	(0.014)
2	BS 17-4PHB	3.35	4.53	15.60	0.042	0.56	0.021	0.024	0.42	0.040	0.11	0.046	0.31	.	0.059	.
2	BS 9622	3.34	4.34	14.34	0.032	0.63	0.019	0.004	0.42	0.040	0.27	0.028	0.33	(0.001)	0.074	(0.020)
2	BS 17-4PHA	3.30	4.69	15.40	0.018	0.85	0.023	0.022	0.40	0.072	0.34	0.022	0.204	.	0.043	.
2	CT 20 Cb-3	3.28	33.55	19.63	0.034	0.19	0.017	0.003	0.38	0.035	2.25	.	0.86	.	0.053	.
1	IARM 22C	3.24	4.63	14.28	0.042	0.63	0.027	0.0004	0.39	0.086	0.48	0.030	0.29	0.002	0.068	0.031
2	CT 630	3.25	4.20	15.94	0.036	0.39	0.018	0.013	0.63	0.11	0.11	0.028	0.36	.	0.022	.
2	BS 187C	3.17	32.93	20.16	0.020	0.77	0.024	<0.002	0.77	0.096	2.07	0.022	0.36	(0.001)	0.059	.
2	BS 187A	3.10	33.06	19.75	0.022	0.52	0.017	0.0025	0.26	0.32	2.06	0.0157	0.57	(0.002)	0.10	(0.02)
1	13X PH17400A	3.09	4.252	15.74	0.0200	0.829	0.0202	0.0215	0.349	0.0411	0.061	0.0342	0.184	.	0.112	(0.0056)
1	ECRM 273-1D	3.046	4.85	14.747	0.0336	0.785	0.0131	0.0004	0.378	0.0391	0.2462	0.0444	0.221	.	0.0512	.
1	VS LG64	2.88	28.3	24.7	0.049	0.75	0.017	0.0032	0.76	.	2.89	.	0.048	0.64	0.094	0.013
1	SRM C2400	2.63	4.07	17.06	0.036	0.71	0.013	0.003	0.61	0.10	0.23	.	0.15	.	0.092	.
2	CT 455	2.32	8.22	11.37	0.012	0.074	0.010	0.005	0.13	.	0.027	0.002	0.28	1.18	.	.
2	BS SS1962	2.22	8.32	11.42	0.008	0.06	0.006	0.0025	0.06	(0.015)	0.008	0.0025	0.27	1.11	0.071	(<0.02)
1	13X 45500A	2.20	8.36	11.39	0.0041	0.0263	0.0049	0.0020	0.059	0.0152	0.0185	0.0030	0.250	1.187	0.0689	.
2	BS SS1961	2.11	8.31	11.61	0.009	0.049	0.008	0.0038	0.056	0.036	0.020	0.0025	0.26	1.16	0.074	(0.01)
1	IARM 16C	2.08	8.23	11.34	0.003	0.024	0.007	0.0046	0.03	0.017	0.009	0.0030	0.248	1.16	0.070	0.008
1	SS 475	1.94	5.66	14.14	0.050	0.89	0.037	0.008	0.21	0.22	1.59	.	0.22	.	.	.
1	**BS 9812**	1.65	6.61	14.82	0.031	0.485	0.018	0.004	0.43	0.110	0.76	0.0195	0.645	(0.005)	0.088	0.025
1	**BS 9811**	1.63	6.55	14.87	0.027	0.380	0.016	0.0010	0.36	0.055	0.744	0.0196	0.62	(0.003)	0.086	0.013
1	IARM 318B	1.63	5.71	15.9	0.050	1.02	0.022	0.0006	0.41	0.100	1.57	0.032	0.086	0.014	0.115	0.087
1	13X PH2S143A	1.61	5.20	13.45	0.044	0.544	0.0205	0.0022	0.478	0.0475	1.325	0.024	0.222	.	0.087	0.019
1	**BS 179B**	1.56	6.17	25.9	0.0161	0.890	0.0243	0.0002	0.371	0.0394	3.34	0.239	0.008	(0.0008)	0.079	0.053
1	IARM 15C	1.54	6.35	14.39	0.032	0.760	0.019	0.0018	0.26	0.024	0.722	0.0148	0.63	(0.002)	0.041	(0.020)
1	**BS 179C**	1.53	6.10	25.9	0.0164	0.878	0.0236	0.0003	0.373	0.0386	3.34	0.236	0.009	(0.0005)	0.080	0.056
1	IARM 15B	1.53	6.94	14.53	0.047	0.39	0.013	0.001	0.33	0.24	0.82	0.0355	0.65	0.005	0.033	0.12
1	13X NSA6B	1.52	31.13	26.14	0.0467	1.607	0.060	0.0113	0.64	.	7.03	0.245	0.149	.	.	.
2	CT 450	1.49	6.36	15.20	0.036	0.39	0.014	0.006	0.29	0.16	0.80	0.028	0.67	.	0.043	.
1	ECRM 295-1D	1.481	24.40	19.51	0.0166	1.758	0.0167	0.0004	0.418	0.0450	3.996	0.0615	.	.	0.0453	.
1	IARM 239B	1.48	5.78	25.9	0.013	0.86	0.025	0.0005	0.39	0.048	3.42	0.25	0.024	0.002	0.099	0.106
1	13X NSA 7A	1.42	5.67	25.91	0.0209	0.951	0.022	0.0009	0.359	.	3.25	0.247	0.015	.	.	.

* Provisional Analysis

Number	Al	Ag	As	B	Ca	Cd	Fe	Mg	O	Pb	Sb	Sn	Ta	Units
13X PH 3M	.	.	.	0.0049	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X PH2M	0.0419	.	.	0.0047	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 9621	0.003	.	.	0.0004	(0.0001)	.	.	.	.	.	.	0.003	(0.002)	38 mm Ø x ~7 or 19+ mm
BS 185A	0.002	.	.	0.0017	(0.0002)	.	.	.	(0.0021)	.	.	0.007	(0.002)	38 mm Ø x ~7 or 19+ mm
BS 17-4PHB	.	.	.	0.0036	.	.	.	.	.	.	.	.	(0.002)	41 mm Ø x ~7 or 19+ mm
BS 9622	0.002	.	.	0.0004	.	.	.	.	.	.	.	0.006	.	38 mm Ø x ~7 or 19+ mm
BS 17-4PHA	.	.	.	0.0016	.	.	.	.	.	.	.	.	(0.002)	38 mm Ø x ~7 or 19+ mm
CT 20 Cb-3	.	0.0019	.	0.0023	.	.	.	.	.	0.002	.	0.003	.	30-35 mm Ø x ~19 mm
IARM 22C	0.006	.	(0.004)	0.0006	(0.0002)	.	.	.	0.0021	(0.00003)	.	0.013	(0.004)	31 mm Ø x 2 or 18 mm
CT 630	.	0.0004	.	0.0018	.	.	.	.	.	0.001	.	0.007	.	30-35 mm Ø x ~16 mm
BS 187C	0.10	.	.	(0.0019)	.	.	.	.	0.0024	last of stock		0.004	(<0.002)	44 mm Ø x 10 mm
BS 187A	(0.009)	.	.	0.0022	.	.	.	.	0.0029	.	.	0.003	<0.002	41 mm Ø x ~7 or 19+ mm
13X PH17400A	.	.	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x ~15 mm
ECRM 273-1D	.	.	0.0030	.	.	.	.	.	.	.	.	0.0021	.	40 mm Ø x 20 mm
VS LG64	0.189	.	.	.	.	.	.	.	.	.	.	.	.	~47 mm Ø x ~30 mm
SRM C2400	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
CT 455	.	0.0002	.	0.0024	.	.	.	.	.	<0.001	.	0.004	.	30-35 mm Ø x ~19 mm
BS SS1962	0.067	.	0.002	0.0018	.	.	.	.	(0.001)	.	.	0.004	.	38 mm Ø x ~7 or 19+ mm
13X 45500A	0.073	.	.	.	.	.	.	.	.	.	.	0.0048	(0.0050)	~38 mm Ø x ~15 mm
BS SS1961	0.069	.	0.004	0.0022	.	.	.	.	(0.002)	.	.	0.004	.	38 mm Ø x 12+ mm last
IARM 16C	0.072	.	(0.003)	0.0011	.	.	.	.	0.0014	.	.	(0.003)	.	31 mm Ø x 2 or 18 mm
SS 475	0.013	.	.	.	.	.	.	.	.	.	.	0.015	.	38 mm Ø x 19 mm
BS 9812	(0.002)	.	(0.005)	(0.0003)	0.0012	.	.	.	(0.007)	**25(pre-17025)**		0.004	.	50 mm Ø x ~7 or 19+ mm
BS 9811	(0.003)	.	(0.003)	(0.0003)	0.0014	.	.	.	(0.0060)	**25(pre-17025)**		0.004	.	38 mm Ø x ~7 or 19+ mm
IARM 318B	(0.004)	.	(0.004)	0.0003	.	.	.	.	0.009	.	.	0.004	(0.004)	31 mm Ø x 2 or 18 mm
13X PH2S143A	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 179B	0.0070	.	0.0036	0.0015	(0.0004)	**17025**	[61.5]	(0.0004)	0.0037	(0.00002)	0.0005	0.0019	(0.0006)	38 mm Ø x 19+ mm
IARM 15C	(0.005)	.	0.0044	(0.0006)	(0.0004)	.	.	.	(0.003)	(0.003)	(0.003)	0.009	(0.004)	31 mm Ø x 2 or 18 mm
BS 179C	0.0078	.	0.0034	0.0015	(0.0003)	**17025**	[61.6]	(0.0004)	0.0038	(0.00002)	0.0005	0.0018	(0.0006)	38 mm Ø x ~7 or 19+ mm
IARM 15B	0.006	.	.	.	.	.	.	.	0.0039	.	.	0.009	.	31 mm Ø x 2 or 18 mm
13X NSA6B	(0.080)	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
CT 450	.	0.0013	.	.	.	.	.	.	.	0.001	.	0.008	.	30-35 mm Ø x ~19 mm
ECRM 295-1D	0.0203	.	0.0041	0.0018	.	.	48.36	(0.0003)	.	.	0.0007	0.0025	.	38 mm Ø x 25 or 30 mm
IARM 239B	0.008	.	0.0008	.	.	.	.	.	(0.004)	.	.	(0.003)	.	31 mm Ø x 2 mm
13X NSA 7A	(0.009)	.	.	.	.	.	.	.	.	.	.	.	.	42 mm Ø x 15 mm

MARAGING STEEL AND COBALT IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	Co	Mo	Ni	Cr	C	Mn	P	S	Si	Cu	Al	B	N	Nb	Ti
1	IARM 326A	48.4	(0.002)	0.037	(0.002)	(0.002)	0.003	0.0013	0.0011	0.029	(0.002)	(0.003)	(0.001)	0.0004	0.038	(0.002)
2	CT ISO070A	29.00	0.006	24.47	5.54	0.014	0.015	0.003	<0.001	0.32	0.010	0.47	0.0038	.	4.63	0.82
1	IMZ 521	20.25	4.84	8.63	0.040	0.015	0.039	0.0031	0.0058	0.072	0.027	.	.	0.0113	.	.
1	IMZ 522	18.72	6.45	11.47	0.022	0.0088	0.032	(0.003)	0.0043	0.048	0.019	.	.	0.0045	(0.008)	0.54
1	IMZ 520	17.66	4.92	10.10	0.242	0.011	0.070	0.0043	0.019	0.094	0.080	.	(0.001)	0.0105	(0.008)	(0.007)
1	IARM 98B	17.0	0.010	29.4	0.012	0.007	0.18	0.002	0.0007	0.17	0.028	0.07	0.001	0.0024	0.002	0.03
1	IMZ 523	14.44	6.67	15.94	0.048	0.0098	0.051	(0.004)	0.0039	0.043	0.059	.	.	0.0037	(0.008)	0.70
1	IARM 242A	13.5	1.21	11.1	3.00	0.24	0.018	0.002	0.0004	0.02	0.007	0.004	(0.0005)	0.0003	0.004	0.009
2	CT ISO045A	13.39	1.18	11.38	3.12	0.228	0.002	0.001	0.0004	<0.010	0.006	0.004	.	.	.	0.005
1	IARM 309A	12.3	4.71	18.4	0.053	0.0059	0.018	0.004	0.0006	0.020	0.023	0.11	0.0032	0.0010	0.004	1.47
1	IMZ 524	12.25	4.95	13.75	0.085	0.012	0.68	(0.004)	0.004	0.13	0.024	.	.	0.0038	(0.007)	0.85
1	DSZU C093	12.08	3.79	15.80	0.42	0.013	0.32	(0.006)	(0.007)	(0.10)	(0.12)	0.17	.	.	.	1.56
1	**BS 161A**	9.22	4.82	18.40	0.12	0.004	0.031	0.004	0.0007	0.032	0.22	0.14	0.0023	(0.002)	(0.004)	0.65
2	CT 300	9.07	4.97	18.51	0.034	0.005	0.032	0.005	0.004	0.030	0.047	0.12	0.0020	.	.	0.69
1	13X 14934Q	9.03	4.22	17.60	0.388	0.0254	0.254	0.024	0.0288	0.502	.	0.15	.	0.0132	.	0.694
1	DSZU C091	8.07	4.98	18.20	0.12	0.035	0.092	(0.006)	(0.011)	(0.09)	(0.12)	0.05	.	.	.	0.81
1	IARM 308A	7.80	4.78	18.53	0.023	0.003	0.019	0.004	0.0005	0.014	0.018	0.097	0.0029	0.0013	0.003	0.46
1	ECRM 285-2D	7.76	4.99	18.07	0.0236	0.0018	0.0168	0.0053	0.0025	0.0117	0.0094	0.1067	0.0009	0.0007	.	0.520
2	CT 250	7.54	4.88	18.44	0.008	0.002	0.006	0.003	0.002	0.008	0.008	0.058	0.0024	.	.	0.41
1	13X 14935T	7.17	5.61	18.96	0.745	0.0105	0.494	0.036	0.055	0.441	.	(0.007)	.	0.0102	.	0.106
3	DSZU C55	6.5	1.25	2.34	14.1	0.23	0.69	0.033	0.023	0.70	.	.	.	0.11	0.29	.
3	DSZU C53	5.9	1.88	0.96	15.0	0.10	0.54	0.050	0.031	0.25	.	.	.	.	0.12	.
3	DSZU C54	5.3	1.45	1.95	18.4	0.07	0.55	0.040	0.020	0.54	.	.	.	0.13	0.41	.
1	DSZU C092	5.21	5.50	20.12	0.23	0.015	0.27	(0.006)	(0.009)	(0.10)	(0.16)	(0.006)	.	.	.	(0.008)
3	DSZU C51	4.7	0.72	1.78	11.0	0.20	0.40	0.017	0.036	0.24	.	.	.	0.090	0.12	.
3	DSZU C52	3.8	1.17	1.55	11.6	0.14	0.37	0.020	0.028	0.17	.	.	.	.	0.31	.
1	**BS 85D**	0.97	0.59	9.98	17.09	0.048	1.69	0.024	0.024	0.54	0.45	0.13	(0.001)	(0.02)	0.062	0.48

Number	As	Ca	Fe	Mg	O	Sb	Sn	Ta	V	W	Zr	Units	
IARM 326A	<0.005	.	49.6	(0.001)	0.0082	.	<0.001	(0.01)	1.94	(0.001)	0.002	31 mm Ø x 2 or 18 mm	Fe: 49.6
CT ISO070A	.	.	34.66	.	.	.	.	<0.01	0.043	<0.01	.	30-35 mm Ø x ~16 mm	
IMZ 521	.	.	.	.	.	.	(0.002)	.	3.97	5.23	.	38 mm Ø x 20 mm	
IMZ 522	.	.	.	.	.	.	(0.001)	.	2.21	2.25	.	38 mm Ø x 20 mm	
IMZ 520	.	.	.	.	.	.	(0.002)	.	4.03	4.90	.	38 mm Ø x 20 mm	
IARM 98B	<0.002	<0.0005	52.9	0.0040	0.0021	.	0.002	<0.05	(0.003)	(0.02)	<0.01	31 mm Ø x 2 or 18 mm	OES is last
IMZ 523	.	.	.	.	.	.	(0.001)	.	2.01	1.87	.	38 mm Ø x 20 mm	
IARM 242A	.	.	.	.	0.0006	.	(0.001)	0.008	0.01	<0.01	.	31 mm Ø x 2 or 18 mm	
CT ISO045A	.	.	70.70	.	.	.	.	.	.	.	.	30-35 mm Ø x ~19 mm	
IARM 309A	.	.	.	.	0.0005	.	(0.001)	(0.006)	0.01	0.01	0.008	31 mm Ø x 2 or 18 mm	
IMZ 524	(0.003)	.	.	.	.	.	.	.	3.02	1.84	.	38 mm Ø x 20 mm	
DSZU C093	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x 17 mm	
BS 161A	(0.002)	(0.0008)	**25(pre-17025)**	(0.0004)	.	.	(0.0015)	(0.03)	0.031	(0.008)	(0.002)	38 mm Ø x ~7 or 19+ mm	
CT 300	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm	
13X 14934Q	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm	
DSZU C091	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x 17 mm	
IARM 308A	.	.	.	.	0.0005	.	0.001	<0.01	0.01	0.01	0.01	31 mm Ø x 2 or 18 mm	
ECRM 285-2D	.	.	.	.	.	.	.	.	.	.	0.0050	38 mm Ø x 25 or 30 mm	
CT 250	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~19 mm	
13X 14935T	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm	
DSZU C55	.	.	.	.	.	.	.	.	0.16	1.1	.	42 mm Ø x 25 mm	
DSZU C53	.	.	.	.	.	.	.	.	0.25	0.58	.	42 mm Ø x 25 mm	
DSZU C54	.	.	.	.	.	.	.	.	0.40	0.62	.	42 mm Ø x 25 mm	
DSZU C092	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x 17 mm	
DSZU C51	.	.	.	.	.	.	.	.	0.08	0.32	.	42 mm Ø x 25 mm	
DSZU C52	.	.	.	.	.	.	.	.	0.03	0.95	.	42 mm Ø x 25 mm	
BS 85D	(0.01)	0.0004	[67.8]	.	(0.002)	(0.001)	0.0062	(0.001)	0.132	(0.07)	(0.004)	38 mm Ø x ~7 or 19+ mm	**17025**

TUNGSTEN IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM

#	Number	W	Ni	Cr	C	Mn	P	S	Si	Cu	Co	Mo	N	Nb	Ti	V
1	VS LG57	4.24	25.2	13.70	0.016	0.52	0.011	0.0023	0.56	0.080	.	0.401	.	.	1.81	0.65
1	13X 14219K	4.17	12.66	21.46	0.0997	0.482	0.0401	0.0456	1.504	0.138	0.0475	0.169	.	0.140	.	0.0188
1	13X 14212S *	3.72	8.76	21.8	0.12	0.15	0.034	0.037	2.5	0.6	0.11	0.52	0.007	0.56	.	0.12
1	IARM 20B	3.52	1.94	12.42	0.18	0.35	0.019	0.004	0.40	0.069	0.030	0.32	0.0434	0.010	0.004	0.17
1	13X 14211Q	3.24	12.55	25.70	0.064	0.766	0.0157	0.0146	1.64	0.161	0.071	0.325	.	0.161	0.220	.
1	VS LG59	3.08	35.1	15.81	0.073	1.15	0.011	0.0083	0.63	0.083	.	0.094	.	0.106	1.12	0.273
1	113X 14215L	3.02	15.86	22.89	0.136	1.110	0.0050	0.0068	0.596	0.0110	0.0057	0.0048	.	0.0196	.	0.0480
2	BS 183A	2.60	1.85	12.14	0.172	0.35	0.016	0.0040	0.37	0.093	0.036	0.12	0.0256	0.006	0.002	0.090
1	IARM 20C	2.59	1.93	12.15	0.18	0.30	0.018	0.007	0.35	0.060	0.031	0.12	0.0222	0.010	(0.003)	0.086
1	VS LG61	1.11	9.18	18.8	0.307	1.51	0.0133	0.0107	0.83	0.065	.	1.05	.	0.47	0.40	0.197
1	IMZ 161	1.05	0.55	12.90	0.074	0.29	0.023	0.023	0.65	0.56	.	1.10	.	.	.	0.33

Number	Al	As	B	Ca	O	Sb	Sn	Units
VS LG57	0.151	.	.	.	.	.	.	~47 mm Ø x ~30 mm
13X 14219K	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 14212S *	* Provisional Analysis			.	.	.	.	~40 mm Ø x ~15 mm
IARM 20B	0.006	.	.	.	0.0056	.	0.005	31 mm Ø x 2 mm
13X 14211Q	(0.11)	.	.	.	.	.	.	~40 mm Ø x ~15 mm
VS LG59	0.079	.	.	.	.	.	.	~47 mm Ø x ~30 mm
13X 14215L	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 183A	0.002	(0.002)	(<0.0005)	0.0020	0.0065	(0.001)	0.003	38 mm Ø x ~7 or 19+ mm
IARM 20C	(0.004)	.	.	.	0.0068	.	0.004	31 mm Ø x 2 or 18 mm
VS LG61	0.033	.	.	.	.	.	.	~47 mm Ø x ~30 mm
IMZ 161	.	.	.	.	.	.	.	40 mm Ø x 40 mm

MANGANESE STAINLESS STEEL

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties * Provisional Analysis

#	Number	Mn	Ni	Cr	C	P	S	Si	Cu	Mo	Al	Co	N	Nb	V	W
1	IARM 294A	21.6	2.9	19.7	0.017	0.026	0.0028	0.43	0.34	1.8	(0.01)	0.021	0.78	(0.03)	0.046	(0.01)
1	IARM 295A	19.7	1.84	18.0	0.021	0.028	0.0041	0.36	0.113	0.97	(0.01)	0.021	0.62	0.018	0.046	0.016
1	ECRM 294-1D	18.68	0.429	17.98	0.0657	0.0271	0.00031	0.283	0.0242	0.0861	(0.0095)	0.0288	0.566	(0.00117)	0.0694	(0.00114)
1	IARM 214A	18.3	2.33	12.36	0.018	0.033	0.002	1.00	0.36	0.44	(0.002)	0.021	0.27	0.23	0.04	0.02
1	VS RG20/1	15.77	0.673	14.35	0.064	(0.02)	(0.01)	0.81	0.265	0.089	.	.	.	0.175	0.166	0.007
1	VS RG22/1	13.41	3.94	13.25	0.054	(0.02)	(0.008)	0.63	0.358	0.121	.	.	.	0.38	0.125	0.137
2	BS 193	12.11	1.82	18.48	0.104	0.018	0.002	0.66	0.088	0.21	(0.003)	0.028	0.37	0.014	0.107	(0.007)
2	CT ISO035A	12.04	1.81	18.48	0.102	0.023	0.002	0.59	0.17	0.28	<0.004	0.037	0.33	0.004	0.058	0.002
1	IARM 296A	10.6	1.71	11.2	0.074	0.027	0.002	0.38	0.12	0.60	(0.005)	0.018	0.23	0.043	0.056	(0.01)
1	13X NSC3Z	10.15	2.96	23.02	0.895	.	0.0110	1.28	0.100	0.060	0.105	.	0.498	2.81	0.110	.
2	BS 190	9.72	6.74	19.57	0.022	0.015	0.001	0.46	0.072	0.15	(0.004)	0.044	0.255	(0.004)	0.11	0.015
2	CT ISO129A	9.31	6.86	19.62	0.030	0.002	<0.001	0.40	0.152	0.25	0.014	0.102	0.264	0.025	0.144	0.03
1	IARM 19C *	9.02	6.40	19.51	0.012	0.027	0.0007	0.31	0.45	0.40	0.007	0.087	0.32	0.028	0.090	0.037
1	13X NSC6A	8.85	6.52	20.47	0.0266	0.0049	0.0055	0.523	0.0064	(0.002)	(0.009)	.	0.235	.	0.0052	.
1	VS RG23/1	8.74	1.98	18.5	0.045	(0.02)	(0.004)	0.49	0.099	0.401	.	.	.	0.24	0.69	0.3
1	13X NSC2P	8.70	4.20	21.98	0.560	.	0.0117	0.997	1.026	0.850	.	.	0.341	2.21	0.321	0.062
2	BS 181A	8.16	8.15	16.52	0.071	0.019	0.001	4.03	0.18	0.21	0.022	0.072	0.148	0.017	0.094	0.04
1	**BS 181B**	8.07	8.18	16.17	0.070	0.021	0.0009	3.94	0.206	0.173	0.0119	0.044	0.158	0.026	0.044	0.016
1	13X 21800A	8.00	8.32	16.81	0.0765	0.032	0.0011	4.03	0.431	0.325	0.012	0.0943	0.125	0.007	0.0619	.
1	13X NSC4F	7.97	7.03	32.58	0.513	.	0.0071	1.52	0.162	1.390	0.119	0.218	0.942	2.41	0.219	0.204
1	SRM 1297	7.11	5.34	16.69	0.066	0.038	0.0033	0.397	0.442	0.331	.	0.127	.	.	0.080	.
1	13X NSC1P	6.53	5.06	18.76	0.316	.	0.0097	0.788	0.391	0.196	.	.	0.0877	1.499	0.501	0.100
1	VS RG21/1	6.39	7.52	15.53	0.169	(0.02)	(0.008)	1.95	0.17	0.88	.	.	.	0.48	1.71	(0.2)
3	CZ SL-5A	5.8	4.94	11.7	0.37	0.021	0.014	0.36	2.90	4.12	0.035	0.26	.	0.20	0.21	0.78
2	BS 191	5.71	5.34	16.33	0.098	0.024	0.023	3.73	0.33	0.36	(0.002)	0.11	0.117	0.024	0.083	0.033
1	VS RG19/1	5.63	17.73	24.5	0.064	(0.02)	(0.009)	0.90	(0.2)	0.166	.	.	.	0.108	0.407	0.206
1	13X NSA4B	5.55	17.62	23.85	0.115	0.0302	0.0095	0.519	0.595	4.32	0.0048	.	0.446	0.154	.	.
1	13X NSA10A	5.23	12.98	20.67	0.0180	0.0206	0.0007	0.375	0.170	2.636	.	0.060	0.342	0.143	0.151	(0.061)
2	BS 180A	5.05	13.19	21.09	0.018	0.012	0.001	0.32	0.067	2.04	0.012	0.039	0.334	0.20	0.20	0.02
1	IARM 292A	5.0	1.47	21.35	0.030	0.018	0.001	0.75	0.29	0.097	0.010	0.031	0.245	0.009	0.084	0.01
1	**BS 180B**	4.65	11.9	21.5	0.022	0.017	0.0008	0.46	0.201	2.20	(0.007)	0.111	0.315	0.131	0.149	0.050
2	HRT FE2017-H	4.43	15.45	20.15	0.015	0.022	0.002	0.34	0.21	3.17	.	.	0.311	0.131	.	.
1	13X NSA5A	4.27	9.52	20.73	0.063	(0.010)	0.0212	0.281	0.098	2.32	(0.012)	.	0.340	0.574	.	.
1	IARM 17D	4.15	11.83	21.06	0.041	0.026	0.0018	0.416	0.412	1.52	0.0032	0.23	0.311	0.14	0.118	0.056
1	13X NSC7A	3.80	7.41	23.63	0.410	0.0155	0.0091	0.803	0.144	0.448	(0.096)	0.308	0.337	0.509	0.123	0.052
1	13X NSC5B	2.22	4.34	22.10	0.558	.	0.0155	1.19	0.787	(0.009)	0.21	.	0.296	2.38	0.0461	.

Number	As	B	Ca	O	Pb	Sb	Sn	Ta	Te	Ti	Zr	Units
IARM 294A	.	(0.003)	.	(0.003)	.	.	(0.006)	(0.003)	.	(0.002)	(0.002)	31 mm Ø x 2 or 18 mm
IARM 295A	.	0.002	.	(0.003)	.	.	0.004	.	.	0.0019	(0.001)	31 mm Ø x 2 or 18 mm
ECRM 294-1D	0.0037	(<0.00005)	(0.00026)	.	(0.000128)	(0.00053)	(0.0014)	.	(<0.00008)	(0.0008)	(0.0001)	40 mm Ø x 20 mm
IARM 214A	.	(0.001)	.	0.0026	.	.	0.008	.	.	0.002	.	31 mm Ø x 2 or 18 mm
VS RG20/1	.	.	.	.	.	.	.	.	.	0.093	.	~45 mm Ø x ~30 mm
VS RG22/1	.	.	.	.	.	.	.	.	.	0.33	.	~45 mm Ø x ~30 mm
BS 193	.	0.0007	0.0020	(0.004)	.	.	0.004	.	.	0.003	.	32 mm Ø x ~7 or 19+ mm
CT ISO035A	.	.	Fe: 65.91	.	(<0.0001)	.	0.003	.	.	0.001	<0.001	30-35 mm Ø x ~19 mm
IARM 296A	.	(0.001)	.	(0.003)	.	.	0.007	.	.	(0.002)	.	31 mm Ø x 2 or 18 mm
13X NSC3Z	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 190	.	0.0005	.	0.0045	.	.	0.003	.	.	0.002	.	38 mm Ø x ~7 or 19+ mm
CT ISO129A	.	.	Fe: 62.62	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
IARM 19C *	(0.004)	0.0011	.	0.003	.	.	0.0061	0.005	.	0.003	.	31 mm Ø x 2 or 18 mm
13X NSC6A	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 13 mm HIP
VS RG23/1	.	.	.	.	.	.	.	.	.	0.21	.	~45 mm Ø x ~30 mm
13X NSC2P	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~12 mm
BS 181A	.	0.0009	.	0.0010	.	.	0.005	.	.	0.007	last	38 mm Ø x ~7 or 19+ mm
BS 181B	(0.002)	(0.0008)	(0.001)	0.0010	(0.0005)	(0.0007)	(0.004)	Fe:62.9	**17025**	0.0051	(0.0004)	38 mm Ø x ~7 or 19+ mm
13X 21800A	.	(0.001)	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
13X NSC4F	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
SRM 1297	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
13X NSC1P	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
VS RG21/1	.	.	.	.	.	.	.	.	.	0.18	.	~45 mm Ø x ~30 mm
CZ SL-5A	0.005	.	.	.	.	.	0.004	0.07	.	0.004	.	~39 mm Ø x 25 mm
BS 191	.	(0.0006)	.	0.002	.	.	(0.006)	0.002	.	0.012	.	38 mm Ø x ~7 or 19+ mm
VS RG19/1	.	.	.	.	.	.	.	.	.	0.14	.	~45 mm Ø x ~30 mm
13X NSA4B	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X NSA10A	.	0.0031	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
BS 180A	.	(0.0023)	.	0.003	.	.	(0.002)	.	.	(0.002)	.	37 mm Ø x ~7 or 19+ mm
IARM 292A	.	0.0011	.	0.0024	.	.	0.004	(0.006)	.	0.005	.	31 mm Ø x 2 or 18 mm
BS 180B	(0.004)	0.0011	0.0009	0.0043	**17025**	(0.0007)	0.0040	(0.003)	Fe:58.5	(0.005)	(0.0009)	38 mm Ø x ~7 or 19+ mm
HRT FE2017-H	.	.	.	.	.	.	.	.	.	.	.	30 mm x 30 mm x 10 mm
13X NSA5A	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~14 mm
IARM 17D	0.005	0.001	(0.002)	0.003	(0.0002)	(0.001)	0.0044	(0.003)	.	0.010	(0.002)	31 mm Ø x 2 or 18 mm
13X NSC7A	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~13 mm
13X NSC5B	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm

CRM NICKEL BINARIES

analysis listed in mass % ~40 mm Ø x ~15 mm

Number	Ni	C	Mn	P	S	Si	Cu	Cr	Al	Co	N	Mg	Mo	Nb	Ti	W
14X FeNi50C *	51.4	0.025	.	0.015	0.14	0.15	0.09	0.07	0.30	0.42	* Provisional Analysis		.	.	.	
14X FeNi45C *	45.0	0.005	.	0.03	0.003	0.75	0.085	0.07	0.95	0.6	* Provisional Analysis		.	.	.	
14X 94100A	41.00	0.0055	0.443	0.0051	0.0027	0.103	0.0628	0.0265	.	0.0208	0.0016	0.0021	0.0053	(0.01)	0.0011	0.0017
14X FeNi35D	34.17	0.035	0.303	0.0400	0.146	0.255	0.0363	0.409	(0.004)	0.400	.	.	.	.	.	.
14X FeNi20B	20.06	0.0137	0.0284	0.010	0.0089	1.12	0.074	0.102	0.018	0.994	.	.	.	.	.	.
14X FeNi10A	10.12	0.095	0.272	0.015	0.027	0.061	0.029	0.070	0.025	.	0.0055	.	.	.	.	.
14X FeNi8A	8.10	0.097	0.330	0.015	0.029	0.097	0.030	0.250	0.029	.	0.0061	.	.	.	.	.
14X FeNi6A	6.08	0.100	0.330	0.0155	0.028	0.075	0.028	0.073	0.025	.	0.0055	.	.	.	.	.

SULFUR AND PHOSPHORUS IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	S	P	Ni	Cr	C	Mn	Si	Cu	Al	Co	Mo	N	Nb	Ti	V
2	CT 416	0.36	0.018	0.24	13.15	0.088	0.52	0.63	0.004	.	0.019	0.065	0.020	.	.	0.025
1	IARM 10D	0.334	0.0178	0.291	12.42	0.110	1.11	0.475	0.192	(0.0027)	0.0187	0.148	0.0241	0.0027	0.0015	0.051
2	BS 150	0.33	0.020	0.19	18.61	0.048	1.71	0.43	0.042	0.002	0.024	1.97	0.029	0.003	.	0.054
1	SRM 1223	0.329	0.018	0.232	12.64	0.127	1.08	0.327	0.081	.	.	0.053	.	.	.	0.068
2	BS 90F	0.328	0.023	0.30	13.01	0.085	0.53	0.58	0.12	(0.006)	0.021	0.14	0.037	0.011	.	0.076
1	**BS 303**	0.326	0.028	8.17	17.23	0.044	1.80	0.415	0.627	0.0019	0.071	0.410	0.023	0.008	0.017	0.056
1	13X 30300A	0.312	0.0205	8.60	17.62	0.041	1.83	0.422	0.025	.	0.0255	0.334	0.034	.	.	0.091
2	CT 303	0.31	0.029	9.08	17.78	0.070	1.64	0.58	0.49	.	0.16	0.41	.	.	.	0.044
1	IARM 355A	0.31	0.0186	0.427	17.81	0.0274	0.47	0.435	0.083	0.0016	0.047	0.337	0.0439	0.0095	0.0020	0.038
2	BS 154	0.302	0.027	0.25	17.58	0.030	0.40	1.26	0.063	(0.002)	0.019	0.31	0.039	0.005	.	0.046
2	13X 12549K	0.29	0.092	1.26	11.70	0.16	0.34	0.43	0.10	.	0.52	1.49	.	0.23	.	.
2	BS 153	0.280	0.018	0.140	17.38	0.026	0.41	0.53	0.052	0.002	0.017	0.30	0.021	0.002	(0.004)	0.045
2	BS 152	0.275	0.022	0.14	13.41	0.320	0.36	0.44	0.050	(0.002)	0.015	0.061	0.020	0.006	.	0.051
3	CZ SP-1A	0.26	0.024	8.6	17.7	0.047	1.87	0.33	0.52	0.004	0.095	0.42	.	0.012	0.02	0.058
1	13X 12548M	0.219	0.027	1.075	12.96	0.188	0.577	0.425	0.230	.	0.353	1.318	0.0500	0.586	.	.
1	IARM 352A	0.21	0.0182	0.269	13.11	0.341	1.13	0.357	0.148	(0.0025)	(0.016)	0.38	0.029	(0.012)	0.0015	0.028
1	13X 43020A	0.189	0.0246	0.517	16.07	0.147	1.439	0.415	0.0687	0.0047	0.0191	0.226	0.0212	0.0102	.	0.0542
1	IMZ 154	0.16	0.040	9.86	17.71	0.076	2.18	0.89	0.33	(0.16)	0.105	2.58	.	.	1.00	0.073
2	BS 155	0.145	0.014	0.13	16.64	1.00	0.35	0.40	0.035	(0.001)	0.019	0.46	0.032	0.002	.	0.10
1	13X 12536S	0.136	0.052	12.07	15.30	0.149	0.406	0.865	0.065	0.049	0.298	2.54	0.062	.	0.105	.
1	13X 8110L	0.068	0.052	4.62	12.30	0.750	0.446	0.812	0.344	(0.071)	0.31	2.81	0.0286	.	0.0108	0.211
1	13X 12535BE	0.0591	0.0400	14.79	16.95	0.229	0.342	1.407	0.130	0.194	0.146	4.09	0.029	.	0.625	0.252
1	SRM C1154a	0.051	0.06	13.08	19.31	0.100	1.44	0.53	0.44	.	0.38	0.068	.	.	.	0.135
1	13X 19003C	0.046	0.0382	12.46	18.99	0.047	1.138	0.497	0.171	.	0.105	2.50	0.077	0.120	.	0.0486
1	VS LG58	0.0280	0.0135	4.26	23.4	0.48	0.99	0.292	0.388	.	.	2.41	.	0.214	0.039	0.264
1	VS LG60	0.0205	0.028	19.86	21.8	0.020	2.31	0.289	0.027	0.040	.	3.62	.	0.83	0.265	0.229
2	13X 19004B	0.014	0.069	17.9	22.8	0.066	1.96	0.36	0.022	.	.	3.62	.	0.18	.	.
1	13X 18004B	0.0191	0.068	12.67	21.57	0.099	1.400	1.21	0.050	0.011	0.211	0.601	0.061	0.749	.	0.161

Number	Ag	As	B	O	Pb	Sn	Ta	W	Units	
CT 416	0.0002	.	.	.	<0.001	0.005	.	.	30-35 mm Ø x ~16 mm	
IARM 10D	.	(0.007)	(0.002)	(0.005)	.	0.010	.	(0.005)	31 mm Ø x 2 or 18 mm	
BS 150	.	.	.	0.012	.	(0.003)	.	0.01	35 mm Ø x ~7 or 19+ mm	
SRM 1223	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm	
BS 90F	.	.	.	0.011	.	0.005	.	0.032	38 mm Ø x ~7 or 19+ mm	
BS 303	.	.	0.0013	0.0058	.	0.0091	.	0.023	44 mm Ø x ~7 or 19+ mm	**17025**
13X 30300A	.	.	0.0035	.	.	.	.	.	~40 mm Ø x ~15 mm	
CT 303	0.0003	.	.	.	0.001	0.007	.	.	30-35 mm Ø x ~16 mm	
IARM 355A	.	(0.004)	(0.0011)	(0.010)	(0.0002)	(0.005)	.	(0.018)	31 mm Ø x 2 or 18 mm	
BS 154	.	.	.	0.008	.	(0.005)	.	(0.01)	38 mm Ø x ~7 or 19+ mm	
13X 12549K	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm	
BS 153	.	(0.004)	.	.	(0.001)	0.002	.	(0.002)	35 mm Ø x ~7 or 19+ mm	
BS 152	.	.	.	.	.	0.003	.	<0.01	41 mm Ø x ~7 or 19+ mm	
CZ SP-1A	.	0.006	0.0007	.	.	0.01	.	0.03	~39 mm Ø x 25 mm	
13X 12548M	.	.	.	.	.	Sb:0.022	.	0.031	40 mm Ø x 15 mm	
IARM 352A	.	(0.005)	(0.0007)	(0.005)	.	0.0046	.	(0.005)	31 mm Ø x 2 or 18 mm	
13X 43020A	.	.	(0.0032)	.	.	.	.	0.0108	~40 mm Ø x ~15 mm	
IMZ 154	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm	
BS 155	.	.	.	0.0048	.	(0.003)	.	.	36 mm Ø x ~7 or 19+ mm	
13X 12536S	.	.	0.0274	.	.	0.018	0.091	.	~40 mm Ø x ~15 mm	
13X 8110L	.	0.074	0.989	.	.	.	.	.	~40 mm Ø x ~15 mm	
13X 12535BE	.	.	0.0051	.	.	0.0194	(0.020)	.	~40 mm Ø x ~15 mm	
SRM C1154a	.	.	.	.	0.017	.	.	.	32 mm Ø x 19 mm	
13X 19003C	.	.	.	.	.	.	(0.005)	.	~40 mm Ø x ~15 mm	
VS LG58	.	.	.	.	.	.	.	0.21	~47 mm Ø x ~30 mm	
VS LG60	.	.	.	.	.	.	.	0.115	~47 mm Ø x ~30 mm	
13X 19004B	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm	
13X 18004B	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm	

SELENIUM IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM

#	Number	Se	Ni	Cr	C	Mn	P	S	Si	Cu	Al	Co	Mo	N	Nb	Ti
2	BS 151	0.328	0.24	13.19	0.090	0.41	0.021	0.018	0.65	0.11	(0.002)	0.018	0.088	0.022	0.005	(<0.003)
2	BS 186A	0.229	35.86	0.16	0.040	0.72	0.008	0.0053	0.19	0.016	(0.001)	0.028	0.0032	0.0026	(<0.002)	(<0.003)
1	IARM 253A	0.21	9.17	17.90	0.041	1.50	0.140	0.0089	0.50	0.223	0.003	0.088	0.348	0.0373	0.016	0.002
1	IARM 24B	0.19	35.86	0.121	0.053	0.82	0.009	0.0010	0.28	0.052	0.002	0.036	0.011	0.0017	<0.01	0.002
1	IARM 353A	0.17	0.265	17.01	0.98	0.95	0.019	0.025	0.49	0.13	0.0018	0.032	0.50	0.027	(0.011)	0.0015
2	CT ISO124A	0.167	48.07	0.079	0.011	0.73	0.007	0.006	0.40	0.015	.	0.012	0.009	.	.	.
2	BS 156	0.142	0.35	16.87	1.06	1.15	0.022	0.007	0.47	0.09	(<0.002)	0.047	0.50	0.041	0.005	0.001
1	IARM 253B	0.13	9.11	17.64	0.051	1.61	0.13	0.011	0.46	0.44	(0.004)	0.145	0.59	0.031	0.021	0.0027

Number	B	Fe	O	Sn	Ta	V	W	Zr	Units
BS 151	.	.	0.009	0.005	.	0.046	0.010	.	50 mm Ø x ~7 or 19+ mm
BS 186A	.	.	.	(0.002)	.	0.0012	(0.01)	.	38 mm Ø x ~7 or 19+ mm
IARM 253A	0.0003	.	0.009	0.01	.	0.106	0.10	.	31 mm Ø x 2 or 18 mm
IARM 24B	(0.001)	62.6	0.003	0.0018	<0.005	<0.005	<0.04	<0.005	31 mm Ø x 2 or 18 mm
IARM 353A	(0.0006)	.	(0.005)	0.0056	(0.004)	0.116	0.041	(0.002)	31 mm Ø x 2 or 18 mm
CT ISO124A	.	50.65	.	.	.	.	.	.	30-35 mm Ø x ~19 mm
BS 156	.	.	0.0045	(0.004)	.	0.13	0.11	.	41 mm Ø x ~7 or 19+ mm
IARM 253B	0.0007	.	0.007	(0.012)	(0.003)	0.092	(0.05)	.	31 mm Ø x 2 or 18 mm

STAINLESS STEEL WITH NI < 5.0 % CONTINUED ON THE NEXT PAGE

= Class, 1=CRM, 2=RM, and 3=RM with no uncertainties analysis listed in mass % except * which is mg/kg ** Provisional Analysis

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
1	14X HS10A	1.710	0.134	0.0135	0.0099	0.660	0.0605	0.146	14.83	0.0866	1.679	(0.001)	.	.	1.142	1.75
3	CZ SL-4A	1.38	2.85	0.038	0.017	2.28	0.75	2.04	26.3	0.11	0.92	.	1.11	0.8	0.54	0.35
2	BS 156	1.06	1.15	0.022	0.007	0.47	0.09	0.35	16.87	0.047	0.50	0.041	0.005	0.001	0.13	0.11
1	**BS 93F**	1.047	0.59	0.0266	(<0.0025)	0.49	0.132	0.187	16.72	0.021	0.46	0.051	0.0029	0.0012	0.057	0.0016
1	13X 44004A	1.052	0.346	0.0214	0.0178	0.363	0.0548	0.207	16.74	0.0188	0.462	0.0247	.	.	0.076	0.030
1	IARM 13D	1.040	0.697	0.0195	0.0012	0.614	0.184	0.256	16.36	0.0212	0.488	0.0492	0.0074	0.0035	0.058	0.046
2	BS 155	1.00	0.35	0.014	0.145	0.40	0.035	0.13	16.64	0.019	0.46	0.032	0.002	.	0.10	.
1	NCS HS41752	0.97	0.46	0.023	0.0016	0.48	0.082	0.192	17.61	.	0.057	.	.	.	0.088	.
1	ECRM 291-1D	0.90	0.81	0.017	0.0088	0.91	0.071	0.56	17.15	0.0233	2.10	0.1142	.	.	0.39	.
1	VS LG40/1	0.66	0.318	(0.02)	(0.006)	0.289	(0.15)	0.271	13.67	.	0.039	.	.	.	0.038	.
1	VS LG39/1	0.406	0.64	(0.02)	(0.007)	0.94	(0.12)	0.42	13.11	.	0.136	.	.	.	0.135	.
1	13X 14122A	0.356	0.480	0.0177	0.0021	0.449	0.066	0.632	15.91	0.0224	0.855	0.0290	0.006	.	0.101	0.004
1	IARM 154B	0.35	0.405	0.017	0.0004	0.45	0.087	0.223	12.20	0.020	0.079	0.020	0.003	0.002	0.067	0.010
2	BS SS4952	0.347	0.41	0.016	0.003	0.66	0.045	0.23	13.15	0.030	0.049	0.027	0.004	0.002	0.089	(0.007)
1	IARM 154C	0.339	0.423	0.0174	0.0043	0.37	0.120	0.215	12.41	0.016	0.036	0.054	0.014	0.0015	0.043	(0.005)
2	BS SS4951	0.333	0.58	0.016	0.0012	0.62	0.033	0.15	13.55	0.013	0.009	0.0127	0.006	0.002	0.032	.
2	BS 152	0.320	0.36	0.022	0.275	0.44	0.050	0.14	13.41	0.015	0.061	0.020	0.006	.	0.051	<0.01
1	IRSID 1825	0.305	0.650	0.019	0.022	0.336	0.100	0.308	12.90	0.026	0.052	.	.	.	0.052	.
1	ECRM 272-1D	0.2815	0.600	0.0156	0.0196	0.420	0.0192	0.2445	11.927	0.0145	0.0030	0.0508	0.0028	0.00096	0.0167	.
1	SS 469	0.279	0.598	0.015	0.020	0.421	(0.02)	0.246	11.93	(0.01)	.	.	.	.	(0.02)	.
1	VS LG38/1	0.255	0.73	(0.02)	(0.01)	0.81	(0.16)	0.551	11.75	.	0.344	.	.	.	0.190	.
1	IMZ 168	0.24	1.36	0.019	0.012	1.12	0.093	0.17	13.91	(0.019)	0.026	(0.057)	.	(0.003)	0.053	.
1	13X 12547M	0.238	1.191	0.0441	0.0746	0.344	0.531	1.492	17.49	0.302	1.009	0.099	0.347	.	0.1021	.
1	IARM 205D	0.232	0.736	0.0209	0.0028	0.257	0.122	0.841	12.18	0.043	1.002	0.0484	0.013	0.0022	0.319	1.07
1	**BS 422**	0.232	0.640	0.0169	0.0013	0.404	0.080	0.676	11.25	0.0293	0.896	0.050	0.045	0.0011	0.274	0.95
1	SS 472	0.227	1.02	0.032	0.029	1.05	(0.02)	1.95	15.82	(0.02)	0.661	.	.	.	(0.02)	.
1	13X 42200A	0.220	0.651	0.0182	0.0012	0.314	0.136	0.738	11.41	0.0114	1.042	0.0585	0.0203	.	0.246	1.177
1	NCS HS41749	0.21	0.39	0.023	0.012	0.56	1.15	1.52	12.27	.	0.158	.	.	.	0.074	.
1	13X 42000A	0.208	0.679	0.0241	0.0253	0.496	0.202	0.295	12.56	0.0161	0.0398	0.0273	.	.	0.046	.
1	13X 14923A	0.205	0.501	0.0197	0.0031	0.330	0.0563	0.452	11.26	0.0207	0.819	0.0321	0.005	.	0.295	.
1	VS LG41/1	0.200	0.91	(0.02)	(0.008)	0.64	(0.12)	1.53	15.90	.	0.277	.	.	.	0.303	.
1	IMZ 171	0.195	0.42	0.020	0.014	0.21	0.116	0.59	11.44	0.024	1.23	0.057	.	(0.001)	0.26	.
1	NCS HS41748	0.194	0.62	0.016	0.011	0.54	0.008	0.077	12.70	.	0.010	.	.	.	0.048	.
2	HRT FE2015-H	0.19	0.52	0.021	0.002	0.37	0.07	0.25	12.87	.	0.07	0.045	.	.	0.055	.
1	13X 12548M	0.188	0.577	0.027	0.219	0.425	0.230	1.075	12.96	0.353	1.318	0.0500	0.586	.	.	0.031
2	HRT FE2010-H	0.18	0.60	0.024	0.004	0.39	0.08	1.94	15.95	0.023	0.13	.	.	.	0.044	0.024
1	SS 70	0.18	0.38	0.024	0.020	0.35	(0.06)	0.40	16.35	.	.	.	.	.	.	.
1	IARM 20B	0.18	0.35	0.019	0.004	0.40	0.069	1.94	12.42	0.030	0.32	0.0434	0.010	0.004	0.17	3.52
1	IARM 20C	0.18	0.30	0.018	0.007	0.35	0.060	1.93	12.15	0.031	0.12	0.0222	0.010	(0.003)	0.086	2.59
1	IMZ 167	0.175	1.16	0.016	0.0025	0.755	0.106	0.16	13.07	(0.021)	0.024	0.053	.	(0.002)	0.054	.
1	13X 41800A **	0.175	0.335	0.017	0.0005	0.32	0.105	2.05	12.3	0.036	0.07	0.029	0.004	.	0.021	2.80
1	SS 473	0.172	0.494	0.019	0.030	0.604	(0.02)	(0.06)	9.06	(0.01)	0.95	.	.	.	(0.02)	.
2	BS 183A	0.172	0.35	0.016	0.0040	0.37	0.093	1.85	12.14	0.036	0.12	0.0256	0.006	0.002	0.090	2.60
1	13X 15024X	0.166	0.610	0.0284	0.0294	0.750	0.332	2.99	14.65	0.1059	0.299	0.0156	0.099	.	0.150	0.039
1	13X 43100A	0.166	0.378	0.0199	0.0050	0.535	0.134	2.10	16.39	0.0239	0.0768	0.075	0.006	.	0.0577	0.004

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
2	13X 12549K	0.16	0.34	0.092	0.29	0.43	0.10	1.26	11.70	0.52	1.49	.	0.23	.	.	.
1	IARM 12C	0.155	0.55	0.022	0.0032	0.34	0.33	2.23	15.78	0.048	0.125	0.056	0.020	(0.002)	0.040	0.015
1	SS 470	0.153	0.235	0.024	0.035	0.335	(0.02)	0.369	17.68	(0.02)	.	.	.	.	(0.02)	.
2	BS 92B	0.150	0.42	0.021	0.003	0.42	0.13	2.12	15.92	0.04	0.17	0.073	(0.006)	.	0.07	0.02
1	SRM 1219	0.149	0.42	0.026	0.001	0.545	0.162	2.16	15.64	.	0.164	0.078	.	.	.	0.056
2	CT X68890	0.147	0.48	0.015	0.007	0.35	0.064	0.10	11.87	.	0.009	0.030	0.10	.	.	.
1	**BS 431**	0.146	0.579	0.0232	0.0047	0.393	0.282	2.25	15.8	0.050	0.092	0.049	0.034	0.0007	0.062	0.012
1	IARM 335A	0.138	0.85	0.016	0.0005	0.39	0.086	4.27	15.30	0.063	2.72	0.085	0.015	(0.002)	0.094	0.008
1	**BS 355**	0.136	0.862	0.0171	0.0003	0.374	0.173	4.18	15.43	0.053	2.73	0.081	0.0103	0.0007	0.106	0.0069
1	13X 41001A	0.136	0.464	0.0142	0.0037	0.298	0.056	0.0939	12.06	0.0143	0.0102	0.0316	.	.	0.079	.
1	NCS HS28747	0.132	0.453	0.027	0.0068	0.502	0.126	1.79	16.24	0.051	0.153	0.030	.	(0.002)	0.075	.
1	13X 12540M	0.131	0.800	0.051	0.0512	0.805	0.181	4.975	27.44	0.109	0.993	0.054	0.107	.	0.210	0.097
1	**BS 410C**	0.131	0.381	0.0206	0.0051	0.366	0.084	0.352	12.78	0.0185	0.055	0.039	0.0056	0.0006	0.042	0.0131
1	**BS 0021**	0.128	0.420	0.021	0.008	0.354	0.040	0.100	12.00	0.015	0.016	0.029	(0.001)	(0.003)	0.029	0.005
1	IARM 10C	0.128	0.35	0.026	0.29	0.37	0.155	0.24	12.25	0.022	0.08	0.015	0.003	0.002	0.024	0.011
1	SRM 1223	0.127	1.08	0.018	0.329	0.327	0.081	0.232	12.64	.	0.053	.	.	.	0.068	.
1	ECRM 296-1D	0.1166	0.676	0.0178	0.0026	0.242	0.1498	2.790	11.82	0.0218	1.700	0.0214	.	.	0.363	.
1	**BS 416**	0.116	0.64	0.0237	0.35	0.232	0.154	0.371	13.41	0.0241	0.030	0.043	(0.006)	0.0012	0.100	0.0034
2	CT X23576	0.116	0.40	0.018	0.027	0.40	0.072	0.26	12.30	.	0.062	0.032	.	.	.	.
1	13X 15035U	0.115	0.674	0.0415	0.0456	0.636	0.204	2.38	14.00	0.199	0.399	0.0584	0.500	.	0.160	0.048
1	13X 64152A	0.114	0.666	0.0123	0.0020	0.224	0.0622	2.50	11.34	0.0185	1.567	0.0339	.	.	0.275	.
1	13X 41600A	0.111	0.627	0.0253	0.302	0.442	0.160	0.331	13.23	0.0216	0.0499	0.0245	0.0053	.	0.0888	(0.003)
1	13X 12533Z	0.110	0.812	0.0149	0.0156	0.440	0.131	5.06	18.80	0.0299	1.05	0.073	.	0.147	0.181	.
1	IARM 291A	0.11	0.71	0.016	0.009	0.23	0.060	2.62	11.3	0.021	1.61	0.035	0.022	0.0011	0.29	(0.01)
2	CT 410	0.11	0.48	0.015	0.023	0.27	0.079	0.34	12.04	0.023	0.053	0.036	0.001	0.001	0.025	0.004
1	IMZ 156	0.101	0.84	0.031	0.008	1.11	0.071	0.64	16.96	(0.033)	0.035	.	.	(0.032)	0.073	.
1	SS 471	0.095	0.417	0.018	0.023	0.326	(0.02)	0.96	23.85	(0.02)	.	.	.	.	(0.03)	.
1	IMZ 158	0.091	1.34	0.015	0.007	2.23	0.097	0.24	25.51	.	0.025	.	.	0.12	0.078	.
2	BS 151	0.090	0.41	0.021	0.018	0.65	0.11	0.24	13.19	0.018	0.088	0.022	0.005	(<0.003)	0.046	0.010
1	13X 15023W **	0.09	1.76	0.01	0.005	0.35	0.03	0.96	11.2	0.05	0.98	0.01	1.43	.	0.03	0.039
1	13X 14742A	0.084	0.714	0.0214	0.0008	0.910	0.1267	0.449	17.60	0.0186	0.0968	0.0209	0.0202	0.0051	0.0463	.
2	BS 90F	0.085	0.53	0.023	0.328	0.58	0.12	0.30	13.01	0.021	0.14	0.037	0.011	.	0.076	0.032
1	13X 14762A	0.082	0.662	0.0275	0.0007	1.069	0.0801	0.346	24.38	0.0293	0.0553	0.0285	0.0277	0.0058	0.0993	.
1	IMZ 155	0.078	0.84	0.018	0.012	0.49	0.084	0.77	11.07	.	0.056	.	.	0.19	0.045	(0.095)
3	CZ SL-1A	0.078	0.46	0.024	0.011	1.39	0.09	0.23	13.4	0.02	0.03	0.025	.	0.004	0.017	0.1
1	IMZ 161	0.074	0.29	0.023	0.023	0.65	0.56	0.55	12.90	.	1.10	.	.	.	0.33	1.05
1	IARM 11D	0.070	0.400	0.023	0.004	0.83	0.085	0.60	17.35	0.024	0.075	0.021	0.009	(0.003)	0.052	0.008
1	IARM 14C	0.061	0.385	0.021	0.0015	0.63	0.19	0.364	24.9	0.043	0.101	0.058	0.013	0.013	0.078	0.031
1	BS 430 **	0.061	0.71	0.024	0.002	0.37	0.12	0.22	16.5	<0.5	0.052	0.06	0.01	<0.05	0.057	<0.5
1	IMZ 163A	0.058	1.38	0.018	0.010	0.39	0.061	4.59	22.62	(0.020)	2.40	0.221	0.13	(0.002)	0.029	(0.016)
2	BS 94C	0.057	0.45	0.024	0.002	0.62	0.056	0.43	25.90	0.042	0.20	0.065	0.032	.	0.12	.
1	**BS 0022**	0.050	0.41	0.018	0.011	0.62	0.036	0.23	12.36	0.017	0.117	0.033	0.007	0.002	0.034	(0.008)
2	BS 150	0.048	1.71	0.020	0.33	0.43	0.042	0.19	18.61	0.024	1.97	0.029	0.003	.	0.054	0.01
1	13X 14418A	0.0450	0.819	0.0265	0.0108	0.291	0.173	4.65	15.44	0.1004	0.847	0.0423	(0.009)	.	0.0539	0.013
1	NCS HS28748	0.045	0.742	0.028	0.013	0.644	3.23	3.85	15.88	0.119	0.259	0.030	0.230	(0.002)	0.076	.
2	BS 17-4PHB	0.042	0.56	0.021	0.024	0.42	3.35	4.53	15.60	0.040	0.11	0.046	0.31	.	0.059	.
1	SRM C1296	0.038	0.256	0.024	0.013	0.66	0.056	0.373	27.90	0.026	3.43	.	0.20	0.23	0.134	.
1	SRM C2400	0.036	0.71	0.013	0.003	0.61	2.63	4.07	17.06	0.10	0.23	.	0.15	.	0.092	.
2	HRT FE2009-H	0.035	0.78	0.034	0.003	0.35	0.08	3.89	12.83	.	0.42	(0.0339)	.	.	0.043	0.058
2	BS 9621	0.035	0.31	0.017	0.0011	0.468	3.42	4.61	14.93	0.029	0.063	0.013	0.27	(0.001)	0.096	(0.01)
1	ECRM 273-1	0.0336	0.785	0.0131	0.0004	0.378	3.046	4.85	14.747	0.0391	0.2462	0.0444	0.221	.	0.0512	.
2	BS 185A	0.033	0.49	0.022	0.002	0.38	3.41	4.43	14.46	0.026	0.30	0.027	0.32	(0.001)	0.048	(0.014)
1	13X 32101A	0.0325	4.91	0.0194	(0.0004)	0.777	0.295	1.476	21.12	0.0347	0.0970	0.241	0.0070	.	0.0830	.
2	BS 9622	0.032	0.63	0.019	0.004	0.42	3.34	4.34	14.34	0.040	0.27	0.028	0.33	(0.001)	0.074	(0.020)
2	BS 154	0.030	0.40	0.027	0.302	1.26	0.063	0.25	17.58	0.019	0.31	0.039	0.005	.	0.046	(0.01)
1	SRM 1295	0.027	0.387	0.022	0.0003	0.321	0.260	0.194	13.52	0.020	0.023	.	(<0.0005)	(0.01)	0.082	(0.002)
2	BS 153	0.026	0.41	0.018	0.280	0.53	0.052	0.140	17.38	0.017	0.30	0.021	0.002	(0.004)	0.045	(0.002)
1	IARM 317A	0.025	1.26	0.028	0.0007	0.39	0.21	4.19	22.5	0.064	0.249	0.123	(0.004)	(0.002)	0.061	0.015
2	BS 17-4PHA	0.018	0.85	0.023	0.022	0.40	3.30	4.69	15.40	0.072	0.34	0.022	0.204	.	0.043	.
1	IARM 327A	0.018	0.54	0.018	0.0010	0.43	0.082	3.83	12.73	0.019	0.53	0.0157	0.008	0.0026	0.036	0.009
1	13X 14775S	0.006	1.405	0.047	0.154	0.552	0.167	1.949	17.78	0.153	0.529	.	0.691	.	0.0287	.

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W

STAINLESS STEEL WITH NI < 5.0 % CONTINUED FROM THE PREVIOUS PAGE

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

Number	Al	As	B	Ca*	Mg*	Pb*	O	Sb	Se	Sn	Ta	Zn	Zr	Units
14X HS10A	.	.	.	.	.	.	.	.	.	.	.	.	.	~48 mm Ø x ~10 mm
CZ SL-4A	0.12	.	0.0013	.	.	.	.	.	.	0.02	.	.	.	~39 mm Ø x 25 mm
BS 156	(<0.002)	.	.	.	.	.	0.0045	.	0.142	(0.004)	.	.	.	41 mm Ø x ~7 or 19+ mm
BS 93F	0.0052	0.0056	(0.0001)	19	(6)	(2)	0.0031	0.0016	.	0.0059	.	**17025**	(0.001)	38 mm Ø x ~7 or 19+ mm Fe:[80.2]
13X 44004A	0.0305	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x ~15 mm
IARM 13D	(0.006)	(0.008)	0.0005	(7)	.	.	0.0031	(0.0027)	.	0.011	(0.004)	.	(0.0017)	31 mm Ø x 2 or 18 mm
BS 155	(0.001)	.	.	.	.	.	0.0048	.	.	(0.003)	.	.	.	36 mm Ø x ~7 or 19+ mm
NCS HS41752	(0.032)	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm
ECRM 291-1D	.	.	.	.	.	.	.	.	.	.	.	.	.	36-41 mm Ø x 28-35 mm
VS LG40/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
VS LG39/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
13X 14122A	(0.002)	.	.	.	.	.	.	.	.	0.0041	.	.	.	~40 mm Ø x ~15 mm
IARM 154B	0.002	.	(0.001)	.	.	.	0.0016	.	.	0.006	.	.	.	31 mm Ø x 18 mm last
BS SS4952	0.003	0.002	(0.0004)	19	.	.	0.005	.	.	0.004	.	.	.	38 mm Ø x ~7 or 19+ mm
IARM 154C	(0.0034)	(0.004)	0.0007	.	.	.	(0.0042)	(0.001)	(0.0003)	0.0058	.	.	(0.0014)	31 mm Ø x 2 or 18 mm
BS SS4951	0.002	0.002	.	.	.	.	0.0055	.	.	0.003	.	.	.	42 mm Ø x ~7 or 19+ mm
BS 152	(0.002)	.	.	.	.	.	.	.	.	0.003	.	.	.	41 mm Ø x 19+ mm
IRSID 1825	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
ECRM 272-1D	0.0046	0.0116	0.0018	9.0	(2)	.	.	0.0007	.	.	.	0.0031	.	38 mm Ø x 25 or 30 mm
SS 469	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
VS LG38/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IMZ 168	(0.004)	.	.	.	.	.	.	.	.	0.009	.	.	.	40 mm Ø x 40 mm
13X 12547M	.	.	.	.	.	.	.	.	.	0.030	.	.	.	~40 mm Ø x ~15 mm
IARM 205D	0.0021	0.004	0.0007	(20)	(7)	(20)	0.0053	(<0.007)	(<0.005)	0.0047	(<0.005)	(<0.005)	0.0022	31 mm Ø x 2 or 18 mm
BS 422	0.0135	0.0041	(0.0002)	31	(9)	(0.5)	0.0030	(0.0007)	.	0.0043	(0.0001)	**17025**	(0.001)	38 mm Ø x ~7 or 19+ mm Fe:84.5
SS 472	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
13X 42200A	0.0020	.	.	.	.	.	.	.	.	0.0052	.	.	.	~38 mm Ø x ~15 mm
NCS HS41749	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm
13X 42000A	.	.	0.0013	.	.	.	.	.	.	0.0073	.	.	.	~38 mm Ø x ~15 mm
13X 14923A	0.003	.	.	44	.	.	.	.	.	0.004	.	.	.	~40 mm Ø x ~15 mm
VS LG41/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IMZ 171	0.036	.	.	.	.	.	.	(0.003)	.	0.008	.	.	.	40 mm Ø x 40 mm
NCS HS41748	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm
HRT FE2015-H	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 20 mm
13X 12548M	.	.	.	.	.	.	.	0.022	.	.	.	.	.	40 mm Ø x 15 mm
HRT FE2010-H	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 20 mm
SS 70	.	.	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 13 mm
IARM 20B	0.006	.	.	.	.	.	0.0056	.	.	0.005	.	.	.	31 mm Ø x 2 mm
IARM 20C	(0.004)	.	.	.	.	.	0.0068	.	.	0.004	.	.	.	31 mm Ø x 2 or 18 mm
IMZ 167	(0.018)	.	.	.	.	.	.	.	.	0.009	.	.	.	40 mm Ø x 40 mm
13X 41800A **	0.005	.	.	.	.	.	.	.	.	0.005	.	.	.	~38 mm Ø x ~15 mm
SS 473	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
BS 183A	0.002	(0.002)	(<0.0005)	20	.	.	0.0065	(0.001)	.	0.003	.	.	.	38 mm Ø x ~7 or 19+ mm
13X 15024X	0.0049	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 43100A	.	.	.	.	.	.	.	.	.	0.004	.	.	.	~38 mm Ø x ~15 mm

Number	Al	As	B	Ca*	Mg*	Pb*	O	Sb	Se	Sn	Ta	Zn	Zr	Units
13X 12549K	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
IARM 12C	(0.004)	(0.004)	0.0004	7	(2)	(5)	(0.005)	.	.	0.008	(0.0005)	.	(0.001)	31 mm Ø x 2 or 18 mm
SS 470	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
BS 92B	(0.002)	.	.	(9)	.	.	0.0064	.	.	0.006	.	.	.	44 mm Ø x ~7 mm last
SRM 1219	.	.	.	.	.	.	.	.	.	.	.	.	.	34 mm Ø x 19 mm
CT X68890	<0.004	.	.	.	.	.	.	.	.	0.004	.	.	.	30-35 mm Ø x ~16 mm
BS 431	0.0019	0.0038	0.0003	7	(2)	.	0.0059	0.0011	.	0.0134	.	**17025**	(0.001)	38 mm Ø x ~7 or 19+ mm Fe: 80.2
IARM 335A	0.019	(0.01)	0.0007	(10)	.	.	0.0020	.	.	0.0034	(0.01)	.	(0.002)	31 mm Ø x 2 or 18 mm
BS 355	0.0192	0.0039	(0.0001)	(2)	(2)	(0.3)	0.0020	(0.0009)	.	0.0038	(0.0001)	.	(0.003)	41 mm Ø x ~7 or 19+ mm **17025**
13X 41001A	(0.004)	.	.	10	.	.	.	.	.	0.0051	.	.	.	~41 mm Ø x ~15 mm
NCS HS28747	.	0.0063	.	.	1	.	.	.	.	0.0057	.	.	.	38 mm Ø x 35 mm
13X 12540M	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 410C	0.0079	0.0029	(0.0001)	22	(3)	(1)	0.0051	(0.0002)	.	0.0023	(0.001)	.	(0.0002)	38 mm Ø x ~7 or 19+ mm **17025**
BS 0021	0.008	(0.004)	(<0.0002)	(2)	.	.	(0.004)	.	.	0.003	.	**25 (pre-17025)**		40 mm Ø x ~7 or 19+ mm
IARM 10C	0.003	.	<0.0005	.	.	.	0.008	.	.	0.009	.	last of stock		31 mm Ø x 2 or 18 mm
SRM 1223	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
ECRM 296-1D	0.0275	0.0139	(0.0003)	.	.	1.6	.	.	.	0.0131	.	.	.	38 mm Ø x 25 or 30 mm
BS 416	(0.002)	0.0039	(0.001)	(3)	(3)	(6)	0.0081	(0.002)	.	(0.005)	(0.004)	**17025**	(0.002)	38 mm Ø x ~7 or 19+ mm Fe:[84.3]
CT X23576	.	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
13X 15035U	(0.093)	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 64152A	0.0315	.	.	.	.	.	.	.	.	0.0053	.	.	.	~38 mm Ø x ~15 mm
13X 41600A	(0.004)	.	.	.	.	.	.	.	.	0.0066	.	.	.	~41 mm Ø x ~15 mm
13X 12533Z	0.059	.	0.0100	.	.	.	.	.	.	0.0097	.	.	.	~40 mm Ø x ~15 mm
IARM 291A	(0.004)	.	0.001	.	.	.	0.014	.	.	0.004	(0.001)	.	<0.005	31 mm Ø x 2 or 18 mm
CT 410	0.015	.	.	.	<10	.	.	.	.	0.006	.	.	.	30-35 mm Ø x ~16 mm Ag: 2 ppm
IMZ 156	(0.034)	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
SS 471	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
IMZ 158	1.56	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BS 151	(0.002)	.	.	.	.	.	0.009	.	0.328	0.005	.	.	.	50 mm Ø x ~7 or 19+ mm
13X 15023W **	0.003	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 14742A	0.804	.	.	.	22	.	.	.	.	0.0046	.	0.0055	.	~40 mm Ø x ~15 mm
BS 90F	(0.006)	.	.	.	.	.	0.011	.	.	0.005	.	.	.	38 mm Ø x ~7 or 19+ mm
13X 14762A	1.318	0.0025	.	.	24	.	.	.	.	0.0048	.	.	.	~40 mm Ø x ~15 mm
IMZ 155	(0.20)	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
CZ SL-1A	0.86	.	.	.	.	.	.	.	.	0.01	.	.	.	~39 mm Ø x 25 mm
IMZ 161	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
IARM 11D	0.015	(0.005)	0.0006	(20)	(30)	(5)	(0.004)	.	(0.001)	0.006	(0.003)	(0.004)	(0.001)	31 mm Ø x 2 or 18 mm
IARM 14C	0.0041	(0.003)	0.0005	(10)	(5)	(1)	(0.006)	(0.002)	(0.0001)	0.004	(0.002)	(0.0003)	(0.001)	31 mm Ø x 2 or 18 mm
BS 430 **	<0.05	0.003	<0.005	<50	<50	<50	(0.006)	.	.	0.009	<0.05	.	<0.005	44 mm Ø x 19 mm Fe: 81.7
IMZ 163A	0.018	(0.0035)	.	.	.	(10)	.	.	.	(0.003)	.	.	.	40 mm Ø x 40 mm
BS 94C	0.004	.	.	8	.	.	0.0061	.	.	0.006	.	.	.	44 mm Ø x 19+ mm
BS 0022	0.078	0.003	0.0007	.	(<5)	(6)	(0.002)	(0.0004)	.	0.004	.	**25 (pre-17025)**		38 mm Ø x ~7 or 19+ mm
BS 150	0.002	.	.	.	.	.	0.012	.	.	(0.003)	.	.	.	35 mm Ø x ~7 or 19+ mm
13X 14418A	(0.003)	.	.	.	.	.	.	.	.	0.005	.	.	.	~40 mm Ø x ~15 mm
NCS HS28748	.	0.0047	.	.	.	1	.	.	.	0.0063	.	.	.	38 mm Ø x 35 mm
BS 17-4PHB	.	.	0.0036	.	.	.	.	.	.	.	(0.002)	.	.	40 mm Ø x ~7 or 19+ mm
SRM C1296	0.035	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
SRM C2400	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
HRT FE2009-H	.	.	.	(10)	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BS 9621	0.003	.	0.0004	(1)	.	.	.	.	.	0.003	(0.002)	.	.	38 mm Ø X ~7 or 19+ mm
ECRM 273-1	.	0.0030	.	.	.	.	.	.	.	0.0021	.	.	.	40 mm Ø x 20 mm
BS 185A	0.002	.	0.0017	(2)	.	.	(0.0021)	.	.	0.007	(0.002)	.	.	38 mm Ø x ~7 or 19+ mm
13X 32101A	0.0122	.	0.0014	.	.	.	.	.	.	0.0035	(0.115)	.	.	~38 mm Ø x ~15 mm
BS 9622	0.002	.	0.0004	.	.	.	.	.	.	0.006	.	.	.	38 mm Ø x ~7 or 19+ mm
BS 154	(0.002)	.	.	.	.	.	0.008	.	.	(0.005)	.	.	.	38 mm Ø x ~7 or 19+ mm
SRM 1295	(0.20)	(0.006)	(<0.0004)	.	.	(1)	.	(0.003)	(<1*)	(0.02)	(<0.001)	.	.	32 mm Ø x 19 mm
BS 153	0.002	(0.004)	.	.	.	(10)	.	.	.	0.002	.	.	.	35 mm Ø x ~7 or 19+ mm
IARM 317A	0.005	(0.006)	0.0019	(3)	.	.	0.0032	.	.	0.008	(0.004)	.	.	31 mm Ø x 2 or 18 mm
BS 17-4PHA	.	.	0.0016	.	.	.	.	.	.	.	(0.002)	.	.	36 mm Ø x 12+ mm
IARM 327A	(0.003)	(0.004)	(0.001)	.	(3)	.	0.0047	.	.	0.006	(0.004)	.	(0.002)	31 mm Ø x 2 or 18 mm
13X 14775S	0.0301	(0.002)	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm

Number Al As B Ca* Mg* Pb* O Sb Se Sn Ta Zn Zr Units

STAINLESS STEEL WITH C > 0.05 %

CONTINUED ON THE NEXT PAGE

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
1	KUT S24	0.65	0.94	0.062	0.036	0.76	0.12	9.19	10.28	.	0.41	.	1.65	0.27	.	.
1	VS LG76	0.445	0.342	0.021	0.0076	0.455	0.098	13.39	13.77	.	0.263	0.031	.	0.020	0.041	2.38
1	VS LG74	0.373	0.962	0.024	0.0049	2.49	0.093	23.66	18.30	0.031	0.104	0.030	.	0.030	.	0.052
1	KUT S21	0.37	0.19	0.017	0.021	1.26	0.11	22.3	3.99	.	4.12	.	.	0.50	.	.
2	CZ CM-19A	0.361	0.783	0.0440	0.0182	1.588	0.986	15.27	13.12	0.222	1.023	(0.021)	0.091	0.254	1.235	0.311
1	VS LG79	0.313	1.28	0.017	0.0036	0.703	0.065	8.72	19.23	.	1.18	.	0.47	.	0.049	1.16
2	CZ SP-3C	0.30	0.43	0.026	0.011	0.84	0.185	5.31	16.42	0.041	0.26	.	(0.04)	(0.17)	0.19	0.12
1	DSZU C016	0.281	3.26	0.0192	0.0174	1.16	0.054	7.47	21.9	.	0.52	0.010	.	0.72	0.036	0.014
3	CZ SP-3B	0.27	0.29	0.023	0.008	0.72	0.62	5.65	15.1	0.02	0.24	.	.	0.13	0.10	0.12
1	KUT S19	0.26	0.32	0.012	0.021	2.32	0.19	12.8	7.00	.	0.11	.	0.81	0.048	.	.
1	SRM C1153a	0.225	0.544	0.030	0.019	1.00	0.226	8.76	16.70	0.127	0.24	.	.	.	0.176	.
1	VS LG34/5	0.222	0.362	0.010	0.019	0.80	0.269	9.54	17.32	.	0.266	.	.	0.138	0.195	0.33
1	13X 18001B	0.207	0.463	0.0090	0.0786	0.203	0.149	6.13	15.92	0.0231	0.816	0.0347	0.612	.	0.0996	.
1	KUT H6/1	0.20	0.49	0.021	0.024	0.67	0.10	0.15	18.9	.	.	.	.	0.10	.	(0.12)
2	CZ SP-3D	0.171	0.34	0.021	0.015	0.71	0.73	5.36	16.44	0.033	0.25	.	(0.04)	0.088	0.11	0.12
2	13X NSB1D	0.17	0.44	.	.	0.58	.	10.0	19.1	.	0.11	0.04	.	.	.	.
1	IARM 339A	0.16	1.71	0.004	0.009	0.64	0.021	12.9	17.0	0.007	2.79	0.0060	(0.005)	(0.002)	0.007	(0.0119)
2	13X NSA3J	0.16	1.07	.	.	0.57	.	12.0	16.1	.	2.8	0.20	.	.	.	.
1	13X 18002D	0.159	0.722	0.0245	0.0487	0.352	0.116	7.92	17.77	0.0514	0.209	0.072	1.531	.	0.0542	.
2	13X 12540L	0.15	0.44	.	.	1.05	.	5.17	27.88	.	0.54	.	.	.	.	.
2	CZ CM-18A	0.143	1.792	0.0182	0.0119	0.903	2.393	20.44	20.59	0.097	2.282	0.0848	.	.	0.113	0.097
1	SS 468/1	0.143	1.70	0.014	0.020	1.41	.	8.90	17.96	0.018	.	.	.	.	.	.
1	SRM C1152a	0.142	0.95	0.023	0.0064	0.64	0.097	10.86	17.76	0.22	0.44	.	.	.	0.033	.
1	VS LG32/5	0.138	0.54	0.0057	0.039	0.185	0.019	7.10	19.75	.	0.110	.	.	0.92	0.317	0.205
1	IARM 289A	0.126	1.67	0.006	0.0019	0.58	0.016	7.12	17.0	0.054	(0.005)	0.0032	0.008	0.028	0.01	0.01
1	IARM 241D	0.125	1.94	(0.003)	0.0023	1.00	0.242	8.98	18.12	0.022	(0.02)	(0.008)	0.028	0.018	0.031	(0.012)
1	DSZU C018	0.125	1.09	0.0268	0.0099	0.53	0.163	9.33	17.54	.	0.189	0.009	.	0.54	0.048	0.066
1	13X NSB3G	0.121	0.632	.	.	0.471	.	9.26	15.22	.	0.630	0.198	.	.	.	.
1	KUT H5	0.12	0.48	0.017	(0.003)	0.70	0.22	0.20	21.8	.	.	.	.	0.03	.	0.10
2	13X 17001B	0.114	1.73	0.080	0.016	0.34	0.037	6.05	14.89	0.15	0.12	0.040	0.76	.	.	.
1	13X 18003C	0.113	1.000	0.0545	0.0245	0.805	0.0433	10.08	19.56	0.100	0.401	0.090	1.042	.	0.0750	.
1	IRSID 1819	0.112	0.903	0.023	0.0112	0.616	0.064	7.10	17.31	0.117	0.110	0.0288	.	.	.	.
1	13X 17002E	0.112	0.801	0.0409	0.0250	0.486	0.1012	7.87	17.45	0.0702	0.204	0.061	0.487	.	0.0587	.
1	NCS HS28743	0.110	0.841	0.024	0.0082	0.780	0.089	18.02	23.71	0.102	0.115	0.057	0.016	(0.003)	0.077	.
1	IMZ 166A	0.108	1.99	0.019	0.005	2.51	0.025	21.93	25.53	0.030	(0.025)	0.077	.	0.003	0.038	.
1	13X 14828A *	0.108	1.53	0.027	0.007	2.17	0.41	11.2	19.4	0.145	0.300	0.037	0.016	.	0.081	0.015
1	VS LG81	0.104	0.29	0.0121	0.0014	0.231	0.088	22.5	11.51	.	1.22	.	0.004	2.93	0.040	0.012
1	VS LG77	0.101	0.34	0.0149	0.0021	0.44	0.116	4.32	15.67	.	0.020	0.054	0.109	.	0.022	0.006
1	IMZ 164	0.100	1.77	0.019	0.002	0.82	0.26	6.75	20.96	0.035	3.48	0.249	0.049	(0.003)	0.053	(0.025)
2	13X 17003A	0.10	0.85	0.037	0.035	0.78	0.08	11.9	11.89	0.07	0.27	.	0.34	.	.	.
1	VS LG73	0.098	1.26	0.019	0.0073	0.570	0.140	17.74	22.60	0.247	0.061	0.0319	.	0.0022	.	0.102
1	KUT S20	0.097	1.50	0.011	0.025	1.80	0.44	18.2	2.06	.	3.15	.	1.22	(0.01)	.	.
1	VS LG80	0.097	0.709	0.025	0.0029	2.15	0.166	19.38	24.7	.	0.086	0.064	.	0.015	0.032	0.029
2	**BS 253**	0.094	0.58	0.018	<0.001	1.81	0.14	10.89	20.68	0.15	0.21	0.146	0.017	0.005	0.050	0.03
1	IARM 234C	0.092	1.93	0.0090	(0.0027)	0.88	3.41	9.00	18.15	0.034	0.012	(0.01)	0.053	0.026	0.055	(0.006)
1	SS 462	0.092	0.74	0.010	0.018	0.46	.	12.53	12.37	.	.	.	.	.	.	.
1	13X 12537T	0.0889	1.116	0.0382	0.0206	1.151	0.248	10.71	20.43	0.1520	3.05	0.048	0.102	0.273	0.0908	.
1	DSZU C015	0.087	0.420	0.0118	0.059	0.214	0.070	12.15	15.36	.	0.89	0.020	.	0.177	0.021	0.023
1	SS 464/1	0.086	0.791	0.020	0.028	0.57	.	20.05	25.39	0.054	.	.	.	.	.	.
1	IMZ 165	0.082	0.98	0.017	0.007	1.42	0.040	19.01	23.28	0.029	0.025	0.105	.	(0.002)	0.042	.
1	SS 467/1	0.082	0.788	0.018	0.019	0.52	.	9.21	18.09	.	.	.	0.99	.	.	.
1	VS LG35/5	0.078	0.81	0.042	0.0094	1.01	0.066	8.23	18.44	.	0.39	.	.	0.73	0.041	0.107
1	13X 17001C	0.0769	1.543	0.055	0.0134	0.215	0.0161	6.31	14.83	0.0979	0.0967	.	0.546	.	.	.
1	KUT S26	0.076	0.99	0.027	0.026	0.67	0.14	3.31	18.9	.	2.59	.	0.07	0.11	.	.
1	NCS HS41750	0.075	1.43	0.031	0.012	0.33	0.276	6.35	16.31	.	0.107	0.058	.	(0.001)	0.064	.

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
1	ECRM 270-1D	0.0742	0.540	0.0196	0.0007	1.517	0.1076	10.86	20.88	0.0685	0.2099	0.1417	.	(0.0019)	0.0256	(0.0244)
1	VS LG78	0.074	1.60	0.017	0.0017	0.58	0.053	35.4	14.71	.	0.061	0.0062	0.004	1.31	0.020	3.16
1	**BS 192**	0.074	0.835	0.025	0.0005	0.387	0.412	7.11	16.44	0.104	0.430	0.0290	0.168	0.076	0.124	0.05
2	BS 83G	0.073	1.66	0.024	0.004	0.56	0.114	19.15	24.50	0.153	0.085	0.026	0.061	(0.003)	0.077	0.007
1	VS LG72	0.072	1.32	.	0.0050	0.334	0.306	12.4	16.36	0.090	2.07	0.0073	.	0.57	.	0.077
1	13X 12534X	0.0716	0.589	0.0192	0.0086	0.811	0.0586	8.50	17.71	0.0602	2.04	.	0.201	0.348	0.110	0.010
1	IARM 316A	0.070	0.61	0.023	0.0011	1.50	0.19	10.81	21.07	0.118	0.250	0.16	(0.003)	(0.002)	0.042	0.022
1	VS LG63	0.068	0.356	0.010	0.0050	0.285	0.024	22.15	10.13	.	1.65	.	0.113	2.98	0.086	0.43
1	KUT S25	0.067	1.90	0.045	0.015	1.49	0.07	13.8	15.6	.	1.77	.	0.07	0.46	.	.
2	CT 305	0.067	1.85	0.025	0.022	0.55	0.29	11.95	18.58	0.22	0.45	.	.	.	0.078	.
1	SRM 1171	0.067	1.81	(0.019)	(0.013)	0.536	0.1205	11.18	17.50	(0.097)	0.167	.	.	0.346	.	(0.012)
1	**BS 9841**	0.067	1.69	0.024	0.024	0.54	0.356	19.55	24.30	0.116	0.57	0.064	0.070	(0.002)	0.070	0.06
1	SS 4657i	0.066	1.380	0.021	0.012	0.405	0.098	9.24	17.31	0.053	0.092	.	.	0.40	0.102	.
1	**BS 192A**	0.066	0.768	0.021	<0.002	0.300	0.334	7.01	16.44	0.114	0.28	0.029	0.208	0.083	0.077	0.048
1	IMZ 152	0.065	1.42	0.010	0.0025	0.52	0.061	9.48	18.04	.	0.017	.	.	.	0.030	.
1	13X 12853L *	0.065	1.15	0.007	0.006	0.95	0.09	12.2	17.1	0.04	2.7	0.008	0.19	0.042	.	0.09
1	VS LG71	0.064	1.33	0.032	0.0072	0.602	0.204	10.40	17.63	0.188	0.161	.	.	0.473	.	0.048
1	IARM 7C	0.064	1.32	0.014	0.0004	1.21	0.031	34.9	18.4	0.041	0.095	0.034	0.189	0.022	0.060	(0.02)
2	CT 304	0.063	0.78	0.026	0.023	0.56	0.34	9.60	18.57	0.20	0.33	.	0.043	.	0.037	.
2	BS 82E	0.062	1.61	0.027	0.001	0.58	0.26	12.49	22.38	0.12	0.31	0.072	0.062	0.003	0.064	0.041
1	13X 31008A	0.062	1.232	0.030	0.0040	0.510	0.157	19.35	24.45	0.078	0.337	0.063	0.012	.	0.079	0.166
1	KUT H7/1	0.062	0.35	0.018	0.022	0.42	0.085	0.10	9.07	.	.	.	.	0.21	.	0.15
2	CT 316	0.061	1.64	0.029	0.023	0.69	0.25	12.61	17.60	0.14	2.45	.	.	.	0.051	.
1	VS LG36/5	0.060	1.97	0.017	0.027	0.70	0.085	12.6	14.95	.	0.197	.	.	0.39	0.156	0.056
2	CT X52353	0.060	0.90	0.022	0.008	0.56	0.28	11.94	17.46	0.28	0.34	.	.	.	0.053	.
2	13X NSB2D	0.06	0.62	.	.	0.66	.	11.1	18.2	.	0.21	0.095	.	.	.	.
1	**BS 9842**	0.059	1.50	0.025	0.0016	0.99	0.147	20.02	24.19	0.237	0.111	0.037	0.026	0.003	0.075	0.011
2	BS 82D	0.058	1.85	0.020	0.009	0.63	0.16	14.12	22.40	0.042	0.144	0.070	0.053	0.005	0.087	0.028
1	13X 30908A	0.0560	1.638	0.0267	0.0011	0.320	0.269	12.05	22.51	0.120	0.221	0.0652	0.0142	.	0.128	.
1	SRM 1172	0.056	1.7	0.025	0.01	0.59	0.10	11.3	17.4	0.12	0.22	.	0.65	.	.	.
1	VS LG82	0.056	0.308	0.023	0.0027	0.69	2.89	27.3	23.2	.	2.95	0.0076	0.037	0.85	0.050	0.116
1	IARM 3E	0.0553	1.62	0.0259	0.0009	0.307	0.259	11.99	22.47	0.120	0.215	0.063	0.014	0.0022	0.126	0.018
2	BS 87F	0.055	1.64	0.024	0.025	0.67	0.28	10.12	17.30	0.17	0.29	0.037	0.57	0.004	0.13	0.050
1	13X 19001B	0.055	0.460	0.0151	0.0174	1.20	0.202	5.10	15.07	0.025	1.51	.	0.032	.	0.083	.
2	BS 86F	0.054	1.30	0.021	0.0011	1.22	0.23	34.99	18.74	0.098	0.24	0.035	0.19	(0.006)	0.061	(0.03)
1	DSZU C017	0.053	2.03	0.040	0.0298	0.61	0.36	10.85	19.21	.	2.36	0.018	.	0.32	0.084	0.20
2	BS 347B	0.051	1.57	0.028	0.026	0.51	0.15	9.16	17.24	0.05	0.38	0.056	0.71	(0.002)	0.04	(0.005)
2	BS 347A	0.051	1.50	0.026	0.020	0.54	0.31	9.20	17.44	0.054	0.326	0.044	0.79	(0.002)	0.10	(0.03)
1	IARM 2H	0.050	1.86	0.0320	0.0278	0.248	0.437	8.23	18.28	0.130	0.264	0.080	0.0099	0.0019	0.066	0.022
2	BS 188A	0.050	0.139	0.015	0.0049	0.15	0.099	24.61	14.04	0.18	1.10	0.0029	0.050	2.21	0.24	0.055

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W

STAINLESS STEEL WITH C > 0.05 % CONTINUED FROM THE PREVIOUS PAGE

Number	Al	As	B	Bi	Ca	Ce	O	Pb	Sb	Sn	Ta	Zr	Units
KUT S24	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
VS LG76	0.034	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
VS LG74	0.035	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
KUT S21	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
CZ CM-19A	0.0788	.	(0.091)	.	(0.0036)	.	.	.	.	0.0283	.	.	~37 mm Ø x ~25 mm
VS LG79	0.059	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
CZ SP-3C	0.095	(0.03)	1.67	.	.	.	.	.	.	(0.02)	.	.	~39 mm Ø x 25 mm
DSZU C016	0.007	.	.	.	0.0004	.	.	.	.	.	.	.	40 mm Ø x 25 mm
CZ SP-3B	0.08	.	0.88	.	.	.	.	.	.	0.01	.	.	~39 mm Ø x 25 mm
KUT S19	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
SRM C1153a	.	.	.	.	.	.	.	0.006	.	.	.	.	32 mm Ø x 19 mm
VS LG34/5	0.029	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~25 mm
13X 18001B	0.0157	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
KUT H6/1	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
CZ SP-3D	0.037	(0.03)	2.45	.	.	.	.	.	.	(0.04)	.	.	~39 mm Ø x 25 mm
13X NSB1D	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
IARM 339A	0.004	(0.001)	0.0006	.	0.0014	.	0.016	.	.	(0.002)	(0.005)	(0.003)	31 mm Ø x 2 or 18 mm
13X NSA3J	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
13X 18002D	0.0617	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 12540L	.	.	.	.	.	.	.	.	.	.	last of stock		40 mm Ø x 15 mm
CZ CM-18A	0.0344	.	.	.	.	.	.	.	.	.	.	.	~37 mm Ø x ~25 mm
SS 468/1	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SRM C1152a	.	.	.	.	.	.	.	0.0047	.	.	.	.	32 mm Ø x 19 mm
VS LG32/5	0.156	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~25 mm
IARM 289A	0.01	.	0.0003	.	.	.	0.0104	.	.	(0.002)	<0.005	.	31 mm Ø x 2 mm
IARM 241D	0.022	(0.001)	0.0016	.	(0.0012)	.	(0.005)	(0.0003)	.	(0.0022)	(0.007)	(0.005)	31 mm Ø x 2 or 18 mm
DSZU C018	0.086	.	.	.	0.0003	.	.	.	.	.	.	.	40 mm Ø x 25 mm
13X NSB3G	.	.	.	.	.	.	.	0.006	.	.	.	.	42 mm Ø x 15 mm
KUT H5	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
13X 17001B	0.01	.	0.008	.	.	.	.	.	.	0.030	.	.	~40 mm Ø x ~15 mm last
13X 18003C	0.0292	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IRSID 1819	.	.	(0.0004)	.	.	.	.	.	.	.	.	.	47 mm x 47 mm x 30 mm
13X 17002E	(0.030)	.	0.0012	.	.	.	.	.	.	.	(0.012)	.	~40 mm Ø x ~15 mm
NCS HS28743	0.0056	0.0042	.	.	.	.	.	0.0004	.	0.0025	.	.	38 mm Ø x 35 mm
IMZ 166A	0.036	(0.0026)	.	.	.	.	.	.	.	(0.0035)	.	.	40 mm Ø x 40 mm
13X 14828A *	0.008	* Provisional Analysis			0.001	.	.	.	.	0.012	.	.	~40 mm Ø x ~15 mm
VS LG81	0.409	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
VS LG77	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IMZ 164	0.040	(0.005)	.	.	.	.	.	(0.002)	.	(0.003)	.	.	40 mm Ø x 40 mm
13X 17003A	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
VS LG73	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
KUT S20	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
VS LG80	0.025	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
BS 253	0.016	0.005	.	.	.	0.044	.	.	.	0.006	**25(pre-17025)**		38 mm Ø X ~7 or 19+ mm
IARM 234C	0.035	(0.001)	0.0023	.	(0.0017)	.	(0.005)	(0.001)	.	0.0017	(0.003)	(0.006)	31 mm Ø x 2 or 18 mm
SS 462	.	0.007	.	.	.	.	.	0.0005	.	.	.	.	38 mm Ø x 19 mm
13X 12537T	(0.062)	.	0.0029	.	.	.	.	.	.	0.0401	0.0194	.	~40 mm Ø x ~15 mm
DSZU C015	(0.008)	.	.	.	0.0017	.	.	.	.	.	.	.	40 mm Ø x 25 mm
SS 464/1	.	(0.003)	.	.	.	.	.	0.0004	.	.	.	.	38 mm Ø x 19 mm
IMZ 165	0.038	(0.003)	.	.	.	.	.	(0.001)	.	0.003	.	.	40 mm Ø x 40 mm
SS 467/1	.	0.004	.	.	.	.	.	0.004	.	.	0.0017	.	38 mm Ø x 19 mm
VS LG35/5	0.087	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~25 mm
13X 17001C	0.0312	.	0.0085	.	.	.	.	.	.	.	0.0124	.	~40 mm Ø x ~15 mm
KUT S26	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
NCS HS41750	0.009	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm

Number	Al	As	B	Bi	Ca	Ce	O	Pb	Sb	Sn	Ta	Zr	Units
ECRM 270-1D	(0.0023)	(0.0034)	Ce: 0.0487	La: 0.0154	.	.	.	.	(0.0007)	(0.0035)	.	(0.002)	38 mm Ø x 25 mm
VS LG78	0.15	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
BS 192	1.17	(0.005)	(0.0003)	.	0.0007	.	0.0014	**25(pre-17025)**		0.008	(0.001)	.	38 mm Ø x ~7 or 19+ mm
BS 83G	(0.004)	.	(0.001)	.	.	.	0.0064	.	.	0.003	.	.	38 mm Ø x ~7 or 19+ mm
VS LG72	0.089	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
13X 12534X	0.0485	.	.	.	.	.	.	.	.	.	0.031	.	~40 mm Ø x ~15 mm
IARM 316A	0.006	0.007	(0.0003)	.	0.0017	0.064	0.0052	(0.0001)	.	0.006	(0.003)	.	31 mm Ø x 2 or 18 mm
VS LG63	0.45	.	.	.	.	.	.	.	.	.	.	.	~47 mm Ø x ~30 mm
KUT S25	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
CT 305	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm
SRM 1171	.	.	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 19 mm
BS 9841	(<0.006)	(0.003)	0.0026	**25(pre-17025)**	.	(0.011)	(0.001)	(0.006)	0.006	.	(0.002)		44 mm Ø x ~7 or 19+ mm
SS 4657/1	0.026	.	0.0006	.	.	.	(<0.001)	.	.	.	.		38 mm Ø x 19 mm
BS 192A	0.98	(0.0035)	(0.0003)	.	(0.0006)	.	(0.0006)	.	.	0.008	**25(pre-17025)**		38 mm Ø x ~7 or 19+ mm
IMZ 152	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
13X 12853L *	0.17	.	0.002	* Provisional Analysis		.	.	.	.	.	0.03	.	~40 mm Ø x ~15 mm
VS LG71	0.072	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IARM 7C	0.017	.	0.0027	.	.	.	0.0021	(0.0001)	.	0.0020	(0.002)	(0.001)	31 mm Ø x 2 or 18 mm Mg:15ppm
CT 304	.	.	.	.	.	.	.	<0.001	.	0.017	.	.	30-35 mm Ø x ~16 mm Ag: 7ppm
BS 82E	0.006	.	0.0024	.	0.0014	.	.	.	.	0.006	.	.	38 mm Ø x ~7 or 19+ mm
13X 31008A	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
KUT H7/1	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
CT 316	.	.	.	.	.	.	.	0.001	.	0.006	.	.	30-35 mm Ø x ~19 mm Ag: 5ppm
VS LG36/5	0.080	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~25 mm
CT X52353	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm last
13X NSB2D	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
BS 9842	0.014	(0.002)	0.0025	.	0.0010	.	(0.0044)	.	.	0.005	**25(pre-17025)**		38 mm Ø x ~7 or 19+ mm
BS 82D	(0.002)	.	0.0040	.	0.0007	.	0.007	.	.	0.004	.	last	38 mm Ø x ~7 or ~11 mm
13X 30908A	0.0035	.	0.0027	.	(0.0005)	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
SRM 1172	.	.	.	.	.	.	.	.	.	.	<0.001	.	32 mm Ø x 19 mm
VS LG82	0.076	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
IARM 3E	0.0045	(0.005)	(0.0005)	.	0.0015	.	0.0048	(0.0003)	(0.0013)	0.007	(0.005)	0.0018	31 mm Ø x 2 or 18 mm
BS 87F	0.004	0.005	(0.0006)	.	0.0007	.	0.005	.	.	0.004	.	.	41 mm Ø x ~7 or 19+ mm
13X 19001B	.	.	.	.	.	.	.	.	.	.	(0.019)	.	40 mm Ø x 15 mm
BS 86F	(0.007)	(0.003)	0.0026	.	(0.001)	.	.	(0.001)	.	0.004	.	.	44 mm Ø x ~7 or 19+ mm
DSZU C017	0.28	.	.	.	0.0031	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS 347B	0.002	(0.003)	0.0036	.	(0.0005)	.	0.005	.	.	0.006	(<0.004)	.	38 mm Ø x ~7 or 19+ mm
BS 347A	(0.002)	(0.003)	(0.0004)	.	(0.0002)	.	0.0047	.	.	0.007	(<0.004)	.	38 mm Ø x 19+ mm
IARM 2H	0.0034	0.007	0.0005	.	(0.0021)	.	0.007	.	(0.0018)	0.011	0.006	(0.003)	31 mm Ø x 2 or 18 mm
BS 188A	0.19	.	0.0065	.	.	.	0.0012	<0.001	.	0.002	.	.	38 mm Ø x ~7 mm last of stock

Number	Al	As	B	Bi	Ca	Ce	O	Pb	Sb	Sn	Ta	Zr	Units

STAINLESS STEEL WITH C < 0.05 % CONTINUED ON THE NEXT PAGE

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties analysis listed in mass %

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
1	ECRM 269-1D	0.0499	1.262	0.0313	0.0010	0.441	0.366	8.044	18.150	0.1116	0.397	0.0460	0.0242	0.0006	0.0991	0.0306
1	IARM 8H *	0.049	1.81	0.0250	(0.002)	0.40	0.192	9.08	17.14	0.083	0.237	0.027	0.48	0.0027	0.049	(0.016)
1	IARM 6i	0.049	1.76	0.0208	(0.023)	0.31	0.202	9.20	17.76	0.052	0.133	(0.013)	(0.018)	0.60	0.048	(0.023)
1	IARM 5i	0.049	1.443	0.0279	0.033	0.433	0.487	10.04	16.67	0.185	2.027	0.048	0.0133	0.0025	0.064	0.182
1	ECRM 289-1D	0.0489	1.016	0.0114	0.0027	0.531	.	24.68	14.63	0.065	1.102	.	.	2.01	0.260	.
1	IMZ 150A	0.048	1.35	0.0064	0.0095	0.59	0.090	12.75	18.89	0.125	0.12	.	0.0026	0.021	(0.027)	0.11
1	IARM 4F	0.047	1.17	0.0195	0.0015	0.494	0.146	20.1	24.5	0.067	0.142	0.056	0.007	0.0031	0.146	0.012
1	13X 32100A	0.0463	1.52	0.0298	0.0011	0.498	0.415	9.32	17.39	0.105	0.282	0.0115	0.0191	0.376	0.106	0.021
1	**BS 188B**	0.046	0.247	0.016	(0.0007)	0.266	0.120	24.81	14.32	0.274	1.30	0.0021	0.099	2.20	0.264	0.043
1	IARM 4G	0.0454	1.36	0.027	0.0008	0.630	0.320	19.2	24.9	0.085	0.580	0.058	0.008	0.029	0.092	0.017
1	IARM 6J	0.045	1.52	0.028	(0.002)	0.62	0.383	9.00	17.74	0.191	0.387	0.0109	0.010	0.34	0.081	0.026
1	**BS 303**	0.044	1.80	0.028	0.326	0.415	0.627	8.17	17.23	0.071	0.410	0.023	0.008	0.017	0.056	0.023
1	IARM 4E	0.044	1.07	0.0224	0.0006	0.514	0.234	20.18	24.25	0.066	0.32	0.038	0.024	(0.003)	0.052	0.046
3	CZ SL-3A	0.043	1.73	0.024	0.002	0.53	0.22	19.6	24.6	0.06	0.38	0.065	0.013	0.003	0.066	0.03
1	KUT S15	0.043	0.38	(0.02)	0.013	0.26	1.54	3.90	16.7	.	2.46	.	0.64	.	.	.
1	IARM 8i	0.0424	1.395	0.0352	0.0118	0.38	0.441	9.01	17.08	0.301	0.416	0.052	0.60	(0.008)	0.057	0.060
1	13X 14216P	0.0424	0.663	0.0048	0.0070	1.566	0.231	12.06	23.44	0.248	0.209	0.0152	0.248	.	0.0722	2.25
1	IARM 8G	0.042	1.468	0.0327	0.0126	0.36	0.390	9.02	17.20	0.162	0.359	0.046	0.53	0.0024	0.062	0.032
1	VS LG70	0.042	0.834	0.042	0.0020	0.382	0.062	9.17	17.10	0.209	0.096	0.0134	.	0.305	.	0.0053
1	NILAB 500HA D	0.041	1.541	0.024	0.012	0.720	0.182	11.00	16.93	0.139	2.73	0.1154	0.023	.	0.074	.
1	13X 12538J	0.04	0.78	.	.	0.64	.	6.07	23.72	.	1.53	.	.	.	.	.
1	NCS HS41751	0.039	1.81	0.035	0.200	0.353	0.124	8.12	17.22	.	0.044	0.064	.	(0.001)	0.121	.
1	NCS HS28741	0.039	1.07	0.037	0.016	0.425	0.399	8.19	18.31	0.208	0.027	0.069	.	(0.002)	0.106	.
2	BS 321C	0.037	1.72	0.025	0.022	0.58	0.28	10.58	17.16	0.048	0.30	0.0082	0.008	0.38	0.079	(0.03)
1	IRSID 1821	0.037	1.72	(0.025)	(0.004)	0.542	0.058	10.42	17.04	0.266	2.04	0.0125	.	0.297	.	.
1	13X 14207L *	0.037	0.58	0.006	0.005	1.4	0.18	12.3	19.6	0.01	0.57	0.010	0.26	.	.	3.0
1	ECRM 292-1D	0.0367	1.744	0.0175	0.0055	0.402	0.0391	10.09	18.00	0.0255	0.0464	0.0640	0.571	.	.	.
1	13X 66286A	0.036	1.172	0.0173	(0.0006)	0.216	0.195	25.21	15.00	0.083	1.190	0.0040	.	1.92	0.264	0.098
2	BS 184A	0.035	0.06	0.007	0.001	0.080	0.041	8.34	12.66	0.036	2.20	0.0045	(0.006)	0.051	0.014	0.032
1	IARM 21C	0.035	0.051	0.007	0.0038	0.042	0.047	8.18	12.39	0.021	2.11	0.0045	0.007	0.012	0.013	(0.01)
1	SS 462/1	0.0345	0.722	0.0053	0.0041	0.463	0.0112	12.85	11.888	.	0.0304	.	.	.	.	.
1	SRM C1151a	0.034	2.37	0.017	0.038	0.29	0.385	7.25	22.59	0.033	0.79	.	.	.	0.040	.
1	B13X 314400A *	0.033	1.60	0.025	0.0005	2.28	0.21	18.8	24.3	0.133	0.24	0.029	0.02	.	0.095	0.013
1	**BS 9812**	0.031	0.485	0.018	0.004	0.43	1.65	6.61	14.82	0.110	0.76	0.0195	0.645	(0.005)	0.088	0.025
1	IMZ 153A	0.030	1.49	0.021	0.0073	0.13	0.102	13.56	16.45	0.015	2.61	0.107	0.034	0.036	0.020	.
2	HRT FE2014-H	0.027	1.91	0.023	(0.002)	0.39	0.25	9.92	17.16	.	0.41	(0.018)	.	0.31	.	.
2	BS 317L	0.027	1.17	0.029	0.0014	0.67	0.23	13.53	18.16	0.14	3.07	0.056	0.031	.	0.09	0.018
1	VS LG75	0.027	0.728	0.0046	0.0026	0.298	0.029	24.5	14.80	0.190	0.052	0.0044	.	1.76	.	4.14
1	**BS 9811**	0.027	0.380	0.016	0.0010	0.36	1.63	6.55	14.87	0.055	0.744	0.0196	0.62	(0.003)	0.086	0.013
1	SRM 1155a	0.0260	1.593	0.0271	(0.0020)	0.521	0.2431	12.471	17.803	0.225	2.188	(0.0428)	0.0082	0.0039	0.0725	0.0809

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
2	HRT FE2013-H	0.026	0.61	0.022	0.005	0.38	0.13	6.20	25.71	.	3.63	0.28	.	.	0.05	.
1	13X 32900A	0.0251	1.478	0.0276	0.0269	0.556	0.354	5.57	24.91	0.0724	1.310	0.097	.	0.0139	0.0938	0.017
1	13X NSA8A	0.0240	0.656	0.0216	0.0008	(0.40)	0.903	6.29	25.93	0.0374	3.60	0.239	(0.004)	.	0.060	0.586
1	IARM 162D	0.0240	1.82	0.0296	0.0271	0.570	0.52	8.15	18.31	0.074	0.573	0.097	0.0090	0.013	0.063	0.028
1	IARM 153C	0.0225	1.60	0.0289	0.0288	0.349	0.442	11.10	18.22	0.251	3.00	0.086	0.015	0.004	0.058	0.043
1	ECRM 297-1D	0.0223	0.897	0.0137	0.0101	0.344	0.204	12.33	18.37	0.0413	0.290	0.0152	(0.0089)	0.0072	0.0535	(0.0057)
1	NCS HS28746	0.021	1.87	0.031	0.0009	0.510	0.340	8.24	17.19	0.191	0.069	0.011	.	0.184	0.096	.
1	**BS 9942**	0.021	1.84	0.025	0.006	0.49	0.305	13.55	18.21	0.086	3.30	0.071	0.005	(0.002)	0.072	0.032
1	**BS 9941**	0.021	1.78	0.027	0.024	0.33	0.424	13.68	18.48	0.178	3.24	0.036	0.015	(0.002)	0.062	0.068
1	IRSID I820	0.021	1.61	(0.021)	0.0079	0.428	0.045	9.07	19.51	0.151	0.115	0.064	.	.	.	.
1	NCS HS28742	0.021	0.940	0.034	0.0028	0.414	0.043	8.11	18.2	0.216	0.025	0.059	.	0.006	0.089	.
1	IARM 301B	0.0206	0.807	0.0251	0.0010	0.419	0.192	7.01	25.06	0.055	3.75	0.297	0.020	(0.003)	0.070	0.050
1	13X 30403A	0.0200	1.495	0.029	0.025	0.288	0.217	7.93	18.27	0.101	0.193	0.081	(0.019)	.	0.113	0.018
1	13X NSA9A	0.020	1.593	0.0246	(0.0008)	0.476	0.242	5.46	22.59	0.071	3.10	0.156	0.012	.	0.070	(0.024)
1	SS 463/1	0.019	1.400	0.025	0.019	0.270	0.276	10.20	18.46	0.116	0.265	0.063	.	.	.	.
1	**BS 2205**	0.0199	1.029	0.0227	0.0005	0.564	0.196	5.27	22.92	0.041	3.26	0.169	0.0052	0.0019	0.0560	0.0309
1	I3X NSA12A	0.0192	1.272	0.0267	0.0007	0.492	1.485	24.84	19.63	0.090	4.20	0.0662	0.0088	.	0.0660	0.047
1	**BS 304A**	0.019	1.706	0.0402	0.0188	0.56	0.548	8.20	18.17	0.126	0.28	0.072	0.014	(0.0005)	0.067	0.042
1	IARM 212D	0.019	1.21	0.024	0.0007	0.34	0.125	5.53	22.60	0.049	3.27	0.182	(0.009)	(0.002)	0.063	0.014
1	I13X NSA13A *	0.019	0.75	0.025	0.0005	0.24	0.155	6.75	25.35	0.033	3.70	0.275	0.025	.	0.072	0.030
1	**BS 316D**	0.0185	1.400	0.0294	0.0189	0.278	0.409	10.38	16.76	0.294	2.05	0.042	0.0277	(0.002)	0.074	0.072
1	**BS 316E**	0.0183	1.413	0.0295	0.0214	0.268	0.408	10.43	16.70	0.287	2.06	0.042	0.0282	(0.002)	0.074	0.067
1	IARM 162C	0.0181	1.45	0.032	0.024	0.25	0.44	8.68	18.07	0.158	0.34	0.074	0.011	0.0012	0.076	0.043
1	13X FV520BA	0.0181	0.655	0.0221	0.0016	0.342	1.462	5.29	13.73	0.030	1.334	0.0197	0.301	.	0.080	0.020
2	HRT FE2000-H	0.018	2.02	0.022	(0.003)	0.36	0.15	5.98	22.15	0.048	3.27	0.20	0.010	0.005	0.042	0.063
1	**BS 304**	0.018	1.775	0.039	0.0214	0.451	0.474	8.20	18.01	0.153	0.237	0.063	0.0054	(0.0004)	0.087	0.040
1	VS LG33/5	0.018	1.32	0.025	0.016	0.44	0.167	10.40	16.26	.	0.045	.	.	0.21	0.101	0.158
1	NCS HS28745	0.018	1.17	0.042	0.0057	0.317	0.334	10.34	16.61	0.185	2.05	0.070	.	(0.002)	0.070	.
1	**BS 304B**	0.017	1.72	0.022	0.023	0.540	0.257	8.68	18.3	0.220	0.42	0.081	0.074	(0.0018)	0.097	(0.01)
1	EIARM 239C *	0.017	0.87	0.023	(0.0010)	0.38	1.49	6.14	25.8	0.039	3.33	0.228	(0.006)	(0.004)	0.083	(0.05)
1	**BS 179C**	0.0164	0.878	0.0236	0.0003	0.373	1.53	6.10	25.9	0.0386	3.34	0.236	0.009	(0.0005)	0.080	0.056
1	**BS 179B**	0.0161	0.890	0.0243	0.0002	0.371	1.56	6.17	25.9	0.0394	3.34	0.239	0.008	(0.0008)	0.079	0.053
1	ECRM 287-1D	0.016	1.48	0.027	0.0014	0.569	0.203	10.35	18.61	0.148	0.247	0.019	.	.	.	.
1	13X 34700A	0.016	1.290	0.028	(0.0006)	0.483	0.163	9.38	17.19	0.131	0.393	0.0166	0.330	.	0.123	0.146
1	13X NSA11A	0.0159	0.640	0.0186	<0.001	0.275	0.187	23.89	20.18	0.0981	6.16	0.203	0.150	.	0.0513	0.038
3	CZ SL-2A	0.015	1.84	0.025	0.027	0.64	0.50	11.0	16.9	0.09	2.03	0.04	.	0.06	0.075	0.03
1	IARM 319A	0.015	0.53	0.024	0.0006	0.23	0.51	6.92	25.2	0.051	3.56	0.240	(0.006)	(0.003)	0.076	0.52
1	ECRM 298-1D	0.0146	0.398	0.0198	0.0006	0.262	0.201	7.056	24.72	0.055	3.799	0.263	.	0.0014	0.0607	.
1	SS 466/2	0.0141	1.311	0.0105	0.0069	0.480	0.0278	10.20	17.84	0.0184	2.776	0.0508	.	.	0.0346	.
2	BS SS3951	0.014	1.56	0.023	0.031	0.61	0.22	9.18	18.17	0.16	0.303	0.077	0.085	(0.002)	0.067	0.040
1	IARM 163E *	0.014	1.48	0.028	0.031	0.530	0.47	10.17	16.74	0.115	2.05	0.061	0.034	(0.020)	0.063	0.035
2	HRT FE2016-H	0.011	1.83	0.023	0.007	0.35	0.21	11.33	16.85	.	2.03	0.073	.	.	0.061	.
1	SS 461/1	0.0103	0.686	0.0053	0.0051	0.374	0.0091	6.124	14.727	(0.004)	0.0138	.	.	.	.	.
2	BS SS1961	0.009	0.049	0.008	0.0038	0.056	2.11	8.31	11.61	0.036	0.020	0.0025	0.26	1.16	0.074	(0.01)
1	JK 27B	0.0089	1.510	0.0298	0.0207	0.401	0.265	12.56	17.36	0.142	2.510	0.0630	.	.	0.057	0.031
2	BS SS1962	0.008	0.06	0.006	0.0025	0.06	2.22	8.32	11.42	(0.015)	0.008	0.0025	0.27	1.11	0.071	(<0.02)
1	IARM 354A	0.0076	(0.012)	(0.0029)	(0.0019)	(0.04)	(0.018)	11.05	11.61	0.022	0.95	0.0018	(0.02)	1.56	(0.02)	(0.02)
2	CT ISO123A	0.003	0.035	0.007	<0.0005	0.031	0.010	11.10	11.67	0.016	0.92	0.003	<0.001	1.58	0.014	.
1	I13X 46500A *	0.003	0.005	0.002	0.001	0.075	0.039	10.9	11.7	0.008	0.94	0.003	0.005	1.53	0.006	.
1	ECRM 284-3D	0.0025	0.0615	0.0049	0.0066	0.0442	0.0105	12.09	17.37	0.0366	2.236	0.0418	.	0.0050	.	0.0039

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W

RM TRACE ELEMENTS IN STAINLESS STEEL

certified analysis | informational analysis | 40 mm Ø x 20 mm

Number	As	Pb	Sb	Sn	Zn	C	Mn	P	Si	Cu	Ni	Cr	Mo	N	B	Ca	Ti	V
DSZU C25	0.093	0.038	0.094	0.095	0.034	0.3	0.1	0.02	0.3	0.7	1.6	13	0.1	0.10	0.03	0.004	.	0.03
DSZU C35	0.064	0.086	0.058	0.064	0.058	0.1	1.1	0.03	0.3	0.5	11	16	1.4	0.02	0.002	0.001	0.05	.
DSZU C22	0.051	0.023	0.050	0.051	0.019	0.4	0.1	0.02	0.2	0.5	1.5	13	0.1	0.04	0.03	0.002	.	0.03
DSZU C34	0.042	0.015	0.033	0.039	0.041	0.1	1.0	0.03	0.3	0.4	12	16	1.1	0.11	0.005	0.001	0.05	.
DSZU C33	0.021	0.0046	0.015	0.020	0.019	0.1	1.1	0.03	1.0	0.3	16	17	1.2	0.14	0.02	0.0004	0.05	.
DSZU C24	0.014	0.0017	0.010	0.011	0.0035	0.4	0.1	0.02	0.2	0.3	1.5	13	0.1	0.12	0.007	0.003	.	0.03
DSZU C31	0.012	0.0017	0.007	0.010	0.028	0.1	1.4	0.03	0.8	0.2	10	17	0.8	0.04	0.02	0.008	0.05	.
DSZU C23	0.008	0.0008	0.006	0.010	0.0028	0.4	0.1	0.02	0.3	0.2	1.4	13	0.1	0.10	0.004	0.002	.	0.03
DSZU C32	0.008	0.0005	0.0015	0.006	0.015	0.1	1.2	0.03	0.6	0.2	11	17	1.0	0.04	0.02	0.005	0.05	.
DSZU C21	0.005	0.0002	0.0011	0.003	0.0026	0.4	0.1	0.02	0.3	0.2	1.2	13	0.1	0.03	0.002	0.001	.	0.03

STAINLESS STEEL WITH C < 0.05 % CONTINUED FROM THE PREVIOUS PAGE

analysis listed in mass %

Number	Al	As	B	Ca	O	Pb	Sb	Sn	Ta	Units
ECRM 269-1D	.	0.0061	.	.	.	.	.	0.0099	.	35 mm Ø x 25 mm
IARM 8H *	(0.005)	.	(0.0002)	* Provisional Analysis			.	(0.008)	(0.01)	31 mm Ø x 2 or 18 mm
IARM 6i	0.084	(0.005)	0.0034	(0.0004)	0.0012	.	.	(0.0060)	.	31 mm Ø x 2 or 18 mm
IARM 5i	0.004	0.006	0.0006	(0.0016)	0.0057	(0.0001)	(0.0019)	0.0077	(0.005)	31 mm Ø x 2 or 18 mm
ECRM 289-1D	0.199	.	0.0044	.	.	.	.	0.111	.	38 mm Ø x 30 mm
IMZ 150A	0.022	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
IARM 4F	0.015	(0.003)	(0.0012)	(0.002)	(0.004)	.	(0.001)	(0.005)	(0.007)	31 mm Ø x 2 or 18 mm
13X 32100A	0.0247	.	0.0025	.	.	.	.	0.0115	.	~38 mm Ø x ~15 mm
BS 188B	0.168	0.0045	0.0047	(0.00003)	0.0006	(0.0001)	(0.0006)	0.0051	.	38 mm Ø x ~7 or 19+ mm Fe: 55.8 **17025**
IARM 4G	0.008	(0.005)	0.0032	(0.001)	(0.003)	(0.0005)	(0.001)	0.008	(0.008)	31 mm Ø x 2 or 18 mm
IARM 6J	0.0195	.	0.0024	.	(0.001)	.	.	(0.009)	(0.01)	31 mm Ø x 2 or 18 mm
BS 303	0.0019	.	0.0013	(0.0015)	0.0058	.	(0.002)	0.0091	.	44 mm Ø x ~7 or 19+ mm **17025** Fe:[70.7]
IARM 4E	0.004	(0.005)	0.0011	.	0.0021	.	.	0.0060	0.005	31 mm Ø x 2 or 18 mm
CZ SL-3A	0.007	.	0.002	.	.	.	.	0.006	.	~39 mm Ø x 25 mm
KUT S15	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
IARM 8i	(0.0030)	.	(0.0005)	.	(0.004)	.	.	(0.012)	.	31 mm Ø x 2 or 18 mm
13X 14216P	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
IARM 8G	0.0030	(0.007)	(0.0005)	(0.0005)	(0.003)	.	.	0.0107	(0.004)	31 mm Ø x 2 or 18 mm
VS LG70	0.029	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
NILAB 500HA D	.	.	.	.	.	.	.	.	.	38 mm Ø x 20 mm
13X 12538J	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
NCS HS41751	(0.004)	.	.	.	.	(0.001)	.	.	.	38 mm Ø x 35 mm
NCS HS28741	.	0.0035	.	.	.	0.0001	.	0.0051	.	38 mm Ø x 35 mm
BS 321C	0.044	(0.004)	(0.0005)	(0.0001)	(0.0011)	.	.	0.006	.	38 mm Ø x ~7, ~11, or 12 mm last
IRSID 1821	.	.	.	.	.	.	.	.	.	47 mm x 47 mm x 30 mm
13X 14207L *	* Provisional Analysis		.	.	.	.	.	.	0.08	~40 mm Ø x ~15 mm
ECRM 292-1D	(0.002)	(0.008)	.	(0.0006)	.	.	.	.	(0.001)	38 mm Ø x 25 or 30 mm
13X 66286A	0.193	.	0.0044	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 184A	1.00	.	(0.0004)	(0.0003)	(0.0003)	.	.	(0.002)	(0.002)	38 mm Ø x ~7 or 19+ mm
IARM 21C	1.07	.	0.0004	.	0.0004	.	.	0.005	(0.002)	31 mm Ø x 2 or 18 mm
SS 462/1	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
SRM C1151a	.	.	.	.	.	0.0039	.	.	.	32 mm Ø x 19 mm
13X 31400A *	0.021	.	.	0.0025	* Provisional Analysis		.	.	.	~40 mm Ø x ~15 mm
BS 9812	(0.002)	(0.005)	(0.0003)	0.0012	(0.007)	.	.	0.004	.	50 mm Ø x ~7 or 19+ mm **25(pre-17025)**
IMZ 153A	0.036	.	.	.	.	.	.	.	.	38 mm Ø x 20 mm
HRT FE2014-H	.	.	.	.	.	.	.	.	.	35mm Ø x 20 mm
BS 317L	(0.005)	(0.003)	0.0013	(0.001)	0.007	.	.	0.005	.	37 mm Ø x ~7 or 19+ mm
VS LG75	0.113	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 mm
BS 9811	(0.003)	(0.003)	(0.0003)	0.0014	(0.0060)	.	.	0.004	.	38 mm Ø x ~7 or 19+ mm **25(pre-17025)**
SRM 1155a	<0.01	(0.007)	(0.002)	.	(0.003)	<0.005	.	(0.0069)	.	32 mm Ø x 19 mm

Number	Al	As	B	Ca	O	Pb	Sb	Sn	Ta	Units
HRT FE2013-H	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm last of stock
13X 32900A	0.007	.	0.0028	0.0033	.	.	.	.	.	~40 mm Ø x ~15 mm
13X NSA8A	.	.	.	.	.	.	.	.	.	~44 mm Ø x ~15 mm
IARM 162D	(0.0026)	0.0072	0.0027	(0.003)	0.005	.	(0.0019)	0.0102	(0.005)	31 mm Ø x 2 or 18 mm
IARM 153C	(0.003)	0.0061	0.0009	(0.0026)	0.006	(0.001)	(0.002)	0.010	(0.006)	31 mm Ø x 2 or 18 mm
ECRM 297-1D	0.0195	0.0040	1.146	(0.0002)	.	.	.	.	.	40 mm Ø x 30 mm
NCS HS28746	0.086	0.0032	.	.	.	0.0002	.	0.0065	.	38 mm Ø x 35 mm
BS 9942	0.004	(0.004)	0.0014	0.0014	(0.0023)	.	.	0.006	.	44 mm Ø x ~7 or 19+ mm **25(pre-17025)**
BS 9941	0.004	(0.010)	0.0025	(0.0003)	(0.0058)	.	.	0.007	.	38 mm Ø x ~7 or 19+ mm **25(pre-17025)**
IRSID I820	.	.	(0.0013)	.	.	.	.	.	.	47 mm x 47 mm x 30 mm
NCS HS28742	.	0.0025	.	.	.	0.0001	.	(0.0001)	.	38 mm Ø x 35 mm
IARM 301B	0.005	(0.004)	0.0024	(0.0009)	0.0069	(0.0003)	(0.0006)	0.0051	(0.003)	31 mm Ø x 2 or 18 mm
13X 30403A	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X NSA9A	.	.	.	.	.	.	.	.	.	40 mm Ø x ~15 mm
SS 463/1	.	.	0.0022	.	.	.	.	.	.	38 mm Ø x 19 mm
BS 2205	0.0080	0.0059	0.0016	0.0014	0.0034	(0.0001)	0.0010	0.0050	**17025**	38 mm Ø x ~7 or 19+ mm Fe:[67.0] Mg:(0.0004) Zr:(0.006)
13X NSA12A	0.0169	.	0.0020	.	.	.	.	.	.	~40 mm Ø x ~15 mm
BS 304A	0.0028	(0.007)	(0.0005)	.	0.0061	(0.0001)	(0.002)	0.0096	last	38 mm Ø x ~7, ~11, ~15 or 19 mm 17025 Fe:[70.1]
IARM 2I2D	(0.005)	(0.01)	0.001	(0.001)	0.0034	(0.001)	.	(0.003)	(0.003)	31 mm Ø x 2 mm
13X NSA13A *	0.007	.	0.0028	.	* Provisional Analysis			.	.	~40 mm Ø x ~15 mm
BS 316D	(0.002)	0.0048	0.0038	(0.0008)	0.0039	(0.0003)	(0.002)	0.0080	last	38 mm Ø x ~7, ~12, ~17 or 19 mm **17025** Fe: 68.1
BS 316E	0.0027	0.0045	0.0036	(0.0006)	0.0039	(0.0002)	(0.002)	0.0082	.	38 mm Ø x ~7 or 19+ mm **17025** Fe: 68.1
IARM 162C	0.004	(0.006)	(0.001)	(0.001)	0.005	(0.001)	.	0.011	last	31 mm Ø x 18 mm
13X FV520BA	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
HRT FE2000-H	.	.	0.0013	.	.	.	.	.	.	40 mm Ø x 20 mm
BS 304	0.0022	(0.005)	(0.0005)	(0.001)	0.0083	(0.0003)	(0.002)	0.0116	.	38 mm Ø x ~7 or 19+ mm 17025 Fe:[70.5]
VS LG33/5	0.024	.	.	.	.	.	.	.	.	~38 mm Ø x ~25 mm
NCS HS28745	.	0.0055	.	.	.	0.0001	.	0.0073	.	38 mm Ø x 35 mm
BS 304B	0.0036	0.0051	(0.0004)	0.0009	0.0038	(0.0008)	.	0.0057	.	38 mm Ø x ~7 or 19+ mm **17025** Fe: 69.6
IARM 239C *	0.007	(0.004)	0.0014	.	* Provisional Analysis			(0.003)	(0.004)	31 mm Ø x 2 or 18 mm
BS 179C	0.0078	0.0034	0.0015	(0.0003)	0.0038	(0.00002)	0.0005	0.0018	(0.0006)	38 mm Ø x ~7 or 19+ mm **17025** Fe:[61.6]
BS 179B	0.0070	0.0036	0.0015	(0.0004)	0.0037	(0.00002)	0.0005	0.0019	(0.0006)	38 mm Ø x 19+ mm **17025** Fe:[61.5]
ECRM 287-1D	.	.	0.924	.	.	.	.	.	.	38 mm Ø x 25 or 30 mm
13X 34700A	0.023	.	0.0008	.	.	.	.	.	.	~38 mm Ø x ~15 mm
13X NSA11A	(0.021)	.	.	.	.	.	.	.	.	~38 mm Ø x ~15 mm
CZ SL-2A	0.005	0.008	0.002	.	.	.	.	0.01	.	~39 mm Ø x 25 mm
IARM 319A	(0.010)	(0.004)	0.0020	.	0.0025	.	.	0.0055	(0.002)	31 mm Ø x 2 mm
ECRM 298-1D	0.0285	.	0.0021	.	.	0.00008	.	.	.	38 mm Ø x 25 mm Fe: 63.38
SS 466/2	0.0018	0.0020	0.0039	.	.	.	.	.	.	38 mm Ø x 19 mm
BS SS3951	0.002	.	(0.0006)	0.0005	0.0075	.	.	0.007	.	41 mm Ø x ~7 or 19+ mm
IARM 163E *	0.0039	(0.008)	0.0019	(0.002)	0.007	.	(0.002)	0.012	.	31 mm Ø x 2 mm * Provisional Analysis, last
HRT FE2016-H	.	.	.	.	.	.	.	.	.	30 mm Ø x 20 mm
SS 461/1	0.069	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
BS SS1961	0.067	0.004	0.0022	.	(0.002)	.	.	0.004	.	38 mm Ø x 12 mm last
JK 27B	.	.	0.00072	0.0022	.	.	.	0.0068	.	~37 mm Ø x 25 mm
BS SS1962	0.062	0.002	0.0018	.	(0.001)	.	.	0.004	.	38 mm Ø x ~7 or 19+ mm
IARM 354A	(0.05)	(0.002)	0.0023	(0.0003)	(0.0012)	(0.004)	(0.0002)	(0.002)	.	31 mm Ø x 2 or 18 mm
CT ISO123A	0.027	.	0.0021	.	.	.	.	.	.	30-35 mm Ø x ~16 mm Fe: 74.72
13X 46500A *	0.067	.	0.0016	.	* Provisional Analysis			.	.	~32 mm Ø x ~20 mm
ECRM 284-3D	.	0.00131	0.00020	.	.	.	.	0.00074	.	39 mm Ø x 28 mm

Number	Al	As	B	Ca	O	Pb	Sb	Sn	Ta	Units

STAINLESS STEEL XRF SETS

AVAILABLE IN SETS OR INDIVIDUALLY ~7 mm discs

Grade	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	V	W
SET BS SS-17															
15-5PH	BS 185A	0.033	0.49	0.022	0.002	0.38	3.41	4.43	14.46	0.026	0.30	0.027	0.32	0.048	(0.014)
17-4PH	BS 17-4PHA	0.018	0.85	0.023	0.022	0.40	3.30	4.69	15.40	0.072	0.34	0.022	0.204	0.043	.
17-7PH	BS 192	0.075	0.84	0.025	0.001	0.38	0.41	7.10	16.42	0.104	0.42	0.029	0.17	0.13	0.04
253 MA	BS 253	0.094	0.58	0.018	<0.001	1.81	0.14	10.89	20.68	0.15	0.21	0.146	0.017	0.050	0.03
255	**BS 179C**	0.0164	0.878	0.0236	0.0003	0.373	1.53	6.10	25.9	0.0386	3.34	0.236	0.009	0.080	0.056
2205 (318)	**BS 2205**	0.0199	1.029	0.0227	0.0005	0.564	0.196	5.27	22.92	0.041	3.26	0.169	0.0052	0.0560	0.0309
303	**BS 303**	0.044	1.80	0.028	0.326	0.415	0.627	8.17	17.23	0.071	0.410	0.023	0.008	0.056	0.023
304 L	BS 81P	0.026	1.35	0.023	0.012	0.36	0.19	10.06	18.15	0.21	0.41	0.069	.	0.078	0.037
309	BS 82D	0.058	1.85	0.020	0.009	0.63	0.16	14.12	22.40	0.042	0.144	0.070	0.053	0.087	0.028
310	BS 83G	0.073	1.66	0.024	0.004	0.56	0.114	19.15	24.50	0.153	0.085	0.026	0.061	0.077	0.007
316 L	**BS 316D**	0.0185	1.400	0.0294	0.0189	0.278	0.409	10.38	16.76	0.294	2.05	0.042	0.0277	0.074	0.072
317 L	BS 317L	0.027	1.17	0.029	0.0014	0.67	0.23	13.53	18.16	0.14	3.07	0.056	0.031	0.09	0.018
321	**BS 85D**	0.048	1.69	0.024	0.024	0.54	0.45	9.98	17.09	0.97	0.59	(0.02)	0.062	0.132	(0.07)
330	BS 86F	0.054	1.30	0.021	0.0011	1.22	0.23	34.99	18.74	0.098	0.24	0.035	0.19	0.061	(0.03)
347	BS 347B	0.051	1.57	0.028	0.026	0.51	0.15	9.16	17.24	0.05	0.38	0.056	0.71	0.04	(0.005)
355	BS 355	0.136	0.862	0.0171	0.0003	0.374	0.173	4.18	15.43	0.053	2.73	0.081	0.0103	0.106	0.0069
PH13-8 Mo	BS 184A	0.035	0.06	0.007	0.001	0.080	0.041	8.34	12.66	0.036	2.20	0.0045	(0.006)	0.014	0.032
SET BS 400-SS-16															
182PM	BS 150	0.048	1.71	0.020	0.33	0.43	0.042	0.19	18.61	0.024	1.97	0.029	0.003	0.054	0.01
410	BS 410C	0.131	0.381	0.0206	0.0051	0.366	0.084	0.352	12.78	0.0185	0.055	0.039	0.0056	0.0006	0.0131
416	BS 90F	0.085	0.53	0.023	0.328	0.58	0.12	0.30	13.01	0.021	0.14	0.037	0.011	0.076	0.032
416 Se	BS 151	0.090	0.41	0.021	0.018	0.65	0.11	0.24	13.19	0.018	0.088	0.022	0.005	0.046	0.010
420	BS 98	0.309	0.48	0.019	0.0014	0.72	0.098	0.21	13.35	0.020	0.034	0.0181	0.003	0.075	0.009
420F	BS 152	0.32	0.36	0.022	0.275	0.44	0.050	0.14	13.41	0.015	0.061	0.020	0.006	0.051	<0.01
422	BS 97	0.216	0.71	0.021	0.0004	0.39	0.066	0.76	11.82	0.041	1.05	0.030	0.007	0.21	0.95
430	BS 91E	0.066	0.42	0.017	0.002	0.52	0.05	0.17	16.58	0.02	0.035	0.032	(0.004)	0.09	0.01
430F	BS 153	0.026	0.41	0.018	0.280	0.53	0.052	0.140	17.38	0.017	0.30	0.021	0.002	0.045	(0.002)
431	BS 92B	0.150	0.42	0.021	0.003	0.42	0.13	2.12	15.92	0.04	0.17	0.073	(0.006)	0.07	0.02
440C	BS 93E	1.02	0.52	0.022	0.0010	0.90	0.12	0.35	17.33	0.048	0.50	0.0359	0.005	0.24	0.11
440F	BS 155	1.00	0.35	0.014	0.145	0.40	0.035	0.13	16.64	0.019	0.46	0.032	0.002	0.10	.
440F Se	BS 156	1.06	1.15	0.022	0.007	0.47	0.09	0.35	16.87	0.047	0.50	0.041	0.005	0.13	0.11
446	BS 94C	0.057	0.45	0.024	0.002	0.62	0.056	0.43	25.90	0.042	0.20	0.065	0.032	0.12	(0.03)
450	BS 95A	0.035	0.58	0.026	0.004	0.46	1.50	6.42	14.72	0.081	0.73	0.0255	0.55	0.052	0.02
455	BS 96A	0.009	0.04	0.007	0.004	0.06	2.07	8.38	11.62	0.03	0.021	.	0.26	0.07	.

Number	Al	B	Ca	Se	Sn	Ti	
SET BS SS-17							
BS 185A	0.002	0.0017	(0.0002)	.	0.007	(0.001)	
BS 17-4PHA	.	0.0016	.	.	.	.	Ta:(0.002)
BS 192	1.15	(0.0004)	0.0007	.	0.009	0.078	
BS 253	0.016	.	.	.	0.006	0.005	Ce: 0.044 As: 0.005
BS 179C	0.0078	0.0015	(0.0003)	.	0.0018	(0.0005)	As: 0.0034 O: 0.0038 Sb: 0.0005 **17025**
BS 2205	0.0080	0.0016	0.0014	.	0.0050	0.0019	As: 0.0059 Fe:[67.0] O: 0.0034 Sb:0.0010 **17025**
BS 303	0.0019	0.0013	(0.0015)	.	0.0091	0.017	O: 0.0058 **17025**
BS 81P	(0.003)	0.0026	(0.0004)	.	0.007	0.003	O:(0.0064)
BS 82D	(0.002)	0.0040	0.0007	.	0.004	0.005	
BS 83G	(0.004)	(0.001)	O:0.0064	.	0.003	(0.003)	
BS 316D	(0.002)	0.0038	(0.0008)	O:0.0039	0.0080	(0.002)	As: 0.0048 Fe: 68.1 **17025**
BS 317L	(0.005)	0.0013	(0.001)	.	0.005	.	
BS 85D	0.13	(0.001)	0.0004	.	0.0062	0.48	**17025**
BS 86F	(0.007)	0.0026	(0.001)	.	0.004	(0.006)	
BS 347B	0.002	0.0036	(0.0005)	.	0.006	(0.002)	
BS 355	0.0192	0.0039	(0.0002)	.	0.0038	0.0007	O: 0.0020
BS 184A	1.00	(0.0004)	(0.0003)	.	(0.002)	0.051	
SET BS 400-SS-16							
BS 150	0.002	.	.	.	(0.003)	(0.002)	
BS 410C	0.0079	(0.0001)	0.0022	.	0.0023	0.0006	**17025**
BS 90F	(0.006)	.	.	.	0.005	(0.002)	
BS 151	(0.002)	.	.	0.328	0.005	(<0.003)	
BS 98	0.003	.	(0.0005)	.	0.006	0.002	
BS 152	(0.002)	.	.	.	0.003	(0.002)	
BS 97	0.018	.	.	.	(0.003)	(0.002)	
BS 91E	(0.002)	.	0.0008	.	0.004	(0.002)	
BS 153	(0.004)	.	.	.	0.002	(0.004)	
BS 92B	(0.002)	.	(0.0009)	.	0.006	(0.002)	
BS 93E	0.009	.	.	.	0.003	0.007	
BS 155	(0.001)	.	.	.	(0.003)	(0.002)	
BS 156	(<0.002)	.	.	0.142	(0.004)	0.001	
BS 94C	0.004	.	0.0008	.	0.006	.	
BS 95A	0.002	0.0010	0.0008	.	0.008	(0.003)	
BS 96A	0.08	(0.0017)	.	.	.	1.18	

HIGH ALLOY STEEL

= Class, where 1 = CRM, 2 = RM, and 3 = RM with no uncertainties

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	Nb	Ti	V
3	CZ SP-8B	2.37	0.86	0.022	0.012	1.40	0.075	2.72	37.6	0.13	0.075	0.10	.	0.04	0.13	0.13
2	CZ SP-4C	0.34	1.66	0.020	0.010	1.75	0.056	37.1	22.1	0.011	0.065	0.105	(0.04)	0.022	0.031	0.059
3	CZ SP-4B	0.31	1.36	0.027	0.008	1.51	0.04	35.8	20.8	0.025	.	0.02	.	.	.	.
1	IARM 242A	0.24	0.018	0.002	0.0004	0.02	0.007	11.1	3.00	0.004	13.5	1.21	0.0003	0.004	0.009	0.01
3	CZ SL-6A	0.17	0.24	0.015	0.029	0.23	0.22	32.3	6.8	0.26	0.69	0.13	.	0.36	1.8	0.15
1	SRM 1246	0.082	0.91	0.018	0.001	0.18	0.49	30.8	20.1	0.30	0.076	0.36	(0.018)	(0.09)	0.32	(0.040)
2	23X DS5E	0.080	1.04	.	.	1.98	0.30	36.6	8.64	0.083	0.50	0.30	.	.	0.17	.
1	**BS 800**	0.073	0.789	0.0161	0.00036	0.560	0.323	31.29	19.90	0.279	0.054	0.195	0.0112	0.0183	0.469	0.071
1	NCS HS41747	0.071	0.807	0.015	0.0006	0.36	0.038	32.27	20.72	0.299	0.050	0.297	.	.	0.49	.
3	HH 5157A	0.067	0.95	0.012	0.003	0.43	0.33	29.31	21.48	0.45	.	.	.	.	0.55	.
2	DSZU C103	0.064	0.287	0.027	(0.006)	0.34	0.066	0.21	27.04	5.28	.	0.013	.	(0.002)	0.29	0.035
2	DSZU C104	0.055	0.838	0.035	0.019	0.78	0.199	0.51	29.77	6.58	.	0.18	.	0.52	0.76	0.22
1	IARM 24B	0.053	0.82	0.009	0.0010	0.28	0.052	35.86	0.121	0.002	0.036	0.011	0.0017	<0.01	0.002	<0.005
1	SS 479	0.0529	0.680	0.0029	0.0030	0.553	0.0052	24.87	19.922	(0.013)	(0.002)	(0.003)	0.0057	0.625	0.0306	0.0052
2	23X DS4E	0.05	1.02	.	.	2.01	0.30	37.1	16.83	0.037	0.48	0.29	.	.	0.20	.
1	SRM 1230	0.044	0.64	0.023	0.0007	0.43	0.14	24.2	14.8	0.24	0.15	1.18	.	.	2.12	0.23
3	HH 5179A	0.042	0.87	0.012	0.003	0.38	0.26	34.13	22.20	0.30	.	.	.	.	0.46	.
2	BS 186A	0.040	0.72	0.008	0.0053	0.19	0.016	35.86	0.16	(0.001)	0.028	0.0032	0.0026	(<0.002)	(<0.003)	0.0012
2	DSZU C102	0.038	0.265	0.025	(0.006)	1.27	0.031	0.19	24.41	4.98	.	0.022	.	(0.005)	0.25	0.089
3	HH 5196A	0.036	1.05	0.011	0.002	0.45	0.24	31.46	20.66	0.31	.	.	.	.	1.13	.
3	HH 5300A	0.026	0.86	0.013	0.003	0.35	0.28	33.56	18.18	0.45	.	.	.	.	0.54	.
1	13X 14934Q	0.0254	0.254	0.024	0.0288	0.502	.	17.60	0.388	0.15	9.03	4.22	0.0132	.	0.694	.
1	SRM 1158	0.025	0.468	0.004	0.005	0.194	0.039	36.03	0.062	.	0.008	0.010	.	.	.	0.001
2	DSZU C101	0.024	0.198	0.013	(0.006)	0.32	0.055	0.34	21.77	5.06	.	0.026	.	(0.011)	0.31	0.023
1	IARM 302B	0.0226	0.93	0.0256	0.0007	0.56	0.701	17.7	20.33	0.0159	0.072	6.24	0.180	0.012	0.0031	0.052
2	BS 187A	0.022	0.52	0.017	0.0025	0.26	3.10	33.06	19.75	(0.009)	0.32	2.06	0.0157	0.57	(0.002)	0.10
2	CT ISO139A	0.021	1.00	0.001	0.0005	0.015	<0.001	41.69	0.004	.	0.066	<0.001	.	.	.	.
1	SRM 1247	0.021	0.38	0.018	0.002	0.32	1.75	43.5	23.4	0.060	0.089	2.73	(0.017)	(0.46)	0.75	(0.048)
2	BS 187C	0.020	0.77	0.024	<0.002	0.77	3.17	32.93	20.16	0.10	0.096	2.07	0.022	0.36	(0.001)	0.059
1	13X 17005E *	0.02	0.20	0.002	0.04	1.75	0.12	20.2	24.8	.	0.02	0.60	0.01	0.11	.	.
2	CT ISO141A	0.0199	0.31	0.001	<0.001	0.28	<0.001	47.16	<0.001	0.001	0.030	<0.001	<0.001	.	0.014	0.024
1	13X 31254A	0.0185	0.590	0.0191	0.0011	0.400	0.575	18.34	20.11	0.0134	0.125	6.13	0.205	.	.	0.0595
2	CT ISO136A	0.018	0.44	0.001	<0.001	0.198	<0.001	44.92	0.002	.	0.009	<0.001	.	.	.	.
1	IARM 157D	0.0154	0.626	0.016	0.0005	0.28	0.196	23.9	20.31	0.020	0.102	6.08	0.203	0.149	0.009	0.050
1	ECRM 299-1D	0.0154	0.2678	0.0152	0.00022	0.299	0.0382	0.172	22.32	5.33	0.0187	0.0186	0.0198	.	0.1289	0.0329
1	**BS 189A**	0.0147	0.639	0.019	(0.001)	0.30	0.184	23.8	20.4	0.0129	0.100	6.04	0.198	(0.13)	0.0065	0.054
1	NILAB 501HA D	0.014	0.858	0.020	0.003	.	0.761	17.69	19.79	0.003	0.159	6.14	0.2243	0.007	.	0.044
1	KUT S22	0.014	0.34	0.009	0.008	0.61	(0.02)	28.2	1.00	.	.	0.82	.	.	0.13	.
1	NCS HS41753	0.013	1.45	0.025	0.0057	0.42	1.51	24.40	19.27	(0.012)	.	4.29	0.020	(0.012)	(0.0013)	0.093
1	ECRM 379-1D	0.0121	1.804	0.0166	0.0006	0.393	0.984	30.83	26.79	(0.00246)	0.0390	3.290	0.0550	(0.0028)	(0.0014)	0.0663
2	CT ISO124A	0.011	0.73	0.007	0.006	0.40	0.015	48.07	0.079	.	0.012	0.009	.	.	.	.
1	13X 14935T	0.0105	0.494	0.036	0.055	0.441	.	18.96	0.745	(0.007)	7.17	5.61	0.0102	.	0.106	.
1	14X 93603A	0.0101	0.339	0.0050	0.0045	0.153	0.0460	35.79	0.024	0.0404	0.0974	0.0145	0.0057	.	0.0011	.
1	SRM 1159	0.007	0.30	0.003	0.003	0.32	0.038	48.2	0.06	.	0.022	0.01	.	.	.	.
1	IARM 98B	0.007	0.18	0.002	0.0007	0.17	0.028	29.4	0.012	0.07	17.0	0.010	0.0024	0.002	0.03	(0.003)
1	**BS 160A**	0.0064	0.180	0.0007	(0.0002)	0.158	0.026	29.6	0.0138	0.088	17.0	0.0100	0.0026	0.0014	0.026	0.0008
3	CZ SP-7A	0.006	0.08	0.007	0.010	0.036	0.08	47.3	0.01	0.003	0.003	0.01	.	.	0.004	0.001
1	**BS 161A**	0.004	0.031	0.004	0.0007	0.032	0.22	18.40	0.12	0.14	9.22	4.82	(0.002)	(0.004)	0.65	0.031
2	CT ISO138A	0.002	0.48	0.001	0.006	<0.010	<0.001	39.98	<0.001	.	0.64	<0.001	.	.	0.34	.
1	IARM 326A	(0.002)	0.003	0.0013	0.0011	0.029	(0.002)	0.037	(0.002)	(0.003)	48.4	(0.002)	0.0004	0.038	(0.002)	1.94
1	ECRM 285-2D	0.0018	0.0168	0.0053	0.0025	0.0117	0.0094	18.07	0.0236	0.1067	7.76	4.99	0.0007	.	0.520	.

Number	As	B	Ca	Ce	Mg	O	Se	Sn	Ta	W	Zr	Units
CZ SP-8B	0.05	0.03	.	.	.	.	.	0.06	.	0.05	.	~39 mm Ø x 25 mm
CZ SP-4C	.	.	.	.	.	.	.	.	.	(0.01)	.	~39 mm Ø x 25 mm Fe:(36.6)
CZ SP-4B	.	.	.	.	.	.	.	.	.	.	.	~39 mm Ø x 25 mm last of stock
IARM 242A	.	(0.0005)	.	.	.	0.0006	.	(0.001)	0.008	<0.01	.	31 mm Ø x 2 or 18 mm
CZ SL-6A	0.004	.	.	.	.	.	.	0.006	.	1.74	.	~39 mm Ø x 25 mm
SRM 1246	(0.004)	<0.001	Ga: (0.004)		.	(0.003)	.	.	.	(<0.004)	.	35 mm Ø x 19 mm Fe: 46.2
23X DS5E	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
BS 800	0.0036	0.0032	0.00030	.	(0.002)	(0.0009)	**17025**	0.0026	(0.001)	0.0056	0.0018	44 mm Ø x ~12 or 19 mm Fe:46.0 Pb, Sb in ppm
NCS HS41747	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 30 mm
HH 5157A	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 12 mm sale price
DSZU C103	.	.	.	.	.	.	.	.	.	(0.004)	(0.001)	38 mm Ø x 18 mm
DSZU C104	.	.	.	.	.	.	.	.	.	(0.008)	0.28	36 mm Ø x 18 mm
IARM 24B	<0.005	(0.001)	.	.	.	0.003	0.19	0.0018	<0.005	<0.04	<0.005	31 mm Ø x 2 or 18 mm Fe: 62.6
SS 479	(0.002)	<0.0005	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm
23X DS4E	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
SRM 1230	.	0.0055	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
HH 5179A	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x 12 mm sale price
BS 186A	.	.	.	.	.	.	0.229	(0.002)	.	(0.01)	.	38 mm Ø x ~7 or 19+ mm
DSZU C102	.	.	.	.	.	.	.	.	.	(0.020)	(0.003)	38 mm Ø x 18 mm
HH 5196A	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 12 mm sale price
HH 5300A	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x 12 mm sale price
13X 14934Q	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
SRM 1158	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
DSZU C101	.	.	.	.	.	.	.	.	.	(0.011)	(0.003)	38 mm Ø x 18 mm
IARM 302B	(0.009)	0.0027	(0.0031)	.	(0.0009)	0.0032	(0.0006)	0.0075	0.004	0.025	.	31 mm Ø x 2 or 18 mm
BS 187A	.	0.0022	.	(0.025)	.	0.0029	.	0.003	<0.002	(0.02)	.	41 mm Ø x ~7 or 19+ mm
CT ISO139A	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm Fe: 57.10
SRM 1247	(0.003)	0.002	Ga: (0.011)		.	(0.005)	.	.	.	(0.005)	.	35 mm Ø x 19 mm Fe: 26.5
BS 187C	.	(0.0019)	.	.	.	0.0024	.	0.004	(<0.002)	.	.	44 mm Ø x 10 mm last of stock
13X 17005E *	.	0.003	* Provisional Analysis		.	.	.	.	0.015	.	.	~40 mm Ø x ~15 mm
CT ISO141A	.	.	.	.	0.0002	.	.	.	.	.	.	30-35 mm Ø x ~16 mm Fe: 52.12
13X 31254A	.	0.0025	.	.	.	.	.	.	.	0.017	.	~40 mm Ø x ~15 mm
CT ISO136A	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm Fe: 54.27
IARM 157D	.	0.0007	.	Fe:48.0	.	.	.	0.0036	.	0.036	.	31 mm Ø x 2 or 18 mm
ECRM 299-1D	0.0054	0.0002	.	.	.	.	.	.	.	.	0.1775	40 mm Ø x 25 mm
BS 189A	0.0039	(0.0002)	(0.0004)	.	.	0.0024	.	0.0035	.	0.037	(0.001)	38 mm Ø x ~7 or 19+ mm Fe: [48.1] **17025**
NILAB 501HA D	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 20 mm
KUT S22	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 or 40 mm
NCS HS41753	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm
ECRM 379-1D	(0.0018)	0.00190	0.0033	.	(0.0006)	(0.0027)	.	0.0021	.	(0.0091)	(0.00033)	38 or 45 mm Ø x 25 mm Sb: 0.00057
CT ISO124A	.	.	.	.	.	.	0.167	.	.	.	.	30-35 mm Ø x ~19 mm Fe: 50.65
13X 14935T	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
14X 93603A	.	.	.	.	0.0019	.	.	.	.	.	(0.0009)	~40 mm Ø x ~15 mm
SRM 1159	.	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 19 mm Fe: 51.0
IARM 98B	<0.002	0.001	<0.0005	.	0.0040	0.0021	.	0.002	<0.05	(0.02)	<0.01	31 mm Ø x 2 or 18 mm Fe: 52.9 OES is last
BS 160A	0.0011	0.0010	(0.0004)	.	0.0032	0.0022	.	0.0024	Ta, W:(0.0001)		0.0048	38 mm Ø x ~7 or 19+ mm Fe: 52.9 **17025**
CZ SP-7A	.	.	.	.	.	.	.	.	.	.	.	~39 mm Ø x 25 mm
BS 161A	(0.002)	0.0023	(0.0008)	.	.	(0.0004)	.	(0.0015)	(0.03)	(0.008)	(0.002)	38 mm Ø x ~7 or 19+ mm **25(pre-17025)**
CT ISO138A	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x ~16 mm Fe: 58.53
IARM 326A	<0.005	(0.001)	.	.	(0.001)	0.0082	.	<0.001	(0.01)	(0.001)	0.002	31 mm Ø x 2 or 18 mm Fe: 49.6
ECRM 285-2D	.	0.0009	.	.	.	.	.	.	.	.	0.0050	38 mm Ø x 25 or 30 mm

RM HIGH ALLOY STEEL XRF SET

Part Number: BS HAS-12 AVAILABLE INDIVIDUALLY ~7 mm discs

Number Grade	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	B	Co	N	Nb	Sn	Ti	V	W	O
BS 189A AL6XN	0.0147	0.639	0.019	(0.001)	0.30	0.184	23.8	20.4	6.04	0.0129	(0.0002)	0.100	0.198	(0.13)	0.0035	0.0065	0.054	0.037	0.0024
CRM **17025**																			
BS 179A Alloy 255	0.017	1.04	0.021	0.001	0.44	1.94	5.84	25.45	3.24	(0.009)	(0.001)	0.58	0.184	0.030	0.005	0.006	0.070	(0.2)	.
BS 183 Greek Ascoloy	0.16	0.43	0.020	0.013	0.33	0.068	2.00	12.81	0.35	.	.	0.029	.	(0.003)	(0.0016)	0.003	0.12	2.77	.
BS 186A Invar 36	0.040	0.72	0.008	0.0053	0.19	0.016	35.86	0.16	0.0032	(0.001)	.	0.028	0.0026	(<0.002)	(0.002)	(<0.003)	0.0012	(0.01)	.
BS 187A Carp. 20Cb3	0.022	0.52	0.017	0.0025	0.26	3.10	33.06	19.75	2.06	(0.009)	0.0022	0.32	0.0157	0.57	0.003	(0.002)	0.10	(0.02)	.
BS 188A A-286	0.050	0.139	0.015	0.0049	0.15	0.099	24.61	14.04	1.10	0.19	0.0065	0.18	0.0029	0.050	0.002	2.21	0.24	0.055	.
BS 190 Nitronic® 40	0.022	9.72	0.015	0.001	0.46	0.072	6.74	19.57	0.15	(0.004)	0.0005	0.044	0.255	(0.004)	0.003	0.002	0.11	0.015	0.0045
BS 180A Nitronic® 50	0.018	5.05	0.012	0.001	0.32	0.067	13.19	21.09	2.04	0.012	(0.0024)	0.039	0.334	0.20	(0.002)	(0.002)	0.20	0.02	0.003
BS 181A Nitronic® 60	0.071	8.16	0.019	0.001	4.03	0.18	8.15	16.52	0.21	0.022	0.0009	0.072	0.148	0.017	0.005	0.007	0.094	0.04	0.0010
BS 193 18Cr-12Mn	0.104	12.11	0.018	0.002	0.66	0.088	1.82	18.48	0.21	(0.003)	0.0007	0.028	0.37	0.014	0.004	0.003	0.107	(0.007)	.
BS 182 17Cr-15Mn	0.037	15.09	0.022	(0.003)	0.46	0.56	1.11	16.67	0.99	.	.	0.032	(0.40)	(0.005)	(0.003)	(0.003)	0.059	(0.01)	.
BS 191 16Cr-6Mn-4Si	0.098	5.71	0.024	0.023	3.66	0.33	5.34	16.33	0.36	(0.002)	(0.0006)	0.11	0.117	0.024	(0.006)	0.012	0.083	0.033	.

Number Grade	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	B	Co	N	Nb	Sn	Ti	V	W	O

CRM CAST IRON SETS

AVAILABLE IN SETS ONLY, as grouped

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Sn	Ti	V	Ce	La	Mg	N
30 mm Ø x 28 mm																	
NCS HS11712a-6	4.02	1.41	0.021	0.026	0.163	1.83	1.89	0.112	0.019	0.726	0.057	0.238	0.509	<0.0001	<0.0001	0.104	0.013
NCS HS11712a-7	3.94	1.38	0.085	0.0048	0.918	1.10	1.37	1.05	0.214	0.168	0.134	0.114	0.390	<0.0001	<0.0001	0.056	0.0063
NCS HS11712a-5	3.52	0.311	0.420	0.019	1.17	0.389	1.03	0.766	.	0.629	0.013	0.161	0.324	<0.0001	<0.0001	0.021	0.0047
NCS HS11712a-4	3.16	0.462	0.396	0.017	1.96	0.921	0.778	1.40	0.0073	0.428	0.024	0.065	0.166	<0.0001	<0.0001	0.025	0.0073
NCS HS11712a-2	2.22	0.301	0.043	0.058	2.44	0.458	0.341	2.13	0.060	0.087	0.044	0.065	0.055	0.0010	0.010	0.0085	0.024
NCS HS11712a-3	2.55	0.878	0.071	0.045	1.50	0.641	0.519	0.417	0.034	0.354	0.021	0.027	0.085	0.027	0.0061	0.024	0.024
NCS HS11712a-1	1.75	0.080	0.580	0.119	3.40	0.025	0.030	2.48	0.248	0.031	0.0031	0.038	0.021	<0.0001	<0.0001	0.0006	0.015
30 mm Ø x 30 mm																	
NCS HS19701-7	4.13	2.06	0.306	0.111	1.85	.	0.026	0.157	.	.	0.043	0.399	0.821	.	.	.	.
NCS HS19701-6	3.93	1.46	0.168	0.124	0.99	.	0.094	0.387	.	(0.112)	0.0018	0.105	0.506	.	.	.	.
NCS HS19701-5	3.67	0.596	0.072	0.117	0.183	.	0.502	0.171	.	(0.68)	0.0022	0.066	0.335	.	.	.	.
NCS HS19701-4	3.70	0.857	0.087	0.076	0.451	.	0.032	0.117	.	(0.031)	0.0017	0.030	0.158	.	.	.	.
NCS HS19701-3	3.29	1.22	0.045	0.056	0.689	.	0.046	0.030	.	.	0.009	0.043	0.071	.	.	.	.
NCS HS19701-2	2.99	0.329	0.033	0.038	0.937	.	0.194	0.080	.	.	0.024	0.216	0.044	.	.	.	.
NCS HS19701-1	2.46	0.072	0.011	0.019	0.099	.	0.183	0.511	.	.	0.005	0.0059	0.0090	.	.	.	.

CRM CAST IRON SET

AVAILABLE IN SET ONLY 37 mm x 37 mm x ~20mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Ce	La	Mg	Mo	Sb	Sn	Ti	V
CKD 241	1.71	0.136	0.006	0.14	3.20	0.021	0.014	0.684	.	.	.	0.60	0.13	0.004	0.001	0.092
CKD 242	2.21	0.045	0.040	0.033	2.88	0.045	0.024	0.026	.	.	.	1.20	0.007	0.008	0.314	0.43
CKD 243	2.23	0.385	0.162	0.085	2.44	0.175	0.080	0.378	.	.	.	0.263	0.082	0.111	0.013	0.258
CKD 244	2.60	0.665	0.024	0.019	2.11	0.295	0.36	0.274	0.014	0.005	0.033	0.053	(0.003)	0.177	0.033	0.004
CKD 245	2.78	1.36	0.40	0.049	1.60	0.063	0.165	0.168	.	.	0.004	0.106	0.048	0.074	0.074	0.058
CKD 246	2.82	0.302	0.60	0.022	0.62	1.38	0.043	1.20	(0.01)	0.003	0.010	0.005	0.003	0.005	(0.001)	0.002
CKD 247	3.12	1.01	0.095	0.005	1.16	0.815	0.42	0.054	0.048	0.022	0.037	0.015	0.002	0.038	0.058	0.008
CKD 248	3.41	0.245	0.050	0.006	1.81	0.117	0.70	0.022	0.023	0.014	0.064	0.003	0.012	0.015	0.170	0.171
CKD 249	3.75	0.127	0.25	0.008	0.34	0.485	1.42	0.093	0.077	0.025	0.056	0.013	0.004	0.004	0.096	0.024

Number	Al	As	B	Bi	Ca	Co	Fe	Nb	Nd	Pb	Pr	Se	Te	W	Zn	Zr
CKD 241	0.003	0.003	(0.001)	.	.	0.002	(93.23)	0.002	.	0.003	.	.	.	0.001	.	0.001
CKD 242	0.075	0.007	0.007	0.013	.	0.002	(92.55)	0.007	.	0.020	.	.	0.024	0.011	(0.001)	.
CKD 243	0.012	0.08	0.009	.	.	0.022	(93.03)	0.024	.	(0.04)	.	0.050	.	0.026	(0.016)	.
CKD 244	0.070	0.041	0.084	.	(0.003)	0.047	(92.95)	0.004	(0.004)	0.002	(0.002)	.	.	0.055	0.018	0.034
CKD 245	0.020	0.006	0.008	0.007	.	0.004	(92.89)	.	.	0.015	.	0.034	0.029	0.021	.	0.002
CKD 246	0.006	0.005	.	.	(0.002)	0.008	(92.92)	0.001	(0.003)	(0.0003)	(0.001)	.	.	0.007	.	.
CKD 247	0.013	0.009	(0.01)	.	(0.005)	0.092	(92.82)	0.057	(0.012)	0.002	(0.006)	.	(0.017)	(0.005)	0.013	0.007
CKD 248	0.045	0.019	0.036	0.004	(0.003)	0.016	(92.96)	0.005	(0.005)	0.012	(0.002)	0.003	0.004	(0.003)	0.015	0.015
CKD 249	0.059	0.018	0.018	0.006	(0.002)	0.011	(92.94)	0.035	(0.02)	0.023	(0.009)	0.004	(0.004)	(0.01)	0.004	0.040

These CKD sets may contain 1 or more replacement pieces from later batches.

RM GRAY IRON

as cast (not chill cast) CONTAINS FREE GRAPHITE **OES regularly requires extension of preburn time to analyze correctly**

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	As	Co	Mo	Sb	Sn	Ti	V	mm Ø x mm H
BS 20G	3.33	0.58	0.028	0.029	3.02	0.54	0.38	0.086	0.008	0.004	0.022	0.19	(<0.001)	0.12	0.012	0.018	47 x 19+
BS 20W	3.27	0.62	0.045	0.036	2.64	0.29	0.082	0.092	0.004	0.004	0.005	0.054	(<0.001)	0.086	0.015	0.007	47 x 13
BS 20R	3.25	0.62	0.047	0.034	2.72	0.35	0.096	0.094	0.005	0.004	0.006	0.053	(<0.001)	0.104	0.015	0.007	47 x 19+
BS 20E	3.24	0.80	0.042	0.044	2.29	0.23	0.156	0.088	0.006	(0.003)	0.006	0.042	(<0.002)	0.093	0.017	0.007	47 x 19+
BS 20P	3.22	0.63	0.032	0.044	2.62	0.067	0.143	0.079	0.008	(0.004)	0.018	0.033	(<0.001)	0.099	0.018	0.017	44 x 19+

DUCTILE / NODULAR IRON

= Class, where 1 = CRM and 2 = RM * Provisional Analysis

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Ce	Co	**Mg**	Mo	Ti	V
1	SCRM 666/12	3.599	0.106	.	.	1.763	0.0581	1.709	0.102	.	.	.	**0.0838**	0.0979	0.1069	0.0486
1	SCRM 667/13	3.04	0.222	.	.	2.866	0.497	1.303	0.294	.	0.110	.	**0.070**	.	.	0.103
1	BS 285BL *	3.4	0.73	0.047	0.01	1.9	0.32	1.4	1.0	0.017	.	0.004	**0.056**	0.24	0.043	0.12
1	BS 285BK *	3.4	0.74	0.047	0.01	1.9	0.32	1.4	1.0	0.02	.	0.003	**0.055**	0.24	0.043	0.12
1	BS 285BJ *	3.5	0.73	0.047	0.01	1.9	0.32	1.4	1.0	0.017	.	0.004	**0.054**	0.24	0.043	0.12
1	BS 285BI *	3.4	0.73	0.047	0.01	1.9	0.32	1.4	1.0	0.017	.	0.003	**0.053**	0.24	0.04	0.12
1	BS 285BH *	3.4	0.73	0.047	0.01	1.9	0.32	1.4	1.0	0.017	.	0.003	**0.052**	0.24	0.043	0.12
1	BS 285BG *	3.4	0.73	0.047	0.01	1.9	0.32	1.4	1.0	0.016	.	0.004	**0.051**	0.24	0.042	0.12
1	BS 285BF *	3.4	0.73	0.047	0.013	1.9	0.32	1.4	1.05	0.016	.	0.003	**0.050**	0.24	0.042	0.12
1	BS 285BE *	3.4	0.73	0.048	0.013	1.9	0.32	1.4	1.0	0.016	.	0.003	**0.049**	0.24	0.04	0.12
1	BS 285BD *	3.4	0.73	0.047	0.013	1.9	0.32	1.4	1.0	0.016	.	0.003	**0.048**	0.24	0.04	0.12
1	BS 285BC *	3.4	0.7	0.05	0.01	1.9	0.3	1.4	1.0	0.01	.	0.003	**0.047**	0.2	0.04	0.1
1	BS 285BB *	3.4	0.7	0.05	0.01	1.9	0.3	1.4	1.0	0.01	.	0.004	**0.046**	0.2	0.04	0.1
1	**BS 291EH**	3.23	0.478	0.0192	0.0120	2.07	0.234	0.099	0.015	0.048	.	(0.0027)	**0.046**	0.0076	0.0158	0.0082
1	SCRM 670/20	3.576	0.367	.	0.0110	2.261	0.959	0.892	0.505	.	0.0105	.	**0.0454**	0.0198	0.110	0.0261
1	BS 285BA *	3.5	0.7	0.05	0.01	1.9	0.3	1.4	1.0	0.01	.	0.004	**0.045**	0.2	0.04	0.1
1	**BS 291EG**	3.21	0.479	0.0192	0.0118	2.07	0.232	0.099	0.015	0.048	.	(0.0032)	**0.045**	0.0075	0.0158	0.0082
1	**BS 291EF**	3.22	0.479	0.0190	0.0118	2.077	0.235	0.100	0.015	0.048	.	(0.0032)	**0.044**	0.0075	0.0156	0.0082
1	**BS 291EE**	3.24	0.480	0.0190	0.0119	2.08	0.234	0.099	0.015	0.047	.	(0.0033)	**0.043**	0.0075	0.0157	0.0082
1	**BS 291ED**	3.24	0.479	0.0189	0.0119	2.08	0.235	0.099	0.014	0.047	.	(0.0037)	**0.042**	0.0075	0.0155	0.0082
1	**BS 291EC**	3.23	0.478	0.0190	0.0125	2.09	0.234	0.099	0.014	0.046	.	(0.0048)	**0.041**	0.0074	0.0159	0.0083
1	**BS 291EB**	3.25	0.477	0.0189	0.012	2.09	0.234	0.099	0.015	0.046	.	(0.0040)	**0.040**	0.0075	0.0159	0.0082
1	**BS 291EA**	3.25	0.478	0.086	0.012	2.011	0.233	0.100	0.015	0.046	.	(0.0040)	**0.039**	0.0076	0.0159	0.0082
1	**BS 286AF**	3.24	0.740	0.201	0.0162	2.03	0.341	1.360	0.165	(0.009)	.	(0.004)	**0.037**	0.258	0.054	0.151
1	**BS 286AE**	3.24	0.740	0.201	0.0162	2.03	0.341	1.360	0.165	(0.009)	.	(0.004)	**0.036**	0.258	0.054	0.151
1	SRM C1137a	2.86	0.52	0.087	0.017	1.15	0.192	2.17	0.643	(0.007)	0.016	.	**0.032**	0.86	(0.04)	0.019
1	BAS SIMO 1/4	2.57	0.329	0.031	0.010	3.95	0.027	0.017	0.913	0.024	.	0.014	**0.028**	0.699	0.007	0.008
1	BAS SIMO 2/2	2.14	0.434	0.025	0.007	4.75	0.010	0.0189	0.856	0.013	0.006	0.0029	**0.026**	0.484	0.005	0.009
1	SCRM 669/14	2.955	0.526	.	.	2.201	0.194	0.473	0.214	.	0.0415	.	**0.0224**	0.0550	0.0499	0.532
1	SCRM 668/13	3.724	0.712	.	.	1.400	0.751	0.097	0.962	.	0.0245	.	**0.0116**	0.0193	0.091	0.193
1	SRM C2424	2.68	0.268	0.041	0.024	3.37	0.125	0.061	0.13	(<0.01)	0.0046	(0.05)	**0.006**	0.019	0.050	0.083

Number	As	B	Ca	Fe	La	Nb	Pb	Sn	W	Zr	Units	
SCRM 666/12	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
SCRM 667/13	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
BS 285BL *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	0.001	0.06	0.006	~35 mm Ø x 30 mm	
BS 285BK *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	0.001	0.06	0.006	~35 mm Ø x 30 mm	
BS 285BJ *	<0.005	0.008	0.001	90.5	.	0.004	0.001	0.001	0.06	0.006	~35 mm Ø x 30 mm	
BS 285BI *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	<0.005	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BH *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	<0.005	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BG *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	<0.005	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BF *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	0.002	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BE *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	0.002	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BD *	<0.005	0.008	0.001	90.5	.	0.004	<0.005	0.002	0.06	0.005	~35 mm Ø x 30 mm	
BS 285BC *	<0.005	0.008	<0.005	90	.	0.004	<0.005	0.002	0.06	0.006	~35 mm Ø x 30 mm	
BS 285BB *	0.002	0.008	<0.005	90	.	0.004	<0.005	0.002	0.06	0.006	~35 mm Ø x 30 mm	
BS 291EH	0.0003	0.0055	0.0010	93.6	.	0.0032	0.0004	0.0481	(0.0031)	0.0024	~35 mm Ø x ~30 mm	**17025**
SCRM 670/20	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
BS 285BA *	<0.005	0.008	<0.005	90	.	0.004	<0.005	<0.005	0.06	0.005	~35 mm Ø x 30 mm	
BS 291EG	(0.0005)	0.0055	0.0010	93.6	.	0.0033	0.0004	0.0482	(0.0030)	0.0024	~35 mm Ø x ~30 mm	**17025**
BS 291EF	(0.0005)	0.0055	0.0010	93.6	.	0.0033	0.0005	0.0480	(0.0031)	0.0023	~35 mm Ø x ~30 mm	**17025**
BS 291EE	0.0003	0.0055	0.0009	93.6	.	0.0034	0.0004	0.0480	(0.0030)	0.0023	~35 mm Ø x ~30 mm	**17025**
BS 291ED	(0.0005)	0.0055	0.0010	93.6	.	0.0033	0.0004	0.0480	(0.0029)	0.0022	~35 mm Ø x ~30 mm	**17025**
BS 291EC	(0.0006)	0.0055	0.0010	93.6	.	0.0034	(0.0004)	0.0481	(0.0033)	0.0023	~35 mm Ø x ~30 mm	**17025**
BS 291EB	(0.0007)	0.0055	0.0009	93.6	.	0.0032	(0.0004)	0.0480	(0.0031)	0.0022	~35 mm Ø x ~30 mm	**17025**
BS 291EA	(0.0009)	0.0055	0.0009	93.5	0.0032	(0.0004)	(0.01)	0.047	(0.0032)	(0.0019)	~35 mm Ø x ~30 mm	**17025**
BS 286AF	(0.01)	0.0085	(0.001)	[91.4]	.	(0.003)	.	(0.004)	(0.008)	(0.007)	~35 mm Ø x ~30 mm	**17025**
BS 286AE	(0.01)	0.0085	(0.001)	[91.4]	.	(0.003)	.	(0.004)	(0.008)	(0.007)	~35 mm Ø x ~30 mm	**17025**
SRM C1137a	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm	
BAS SIMO 1/4	0.002	.	.	.	.	.	.	0.046	.	.	48 mm x 42 mm x 12 mm	
BAS SIMO 2/2	0.039	.	.	.	.	.	.	0.038	.	.	48 mm x 42 mm x 12 mm	
SCRM 669/14	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
SCRM 668/13	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
SRM C2424	.	(0.002)	.	.	0.0011	.	.	.	.	.	32 mm Ø x 19 mm	

RM Si-Mo CAST IRON

BAS SIMO: 48 mm x 42 mm x 12 mm block CTIF: each unit = one pair 43 mm Ø x 5 mm discs

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	Ti	V	Co	As	Sn	Ce	Mg
CTIF SiMo-3	3.18	0.61	0.053	(0.0006)	4.02	0.0325	0.066	0.110	0.604	1.15	0.0176	0.0171	0.0296	.	.	.	0.013
CTIF SiMo-1	2.98	0.365	0.013	(0.0015)	4.03	0.035	0.065	0.036	0.752	.	(0.018)	(0.018)	(0.03)	.	.	.	0.019
CTIF SiMo-5	2.94	0.439	0.0282	.	4.31	0.0121	0.194	0.032	0.841	.	0.010	(0.0095)	(0.013)	.	.	.	.
CTIF SiMo-2	(2.85)	0.335	0.0260	(0.001)	3.85	0.036	(0.061)	0.038	1.04	1.51	(0.016)	(0.017)	(0.030)	.	.	.	0.072
BAS SIMO 1/3	2.70	0.333	0.040	0.007	4.07	0.028	0.030	0.899	0.776	0.026	0.007	0.007	0.013	0.047	0.048	.	0.036
CTIF SiMo-4	2.70	0.280	0.0211	(0.0015)	4.35	0.0657	(0.029)	0.0845	0.400	(0.038)	0.0171	0.0133	(0.015)	.	.	.	0.100
BAS SIMO 2/3	2.20	0.463	0.035	0.010	4.78	0.007	0.011	0.903	0.486	0.026	0.010	0.005	0.005	(0.001)	0.052	(0.001)	0.024

CAST IRON WITH MAGNESIUM - continued on the next page

= Class, where 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mg	Te	Al	Ce	Co	Mo	Ti	V
1	CZ 20034 17b	4.38	0.501	0.089	0.0040	0.178	0.111	2.34	0.200	0.009	.	(0.002)	(0.003)	0.043	0.030	0.016	0.086
1	CZ 20034 17a	4.30	0.494	0.115	0.0034	0.170	0.082	2.38	0.200	0.007	.	(0.002)	(0.003)	0.043	0.030	0.016	0.086
1	CZ 20034 17c	4.08	0.503	0.104	0.0033	0.150	0.037	2.32	0.178	0.007	.	(0.002)	(0.003)	0.043	0.030	0.015	0.076
1	Y 2863-11	4.03	0.61	0.613	0.026	0.79	0.96	0.46	1.65	0.0075	.	.	.	.	0.94	0.29	0.079
1	CZ SPL17 43A	3.98	1.322	0.190	0.008	1.63	0.385	0.411	0.032	(0.04)	.	0.024	0.017	0.045	0.152	0.065	0.152
1	CZ SPL17 42A	3.94	0.764	0.294	0.0040	1.94	0.199	0.492	0.145	(0.06)	.	0.087	0.039	0.010	0.021	0.126	0.093
1	Y 451045	3.90	0.12	0.023	0.0027	2.29	0.022	0.45	0.028	0.033	.	.	.	.	0.0030	0.016	0.0014
1	CZ 02033 2g	3.78	0.096	0.125	0.009	1.10	0.88	0.650	0.027	0.036	(0.004)	0.019	0.013	0.012	(0.002)	0.029	0.017
1	Y 2863-12	3.77	0.158	0.053	0.057	0.150	0.55	0.192	2.31	0.0024	.	.	.	.	0.44	0.030	0.229
1	CZ 02033 2f	3.77	0.091	0.159	0.009	1.23	0.89	0.658	0.022	0.053	.	0.024	0.018	(0.003)	(0.002)	0.021	0.010
1	Y 4510251-16	3.75	0.39	0.034	0.012	1.69	0.423	0.60	0.52	0.050	.	0.061	0.034	.	0.203	0.036	0.198
1	VS ChG 25	3.74	0.68	0.0090	0.0035	1.46	0.79	0.38	0.25	0.037	.	0.009	.	.	0.253	0.017	0.086
1	Y 451047	3.73	2.35	0.51	0.0036	2.02	1.98	3.57	1.58	0.060	.	.	.	.	0.050	0.40	0.018
1	SCRM 668/13	3.724	0.712	.	.	1.400	0.751	0.097	0.962	0.0116	.	.	0.0245	.	0.0193	0.091	0.193
1	CZ 02033 3c	3.68	0.333	0.026	0.007	2.15	0.421	0.040	0.100	0.006	(0.005)	0.024	0.013	0.026	0.490	0.021	0.016
1	SCRM 666/12	3.599	0.106	.	.	1.763	0.0581	1.709	0.102	0.0838	.	.	.	.	0.0979	0.1069	0.0486
1	SCRM 670/20	3.576	0.367	.	0.0110	2.261	0.959	0.892	0.505	0.0454	.	.	0.0105	.	0.0198	0.110	0.0261
1	CZ 20034 15a	3.54	0.051	0.054	0.0029	1.68	1.322	0.661	0.070	0.031	.	0.026	0.026	0.027	0.005	0.034	0.014
1	CZ SPL17 31A	3.54	0.041	0.025	0.006	2.10	0.005	0.538	0.019	0.070	.	0.005	(0.004)	0.022	0.004	0.007	0.008
1	11X SG1A	3.53	0.278	0.0363	0.0095	2.96	0.0194	0.042	0.0299	0.040	.	0.0187	.	.	.	0.0150	.
1	CZ 20034 15b	3.52	0.048	0.054	0.0031	1.66	1.322	0.681	0.067	0.037	.	0.029	0.021	0.027	0.004	0.025	0.013
1	CZ SPL17 34A	3.48	0.980	0.105	0.008	2.29	0.230	0.493	0.102	0.026	.	0.010	0.008	0.025	0.072	0.044	0.073
1	11X SG2A	3.48	0.297	0.0353	0.0075	3.03	0.0245	0.0263	0.0304	0.055	.	0.0238	.	.	.	0.0146	.
1	Y 451042	3.47	0.71	0.043	0.012	2.11	0.35	1.39	1.02	0.023	.	.	.	.	0.22	0.029	0.15
1	CZ 02033 2e	3.47	0.168	0.106	0.010	1.03	0.89	0.620	0.043	0.038	(0.006)	0.025	0.017	0.005	(0.002)	0.039	0.026
1	CZ 20034 15c	3.47	0.060	0.054	0.0028	1.68	1.123	0.728	0.078	0.040	.	0.010	0.030	0.026	(0.002)	0.036	0.019
1	CZ SPL17 32A	3.39	0.288	0.037	0.007	2.74	0.306	0.015	0.060	0.024	.	0.029	(0.004)	(0.002)	0.116	0.044	0.005
1	CZ 02033 3b	3.38	0.260	0.012	0.012	1.74	0.400	0.049	0.235	0.012	.	0.026	0.006	0.012	0.456	0.023	0.009
1	CZ SPL17 40A	3.38	0.042	0.021	0.0035	1.98	0.010	0.045	0.031	0.007	.	0.096	0.012	0.027	0.005	0.015	0.014
1	VS ChG 28	3.29	0.414	0.025	0.015	2.22	1.29	0.166	0.127	0.010	.	0.015	.	.	0.0024	0.0041	0.0020
1	CZ 20034 14a	3.29	0.218	0.0115	0.0103	2.25	0.578	0.021	0.042	0.015	.	0.009	0.009	0.005	0.633	0.018	0.013
1	CZ 20034 14b	3.26	0.240	0.0115	0.0096	2.34	0.640	0.020	0.042	0.015	.	0.012	0.012	0.005	0.635	0.021	0.012
1	**BS 286AF**	3.24	0.740	0.201	0.0162	2.03	0.341	1.360	0.165	**0.037**	.	(0.009)	.	(0.004)	0.258	0.054	0.151
1	**BS 286AE**	3.24	0.740	0.201	0.0162	2.03	0.341	1.360	0.165	**0.036**	.	(0.009)	.	(0.004)	0.258	0.054	0.151
1	CZ 02033 3d	3.24	0.317	0.008	0.006	2.12	0.396	0.025	0.236	0.016	.	0.055	0.006	0.014	0.453	0.016	0.072

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mg	Te	Al	Ce	Co	Mo	Ti	V
1	CZ 02033 1f	3.23	0.693	0.043	0.005	2.68	0.018	0.373	0.035	0.070	(0.007)	0.073	0.036	0.024	0.182	0.041	0.014
1	CZ 02033 1g	3.22	0.701	0.036	0.007	2.53	0.027	0.357	0.044	0.050	.	0.062	0.023	0.010	0.185	0.054	0.019
1	CZ 20034 13c	3.15	0.704	0.0261	0.0044	2.23	0.089	1.299	0.124	0.064	.	0.022	0.011	0.024	0.360	0.015	0.043
1	CZ 02033 1e	3.15	0.718	0.037	0.006	2.72	0.012	0.367	0.037	0.044	.	0.058	0.027	0.022	0.185	0.046	0.015
1	CZ 02033 1c	3.15	0.674	0.064	0.010	2.36	0.035	0.367	0.051	0.019	.	0.033	0.009	.	0.197	0.036	0.019
1	CZ 20034 14c	3.14	0.275	0.0162	0.0081	2.49	0.585	0.030	0.045	0.017	.	0.007	0.019	0.009	0.646	0.018	0.013
1	CKD 247C (U)	3.13	0.99	0.099	0.0033	1.29	0.84	0.503	0.029	0.053	(0.007)	0.041	0.058	0.097	0.024	0.057	0.010
1	CZ 20034 13a	3.13	0.691	0.0244	0.0046	2.19	0.021	1.266	0.122	0.053	.	0.017	0.011	0.024	0.364	0.014	0.048
1	CZ 20034 13b	3.12	0.692	0.0243	0.0041	2.12	0.021	1.313	0.125	0.054	.	0.019	0.011	0.024	0.364	0.012	0.048
1	CKD 247B	3.09	1.05	0.098	0.0034	1.20	0.822	0.437	0.041	0.056	(0.008)	0.043	0.053	0.095	0.023	0.067	0.013
1	VS ChG 24	3.05	0.245	0.260	0.0048	2.50	0.100	0.87	0.031	0.015	.	0.007	.	.	0.031	0.060	0.0067
1	Y 2863-9	3.04	1.43	0.049	0.015	1.53	0.269	1.59	0.72	0.043	.	.	.	.	1.38	0.212	0.41
1	VS ChM5/1	3.04	0.311	0.056	0.016	1.37	.	.	.	0.045	.	0.013	.	.	.	.	.
1	SCRM 667/13	3.04	0.222	.	.	2.866	0.497	1.303	0.294	0.070	.	.	0.110	.	.	.	0.103
1	VS ChM6/1	3.03	0.54	0.055	0.0074	2.75	.	.	.	0.072	.	0.022	.	.	.	.	.
1	VS ChM8/1	3.02	0.83	0.055	0.0034	3.39	.	.	.	0.105	.	0.041	.	.	.	.	.
1	CZ SPL17 36A	3.02	0.057	0.026	0.010	2.13	0.007	0.011	0.014	0.012	.	(0.003)	0.0007	(0.004)	0.004	0.021	0.021
1	VS ChM13	2.96	1.05	0.043	0.009	2.98	0.062	1.65	0.273	0.09	.	0.065	.	.	.	0.018	0.0096
1	SCRM 669/14	2.955	0.526	.	.	2.201	0.194	0.473	0.214	0.0224	.	.	0.0415	.	0.0550	0.0499	0.532
1	CKD 245B(U)	2.95	1.38	0.42	0.035	1.59	0.081	0.194	0.197	0.003	(0.017)	0.038	(0.00)	0.007	0.115	0.110	0.055
1	CKD 245A	2.94	1.38	0.41	0.039	1.58	0.076	0.161	0.166	0.003	(0.018)	0.019	(0.00)	0.003	0.114	0.087	0.073
1	VS ChG 26	(2.9)	0.126	0.123	0.0041	2.98	0.014	1.52	0.050	0.044	.	0.038	.	.	0.075	0.0026	0.040
1	VS ChM10	2.89	0.43	0.067	0.017	1.13	0.082	0.85	0.067	0.024	.	0.005	.	.	.	0.028	0.079
1	SRM C1137a	2.86	0.52	0.087	0.017	1.15	0.192	2.17	0.643	0.032	.	(0.007)	0.016	.	0.86	(0.04)	0.019
1	CZ SPL17 33A	2.75	0.710	0.060	0.007	3.10	0.730	0.389	0.239	0.021	.	0.054	0.026	0.015	0.220	0.130	0.356
1	CKD 246B	2.73	0.354	0.66	0.020	0.76	1.39	0.065	1.16	0.016	(0.00)	0.101	0.007	0.012	0.009	0.014	0.013
1	SRM C2424	2.68	0.268	0.041	0.024	3.37	0.125	0.061	0.13	0.006	.	(<0.01)	0.0046	(0.05)	0.019	0.050	0.083
1	VS ChM9	2.61	1.28	0.075	0.021	1.59	0.095	0.38	0.083	0.011	.	0.016	.	.	.	0.027	0.068
1	VS ChM11	2.26	0.77	0.032	0.011	2.32	0.067	1.75	0.122	0.066	.	0.035	.	.	.	0.014	0.0044
1	Y 2863-7	1.98	3.42	0.067	0.0061	3.10	0.089	4.47	0.150	0.050	.	.	0.019	.	0.052	0.060	0.87

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mg	Te	Al	Ce	Co	Mo	Ti	V

BS: 28-34 mm Ø x 17-35 mm CKD 24x: 37 mm x 37 mm x ~15-20 mm CZ: 40 mm Ø x 18 mm SCRM: 48 mm x 42 mm x 12 mm SRM: 32 mm Ø x 19 mm VS: ~40 mm Ø x ~40 mm Y: 30 mm Ø x 30 mm

CAST IRON WITH MAGNESIUM - continued from the previous page

sizes shown below

Number	As	B	Bi	Ca	Fe	La	Nb	Pb	Sb	Se	Sn	W	Zr	Other
CZ 20034 17b	0.008	(0.0002)	(0.001)	.	.	.	.	(0.002)	.	.	(0.002)	0.004	.	
CZ 20034 17a	0.007	(0.0002)	(0.001)	.	.	.	.	(0.002)	.	.	(0.002)	0.004	.	
CZ 20034 17c	0.0005	(0.0006)	(0.002)	.	.	.	.	(0.002)	.	.	(0.002)	0.004	.	
Y 2863-11	(0.022)	0.053	.	.	.	.	0.33	(0.0057)	(0.174)	.	(0.108)	0.010	.	
CZ SPL17 43A	.	0.0014	(0.002)	.	.	N:0.0045	0.008	0.014	(0.004)	.	0.067	0.038	Zn:0.013	
CZ SPL17 42A	.	0.0036	(0.002)	.	.	N:0.0027	0.045	0.020	0.015	.	0.027	0.020	Zn:0.013	
Y 451045	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ 02033 2g	.	0.0023	0.006	.	.	.	.	0.008	0.029	.	0.015	(0.004)	.	Zn: 0.020
Y 2863-12	(0.0097)	0.0078	.	.	.	.	0.21	(0.056)	(0.471)	.	(0.307)	0.13	.	
CZ 02033 2f	.	0.0020	(0.002)	.	.	.	.	0.005	0.028	.	0.014	(0.003)	(0.005)	Zn: 0.018
Y 4510251-16	.	0.0044	.	.	.	0.016	.	.	.	.	0.030	.	.	
VS ChG 25	.	.	.	.	.	.	.	.	0.052	.	0.017	.	.	
Y 451047	.	0.31	.	.	.	.	0.012	.	.	.	.	.	.	
SCRM 668/13	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ 02033 3c	(0.007)	0.0044	(0.002)	.	.	.	.	0.005	.	.	0.009	(0.003)	.	
SCRM 666/12	.	.	.	.	.	.	.	.	.	.	.	.	.	
SCRM 670/20	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ 20034 15a	(0.003)	0.0041	0.012	.	.	.	.	.	0.058	.	0.005	0.006	.	
CZ SPL17 31A	.	(0.0004)	.	.	.	N:0.0042	.	.	.	.	(0.003)	(0.005)	.	
11X SG1A	0.0021	.	.	.	.	.	.	.	.	.	.	.	Zn:0.041	~50Ø x ~15mm
CZ 20034 15b	(0.003)	0.0033	0.010	.	.	.	.	.	0.058	.	0.005	0.007	.	
CZ SPL17 34A	.	0.0076	(0.005)	.	.	N:0.0041	0.014	(0.006)	0.007	.	0.051	0.016	Zn:0.007	
11X SG2A	0.0022	.	.	.	.	.	.	.	.	.	.	.	Zn:0.040	~50Ø x ~15mm
Y 451042	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ 02033 2e	.	0.0024	0.005	.	.	.	.	(0.004)	0.028	.	0.015	0.008	.	Zn: 0.025
CZ 20034 15c	(0.003)	0.0057	0.008	.	.	.	.	.	0.056	.	0.006	0.004	.	
CZ SPL17 32A	.	(0.0005)	(0.007)	.	.	N:0.0042	.	0.022	0.023	.	(0.012)	(0.008)	Zn:0.011	
CZ 02033 3b	.	0.0042	0.001	.	.	.	.	0.009	.	.	0.019	.	.	
CZ SPL17 40A	.	0.0008	.	.	.	N:0.0063	.	.	.	.	(0.004)	.	Zn:(0.002)	
VS ChG 28	.	.	.	.	.	.	.	.	0.015	.	0.0017	.	.	
CZ 20034 14a	0.036	0.0096	0.007	.	.	.	.	(0.005)	0.015	.	0.027	(0.005)	0.011	Zn: 0.010
CZ 20034 14b	0.034	0.0100	0.007	.	.	.	.	(0.005)	0.016	.	0.028	(0.005)	0.014	Zn: 0.009
BS 286AF	(0.01)	0.0085	.	(0.001)	[91.4]	.	(0.003)	.	.	.	(0.004)	(0.008)	(0.007)	**17025**
BS 286AE	(0.01)	0.0085	.	(0.001)	[91.4]	.	(0.003)	.	.	.	(0.004)	(0.008)	(0.007)	**17025**
CZ 02033 3d	(0.018)	0.0071	(0.002)	.	.	.	.	0.005	0.007	.	0.009	.	.	

Number	As	B	Bi	Ca	Fe	La	Nb	Pb	Sb	Se	Sn	W	Zr	Other
CZ 02033 1f	.	0.0043	(0.001)	.	.	.	.	0.009	.	.	0.030	0.022	(0.008)	
CZ 02033 1g	.	0.0034	0.005	.	.	.	.	0.016	.	.	0.028	0.015	(0.004)	
CZ 20034 13c	(0.002)	.	.	.	.	.	.	.	(0.002)	.	0.014	(0.003)	(0.02)	
CZ 02033 1e	.	0.0036	(0.002)	.	.	.	.	0.007	.	.	0.032	0.021	(0.007)	Zn: 0.009
CZ 02033 1c	.	0.0005	0.016	.	.	.	.	0.006	.	.	0.032	0.015	Zn:0.001	
CZ 20034 14c	0.035	0.0123	.	.	.	.	.	.	0.020	.	0.025	(0.003)	0.013	Zn: 0.010
CKD 247C (U)	0.012	0.000	0.007	Zn:0.018	(92.6)	0.023	0.048	(0.002)	0.005	(0.000)	0.040	(0.002)	0.009	last of stock
CZ 20034 13a	(0.002)	.	.	.	.	.	.	.	(0.002)	.	0.014	(0.003)	0.029	
CZ 20034 13b	(0.002)	.	.	.	.	.	.	.	(0.002)	.	0.014	(0.003)	0.023	
CKD 247B	0.010	0.000	0.007	.	(92.7)	0.019	0.052	(0.002)	0.005	(0.000)	0.038	(0.002)	0.009	Zn: 0.012
VS ChG 24	.	.	.	.	.	.	.	.	0.009	.	0.077	.	.	
Y 2863-9	(0.041)	0.153	.	.	.	.	0.11	(0.093)	(0.116)	.	(0.124)	.	.	
VS ChM5/1	.	.	.	.	.	.	.	.	.	.	.	.	.	
SCRM 667/13	.	.	.	.	.	.	.	.	.	.	.	.	.	
VS ChM6/1	.	.	.	.	.	.	.	.	.	.	.	.	.	
VS ChM8/1	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ SPL17 36A	.	0.022	(0.007)	.	.	N:0.0038	.	0.016	.	.	(0.002)	.	Zn:(0.002)	
VS ChM13	.	.	.	.	.	.	.	.	.	.	.	.	.	
SCRM 669/14	.	.	.	.	.	.	.	.	.	.	.	.	.	
CKD 245B(U)	0.006	0.003	0.009	.	(92.5)	(0.00)	0.029	0.020	0.052	(0.029)	0.076	0.020	0.004	
CKD 245A	0.002	0.007	0.008	.	(92.7)	(0.00)	(0.001)	0.015	0.050	(0.036)	0.076	0.021	0.003	last
VS ChG 26	.	.	.	.	.	.	.	.	.	.	0.031	.	.	
VS ChM10	.	.	.	.	.	.	.	.	.	.	.	.	.	
SRM C1137a	.	.	.	.	.	.	.	.	.	.	.	.	.	
CZ SPL17 33A	.	0.0064	(0.002)	.	.	N:0.0043	0.032	0.010	0.019	.	0.039	0.079	Zn:0.009	
CKD 246B	0.003	0.000	(0.001)	.	(92.6)	0.003	(0.001)	(0.002)	0.004	(0.00)	0.002	(0.011)	0.000	
SRM C2424	.	(0.002)	.	.	.	0.0011	.	.	.	.	.	.	.	
VS ChM9	.	.	.	.	.	.	.	.	.	.	.	.	.	
VS ChM11	.	.	.	.	.	.	.	.	.	.	.	.	.	
Y 2863-7	(0.021)	0.100	.	.	.	.	0.041	(0.0025)	(0.010)	.	(0.0073)	.	.	

Number	As	B	Bi	Ca	Fe	La	Nb	Pb	Sb	Se	Sn	W	Zr	Other

BS: 28-34 mm Ø x 17-35 mm CKD 24x: 37 mm x 37 mm x ~13-20 mm CZ: 40 mm Ø x 18 mm SCRM: 48 mm x 42 mm x 12 mm SRM: 32 mm Ø x 19 mm VS: ~39 mm Ø x ~39 mm Y: 30 mm Ø x 30 mm

RM CAST IRON WITH YOUR CHOICE OF MAGNESIUM LEVELS

each unit: 2 pcs mushroom 43 mm Ø x 5 mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mg	Al	Ce	Co	Sn	Ti	V	Zn	Other
CTIF 6134	3.70	0.25	0.030	<0.01	1.60	0.020	2.00	0.040	*	.	<0.03	.	.	.	.	.	
CTIF 8532	3.7	0.288	0.05	.	2.6	0.0443	0.888	0.04	*	.	<0.025	.	0.0303	0.02	0.07	.	
CTIF 6135	3.6	0.38	0.0130	(0.003)	0.9	0.0219	1.98	0.04	*	(0.006)	.	0.037	.	0.007	0.0155	.	
CTIF 4500	3.38	0.60	0.059	(0.002)	1.97	.	1.45	0.014	*	0.033	0.023	0.065	.	.	.	.	
CTIF 5781	3.35	0.26	0.030	(0.0025)	2.50	0.0061	0.83	0.040	*	.	.	(0.004)	.	0.0208	0.0150	.	
CTIF 4497	3.12	0.605	0.043	(<0.002)	2.66	0.048	1.90	0.040	*	.	.	.	0.094	0.031	0.44	.	
CTIF 7160	3.1	0.57	0.05	(0.001)	2.4	0.08	1.0	(0.1)	*	(0.02)	0.02	0.09	.	0.013	0.018	.	As: 0.009
CTIF 5037	3.04	0.76	0.043	(0.0025)	3.40	.	0.64	0.014	*	.	.	.	.	0.029	.	.	
CTIF 3601B	3.0	0.35	0.037	(0.005)	2.1	0.019	1.08	0.029	*	.	<0.01	.	.	0.016	(0.005)	<0.05	Pb:(<0.002)
CTIF 8018	3.0	0.7	0.07	(0.0015)	3.0	0.08	0.127	0.09	*	0.02	(<0.02)	.	0.07	0.06	0.39	.	Sb:(0.01)
CTIF 6736	2.8	0.65	0.012	(0.002)	1.6	0.0258	1.7	0.03	*	.	.	.	.	0.008	(0.03)	.	
CTIF 5783	2.55	0.2	0.0266	(0.003)	2.3	0.110	1.23	0.05	*	.	.	0.0074	.	0.015	0.0127	.	As: 0.0016

Magnesium level available in the below samples. X = available

For Mg Range	Order Suffix	3601B	4497	4500	5037	5781	5783	6134	6135	6736	7160	8018	8532
<0.005	<0.005	X	.	.	.	X	X	.	.	.	.	X	.
0.005 - 0.009	0.005	X	.	.	X	X	X	.	.	X	.	X	X
0.010 - 0.014	0.01	.	.	.	X	X	X	.	.	X	X	X	X
0.015 - 0.024	0.02	X	.	.	X	X	X	.	X	X	X	X	X
0.025 - 0.034	0.03	.	.	.	X	.	X	.	X	X	X	X	X
0.035 - 0.044	0.04	.	.	.	X	.	X	.	X	X	X	X	X
0.045 - 0.054	0.05	.	.	.	X	.	X	.	X	X	X	X	X
0.055 - 0.064	0.06	.	X	X	.	.	X	.	X	X	X	X	X
0.065 - 0.074	0.07	.	X	X	.	.	X	.	X	X	X	X	.
0.075 - 0.084	0.08	.	.	X	.	.	.	X	X	X	X	X	.
0.085 - 0.094	0.09	.	X	X	.	.	.	X	X	X	X	X	.
0.095 - 0.104	0.10	.	.	.	.	.	.	X	X	X	X	X	.
0.105 - 0.114	0.11	.	.	.	.	.	.	X	X	X	X	X	.
0.115 - 0.124	0.12	.	.	.	.	.	.	X	X	X	X	X	.
0.125 - 0.134	0.13	.	.	.	.	.	.	X	.	X	X	.	.
0.135 - 0.144	0.14	.	.	.	.	.	.	X	.	.	X	.	.
0.145 - 0.154	0.15	.	.	.	.	.	.	.	.	.	X	.	.
0.155 - 0.164	0.16	.	.	.	.	.	.	.	.	.	X	.	.
0.165 - 0.174	0.17	.	.	.	.	.	.	.	.	.	X	.	.
0.175 - 0.184	0.18	.	.	.	.	.	.	.	.	.	.	.	.

The above cast iron samples can be ordered with your choice of Magnesium. Examples:
to order CTIF 6736 with Mg 0.035 - 0.044 then order as part number CTIF 6736 0.04
to order CTIF 8018 with trace Mg, order as part number CTIF 8018 <0.005

CRM WHITE IRON

analysis listed in mass %

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	Nb	Ti	V	
BS WI-2	3.61	0.80	0.22	0.056	0.52	0.0124	0.254	0.229	0.0118	0.219	0.128	0.089	0.215	**17025**
SRM C1145	2.92	0.187	0.215	0.191	0.271	0.46	0.62	0.63	0.058	0.48	.	0.012	0.112	
VS Chg 8/6	(2.7)	1.51	0.040	0.013	3.93	.	.	(0.2)	.	.	.	.	(0.3)	
VS Chg 10/6	(2.7)	0.86	0.103	0.0072	2.86	.	.	(0.2)	.	.	.	.	(0.3)	
VS Chg 11/6	(2.7)	0.312	0.23	0.039	1.79	.	.	(0.2)	.	.	.	.	(0.3)	
VS Chg 9/6	(2.7)	0.155	0.38	0.071	0.80	.	.	(0.2)	.	.	.	.	(0.3)	
BS WI-1	1.75	0.24	0.051	0.114	1.90	0.027	0.053	0.048	0.0074	0.0103	0.027	0.020	0.008	**17025**

Number	Al	As	B	Bi	Ca	Fe	Mg	Pb	Sb	Sn	W	Zr	Units
BS WI-2	0.0192	0.0016	0.0008	.	(0.00013)	[93.6]	(0.0002)	0.013	0.023	0.0042	0.023	0.0045	~35 mm Ø x ~30 mm
SRM C1145	(0.04)	(0.03)	(0.02)	(<0.01)	.	.	.	0.0012	(0.04)	(0.10)	.	(0.002)	32 mm Ø x 19 mm
VS Chg 8/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
VS Chg 10/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
VS Chg 11/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
VS Chg 9/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
BS WI-1	0.075	0.0067	0.0032	.	0.0005	[95.5]	0.0009	0.115	.	0.0081	0.185	0.0034	~35 mm Ø x ~30 mm

CAST IRON WITH C > 2.75%

CONTINUED ON THE NEXT PAGE

= Class, 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	Nb	Sn	Ti	V	Zn
1	CZ SPL17 35A	4.55	0.096	0.024	0.011	0.078	0.004	0.024	0.022	(0.002)	0.023	0.003	.	(0.002)	(0.002)	0.009	.
1	CZ 02033 4e	4.45	0.034	0.023	0.006	0.090	0.005	0.049	0.030	(0.003)	0.033	0.002	.	(0.001)	0.011	0.015	.
1	SCRM 672/1	4.322	0.474	0.198	0.036	0.143	0.100	0.083	0.0186	0.0102	0.139	0.117	.	0.0047	0.0373	0.0988	.
1	CZ 02033 4d	4.19	0.112	0.050	0.041	0.259	0.084	0.063	0.056	0.007	(0.003)	0.024	.	(0.001)	0.009	0.012	0.009
1	SCRM 659/9	4.174	1.010	0.0215	0.0372	1.361	.	.	.	.	.	.	.	.	.	.	.
1	Y 2582-7	4.13	2.06	0.306	0.111	1.85	.	0.026	0.157	.	.	.	.	.	0.399	0.821	.
2	BS CC-14	(4.04)	(0.01)	0.016	0.003	0.64	0.021	0.074	0.031	0.006	0.036	(0.003)	.	0.002	0.004	0.021	.
1	DSZU CH04	4.01	1.77	0.074	0.018	0.73	0.55	0.273	0.100	0.014	(0.05)	(0.004)	(0.005)	(0.002)	0.025	(0.004)	.
1	DSZU CH05	3.99	2.23	0.119	0.039	0.46	0.61	0.85	1.63	(0.002)	(0.07)	0.109	(0.3)	(0.01)	0.070	0.200	.
1	CZ 02033 4b	3.95	0.145	0.041	0.046	0.252	0.062	0.023	0.049	0.003	0.005	0.005	.	0.001	0.006	0.004	0.008
1	Y 2582-6	3.93	1.46	0.168	0.124	0.99	.	0.094	0.387	.	.	(0.112)	.	.	0.105	0.506	.
1	VS ChG 2/9	3.93	0.456	0.513	0.078	0.387	0.082	.	0.060	.	.	.	.	.	0.080	0.049	.
1	DSZU CH06	3.88	0.85	0.050	0.050	0.28	1.03	1.23	(2.8)	0.025	(0.07)	0.29	(0.05)	(0.03)	0.33	0.205	.
1	CZ 20034 16c	3.87	1.311	0.173	0.0243	0.95	0.345	0.376	0.332	0.004	0.006	0.195	.	0.125	0.057	0.027	0.017
1	CZ 20034 16a	3.80	1.292	0.171	0.0266	1.00	0.332	0.390	0.374	0.007	0.010	0.203	.	0.125	0.0763	0.021	0.019
1	CZ 20034 16b	3.78	1.327	0.170	0.0236	1.00	0.332	0.388	0.378	0.007	0.010	0.202	.	0.121	0.070	0.029	0.020
1	VS ChG 32	3.74	1.90	0.061	0.018	0.60	0.171	.	0.031	.	.	0.113	.	0.060	0.040	0.294	.
1	SCRM 674/1	3.71	1.437	0.0180	0.078	0.484	.	0.161	0.0296	0.0061	0.0066	0.0497	.	0.0164	0.0131	0.0125	.
1	Y 2582-4	3.70	0.857	0.087	0.076	0.451	.	0.032	0.117	.	.	(0.031)	.	.	0.030	0.158	.
1	CZ SPL17 39A	3.70	0.812	0.160	0.045	1.90	0.298	0.032	0.488	0.008	(0.002)	0.203	.	(0.003)	(0.074)	0.232	0.035
1	Y 451043	3.69	0.49	0.063	0.049	1.50	0.34	0.23	0.47	.	.	0.22	.	.	.	0.11	.
1	11X HPC5A	3.68	1.028	0.246	0.223	1.175	.	.	1.42	.	.	.	.	.	.	.	.
1	Y 2582-5	3.67	0.596	0.072	0.117	0.183	.	0.502	0.171	.	.	(0.68)	.	.	0.066	0.335	.
1	VS ChG 1/9	3.61	1.12	0.184	0.038	1.13	0.041	.	0.017	.	.	.	.	.	0.014	0.006	.
1	CZ 02033 7b	3.61	0.304	0.021	0.020	1.82	0.036	1.28	0.536	0.022	0.050	0.96	.	.	0.015	0.007	.
1	CZ 02033 7c	3.55	0.389	0.028	0.026	1.73	0.016	1.26	0.542	0.040	0.048	0.966	.	(0.004)	0.026	0.067	.
1	DSZU CH03	3.54	0.40	0.023	0.034	0.57	0.194	0.187	0.612	0.035	(0.05)	(0.019)	(0.010)	(0.004)	0.059	0.009	.
1	VS ChG 3/9	3.54	0.387	0.037	0.053	0.516	0.123	.	0.100	.	.	.	.	.	0.125	0.096	.
1	VS ChG 27	3.53	1.21	0.044	0.029	1.82	0.348	0.022	0.162	0.008	.	0.147	.	0.115	0.056	0.160	.
1	SCRM 660/10	3.522	0.398	0.143	0.1089	1.719	.	.	.	.	.	.	.	.	.	.	.
1	VS ChG 5/9	3.51	0.60	0.104	0.036	0.84	0.037	.	0.307	.	.	.	.	.	(0.1)	0.441	.
1	11X C10C	3.48	0.696	0.103	0.050	2.10	1.54	2.673	0.302	0.104	.	0.335	.	0.0458	0.0709	0.0589	.
1	Y 2863-5	3.47	0.78	0.564	0.070	0.89	0.365	0.62	1.53	.	.	0.67	.	.	0.133	0.129	.
1	11X C2U	3.414	1.203	0.268	0.093	1.081	0.1085	1.702	0.882	0.053	0.226	0.111	(0.030)	0.046	0.094	0.314	.
1	CZ SPL17 41A	3.41	0.512	0.199	0.068	1.92	0.151	0.104	0.125	(0.003)	0.031	0.041	.	0.066	0.048	0.011	(0.001)
1	CZ 02033 8c	3.41	0.408	0.168	0.058	1.93	0.158	0.102	0.125	0.004	0.030	0.041	.	0.067	0.022	0.015	.
1	11X C3AB	3.408	0.447	0.451	0.201	0.849	0.295	3.20	2.02	0.0090	0.241	0.216	(0.19)	0.209	0.040	0.692	0.0389
1	VS ChL1/1	3.39	0.53	0.048	0.029	1.32	0.344	0.410	0.264	.	0.017	0.036	.	.	0.061	0.073	.
1	CZ SPL17 38A	3.39	0.401	0.067	0.036	2.37	0.510	0.306	0.141	0.034	0.021	0.101	0.008	0.032	0.012	0.061	0.028
1	11X HPC3J	3.38	1.287	2.01	0.0473	1.63	.	2.18	1.48	.	.	0.120	.	.	.	.	.
1	VS ChG 1/5	3.38	1.09	0.160	0.029	1.04	(0.04)	.	(0.08)	.	.	.	.	.	0.005	0.050	.
1	VS ChG 35	3.34	1.23	0.102	0.021	0.617	0.090	2.15	0.233	.	.	0.027	.	.	0.022	0.043	.
1	KUT 120	3.34	0.59	0.059	0.18	1.84	.	.	.	.	.	.	.	.	.	.	.
1	NCS HS11783	3.33	0.756	0.083	0.090	1.73	0.666	0.304	0.386	.	.	0.238	.	0.066	0.057	0.174	.
1	SCRM 658/11	3.278	0.502	0.177	0.067	1.933	.	.	.	.	.	.	.	.	.	.	.
1	Y 2863-3	3.32	1.27	0.115	0.049	2.27	0.62	2.01	0.49	.	.	0.313	.	.	0.176	0.45	.
1	KUT 121	3.32	0.61	0.135	0.17	(1.86)	.	.	.	.	.	.	.	.	.	.	.
1	KUT 205	3.32	0.80	0.025	(0.010)	1.88	0.81	0.61	0.64	.	.	1.79	.	(0.035)	.	.	.
1	KUT 206	3.32	0.75	0.027	(0.010)	1.84	1.01	0.21	0.12	.	.	2.14	.	(0.107)	.	.	.
1	KUT 122	3.31	0.61	0.22	0.20	1.72	.	.	.	.	.	.	.	.	.	.	.

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	Nb	Sn	Ti	V	Zn
1	KUT 123	3.30	0.69	0.31	0.074	(1.87)	.	.	.	.	.	.	.	.	.	.	.
1	NCS HS11784	3.30	0.528	0.78	0.031	2.68	0.015	0.024	0.812	(0.0012)	.	0.142	(0.0012)	0.0005	0.084	0.020	.
1	Y 2582-3	3.29	1.22	0.045	0.056	0.689	.	0.046	0.030	.	.	.	.	.	0.043	0.071	.
1	11X HPC1H	3.29	0.620	0.808	0.0035	3.27	.	.	1.056	.	.	0.060	.	.	.	.	.
1	SCRM 665/4	3.25	0.24	1.09	0.053	1.66	.	.	(1)	.	.	.	.	.	.	.	.
1	11X C9D	3.24	1.886	0.069	0.0260	1.462	0.581	2.79	1.206	0.051	0.1301	0.155	0.0766	0.040	(0.062)	0.359	0.009
1	VS ChG 4/9	3.24	1.42	0.030	0.024	0.455	0.199	.	0.155	.	.	.	.	.	0.10	0.169	.
2	BAS NCRM3	3.24	0.67	0.125	0.090	0.29	1.21	3.64	3.95	.	.	0.78	.	.	.	0.02	.
1	11X HPC1G	3.22	0.499	0.75	0.0311	2.60	.	.	.	.	.	.	.	.	.	.	.
1	NCS HS11782	3.21	1.09	0.088	0.035	1.64	0.042	0.014	0.061	.	.	0.0048	.	.	0.027	0.0079	.
1	KUT 125	3.20	0.73	0.70	0.019	(1.87)	.	.	.	.	.	.	.	.	.	.	.
1	VS ChG 31	3.19	0.97	0.047	0.043	1.60	0.281	.	0.156	.	.	0.0069	.	0.013	0.0063	0.0035	.
1	NCS HS11785	3.19	0.482	0.79	0.030	2.52	0.021	0.031	0.817	(0.0030)	.	0.139	(0.0009)	0.0010	0.076	0.018	.
1	DSZU CH02	3.18	1.09	0.007	0.0116	1.35	0.038	0.658	0.59	0.026	(0.06)	0.224	(0.4)	(0.014)	0.161	(0.005)	.
1	VS ChM 12	3.17	1.00	0.030	0.007	3.10	0.062	1.65	0.039	0.050	.	.	.	.	0.013	0.0027	.
1	SCRM 671/1	3.165	0.811	0.108	0.0503	0.868	.	0.0627	0.0609	0.030	0.098	0.0259	.	0.0103	0.0407	0.0122	.
1	KUT 126	3.16	0.81	1.41	0.016	1.90	.	.	.	.	.	.	.	.	.	.	.
1	KUT 202	3.16	0.81	0.024	(0.010)	1.77	0.24	2.07	2.36	.	.	0.44	.	(0.21)	.	.	.
1	KUT 204	3.15	0.80	0.023	(0.009)	1.79	0.64	1.09	1.22	.	.	1.38	.	(0.215)	.	.	.
1	CZ 02033 6a	3.14	1.22	0.077	0.032	3.37	0.225	0.023	1.40	0.022	.	0.005	.	0.119	0.066	0.300	.
1	KUT 127	3.14	0.79	1.55	0.014	1.81	.	.	.	.	.	.	.	.	.	.	.
1	CZ 02033 6c	3.11	1.25	0.097	0.019	3.25	0.273	0.021	1.33	0.024	0.005	0.006	.	0.131	0.107	0.192	.
1	CZ 02033 7a	3.11	0.321	0.043	0.019	1.83	0.022	1.29	0.479	0.029	0.044	1.07	.	.	0.027	0.005	.
1	SCRM 653/4	3.10	0.110	0.023	0.050	1.22	.	.	(1)	.	.	.	.	.	.	.	.
1	CZ SPL17 37A	3.07	0.211	0.025	0.023	3.30	0.149	0.106	0.328	0.039	0.031	0.325	.	0.073	0.008	0.122	(0.001)
1	VS ChG 30	3.06	2.10	0.090	0.035	1.97	0.576	.	0.24	.	.	0.0061	.	0.015	0.012	0.0074	.
2	BAS NCRM1	3.05	1.22	0.300	0.156	0.95	2.17	0.57	0.55	.	.	1.02	.	.	.	0.03	.
1	VS ChL3/1	3.04	0.250	0.067	0.024	2.39	0.60	1.08	0.533	.	0.016	0.262	.	.	0.043	0.103	.
1	DSZU CH08	3.02	0.79	0.056	0.058	2.05	1.60	2.52	2.13	0.29	(0.07)	0.96	(0.3)	(0.008)	0.315	0.34	.
1	VS ChG 39	3.01	0.82	0.304	0.088	1.45	0.414	1.09	1.08	.	.	0.113	.	.	0.168	0.274	.
2	BS CC-11	3.00	1.18	0.022	(0.024)	1.92	0.14	0.064	0.060	0.029	0.021	0.011	.	0.045	0.011	0.016	.
2	BAS LARM2	(3.0)	(0.3)	(0.05)	(<0.01)	(2.0)	.	.	2.50	0.066	.	0.22	.	0.22	0.33	.	.
2	BAS LARM4	(3.0)	(0.3)	(0.05)	(<0.01)	(2.0)	0.26	.	1.19	0.014	.	1.00	.	0.11	0.17	.	.
2	BAS LARM1	(3.0)	(0.3)	(0.05)	(<0.01)	(2.0)	2.49	0.49	0.50	.	.	.	.	.	0.14	0.11	.
2	BAS LARM5	(3.0)	(0.3)	(0.05)	(<0.01)	(2.0)	.	2.46	.	.	.	0.62	.	0.025	.	0.24	.
2	BAS LARM3	(3.0)	(0.3)	(0.05)	(<0.01)	(2.0)	1.20	1.80	.	0.042	.	.	.	.	.	0.55	.
1	Y 2863-4	2.99	0.93	0.310	0.059	1.54	0.97	0.93	0.76	.	.	0.61	.	.	0.090	0.082	.
2	BAS LARM5/1	2.98	0.33	0.049	0.012	2.02	.	2.56	.	.	.	0.58	.	0.023	.	0.23	.
2	BAS NCRM2	2.97	0.95	0.068	0.119	1.82	1.67	2.10	1.99	.	.	0.36	.	.	.	0.16	.
1	KUT 124	2.97	0.62	0.50	0.051	1.63	.	.	.	.	.	.	.	.	.	.	.
1	CZ 02033 6b	2.95	1.15	0.095	0.020	3.23	0.272	0.026	1.36	0.007	.	0.005	.	0.140	0.068	0.083	.
1	SCRM 662/4	2.95	0.76	0.30	0.087	2.33	.	.	(1)	.	.	.	.	.	.	.	.
1	VS ChG 36	2.94	0.454	0.232	0.036	1.50	0.70	0.542	0.476	.	.	0.406	.	.	0.027	0.086	.
1	SCRM 657/8	2.93	0.062	0.100	0.024	3.02	.	.	(1)	.	.	.	.	.	.	.	.
1	CZ 20034 12b	2.92	1.047	0.484	0.077	2.96	0.223	0.174	0.638	0.077	0.008	0.117	.	0.042	0.071	0.326	0.004
1	SRM C1145a	2.92	0.187	0.215	0.191	0.271	0.46	0.62	0.63	(0.04)	0.058	0.48	.	(0.10)	0.012	0.112	.
1	11X C1R	2.91	1.350	0.102	0.057	1.49	0.132	0.557	0.250	0.0195	0.0694	0.0278	0.09	0.0391	0.112	0.109	0.0097
1	VS ChG 34	2.87	0.54	0.230	0.086	1.20	0.140	.	1.22	.	.	0.201	.	0.29	0.030	0.115	.
1	SCRM 664/4	2.84	0.57	0.44	0.112	2.71	.	.	(1)	.	.	.	.	.	.	.	.
1	CZ 20034 12a	2.82	0.996	0.480	0.073	2.57	0.160	0.174	0.640	0.077	0.004	0.114	.	0.041	0.085	0.340	(0.003)
1	NCS HS11786	2.82	0.768	1.70	0.064	2.05	0.044	0.048	1.98	(0.0094)	.	0.251	0.012	0.0062	0.102	0.029	.
1	KUT 201	2.77	0.74	0.024	(0.009)	1.71	0.10	2.47	2.90	.	.	0.13	.	(0.31)	.	.	.

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	Nb	Sn	Ti	V	Zn

CAST IRON WITH C > 2.75% CONTINUED FROM THE PREVIOUS PAGE

analysis in mass % except * = mg/kg

Number	As	B	Bi	Ca*	Ce	La	Mg	N	Pb	Sb	Se	Te	W	Zr	Units	
CZ SPL17 35A	.	(0.0002)	.	.	.	.	.	0.0036	(0.002)	.	.	.	(0.005)	.	40 mm Ø x 18 mm	
CZ 02033 4e	.	.	(0.002)	.	.	.	.	.	.	(0.002)	.	.	.	.	40 mm Ø x 18 mm	
SCRM 672/1	0.0079	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
CZ 02033 4d	(0.012)	(0.0001)	(0.002)	.	.	.	.	.	.	0.007	.	.	.	.	40 mm Ø x 18 mm	
SCRM 659/9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
Y 2582-7	0.043	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
BS CC-14	(<0.001)	(0.0003)	(<0.0005)	11	(0.002)	(0.0007)	(0.024)	.	0.0002	(0.001)	.	0.005	(0.003)	(0.002)	32 mm Ø x 17 mm	last
DSZU CH04	.	(0.0007)	.	(7)	.	.	(0.0001)	.	(0.007)	.	.	.	(<0.0002)	.	~30 mm x ~35 mm	
DSZU CH05	.	(0.03)	.	(20)	.	.	(0.001)	.	.	.	.	.	.	.	~30 mm x ~35 mm	
CZ 02033 4b	.	.	.	.	.	.	.	.	0.004	(0.001)	.	.	.	.	40 mm Ø x 18 mm	
Y 2582-6	0.0018	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
VS ChG 2/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
DSZU CH06	.	(0.02)	.	(10)	.	.	.	.	.	.	.	.	0.1	.	~35 mm x ~35 mm	
CZ 20034 16c	(0.003)	0.020	.	.	.	.	.	.	0.015	0.010	.	.	0.015	(0.002)	40 mm Ø x 18 mm	
CZ 20034 16a	0.005	0.018	.	.	.	.	.	.	0.006	0.011	.	.	0.019	(0.002)	40 mm Ø x 18 mm	
CZ 20034 16b	0.005	0.018	.	.	.	.	.	.	0.007	0.011	.	.	0.019	(0.002)	40 mm Ø x 18 mm	
VS ChG 32	.	.	0.361	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x ~20 mm	
SCRM 674/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 2582-4	0.0017	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
CZ SPL17 39A	.	0.0195	0.008	.	.	.	.	0.0037	0.017	0.037	.	.	.	.	40 mm Ø x 18 mm	
Y 451043	.	.	.	.	.	.	.	.	.	0.12	.	.	.	.	30 mm Ø x 30 mm	last
11X HPC5A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 17 mm	
Y 2582-5	0.0022	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
VS ChG 1/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
CZ 02033 7b	.	.	.	.	.	.	.	.	.	.	.	.	0.045	.	40 mm Ø x 18 mm	
CZ 02033 7c	.	0.0008	(0.002)	.	.	.	.	.	.	.	.	(0.006)	0.037	.	40 mm Ø x 18 mm	
DSZU CH03	(0.004)	(0.001)	.	(20)	.	.	(0.0001)	.	(0.01)	.	.	.	(0.006)	.	~30 mm x ~35 mm	
VS ChG 3/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
VS ChG 27	.	.	.	.	.	.	.	.	.	0.029	.	.	.	.	~40 mm Ø x ~40 mm	
SCRM 660/10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
VS ChG 5/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
11X C10C	0.0200	.	.	.	.	.	.	.	0.0050	0.0095	.	.	0.327	.	~40 mm Ø x ~15 mm	
Y 2863-5	.	0.060	.	.	.	.	.	.	.	.	.	.	0.158	.	30 mm Ø x 30 mm	
11X C2U	0.0288	0.0213	0.0055	.	.	.	.	0.0110	0.023	0.104	0.0199	.	0.062	.	~40 mm Ø x ~15 mm	
CZ SPL17 41A	.	(0.0004)	(0.007)	.	.	.	.	0.0070	0.010	0.016	.	.	0.012	.	40 mm Ø x 18 mm	
CZ 02033 8c	(0.006)	.	0.009	.	.	.	.	.	.	0.008	0.014	.	.	.	40 mm Ø x 18 mm	
11X C3AB	0.098	0.0054	0.0144	.	.	.	.	0.0095	0.022	0.245	0.0193	.	0.0520	.	~40 mm Ø x ~15 mm	last
VS ChL1/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
CZ SPL17 38A	.	0.0027	(0.002)	.	.	.	.	0.0100	(0.003)	0.018	.	.	(0.005)	.	40 mm Ø x 18 mm	
11X HPC3J	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm	
VS ChG 1/5	(0.002)	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm	last
VS ChG 35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm	
KUT 120	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
NCS HS11783	0.0085	.	.	.	.	.	.	.	.	0.142	.	.	.	.	31 mm Ø x 28 mm	
SCRM 658/11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
Y 2863-3	.	0.056	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
KUT 121	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
KUT 205	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
KUT 206	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
KUT 122	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	

Number	As	B	Bi	Ca*	Ce	La	Mg	N	Pb	Sb	Se	Te	W	Zr	Units	
KUT 123	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
NCS HS11784	0.0041	.	0.0083	.	.	.	.	.	0.0002	0.0007	.	.	.	.	31 mm Ø x 28 mm	
Y 2582-3	0.009	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
11X HPC1H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm	
SCRM 665/4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
11X C9D	0.068	0.0049	.	.	.	.	.	.	0.0052	0.149	.	0.011	0.304	.	~40 mm Ø x ~15 mm	
VS ChG 4/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
BAS NCRM3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
11X HPC1G	.	.	.	.	.	.	.	.	.	.	.	.	last of stock		40 mm Ø x 15 mm	
NCS HS11782	0.0065	.	.	.	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 28 mm	
KUT 125	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
VS ChG 31	.	.	0.068	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x ~20 mm	
NCS HS11785	0.0049	.	0.013	.	.	.	.	.	0.0002	0.0005	.	.	.	.	31 mm Ø x 28 mm	
DSZU CH02	.	(0.016)	.	(10)	.	.	(0.002)	.	.	.	.	.	.	.	~35 mm Ø x ~18 mm	
VS ChM 12	.	.	.	.	.	.	(0.08)	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
SCRM 671/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 12 mm	
KUT 126	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
KUT 202	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
KUT 204	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
CZ 02033 6a	.	.	.	.	.	.	.	.	.	0.056	.	.	.	.	40 mm Ø x 18 mm	
KUT 127	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
CZ 02033 6c	.	0.0024	.	.	.	.	.	.	.	(0.003)	0.044	.	0.007	.	40 mm Ø x 18 mm	
CZ 02033 7a	.	.	.	.	.	.	.	.	.	.	.	.	0.022	.	40 mm Ø x 18 mm	
SCRM 653/4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	last
CZ SPL17 37A	.	0.0124	(0.002)	.	.	.	.	0.0089	(0.002)	.	.	.	0.026	.	40 mm Ø x 18 mm	
VS ChG 30	.	.	0.082	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x ~20 mm	
BAS NCRM1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
VS ChL3/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm	
DSZU CH08	.	(0.08)	.	(10)	.	.	.	.	.	.	.	.	.	.	~35 mm x ~35 mm	
VS ChG 39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm	
BS CC-11	0.006	0.0012	(<0.0005)	2	(0.001)	(0.001)	(0.013)	.	0.0007	0.14	.	(0.002)	(0.002)	(0.002)	32 mm Ø x 17 mm	last
BAS LARM2	0.044	.	.	.	0.008	.	.	.	0.007	.	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS LARM4	.	.	.	.	0.008	.	.	.	0.018	.	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS LARM1	.	0.006	0.011	.	0.005	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS LARM5	0.018	0.0012	0.0010	.	.	.	.	.	0.0005	.	.	.	.	.	40 mm x 37 mm x 10 mm	last
BAS LARM3	0.092	0.003	0.022	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 2863-4	.	0.041	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm	
BAS LARM5/1	.	0.0016	0.0012	.	.	.	.	.	<0.001	.	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS NCRM2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm	
KUT 124	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	
CZ 02033 6b	.	.	.	.	.	.	.	.	.	0.049	.	.	.	.	40 mm Ø x 18 mm	
SCRM 662/4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
VS ChG 36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm	
SCRM 657/8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
CZ 20034 12b	0.024	0.047	0.006	.	.	.	.	.	0.009	0.046	.	.	0.007	(0.002)	40 mm Ø x 18 mm	
SRM C1145a	(0.03)	(0.02)	.	.	.	.	.	.	0.0012	(0.04)	.	.	.	(0.002)	32 mm Ø x 19 mm	
11X C1R	0.0141	0.0357	0.011	.	.	.	.	0.0091	0.005	0.046	0.0050	.	0.100	0.0030	~40 mm Ø x ~15 mm	
VS ChG34	.	.	0.223	.	.	.	.	.	.	.	.	.	.	.	~35 mm Ø x ~20 mm	
SCRM 664/4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm	
CZ 20034 12a	0.022	0.036	0.005	.	.	.	.	.	0.007	0.046	.	.	0.011	(0.002)	40 mm Ø x 18 mm	
NCS HS11786	0.0075	.	0.015	.	.	.	.	.	0.0003	0.0008	.	.	.	.	31 mm Ø x 28 mm	
KUT 201	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm	

CAST IRON WITH C < 2.75%

= Class, 1 = CRM and 2 = RM analysis in mass % except * = mg/kg

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	Nb	Sn	Ti	V	Zn
1	11X C5Y *	2.75	0.75	0.09	0.09	1.9	0.42	1.2	0.94	0.06	0.045	0.53	0.015	0.03	0.09	0.075	0.01
1	VS ChL4/1	2.69	1.37	0.054	0.027	1.99	0.161	0.725	0.92	.	0.017	0.116	.	.	0.11	0.258	.
1	SRM C1291	2.67	1.14	0.028	0.032	1.34	0.26	4.34	2.78	.	.	0.32	.	.	.	0.031	.
1	VS ChG 6/9	2.65	0.83	0.54	0.027	0.53	0.34	.	0.241	.	.	.	.	.	0.028	0.130	.
1	DSZU CH01	2.61	0.258	0.012	0.0045	1.95	0.097	0.072	0.88	0.079	(0.06)	0.070	(0.010)	(0.05)	0.132	0.134	.
1	VS ChG 40	2.59	1.56	0.059	0.019	1.60	0.98	1.61	1.47	.	.	0.229	.	.	0.18	0.325	.
1	11X C8V *	2.58	0.40	1.0	0.21	1.60	0.31	0.28	0.145	0.085	0.130	0.15	0.02	0.105	0.24	0.063	0.006
1	SCRM 661/4	2.56	0.30	0.84	0.068	2.96	.	.	(1)	.	.	.	.	.	.	.	.
1	SCRM 656/9	2.537	0.820	0.060	0.108	2.504	.	.	.	.	.	.	.	.	.	.	.
1	11X C7N	2.51	1.942	0.0266	0.0101	0.829	0.075	0.0303	0.507	0.0127	0.0335	0.071	0.051	0.0114	0.022	0.036	0.0226
1	Y 2863-2	2.50	1.83	0.069	0.026	3.14	0.020	3.73	0.136	.	.	0.096	.	.	0.066	0.61	.
1	VS ChG 37	2.49	0.92	0.038	0.046	2.03	0.512	0.90	0.82	.	.	0.55	.	.	0.092	0.227	.
1	SCRM 673	2.47	0.133	0.328	0.006	1.72	0.023	0.147	0.037	0.028	0.053	0.006	.	0.0191	0.072	0.059	0.0004
1	SCRM 673/1	2.455	0.123	0.317	0.0112	1.702	.	0.103	0.0423	0.0287	0.053	0.0092	.	0.0206	0.0718	0.052	.
1	CZ 20034 11b	2.44	0.382	0.271	0.140	3.67	0.130	0.082	1.178	0.067	0.005	1.144	.	0.074	0.041	0.182	.
1	VS ChG 38	2.43	0.302	0.386	0.084	2.30	1.20	0.162	1.98	.	.	0.046	.	.	0.105	0.119	.
1	CZ 02033 5b	2.42	0.812	0.033	0.073	1.32	0.031	0.188	0.061	0.062	.	0.089	.	.	0.007	0.005	.
1	VS ChL2/1	2.38	1.03	0.054	0.023	0.55	0.97	0.114	0.077	.	0.013	0.012	.	.	0.009	0.050	.
1	CZ 20034 11a	2.37	0.343	0.271	0.163	3.31	0.086	0.084	1.219	0.046	0.005	1.130	.	0.070	0.028	0.184	.
1	SCRM 652/4	2.34	1.19	0.071	0.129	0.878	.	.	(1)	.	.	.	.	.	.	.	.
1	DSZU CH07	2.33	1.36	0.090	0.064	3.01	0.35	0.403	0.34	0.036	.	0.66	(0.08)	(0.07)	0.150	0.52	.
1	CZ 02033 5a	2.30	0.804	0.035	0.100	1.26	0.014	0.096	0.054	0.060	.	0.100	.	.	0.008	0.005	.
1	CZ 02033 5c	2.30	0.704	0.027	0.091	1.40	0.013	0.188	0.085	0.103	0.013	0.104	.	(0.002)	0.008	0.054	.
1	SCRM 675	1.92	1.81	0.045	0.072	1.29	0.012	0.210	0.080	0.007	0.023	0.034	.	0.0062	0.007	0.178	0.0006
1	SCRM 655/4	1.90	0.44	0.180	0.076	2.110	.	.	(1)	.	.	.	.	.	.	.	.
1	11X C4R	1.86	0.493	0.108	0.098	2.92	0.345	2.02	1.531	0.040	0.0316	0.101	0.0373	0.0102	0.080	0.0208	0.0083
1	CKD 242A	1.84	0.060	0.039	0.036	3.06	0.055	0.039	0.029	0.036	0.002	1.13	0.013	0.010	0.19	0.37	(0.00)
1	Y 2863-1	1.78	2.41	0.021	0.009	3.62	0.022	4.77	0.031	.	.	0.038	0.0052	.	0.068	1.13	.

| # | Number | C | Mn | P | S | Si | Cu | Ni | Cr | Al | Co | Mo | Nb | Sn | Ti | V | Zn |

Number	As	B	Bi	Ca*	Ce	Mg	N	Pb	Sb	Se	Te	W	Zr	Units
11X C5Y *	0.02	0.005	* Provisional Analysis				0.01	0.005	0.03	0.006	.	0.005	0.001	~40 mm Ø x ~15 mm
VS ChL4/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
SRM C1291	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
VS ChG 6/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
DSZU CH01	.	(0.03)	.	(10)	.	(0.0005)	.	.	.	.	.	(0.02)	.	~30 mm x ~35 mm
VS ChG 40	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm
11X C8V *	0.078	0.035	0.01	* Provisional Analysis			.	0.065	0.020	0.005	0.026	.		~40 mm Ø x ~15 mm
SCRM 661/4	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
SCRM 656/9	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
11X C7N	0.0159	0.0097	0.0137	.	.	.	0.025	0.0106	0.025	.	.	0.066	(0.003)	40 mm Ø x 15 mm
Y 2863-2	.	0.0025	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm
VS ChG 37	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm
SCRM 673	0.044	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
SCRM 673/1	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
CZ 20034 11b	0.005	0.0032	0.007	.	.	.	.	0.007	0.011	.	.	(0.005)	0.007	40 mm Ø x 18 mm
VS ChG 38	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~40 mm
CZ 02033 5b	.	0.014	0.020	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 18 mm
VS ChL2/1	.	.	.	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~38 mm
CZ 20034 11a	0.005	0.0018	0.011	.	.	.	.	0.017	0.013	.	.	(0.005)	0.007	40 mm Ø x 18 mm
SCRM 652/4	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
DSZU CH07	.	(0.13)	.	(10)	.	(0.01)	.	.	.	.	.	.	.	~35 mm x ~35 mm
CZ 02033 5a	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 18 mm
CZ 02033 5c	.	0.0078	0.007	.	.	.	.	.	.	(0.002)	(0.010)	.	(0.009)	40 mm Ø x 18 mm
SCRM 675	0.035	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
SCRM 655/4	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
11X C4R	0.0050	0.0086	0.0144	Ag: 0.008		.	0.0078	0.019	0.015	0.021	.	0.120	0.0031	~40 mm Ø x ~12 mm
CKD 242A	0.015	0.008	(0.015)	.	(0.00)	0.000	.	(0.012)	0.007	.	(0.08)	(0.007)	(0.000)	37mm x 37mm x 18 or 20mm
Y 2863-1	.	0.0024	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 30 mm

| Number | As | B | Bi | Ca* | Ce | Mg | N | Pb | Sb | Se | Te | W | Zr | Units |

ALLOYED CAST IRON

= Class, where 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Pb	Sn	Ti	V	Mg	N
2	BAS NCRM5	3.70	0.27	0.025	0.015	1.15	0.204	6.74	10.44	.	0.10	.	.	.	0.06	.	.
1	SRM C1292	3.47	0.55	0.049	0.016	0.59	0.36	5.04	11.4	.	0.25	.	.	.	0.041	.	.
2	BAS CRRM5/2	3.43	0.30	0.029	0.018	0.20	0.22	0.36	30.35	0.15	0.63	.	.	0.009	0.11	.	.
1	Y 451052-1	3.31	1.54	0.369	0.0047	0.098	0.449	2.57	1.17	.	1.47	.	.	.	0.952	.	.
1	**BS PM15**	3.54	0.416	0.0198	0.0127	0.912	0.142	0.203	5.33	0.0025	1.22	(0.00001)	0.0034	0.0029	14.79	(0.0002)	0.111
1	Y 451052-7	3.13	0.201	0.024	0.116	2.48	0.154	0.129	31.26	.	0.086	.	.	0.033	0.087	.	.
1	11X 15309S	3.05	1.506	0.040	0.086	1.398	0.505	0.919	23.26	.	0.249	.	.	0.0156	0.056	.	.
1	SRM C1290	3.04	0.66	0.030	0.013	0.971	0.065	0.917	30.5	.	(0.041)	.	.	.	0.442	.	.
1	Y TSK205	3.03	0.16	0.041	0.088	1.65	0.35	0.37	30.35	.	0.22	.	.	.	0.077	.	0.108
1	Y 451054-2	3.00	1.42	0.133	0.016	0.56	0.324	1.43	7.23	.	2.48	.	.	0.015	0.88	.	.
1	NCS HS11788	2.97	1.62	0.191	0.010	3.29	0.51	17.77	2.56	(0.0023)	0.0013	.	0.0003	0.043	0.017	.	.
1	Y 451052-2	2.96	1.24	0.211	0.0077	0.491	1.57	1.99	9.75	.	2.17	.	.	0.300	0.669	.	.
2	BAS NIRM5/1	2.95	1.01	0.103	0.005	1.50	0.21	21.7	0.51	.	.	.	.	.	.	0.055	.
2	BAS CRRM4/2	2.93	0.58	0.049	0.042	0.45	0.53	0.58	21.93	<0.005	1.15	.	.	0.008	0.11	.	.
2	11X 20003K	2.91	1.53	0.174	0.007	3.03	0.52	17.8	2.53	.	.	.	.	.	.	.	.
1	11X S/1 Cr3J	2.91	0.861	0.072	0.023	1.07	9.01	14.53	1.61	.	.	.	.	.	.	.	.
2	11X 20001J	2.90	0.58	0.005	0.143	1.01	0.01	21.4	1.50	.	.	.	.	.	.	.	.
2	11X S/2 Cr1E	2.83	1.68	0.31	0.011	2.85	0.02	16.5	2.48	.	.	.	.	.	.	.	.
1	11X 0331-1J	2.82	1.646	0.069	0.13	2.50	7.59	12.43	0.607	0.122	0.120	0.0327	0.0439	0.1099	.	.	.
2	BAS NIRM2/1	2.81	2.08	0.129	0.010	1.50	5.98	13.95	1.48	.	.	.	.	.	.	0.050	.
1	Y 451054-3	2.73	1.09	0.105	0.036	0.99	0.451	1.20	12.97	.	2.08	.	.	0.045	0.66	.	.
1	VS ChG45	(2.7)	1.01	0.096	0.047	2.96	0.040	0.60	32.65	.	0.198	.	.	0.011	0.111	.	.
2	11X 20002J	2.67	1.06	0.060	0.045	2.04	0.30	20.0	2.03	.	.	.	.	.	.	.	.
2	BAS NCRM4	2.66	0.40	0.203	0.012	2.13	0.68	5.34	7.94	.	0.57	.	.	.	0.11	.	.
1	NCS HS11787	2.65	1.08	0.067	0.037	2.07	0.306	19.84	1.98	(0.085)	0.0014	.	0.0054	0.022	0.0096	.	.
1	11X 0331-2K	2.64	1.272	0.049	0.119	2.32	6.47	14.26	1.025	0.191	0.0644	0.0205	0.0205	0.14	0.0158	.	.
2	11X S/3 Cr1D	2.61	0.7	0.046	0.011	2.52	0.19	31.7	0.15	.	.	.	.	.	.	.	.
1	Y TSK201	2.56	1.07	0.253	0.023	0.66	1.53	2.44	10.14	.	2.56	.	.	.	0.42	.	0.029
1	11X 15295R	2.52	0.491	0.0504	0.0413	0.589	0.197	0.304	27.53	0.19	0.391	(0.015)	0.047	.	0.201	.	.
2	BAS NIRM3	2.51	0.51	0.208	0.096	2.21	1.00	17.8	2.43	.	.	.	.	.	.	.	.
2	BAS NIRM6	2.44	4.00	0.217	0.062	2.43	0.10	26.7	1.07	.	0.45	.	.	.	.	.	.
1	Y 451052-3	2.40	1.06	0.115	0.015	0.821	0.953	1.55	13.30	.	0.869	.	.	0.171	0.482	.	.
2	BAS CRRM3/2	2.37	0.92	0.073	0.087	1.21	1.09	1.35	18.78	0.102	1.58	.	.	0.015	0.042	.	.
1	Y 451054-4	2.31	0.725	0.071	0.046	1.40	0.739	0.914	17.60	.	1.44	.	.	0.084	0.46	.	.
1	11X 15294V	2.29	0.467	0.093	0.031	0.399	0.134	0.649	30.82	(0.177)	0.325	0.0084	0.0560	.	0.117	.	.
1	CKD 251	2.25	1.97	0.015	0.015	1.14	0.38	19.7	1.07	(0.02)	0.12	(0.009)	(0.01)	(0.005)	(0.02)	0.022	.
1	Y TSK200	2.11	0.82	0.319	0.022	0.17	1.86	3.22	4.97	.	3.50	.	.	.	0.60	.	0.021
2	BAS NIRM1	2.05	6.72	0.055	0.005	3.15	0.20	11.80	0.246	.	.	.	.	.	.	0.021	.
2	BAS NIRM7	2.05	0.71	0.058	0.020	3.05	0.52	32.9	3.53	.	0.99	.	.	.	.	0.019	.
1	Y 451052-4	2.00	0.803	0.090	0.025	1.16	0.738	1.07	18.28	.	0.598	.	.	0.087	0.380	.	.
2	BAS NIRM4	1.97	2.37	0.051	0.008	3.03	0.52	20.2	3.56	.	.	.	.	.	.	0.014	.
1	NCS HS11789	1.97	1.08	0.048	0.076	2.58	6.39	17.80	2.51	0.061	0.062	0.015	0.014	0.011	0.0093	.	.
2	BAS CRRM2/1	1.92	1.11	0.097	0.079	1.18	1.59	1.61	14.13	0.054	2.44	.	.	0.070	0.063	.	.
2	BAS CRRM1/1	1.83	1.45	0.132	0.099	1.53	2.01	2.03	11.18	0.117	3.05	.	.	0.096	0.040	.	.
1	Y 451054-5	1.83	0.466	0.043	0.091	1.80	0.904	0.517	23.40	.	0.739	.	.	0.068	0.26	.	.
1	Y TSK202	1.81	1.16	0.201	0.057	2.00	1.10	1.91	15.42	.	2.20	.	.	.	0.33	.	0.075
1	Y 451052-5	1.48	0.579	0.041	0.058	1.37	0.583	0.708	22.55	.	0.359	.	.	0.056	0.314	.	.
2	BAS NIRM8/2	1.45	1.58	0.105	0.014	5.61	0.23	35.3	2.47	.	0.77	.	.	.	.	0.033	.
1	Y 451054-6	1.45	0.254	0.024	0.123	2.38	1.15	0.216	28.96	.	0.213	.	.	0.084	0.13	.	.
2	BAS NIRM8/1	1.34	1.60	0.109	0.010	5.42	0.23	35.2	2.34	.	0.75	.	.	.	.	0.043	.
1	VS ChG44	1.24	0.87	(1.2)	0.076	1.50	2.27	0.175	25.44	.	0.035	.	.	0.104	0.079	.	.
1	Y TSK203	1.23	0.68	0.117	0.044	0.46	0.75	1.55	19.93	.	1.58	.	.	.	0.22	.	0.094
1	Y 451052-6	1.16	0.302	0.033	0.086	1.44	0.845	0.289	25.76	.	0.150	.	.	0.019	0.146	.	.
1	Y TSK204	0.91	0.34	0.078	0.063	1.00	0.53	0.97	25.37	.	0.95	.	.	.	0.14	.	0.114

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Pb	Sn	Ti	V	Mg	N

Number	Ce	Co	Nb	W	Zr	Units	Other
BAS NCRM5	.	.	.	.	.	40 mm x 37 mm x 10 mm	
SRM C1292	.	.	.	.	.	32 mm Ø x 19 mm	
BAS CRRM5/2	.	.	.	.	.	48 mm x 42 mm x 12 mm	
Y 451052-1	B:0.177	.	0.018	0.015	.	30 mm Ø x 30 mm	
BS PM15	.	0.0330	0.014	0.109	(0.0005)	38 mm Ø x 19+ mm	**17025** Fe:[73.0] As:0.0040 N:0.111 O:0.0129
Y 451052-7	B:0.015	.	0.010	0.175	.	30 mm Ø x 30 mm	
11X 15309S	.	0.032	0.0192	0.015	.	~40 mm Ø x ~15 mm	
SRM C1290	.	.	.	.	.	32 mm Ø x 19 mm	
Y TSK205	.	.	.	.	.	35 mm Ø x 30 mm	
Y 451054-2	.	.	.	.	.	30 mm Ø x 30 mm	
NCS HS11788	B:0.0008 (0.0063)	.	(0.0002)	.		31 mm Ø x 28 mm	As: 0.014
Y 451052-2	B:0.142	.	0.182	1.99	.	30 mm Ø x 30 mm	
BAS NIRM5/1	0.016	.	0.15	.	.	48 mm x 42 mm x 12 mm	
BAS CRRM4/2	.	.	.	.	.	48 mm x 42 mm x 12 mm	
11X 20003K	.	.	.	.	.	40 mm Ø x 15 mm	
11X S/1 Cr3J	.	.	.	.	.	~40 mm Ø x ~15 mm	
11X 20001K	.	.	.	.	.	40 mm Ø x 15 mm	
11X S/2 Cr1E	.	.	.	.	.	40 mm Ø x 15 mm	
11X 0331-1J	.	0.1117	0.149	.	.	~40 mm Ø x ~15 mm	
BAS NIRM2/1	0.015	.	.	.	.	48 mm x 42 mm x 12 mm	
Y 451054-3	.	.	.	.	.	30 mm Ø x 30 mm	
VS ChG45	.	.	.	.	.	~35 mm Ø x ~17 mm	
11X 20002J	.	.	.	.	.	40 mm Ø x 15 mm	
BAS NCRM4	.	.	.	.	.	40 mm x 37 mm x 10 mm	
NCS HS11787	B:0.0007 (0.0054)	.	(0.0002)	.		31 mm Ø x 28 mm	As: 0.0075
11X 0331-2K	.	0.161	0.104	.	.	~40 mm Ø x ~15 mm	
11X S/3 Cr1D	.	.	.	.	.	40 mm Ø x ~12 mm	
Y TSK201	.	.	.	.	.	35 mm Ø x 30 mm	
11X 15295R	.	1.510	(0.036)	0.195	.	~40 mm Ø x ~15 mm	
BAS NIRM3	0.007	.	0.09	.	.	40 mm x 37 mm x 10 mm	
BAS NIRM6	0.003	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 451052-3	B:0.102	.	0.149	1.57	.	30 mm Ø x 30 mm	
BAS CRRM3/2	.	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 451054-4	.	.	.	.	.	30 mm Ø x 30 mm	
11X 15294V	.	0.124	.	0.293	.	~40 mm Ø x ~15 mm	
CKD 251	0.017	0.09	0.10	. last	.	37 mm Ø x 22 mm	
Y TSK200	.	.	.	.	.	35 mm Ø x 30 mm	
BAS NIRM1	0.018	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS NIRM7	0.005	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 451052-4	B:0.086	.	0.071	1.05	.	30 mm Ø x 30 mm	
BAS NIRM4	0.011	.	0.37	.	.	40 mm x 37 mm x 10 mm	
NCS HS11789	B:0.0008 (0.0075)	.	(0.0002)	.		31 mm Ø x 28 mm	As: 0.0076 Bi: 0.067
BAS CRRM2/1	.	.	.	.	.	40 mm x 37 mm x 10 mm	
BAS CRRM1/1	.	.	.	.	.	40 mm x 37 mm x 10 mm	
Y 451054-5	.	.	.	.	.	30 mm Ø x 30 mm	
Y TSK202	.	.	.	.	.	35 mm Ø x 30 mm	
Y 451052-5	B:0.076	.	0.022	0.694	.	30 mm Ø x 30 mm	
BAS NIRM8/2	0.013	.	.	.	.	48 mm x 42 mm x 12 mm	
Y 451054-6	.	.	.	.	.	30 mm Ø x 30 mm	
BAS NIRM8/1	0.013	.	.	.	.	48 mm x 42 mm x 12 mm	last
VS ChG44	.	.	.	.	.	~35 mm Ø x ~17 mm	last
Y TSK203	.	.	.	.	.	35 mm Ø x 30 mm	
Y 451052-6	B:0.055	.	0.014	0.370	.	30 mm Ø x 30 mm	
Y TSK204	.	.	.	.	.	35 mm Ø x 30 mm	

Number	Ce	Co	Nb	W	Zr	Units

RM CAST IRON MUSHROOMS CONTINUED ON THE NEXT PAGE

typical analysis — each unit is one pair of 43 mm Ø x 5 mm mushroom discs

Number	C	Si	Mn	P	S	Cu	Ni	Cr	Al	Co	Mo	Sn	Ti	V	W
CTIF FO19	4.04	1.05	1.05	0.032	0.057	.	.	.	.	.	.	.	.	.	.
CTIF FO12	3.71	1.86	0.44	0.038	0.004	0.77	.	.	0.008	.	.	0.011	.	.	.
CTIF FO8	3.6	1.04	0.37	0.107	0.021	0.215	0.30	0.30	.	.	0.005	0.05	0.055	0.014	.
CTIF FCR7	3.59	1.07	0.365	0.099	0.0427	0.704	0.947	33.65	.	.	2.62	.	.	.	.
CTIF FO6	3.49	0.55	0.715	0.87	0.106	0.120	0.128	0.45	.	.	0.202	0.039	0.080	0.110	.
CTIF FO10	3.5	0.67	1.05	0.20	0.101	0.114	0.118	0.38	.	.	0.20	.	0.1	0.08	.
CTIF NH3	3.47	0.85	0.175	0.36	0.024	0.031	2.53	1.76	.	.	0.73	.	.	.	.
CTIF FO11	3.45	1.57	0.685	0.052	0.103	0.211	0.235	0.34	.	(0.013)	0.225	0.066	0.078	0.113	.
CTIF FO18	3.43	1.24	0.590	1.34	0.136	0.049	0.140	0.170	.	.	0.179	0.046	0.057	0.102	.
CTIF NH7-1	3.43	0.95	0.63	0.035	0.022	0.105	5.53	9.02	.	.	.	.	.	.	.
CTIF FCR5	3.43	0.35	0.62	0.052	0.0175	1.02	2.69	28.5	.	.	3.27	.	.	.	.
CTIF FT2-1	3.39	1.415	0.78	0.045	0.095	0.01	0.070	0.030	.	.	.	.	0.100	0.405	.
CTIF NiMo1	3.22	2.585	0.200	0.0590	(0.0030)	0.376	2.165	0.0353	.	0.0205	0.457	0.0020	0.0190	0.0169	.
CTIF FL7	3.22	2.550	0.100	1.34	0.048	0.351	0.232	0.043	.	.	0.335	0.0291	0.0525	0.0796	.
CTIF FT3	3.2	1.55	0.345	0.063	0.051	0.015	0.092	0.685	.	.	.	.	0.2	0.016	.
CTIF NH7-2	3.2	1.20	0.91	0.034	0.0120	0.108	5.53	8.87	.	.	.	.	.	.	.
CTIF FO5	3.2	0.7	0.2	1.30	0.027	0.12	0.172	0.3	.	.	0.41	0.109	0.04	0.14	.
CTIF NH9	3.13	1.24	0.65	0.087	0.029	0.203	4.11	11.70	.	.	0.059	.	.	.	.
CTIF NR Cu1	3.12	1.465	0.172	0.090	0.99	4.95	18.02	0.994	(0.095)	.	.	.	.	.	.
CTIF FL6	3.1	1.4	0.6	0.012	0.18	0.079	1.03	0.167	.	0.028	0.50	0.005	0.15	0.033	.
CTIF FL10	3.1	1.3	0.85	0.323	0.066	0.104	0.10	(0.07)	(0.03)	.	0.0335	0.028	0.045	0.048	(0.02)
CTIF FPA 1	3.090	0.0300	0.100	0.0022	0.0009	0.0622	0.0450	0.0710	.	0.0097	0.0109	.	0.0010	0.0010	.
CTIF NR 8S	3.05	1.41	4.39	0.124	.	0.071	14.20	0.191	.	.	.	.	.	.	.
CTIF FO17	3.01	2.48	0.475	0.470	0.168	(0.006)	0.021	(0.016)	.	0.032	.	0.024	0.032	0.018	.
CTIF FAL 1	3.0	1.0	0.2	0.04	<0.001	0.2	0.06	0.04	2.1	.	0.015	.	0.01	.	.
CTIF NR 3L	2.99	3.05	0.72	0.088	0.052	0.26	21.58	2.97	.	.	.	.	.	.	.
CTIF NH1	2.98	1.35	0.90	0.060	0.105	1.99	1.38	0.83	.	.	1.45	.	.	.	.
CTIF NH8	2.98	0.80	0.57	0.052	0.076	0.065	8.16	5.03	.	.	0.125	.	.	.	.
CTIF NR 3S	2.92	2.91	0.77	0.024	.	0.33	24.63	3.05	.	.	.	.	.	.	.
CTIF FT1	2.9	2.12	0.71	0.12	0.025	0.012	0.11	0.057	.	.	.	0.067	0.19	0.525	.

Number	C	Si	Mn	P	S	Cu	Ni	Cr	Al	Co	Mo	Sn	Ti	V	W
CTIF NR 8L	2.89	1.70	5.19	0.054	0.030	0.075	13.33	0.165	.	.	.	.	.	.	.
CTIF NH4	2.84	0.49	0.28	0.12	0.022	0.09	3.60	2.46	.	.	0.30	.	.	.	.
CTIF FO4	2.81	1.51	0.64	0.58	0.009	0.31	0.32	0.17	.	.	0.095	0.013	0.075	0.049	.
CTIF FCR2	2.86	1.07	0.740	0.137	0.055	0.135	1.87	11.8	.	.	3.88	.	.	.	.
CTIF FL5	2.8	2.3	0.4	0.02	(0.005)	0.5	0.05	0.35	.	0.010	0.01	0.07	0.01	0.01	.
CTIF FCR Ni3	2.74	0.69	0.47	0.036	0.011	.	11.05	31.65	.	.	.	.	.	.	.
CTIF NH6	2.70	2.28	0.355	0.066	0.036	0.115	7.06	6.60	.	.	0.11	.	.	.	.
CTIF FO9	2.7	1.5	0.7	0.02	0.015	0.31	0.355	0.18	.	.	0.13	0.144	0.017	0.022	.
CTIF FL4	2.6	2.91	0.5	0.288	0.137	0.0168	0.061	0.45	.	.	0.090	0.011	0.0296	0.116	.
CTIF NR 1S	2.58	3.02	1.54	0.19	0.0015	0.11	20.60	2.00	.	.	.	.	.	.	.
CTIF NR 1L	2.50	3.00	1.34	0.125	0.10	0.49	25.87	1.74	.	.	.	.	.	.	.
CTIF NH2	2.50	1.81	1.04	0.047	0.058	1.02	1.78	1.26	.	.	1.01	.	.	.	.
CTIF NR Cu2	2.48	2.07	1.078	0.113	0.049	6.50	15.85	2.05	.	.	.	.	.	.	.
CTIF NR 4S	2.47	4.87	1.71	0.145	.	0.63	18.30	1.50	.	.	.	.	.	.	.
CTIF FCR4	2.47	1.40	2.05	0.097	0.066	1.32	0.571	24.2	.	.	2.16	.	.	.	.
CTIF FCR1	2.46	0.48	0.63	0.019	0.007	0.031	1.30	18.71	.	.	1.41	.	.	.	.
CTIF FO7	2.45	0.675	0.70	0.84	0.085	0.125	0.15	0.455	.	.	0.26	.	0.065	0.13	.
CTIF NR 4L	2.41	5.89	1.495	0.155	0.010	0.758	15.90	1.403	.	.	.	.	.	.	.
CTIF NR 2S	2.32	1.43	0.530	0.062	.	0.210	36.3	0.51	.	.	.	.	.	.	.
CTIF NH5	2.31	0.31	0.24	0.115	0.04	0.035	4.90	2.85	.	.	0.017	.	.	.	.
CTIF FL3	2.3	2.1	0.27	0.729	(0.013)	0.102	0.553	0.107	.	.	0.106	0.111	0.05	0.049	.
CTIF NR 4G	2.24	5.60	1.72	0.11	(0.002)	0.64	21.30	1.40	.	.	.	.	.	.	.
CTIF NR 2G	2.25	1.47	0.380	0.0476	(0.003)	0.232	36.34	0.395	.	.	.	.	.	.	.
CTIF FL2	2.18	3.61	0.0400	0.049	0.082	0.0497	0.0238	0.440	(0.006)	0.0263	(0.004)	0.140	0.0750	0.201	.
CTIF FL1	2.1	3.2	0.80	0.118	0.0765	0.0195	0.245	0.06	.	(0.022)	0.038	0.305	0.020	0.015	.
CTIF FCR Ni2	2.02	1.50	0.61	0.185	0.024	.	13.05	29.00	.	.	.	.	.	.	.
CTIF NR Cu3	1.94	3.12	0.60	0.046	0.016	8.05	13.3	3.50	.	.	.	.	.	.	.
CTIF NR 6S	1.82	2.44	0.99	0.019	.	0.03	30.75	1.06	.	.	.	.	.	.	.
CTIF NR 5L	1.77	2.99	1.207	0.037	0.083	0.48	33.89	0.27	.	.	.	.	.	.	.
CTIF NR 6L	1.76	2.07	0.70	0.031	0.063	0.020	30.37	3.49	.	.	.	.	.	.	.
CTIF NR 5S	1.67	1.97	1.23	0.035	.	0.50	27.05	0.24	.	.	.	.	.	.	.
CTIF FCR6	1.44	0.76	1.47	0.201	0.086	0.480	0.188	30.84	.	.	0.455	.	.	.	.
CTIF FCR Ni1	1.27	1.63	0.71	0.41	0.06	0.02	16.50	26.20	.	.	.	.	.	.	.

Number	C	Si	Mn	P	S	Cu	Ni	Cr	Al	Co	Mo	Sn	Ti	V	W

CAST IRON MUSHROOMS CONTINUED FROM THE PREVIOUS PAGE

Number	As	B	Bs	Bi	Ce	N	Nb	Pb	Sb	Te	Zn	
CTIF FO19	.	.	.	.	.	.	.	.	.	0.0005	.	
CTIF FO12	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO8	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR7	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO6	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO10	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH3	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO11	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO18	.	.	.	.	.	0.0040	.	.	.	.	.	
CTIF NH7-1	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR5	.	.	.	.	.	.	.	.	.	.	.	
CTIF FT2-1	.	.	.	.	.	.	.	.	.	.	.	
CTIF NiMo1	.	.	.	.	.	.	.	.	.	.	.	
CTIF FL7	(0.0266)	(0.010)	.	(0.010)	.	0.0035	.	.	.	.	.	
CTIF FT3	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH7-2	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO5	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH9	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR Cu1	.	.	.	.	.	.	.	.	.	.	.	
CTIF FL6	.	0.008	.	.	.	.	.	.	.	.	.	
CTIF FL10	(0.022)	.	(0.012)	(0.004)	.	.	(0.018)	(0.002)	(0.032)	(0.001)	(0.029)	
CTIF FPA 1	0.0109	.	.	.	.	0.0125	.	.	.	.	.	
CTIF NR 8S	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO17	.	.	.	.	.	.	.	.	.	.	.	
CTIF FAL 1	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 3L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH1	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH8	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 3S	.	.	.	.	.	.	.	.	.	.	.	
CTIF FT1	.	.	.	.	.	.	.	.	.	.	.	

Number	As	B	Bs	Bi	Ce	N	Nb	Pb	Sb	Te	Zn	
CTIF NR 8L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH4	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO4	.	.	.	.	.	.	.	.	.	.	.	last of stock
CTIF FCR2	.	.	.	.	.	.	.	.	.	.	.	
CTIF FL5	.	(0.002)	.	(0.0005)	.	.	.	.	.	.	.	
CTIF FCR Ni3	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH6	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO9	.	.	.	.	.	.	.	.	.	.	.	
CTIF FL4	(0.05)	.	.	(0.003)	.	0.007	.	.	.	.	.	
CTIF NR 1S	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 1L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH2	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR Cu2	.	.	.	.	.	(0.0079)	.	.	.	.	.	
CTIF NR 4S	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR4	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR1	.	.	.	.	.	.	.	.	.	.	.	
CTIF FO7	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 4L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 2S	.	.	.	.	.	.	.	.	.	.	.	
CTIF NH5	.	.	.	.	.	.	.	.	.	.	.	
CTIF FL3	.	.	.	.	.	0.008	.	.	.	.	.	
CTIF NR 4G	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 2G	.	.	.	.	.	.	0.27	.	.	.	.	
CTIF FL2	.	.	.	(0.0135)	.	.	.	.	.	.	.	
CTIF FL1	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR Ni2	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR Cu3	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 6S	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 5L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 6L	.	.	.	.	.	.	.	.	.	.	.	
CTIF NR 5S	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR6	.	.	.	.	.	.	.	.	.	.	.	
CTIF FCR Ni1	.	.	.	.	.	.	.	.	.	.	.	

Number	As	B	Bs	Bi	Ce	N	Nb	Pb	Sb	Te	Zn

ALLOY	ISO?	NUMBER
1.0812		ECRM 191-2D
1.2344		ECRM 271-1D
1.2367		HRT FE2012-H
1.4435, 1.4436		JK 27B
1.4765		ECRM 299-1D
1.5415		HRT FE2012-N
1.6587		HRT FE2013-N
1.7149 20MnCrS5		ECRM 187-2D
1.7160		ECRM 194-1D
1.8550		ECRM 129-3D
1.8519		HRT FE2010-N
1.8928		ECRM 194-2D
1005	17025	BS LC-6
1005		ECRM 064-2D
1005		RM Fe 1/5
1005		SRM 1765
1005		SRM 1766
1005		SS 111/1
1006		BS XCCS-1
1008		ECRM 057-2D
1009		IMZ 71
100C6		IRSID 1747
1010		IMZ 111
1010		IRSID 1665
1011		IMZ 73
1016	17025	BS 1016
1017		IMZ 112
1017		IRSID 1664
1018		12X 10180B
1018		12X 10180C
1018	17025	BS 1018
1018	17025	BS 2931B
1018		ECRM 087-1D
1018		IARM 28K
1020	17025	BS 1020
1026	17025	BS 1026
1026		IARM 359A
1030	17025	BS 1030
1030		IARM 209D
1033		IRSID 1663
1035		BS 1035
1035		IRSID 1645
1035		IARM 360A
1039		IRSID 1637
1040		12X 10400
1040	17025	BS 3941
1040		IARM 210D
1040		IRSID 1657
1042		IRSID 1656
1042		NM EN-8
1043		IRSID 1652
1045		BS 56E
1045	17025	BS 56H
1045		IARM 200D
1045		IPT 503
1050		IARM 254A
1055		NM 3405.01
1060		IARM 373A
1069		ECRM 059-2D
1078		ECRM 056-2D
1078		SRM 1224
1090		SS 602/2
1095		SRM 1227
1117	25(preceeded 17025)	BS 3993
1117		BS 65C
1117		IARM 29E
1118		IARM 307A
1140 P		BS 52D
1141		BS 66B
1141		IARM 348A
1144	17025	BS 1144
1144	17025	BS 1144A
1144		IARM 199C
11L17	17025	BS 75F
11L17	17025	BS 75G
1215	17025	BS 66L
1215		IARM 206B
12L14	17025	BS 74C
12L14		IARM 183C
12Mn18Cr		BS 193
1345		BS XCCV
13-8PH		13X PH13800
13-8PH		BS 184A
13-8PH		CT X92834
1429		ECRM 058-2D
1513		IMZ 76
1526 MOD		SRM 1269
1541		IARM 349A
1541		IPT 504
1541		IRSID 1648
1544		IRSID 1644
15-5PH		BS 185A
15-5PH		BS 9621
15-5PH		BS 9622
15-5PH		ECRM 273-1D
15-5PH		IARM 22C
17-4PH		13X PH2
17-4PH		13X PH17400
17-4PH		BS 17-4PHA
17-4PH		BS 17-4PHB
17-4PH		SRM C2400
17-7PH		13X PH17700
17-7PH 25(preceeded 17025)		BS 192
17-7PH 25(preceeded 17025)		BS 192A
17-7PH		IARM 152C
182FM		BS 150
18Cr2Ni12Mn		CT ISO035A
201		BS 191
201		SRM 1297
20Cb3		BS 187A
20Cb3		CT 20 Cb-3
20MoCr4		ECRM 197-1D
2101		IARM 292A
21Cr6Ni9Mn		CT ISO129A
2205	17025	BS 2205
2205		IARM 212D
2304		IARM 317A
2507		IARM 301B
253 MA	25(pre-17025)	BS 253
253 MA		IARM 316A
254 SMO		13X 31254
254 SMO		IARM 302B
254 SMO		NILAB 501HAD
255, Duplex		IARM 239B
255, Duplex		IARM 239C
300M		12X 44220
300M	17025	BS 300
300M		IARM 340A
301		IARM 289A
301		IRSID 1819
302		IARM 241D
302 HQ		IARM 234C
303		13X 30300
303	17025	BS 303
303		CT 303
303		CZ SP-1A
303 Se		IARM 253A
303 Se		IARM 253B
304		IARM 2H
304 H		13X NSB1
304 H		CT 304
304 H		SS 468/1
304 H		VS LG61
304 L	17025	BS 304
304 L	17025	BS 304A
304 L	17025	BS 304B
304 L		BS SS3951
304 L		IARM 162D
304 L		ECRM 287-1D
304 L		ECRM 292-1D
304 L		IARM 162C
304 L		SS 463/1
305		CT 305
305		CT X52353
305		ECRM 297-1D
308		DSZU C017
309		13X 30908
309		BS 82D
309		BS 82E
309		IARM 3E
310		13X 31008
310		BS 83G
310	25(pre-17025)	BS 9841
310	25(pre-17025)	BS 9842
310		CZ SL-3A
310		IARM 4E
310		IARM 4F
310		IARM 4G
310		SS 464/1
3115		BS XCCT
314		IMZ 165
314		IMZ 166A
316	17025	BS 316C
316		IARM 5H
316		IARM 5i
316		NILAB 500HAD
316		SRM 1155A
316 H		CT 316
316 H		IARM 339A
316 L		13X 31603
316 L	17025	BS 316D
316 L	17025	BS 316E
316 L		CZ SL-2A
316 L		IARM 163E
316 L		SS 466/2
316 Ti		ECRM 284-2D
317 L		BS 317L
317 L	25(pre-17025)	BS 9941
317 L	25(pre-17025)	BS 9942
317 L		IARM 153C
318	17025	BS 2205
321		13X 32100
321		BS 321C
321	17025	BS 85D
321		IARM 6i
321		IARM 6J
321		SRM 1171
321		SS 465/1
321 - Ti		IMZ 152
32750		13X NSA13
330		IARM 7C
3310		BS 1972
347		13X 34700
347		BS 347A
347		BS 347B
347		IARM 8G
347		IARM 8H
347		IARM 8i
347 H		BS 87F
348		SRM 1172
355	17025	BS 355
355		IARM 335A
35MV7		IRSID 1750
405		SRM 1295
409 + Cr		NCS HS20743
410	25(pre-17025)	BS 0021
410	17025	BS 410C
410		CT 410
410		CT X23576
410 + Mo		ECRM 296-1D
410 + Mo		IMZ 161
410 Cb		CT X68890
410 H		13X 41001
410, F6NM	25(pre-17025)	BS 0022
4130	17025	BS 4130
4130		IARM 143F
4130		IPT 501
4130		SRM 1225
4140		12X 41400
4140	25(pre-17025)	BS 1962
4140		IARM 30H
4140		IARM 30J
4140 Bi		BS 4140A
4140 Bi		BS 4140B
41L40MOD	17025	BS 70B
41L40MOD		BS 70C
4150 Bi & S		BS 4150MOD
4150 S	17025	BS 42
4150 S		BS 42A
416		BS 90F
416	17025	BS 416
416		CT 416
416		IARM 10D
416		SRM 1223
416 H		13X 41600
416 Se		BS 151
41CAD7		IRSID 1749
41L40	17025	BS 70B
41L50	17025	BS 72B
42		CT ISO138A
42		CT ISO139A
420		BS SS4951
420		BS SS4952
420		ECRM 272-1D
420		IARM 154B
420		IARM 154C
420		SS 469
420 F		BS 152
420 F S		IARM 352A
422		13X 42200
422	17025	BS 422
422		IARM 205D
430		BS 430
430		IARM 11D

Please use the Adobe Acrobat "search" function to find the complete chemistry of these samples listed within this catalog.

ALLOY	ISO?	NUMBER
430		NCS HS20742
430 F		BS 153
430 F		BS 154
430 F S		IARM 355A
431	17025	BS 431
431		BS 92B
431		IARM 12C
431		HRT FE2010-H
431		SRM 1219
4320		BS 3961
4330 MOD		BS 4330V
4330 MOD		IARM 330B
4340	17025	BS 4340
4340	17025	BS 4340A
4340		IARM 31G
440 C		13X 44004
440 C	17025	BS 93F
440 C		IARM 13D
440 F		BS 155
440 F Se		BS 156
440 F Se		IARM 353A
446		BS 94C
450		IARM 15C
455		13X 45500
446		IARM 14C
4615		BS 3962
4620		BS 4620
4620		BS 51F
4620		IARM 33D
465		13X 46500
465		IARM 354A
4820	17025	BS 4820A
4820		IARM 155F
5160		IMZ 116
6150		BS 4941
6150		IARM 34C
6418		BS 6418
6418		BS 69B
6526		BS 9-4-30
709		CT X67975
800	17025	BS 800
8620		BS 8620A (XRF)
8620	17025	BS 8620E
8620		BS 8620F
8620		IPT 502
86L20 25(preceeded 17025)		BS 73B
86L20		BS 73C
86L20		IARM 182B
8740	17025	BS 67C
8740		IARM 252C
8740		IARM 252D
8740		IARM 252E
8740		IARM 252F
904L		13X NSA12
904L		ECRM 295-1D
9310		BS 58C
9310		BS 58E
9325	17025	BS 9325A
9-4-30		IARM 341A
A-10		BS A-10
A-11		BS 10V
A-11	17025	BS A-11
A-106 Gr B		SRM 1228
A-193 B16		BS 4942
A-193 B16	17025	BS 4942A
A-2		BS 36D
A-2		CT A2
A-2		IARM 39B
A-2		IARM 39C
A-20		BS 187C
A-242		IPT 500
A-242 Mod		SRM C1285
A-286		BS 188A
A-286	17025	BS 188B
A-286		SRM 1230
A-36	17025	BS 2931B
A-36		IARM 213C
A-36		IARM 213D
A-36		SRM 1767
A-485-1		BS A485-1
A-6		BS 40B
A-6		IARM 40B
A-6		IARM 40C
A706-60		IARM 380A
A706-60		IARM 380B
A706-80		IARM 381A
Aermet 100		CT ISO045A
Aermet 100		IARM 242A
AL6XN	17025	BS 189A
AL6XN		IARM 157D
C-.5Mo		BS 3952
C-.5Mo		IARM 229B
C-250		IARM 308A
C-350		IARM 309A
CA6NM		HRT FE2009-H
CA6NM		IARM 327A
CD3MN		13X NSA5
CD3MN		ECRM 298-1D
CD6MN		VS LG58
CF-3		IRSID 1820
CLA1		IARM 164A
CLA11		IARM 180A
CLA5		IARM 168A
CLA9		IARM 172A
CPM15V	17025	BS PM15
Custom 450	25(pre-17025)	BS 9811
Custom 450	25(pre-17025)	BS 9812
Custom 450		CT 450
Custom 450		IARM 15B
Custom 455		BS SS1961
Custom 455		BS SS1962
Custom 455		CT 455
Custom 455		IARM 16C
Custom 465		CT ISO123A
Custom 630		CT 630
D-2		BS 37G
D-2		CT D2
D-2		IARM 41D
D-3, D-4		ECRM 288-1D
D-6	17025	BS D-6
D6-AC		IARM 299A
Duplex		13X NSA9
Duplex	17025	BS 2205
Duplex		IMZ 163A
Duplex		IMZ 164
E52100		BS 2952
E52100		BS 53G
E52100		IARM 49D
E52100		IARM 49E
E52100 Bi		BS 53MOD
Elect./ Magnetic		SRM 1159
Electrolytic		SRM 1265a
F-11		BS 45A
F-11	17025	BS 45B
F-11		IARM 35L
F-2		CT X27081
F-22	17025	BS 46B
F-22 25(preceeded 17025)		BS 1982
F-22		IARM 36C
F-22		SRM 1270
F-22 + Cr		HRT FE2009-N
F-5		BS 47A
F-5		BS 47B
F-5		IARM 37C
F-51	17025	BS 2205
F-9	17025	BS 48B
F-91 25(preceeded 17025)		BS 9905
F-91	17025	BS 9905A
Ferallium 255	17025	BS 179B
Ferallium 255	17025	BS 179C
Greek Ascoloy		BS 183A
Greek Ascoloy		IARM 20B
Greek Ascoloy		IARM 20C
H-10		BS 49
H-11		ECRM 276-2D
H-11		IARM 255A
H-11		IARM 255B
H-11		IMZ 173
H-13	17025	BS H-13
H-13		CT H13
H-13		IARM 42C
H-13		IMZ 174
H-19	17025	BS H-19
HC 250+V		SRM C1290
High Perm		CT ISO124A
High Perm		CT ISO136A
High Perm 49		CT ISO141A
HSLA 100		SRM 1271
HY 130		SRM 1226
HY 80		SRM 1286
Hy-Tuff		IARM 342A
Invar		14X 93603
Invar-36 + Se		BS 186A
Invar-36 + Se		IARM 24B
Invar 42		14X 94100
ISO 898-1		SS 457/2
KOVAR	17025	BS 160A
KOVAR		IARM 98B
L-2, 6150		BS 43A
L-6	17025	BS 39B
L-6		IARM 43B
LDX2101		13X 32101
LF-2		BS 2931B
LF-2	17025	BS LF2B
LF-2		SS 601/2
LF-3		BS LF3
M-1		CT M1
M-1		IARM 304A
M-10		CT M10
M-10		IARM 324A
M-152		13X 64152
M-152		IARM 291A
M-2		CT M2
M-2		IARM 44C
M-2		SRM 1157
M-35		IARM 320A
M-4		IARM 251A
M-42		SS 487/1
M-47	17025	BS M-47
M-50	17025	BS M-50
M-50		IARM 306B
M-7		CT M7
Maraging 250		CT 250
Maraging 300		CT 300
MaragingA538C 25(pre17025)		BS 161A
Mold Steel	17025	BS PP20
NIT 135M		IARM 305B
Nitriding 135G		BS 68B
Nitriding 135G	17025	BS 68E
Nitronic 40		13X NSC6
Nitronic 40		BS 190
Nitronic 40		IARM 19C
Nitronic 50		BS 180A
Nitronic 50	17025	BS 180B
Nitronic 50		IARM 17D
Nitronic 60		13X 21800
Nitronic 60		BS 181A
Nitronic 60	17025	BS 181B
NMS 100		IARM 214A
NMS 140		IARM 295A
NMS J38		IARM 294A
O-1	17025	BS 35D
O-1		CT O1
O-6	17025	BS 41
O-6 25(preceeded 17025)		BS 41A
O-6		IARM 45A
O-6		IARM 45B
P-6, HY100		BS 1972
P-20		BS 55G
PP-20	17025	BS PP20
Permendur 2V		IARM 326A
RA330		BS 86F
S-1		BS 33D
S-1		BS 33E
S-1		IARM 46B
S-5		BS 38C
S-5		IARM 47B
S-7		IARM 259A
S-7		SRM 1772
SA213-T22		IMZ 159
SA213-T22		IMZ 160
SA213-T22		IMZ 169
SAE G2500		BS 20E
STA 361		IARM 268B
T-1		14X HS1
T-1	17025	BS 30D
T-1		IARM 48C
T-4		IARM 281A
T-15	17025	BS TS15
VM12		IMZ 196
W-5		14X 72305
Z30C13		IRSID 1825
Zeron 100, Duplex		13X NSA8
Zeron 100, Duplex		IARM 319A

Please use the Adobe Acrobat "search" function to find the complete chemistry of these samples listed within this catalog.

CARBON STEEL SPECIFICATIONS

Number	C	Mn	P	S
1005	<0.06	<0.35	<0.03	<0.05
1006	<0.08	0.25-0.40	<0.03	<0.05
1008	<0.10	0.30-0.50	<0.03	<0.05
1009	<0.15	<0.60	<0.03	<0.05
1010	0.08-0.13	0.30-0.60	<0.03	<0.05
1011	0.09-0.14	0.60-0.90	<0.03	<0.05
1012	0.10-0.15	0.30-0.60	<0.03	<0.05
1013	0.11-0.16	0.50-0.80	<0.03	<0.05
1015	0.13-0.18	0.30-0.60	<0.03	<0.05
1016	0.13-0.18	0.60-0.90	<0.03	<0.05
1017	0.15-0.20	0.30-0.60	<0.03	<0.05
1018	0.15-0.20	0.60-0.90	<0.03	<0.05
1019	0.15-0.20	0.70-1.00	<0.03	<0.05
1020	0.18-0.23	0.30-0.60	<0.03	<0.05
1021	0.18-0.23	0.60-0.90	<0.03	<0.05
1022	0.18-0.23	0.70-1.00	<0.03	<0.05
1023	0.20-0.25	0.30-0.60	<0.03	<0.05
1025	0.22-0.28	0.30-0.60	<0.03	<0.05
1026	0.22-0.28	0.60-0.90	<0.03	<0.05
1029	0.25-0.31	0.60-0.90	<0.03	<0.05
1030	0.28-0.34	0.60-0.90	<0.03	<0.05
1033	0.29-0.36	0.70-1.00	<0.03	<0.05
1034	0.32-0.38	0.50-0.80	<0.03	<0.05
1035	0.32-0.38	0.60-0.90	<0.03	<0.05
1037	0.32-0.38	0.70-1.00	<0.03	<0.05
1038	0.35-0.42	0.60-0.90	<0.03	<0.05
1039	0.37-0.44	0.70-1.00	<0.03	<0.05
1040	0.37-0.44	0.60-0.90	<0.03	<0.05
1042	0.40-0.47	0.60-0.90	<0.03	<0.05
1043	0.40-0.47	0.70-1.00	<0.03	<0.05
1044	0.43-0.50	0.30-0.60	<0.03	<0.05
1045	0.43-0.50	0.60-0.90	<0.03	<0.05
1046	0.43-0.50	0.70-1.00	<0.03	<0.05
1049	0.46-0.53	0.60-0.90	<0.03	<0.05
1050	0.48-0.55	0.60-0.90	<0.03	<0.05
1053	0.48-0.55	0.70-1.00	<0.03	<0.05
1055	0.50-0.60	0.60-0.90	<0.03	<0.05
1059	0.55-0.65	0.50-0.80	<0.03	<0.05
1060	0.55-0.65	0.60-0.90	<0.03	<0.05
1064	0.60-0.70	0.50-0.80	<0.03	<0.05
1065	0.60-0.70	0.60-0.90	<0.03	<0.05
1069	0.65-0.75	0.40-0.70	<0.03	<0.05
1070	0.65-0.75	0.60-0.90	<0.03	<0.05
1074	0.70-0.80	0.50-0.80	<0.03	<0.05
1078	0.72-0.85	0.30-0.60	<0.03	<0.05
1080	0.75-0.88	0.60-0.90	<0.03	<0.05
1084	0.83-0.93	0.60-0.90	<0.03	<0.05
1085	0.80-0.94	0.70-1.00	<0.03	<0.05
1086	0.80-0.93	0.30-0.50	<0.03	<0.05
1090	0.85-0.98	0.60-0.90	<0.03	<0.05
1095	0.90-1.03	0.30-0.50	<0.03	<0.05

| Number | C | Mn | P | S |

CARBON STEEL SPECIFICATIONS

Number	C	Mn	P	S	Si
1513	0.10-0.16	1.10-1.40	<0.03	<0.05	.
1522	0.18-0.24	1.10-1.40	<0.04	<0.05	.
1524	0.19-0.25	1.35-1.65	<0.04	<0.05	.
1526	0.22-0.29	1.10-1.40	<0.04	<0.05	.
1527	0.22-0.29	1.20-1.50	<0.04	<0.05	.
1533	0.30-0.37	1.10-1.40	<0.04	<0.05	.
1534	0.30-0.37	1.20-1.50	<0.04	<0.05	.
1541	0.36-0.44	1.35-1.65	<0.04	<0.05	.
1544	0.40-0.47	0.80-1.10	<0.04	<0.05	.
1545	0.43-0.50	0.80-1.10	<0.04	<0.05	.
1546	0.44-0.52	1.00-1.30	<0.04	<0.05	.
1548	0.44-0.52	1.10-1.40	<0.04	<0.05	.
1552	0.47-0.55	1.20-1.50	<0.04	<0.05	.
1553	0.48-0.55	0.80-1.10	<0.04	<0.05	.
1566	0.60-0.70	0.85-1.15	<0.04	<0.05	.
1570	0.65-0.75	0.80-1.10	<0.04	<0.05	.
1580	0.75-0.88	0.80-1.10	<0.04	<0.05	.
1590	0.85-0.98	0.80-1.10	<0.04	<0.05	.
LF2	<0.30	0.60-1.35	<0.035	<0.04	0.15-0.30

| Number | C | Mn | P | S | Si |

RESULFURIZED STEEL SPECIFICATIONS

Number	C	Mn	P	S
1108	0.08-0.13	0.50-0.80	<0.04	0.08-0.13
1109	0.08-0.13	0.60-0.90	<0.04	0.08-0.13
1110	0.08-0.13	0.30-0.60	<0.04	0.08-0.13
1116	0.14-0.20	1.10-1.40	<0.04	0.16-0.23
1117	0.14-0.20	1.00-1.30	<0.04	0.08-0.13
1118	0.14-0.20	1.30-1.60	<0.04	0.08-0.13
1119	0.14-0.20	1.00-1.30	<0.04	0.24-0.33
1123	0.20-0.27	1.20-1.50	<0.04	0.06-0.09
1132	0.27-0.34	1.35-1.65	<0.04	0.09-0.13
1137	0.32-0.39	1.35-1.65	<0.03	0.08-0.13
1139	0.35-0.43	1.35-1.65	<0.04	0.13-0.20
1140	0.37-0.44	0.70-1.00	<0.03	0.08-0.13
1141	0.37-0.45	1.35-1.65	<0.03	0.08-0.13
1144	0.40-0.48	1.35-1.65	<0.03	0.24-0.33
1145	0.41-0.49	0.70-1.00	<0.04	0.08-0.13
1146	0.42-0.49	0.70-1.00	<0.04	0.08-0.13
1151	0.48-0.55	0.70-1.00	<0.04	0.08-0.13
1152	0.48-0.55	0.70-1.00	<0.04	0.06-0.09
1211	<0.13	0.60-0.90	0.07-0.12	0.10-0.15
1212	<0.13	0.70-1.00	0.07-0.12	0.16-0.23
1213	<0.13	0.70-1.00	0.07-0.12	0.24-0.33
1215	<0.09	0.75-1.05	0.04-0.09	0.26-0.35

| Number | C | Mn | P | S |

These are specifications, not samples for sale.

LOW ALLOY STEEL SPECIFICATIONS

Number	C	Mn	P	S	Si	Ni	Cr	Mo	Pb	Other
1330	0.28-0.33	1.60-1.90	<0.035	<0.04	0.15-0.35	.	.	.	.	
1335	0.33-0.38	1.60-1.90	<0.035	<0.04	0.15-0.35	.	.	.	.	
1340	0.38-0.43	1.60-1.90	<0.035	<0.04	0.15-0.35	.	.	.	.	
1345	0.43-0.48	1.60-1.90	<0.035	<0.04	0.15-0.35	.	.	.	.	
3140	0.38-0.43	0.70-0.90	<0.04	<0.04	0.15-0.35	1.10-1.40	0.55-0.75	.	.	
4023	0.20-0.25	0.70-0.90	<0.035	<0.04	0.15-0.35	.	.	0.20-0.30	.	
4027	0.25-0.30	0.70-0.90	<0.035	<0.04	0.15-0.35	.	.	0.20-0.30	.	
4028	0.25-0.30	0.70-0.90	<0.035	0.035-0.050	0.15-0.35	.	.	0.20-0.30	.	
4037	0.35-0.40	0.70-0.90	<0.035	<0.04	0.15-0.35	.	.	0.20-0.30	.	
4047	0.45-0.50	0.70-0.90	<0.035	<0.04	0.15-0.35	.	.	0.20-0.30	.	
4118	0.18-0.23	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.40-0.60	0.08-0.15	.	
4120	0.18-0.23	0.80-1.20	<0.035	<0.04	0.15-0.35	.	0.40-0.60	0.15-0.25	.	
4121	0.18-0.23	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.45-0.65	0.15-0.25	.	
4130	0.28-0.33	0.40-0.60	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4135	0.33-0.38	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4137	0.35-0.40	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4140	0.38-0.43	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
41L40	0.38-0.43	0.75-1.00	<0.035	0.02-0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	0.15-0.35	
4142	0.40-0.45	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4145	0.43-0.48	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4147	0.45-0.50	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
4150	0.48-0.53	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	.	
41L50	0.48-0.53	0.75-1.00	<0.035	0.02-0.04	0.15-0.35	.	0.80-1.10	0.15-0.25	0.15-0.35	
4320	0.17-0.22	0.45-0.65	<0.035	<0.04	0.15-0.35	1.65-2.00	0.40-0.60	0.20-0.30	.	
4340	0.38-0.43	0.60-0.80	<0.035	<0.04	0.15-0.35	1.65-2.00	0.70-0.90	0.20-0.30	.	
4615	0.13-0.18	0.45-0.65	<0.035	<0.04	0.15-0.35	1.65-2.00	.	0.20-0.30	.	
4617	0.15-0.20	0.45-0.65	<0.035	<0.04	0.15-0.35	1.65-2.00	.	0.20-0.30	.	
4620	0.17-0.22	0.45-0.65	<0.035	<0.04	0.15-0.35	1.65-2.00	.	0.20-0.30	.	
4715	0.13-0.18	0.70-0.90	<0.035	<0.04	0.15-0.35	0.70-1.00	0.45-0.65	0.45-0.65	.	
4720	0.17-0.22	0.50-0.70	<0.035	<0.04	0.15-0.35	0.90-1.20	0.35-0.55	0.15-0.25	.	
4815	0.13-0.18	0.40-0.60	<0.035	<0.04	0.15-0.35	3.25-3.75	.	0.20-0.30	.	
4820	0.18-0.23	0.50-0.70	<0.035	<0.04	0.15-0.35	3.25-3.75	.	0.20-0.30	.	
50B46	0.44-0.49	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.20-0.35	.	.	B: 0.0005-0.003
5120	0.17-0.22	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	.	
51L20	0.17-0.22	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	0.15-0.35	
5130	0.28-0.33	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.80-1.10	.	.	
5132	0.30-0.35	0.60-0.80	<0.035	<0.04	0.15-0.35	.	0.75-1.00	.	.	
5140	0.38-0.43	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	.	
5150	0.48-0.53	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	.	
5160	0.56-0.64	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	.	
51B60	0.56-0.64	0.75-1.00	<0.035	<0.04	0.15-0.35	.	0.70-0.90	.	.	B: >0.0005
6150	0.48-0.53	0.70-0.90	<0.035	<0.04	0.15-0.35	.	0.80-1.10	.	.	V: >0.15
8615	0.13-0.18	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8617	0.15-0.20	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8620	0.18-0.23	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
86L20	0.18-0.21	0.70-0.90	<0.035	0.02-0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	0.15-0.35	
8622	0.20-0.25	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8630	0.28-0.33	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8637	0.35-0.40	0.75-1.00	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8640	0.38-0.43	0.75-1.00	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8645	0.43-0.48	0.75-1.00	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	.	
8720	0.18-0.23	0.70-0.90	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.20-0.30	.	
8740	0.38-0.43	0.75-1.00	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.20-0.30	.	
8822	0.20-0.25	0.75-1.00	<0.035	<0.04	0.15-0.35	0.40-0.70	0.40-0.60	0.30-0.40	.	
9259	0.56-0.64	0.75-1.00	<0.035	<0.04	0.70-1.10	.	0.45-0.65	.	.	
9260	0.56-0.64	0.75-1.00	<0.035	<0.04	1.80-2.20	.	.	.	.	
E4340	0.38-0.43	0.65-0.85	<0.025	<0.025	0.15-0.35	1.65-2.00	0.70-0.90	0.20-0.30	.	
E51100	0.98-1.10	0.25-0.45	<0.025	<0.025	0.15-0.35	.	0.90-1.15	.	.	
E52100	0.98-1.10	0.25-0.45	<0.025	<0.025	0.15-0.35	.	1.30-1.60	.	.	
E9310	0.08-0.13	0.45-0.65	<0.025	<0.025	0.15-0.35	3.00-3.50	1.00-1.40	0.08-0.15	.	
F-11	0.10-0.20	0.30-0.80	<0.04	<0.04	0.50-1.00	.	1.00-1.50	0.44-0.65	.	
F-22	<0.15	0.30-0.60	<0.03	<0.03	<0.50	.	2.00-2.50	0.90-1.10	.	
F-5	<0.15	0.30-0.60	<0.03	<0.03	<0.50	.	4.00-6.00	0.45-0.65	.	
F-9	<0.15	0.30-0.60	<0.03	<0.03	0.50-1.0	.	8.00-10.00	0.90-1.10	.	
F-91	0.08-0.12	0.30-0.60	<0.02	<0.01	0.20-0.50	<0.40	8.00-9.50	0.85-1.05	.	Al: <0.04 N: 0.03-0.07
F-91	continued									Nb: 0.06-0.10 V: 0.18-0.25
LF2	<0.30	0.60-1.35	<0.035	<0.04	0.15-0.30	.	.	.	.	
LF3	<0.20	<0.90	<0.035	<0.04	0.20-0.35	3.25-3.75	.	.	.	

Number C Mn P S Si Ni Cr Mo Pb Other

These are specifications, not samples for sale.

TOOL STEEL SPECIFICATIONS

* notes optional chemistry

Number	C	Mn	P	S	Si	Ni	Cr	Co	Mo	V	W	Other
A-2	0.95-1.05	<1.00	<0.03	<0.03	<0.50	.	4.75-5.50	.	0.90-1.40	0.15-0.50	.	
A-4	0.95-1.05	1.80-2.20	<0.03	<0.03	<0.50	.	0.90-2.20	.	0.90-1.40	.	.	
A-6	0.65-0.75	1.80-2.50	<0.03	<0.03	<0.50	.	0.90-1.20	.	0.90-1.40	.	.	
A-7	2.00-2.85	<0.80	<0.03	<0.03	<0.50	.	5.00-5.75	.	0.90-1.40	3.90-5.15	0.50-1.50	
A-8	0.50-0.60	<0.50	<0.03	<0.03	0.75-1.10	.	4.75-5.50	.	1.15-1.65	.	1.00-1.50	
A-9	0.45-0.55	<0.50	<0.03	<0.03	0.95-1.15	1.25-1.75	4.75-5.50	.	1.30-1.80	0.80-1.40	.	
A-10	1.25-1.50	1.60-2.10	<0.03	<0.03	1.00-1.50	1.55-2.05	.	.	1.25-1.75	.	.	
A-11	2.45	0.50	.	.	0.90	.	5.25	.	1.30	9.75	.	
D-2	1.40-1.60	<0.60	<0.03	<0.03	<0.60	.	11.00-13.00	<1.00	0.70-1.20	<1.10	.	
D-3	2.00-2.35	<0.60	<0.03	<0.03	<0.60	.	11.00-13.50	.	.	<1.00	<1.00	
D-4	2.05-2.40	<0.60	<0.03	<0.03	<0.60	.	11.00-13.00	.	0.70-1.20	<1.00	.	
D-5	1.40-1.60	<0.60	<0.03	<0.03	<0.60	.	11.00-13.00	2.50-3.50	0.70-1.20	<1.00	.	
D-7	2.15-2.50	<0.60	<0.03	<0.03	<0.60	.	11.50-13.50	.	0.70-1.20	3.80-4.40	.	
H-10	0.35-0.45	0.25-0.70	<0.03	<0.03	0.80-1.20	.	3.00-3.75	.	2.00-3.00	0.25-0.75	.	
H-11	0.33-0.43	0.20-0.50	<0.03	<0.03	0.80-1.20	.	4.75-5.50	.	1.10-1.60	0.30-0.60	.	
H-12	0.30-0.40	0.20-0.50	<0.03	<0.03	0.80-1.20	.	4.75-5.50	.	1.25-1.75	<0.50	1.00-1.70	
H-13	0.32-0.45	0.20-0.50	<0.03	<0.03	0.80-1.20	.	4.75-5.50	.	1.10-1.75	0.80-1.20	.	
H-14	0.35-0.45	0.20-0.50	<0.03	<0.03	0.80-1.20	.	4.75-5.50	.	.	.	4.00-5.25	
H-19	0.32-0.45	0.20-0.50	<0.03	<0.03	0.20-0.50	.	4.00-4.75	4.00-4.50	0.30-0.55	1.75-2.20	3.75-4.50	
H-21	0.26-0.36	0.15-0.40	<0.03	<0.03	0.15-0.50	.	3.00-3.75	.	.	0.30-0.60	8.50-10.00	
H-22	0.30-0.40	0.15-0.40	<0.03	<0.03	0.15-0.40	.	1.75-3.75	.	.	0.25-0.50	10.00-11.75	
H-23	0.25-0.35	0.15-0.40	<0.03	<0.03	0.15-0.60	.	11.00-12.75	.	.	0.75-1.25	11.00-12.75	
H-24	0.42-0.53	0.15-0.40	<0.03	<0.03	0.15-0.40	.	2.50-3.50	.	.	0.40-0.60	14.00-16.00	
H-26	0.45-0.55	0.15-0.40	<0.03	<0.03	0.15-0.40	.	3.75-4.50	.	.	0.75-1.25	17.25-19.00	
H-42	0.55-0.70	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	.	4.50-5.50	1.75-2.20	5.50-6.75	
L-2	0.45-1.00	0.10-0.90	<0.03	<0.03	<0.50	.	0.70-1.20	.	<0.25	0.10-0.30	.	
L-6	0.65-0.75	0.25-0.80	<0.03	<0.03	<0.50	1.25-2.00	0.60-1.20	.	<0.50	.	.	
M-1	0.78-0.88	0.15-0.40	<0.03	<0.03	0.20-0.50	.	3.50-4.00	.	8.20-9.20	1.00-1.35	1.40-2.10	
M-2	0.78-1.05	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	.	4.50-5.50	1.75-2.20	5.50-6.75	
M-3.1	1.00-1.10	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	.	4.75-6.50	2.25-2.75	5.00-6.75	
M-3.2	1.15-1.25	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	.	4.75-6.50	2.75-3.25	5.00-6.75	
M-4	1.25-1.40	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.75	.	4.25-5.50	3.75-4.50	5.25-6.50	
M-6	0.75-0.85	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	11.00-13.00	4.50-5.50	1.30-1.70	3.75-4.75	
M-7	0.97-1.05	0.15-0.40	<0.03	<0.03	0.20-0.55	.	3.50-4.00	.	8.20-9.20	1.75-2.25	1.40-2.10	
M-10	0.84-1.05	0.10-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	.	7.75-8.50	1.80-2.20	.	
M-30	0.75-0.85	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.50-4.25	4.50-5.50	7.75-9.00	1.00-1.40	1.30-2.30	
M-33	0.85-0.92	0.15-0.40	<0.03	<0.03	0.25-0.55	.	3.50-4.00	7.75-8.75	9.00-10.00	1.00-1.35	1.30-2.10	
M-34	0.85-0.92	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.50-4.00	7.75-8.75	7.75-9.20	1.90-2.30	1.40-2.10	
M-36	0.80-0.90	0.15-0.40	<0.03	<0.03	0.20-0.45	.	3.75-4.50	7.75-8.75	4.50-5.50	1.75-2.25	5.50-6.50	
M-41	1.05-1.15	0.20-0.60	<0.03	<0.03	0.15-0.50	.	3.75-4.50	4.75-5.75	3.25-4.25	1.75-2.25	6.25-7.00	
M-42	1.05-1.15	0.15-0.40	<0.03	<0.03	0.15-0.65	.	3.50-4.25	7.75-8.75	9.00-10.00	0.95-1.35	1.15-1.85	
M-46	1.22-1.30	0.20-0.40	<0.03	<0.03	0.40-0.65	.	3.70-4.20	7.80-8.80	8.00-8.50	3.00-3.30	1.90-2.20	
M-48	1.50	.	.	.	.	.	3.75	9.00	5.25	3.10	10.0	
M-52	0.90	.	.	.	.	.	4.00	.	4.00	2.00	1.25	
M-61	1.60	.	.	.	.	.	4.00	.	6.50	5.00	12.0	
M-62	1.30	.	.	.	.	.	3.75	.	10.5	2.00	6.25	
O-1	0.85-1.00	1.00-1.40	<0.03	<0.03	<0.50	.	0.40-0.60	.	.	<0.30	0.40-0.60	
O-2	0.85-0.95	1.40-1.80	<0.03	<0.03	<0.50	.	<0.35	.	<0.30	<0.30	.	
O-6	1.25-1.55	0.30-1.10	<0.03	<0.03	0.55-1.50	.	<0.30	.	0.20-0.30	.	.	
O-7	1.10-1.30	<1.00	<0.03	<0.03	<0.60	.	0.35-0.85	.	<0.30	<0.40	1.00-2.00	
P-20	0.28-0.40	0.60-1.00	<0.03	<0.03	0.20-0.80	.	1.40-2.00	.	0.30-0.55	.	.	
P-21	0.18-0.22	0.20-0.40	<0.03	<0.03	0.20-0.40	4.00-4.25	0.20-0.30	.	.	0.15-0.25	.	Al: 1.05-1.25
P-6	0.05-0.15	0.35-0.70	<0.03	<0.03	0.10-0.40	3.25-3.75	1.25-1.75	.	.	.	.	
S-1	0.40-0.55	0.10-0.40	<0.03	<0.03	0.15-1.20	.	1.00-1.80	.	<0.50	0.15-0.30	1.50-3.00	
S-2	0.40-0.55	0.30-0.50	<0.03	<0.03	0.90-1.20	.	.	.	0.30-0.60	<0.50	.	
S-4	0.50-0.65	0.60-0.95	<0.03	<0.03	1.75-2.25	.	<0.35	.	.	<0.35	.	
S-5	0.50-0.65	0.60-1.00	<0.03	<0.03	1.75-2.25	.	<0.35	.	0.20-1.35	<0.35	.	
S-6	0.40-0.50	1.20-1.50	<0.03	<0.03	2.00-2.50	.	1.20-1.50	.	0.30-0.50	0.20-0.40	.	
S-7	0.45-0.55	0.20-0.80	<0.03	<0.03	0.20-1.00	.	3.00-3.50	.	1.30-1.80	0.20-0.30*	.	
T-1	0.65-0.80	0.10-0.40	<0.03	<0.03	0.20-0.40	.	3.75-4.50	.	.	0.90-1.30	17.25-18.25	
T-15	1.50-1.60	0.15-0.40	<0.03	<0.03	0.15-0.40	.	3.75-5.00	4.75-5.25	<1.00	4.50-5.25	11.75-13.00	
T-4	0.70-0.80	0.10-0.40	<0.03	<0.03	0.20-0.40	.	3.75-4.50	4.25-5.75	0.40-1.00	0.80-1.20	17.50-19.00	
T-5	0.75-0.85	0.20-0.40	<0.03	<0.03	0.20-0.40	.	3.75-5.00	7.00-9.50	0.50-1.25	1.80-2.40	17.50-19.00	
T-6	0.75-0.85	0.20-0.40	<0.03	<0.03	0.20-0.40	.	4.00-4.75	11.00-13.00	0.40-1.00	1.50-2.10	18.50-21.00	
T-8	0.75-0.85	0.20-0.40	<0.03	<0.03	0.20-0.40	.	3.75-4.50	4.25-5.75	0.40-1.00	1.80-2.40	13.25-14.75	
W-1	0.70-1.50	0.10-0.40	<0.025	<0.025	0.10-0.40	<0.20	<0.15	.	<0.10	<0.10	<0.15	Cu: <0.20
W-2	0.85-1.50	0.10-0.40	<0.03	<0.03	0.10-0.40	<0.20	<0.15	.	<0.10	0.15-0.35	<0.15	Cu: <0.20
W-5	1.05-1.15	0.10-0.40	<0.03	<0.03	0.10-0.40	<0.20	0.40-0.60	.	<0.10	<0.10	<0.15	Cu: <0.20

| Number | C | Mn | P | S | Si | Ni | Cr | Co | Mo | V | W | Other |

These are specifications, not samples for sale.

STAINLESS AND HIGH ALLOY STEEL SPECIFICATIONS

* notes optional chemistry

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	N	Nb	Other
13-8PH	<0.05	<0.20	<0.01	<0.008	<0.10	.	7.50-8.50	12.25-13.25	2.00-2.50	<0.01	.	Al: 0.90-1.35
15-5PH	<0.07	<1.00	<0.04	<0.03	<1.00	2.50-4.50	3.50-5.50	14.00-15.50	.	.	0.15-0.45	
17-4PH	<0.07	<1.00	<0.04	<0.03	<1.00	3.00-5.00	3.00-5.00	15.00-17.50	.	.	0.15-0.45	
201	<0.15	5.5-7.5	<0.060	<0.03	<1.00	.	3.50-5.50	16.00-18.00	.	<0.25	.	
202	<0.15	7.5-10.0	<0.060	<0.03	<1.00	.	4.00-6.00	17.00-19.00	.	<0.25	.	
301	<0.15	<2.00	<0.045	<0.03	<1.00	.	6.00-8.00	16.00-18.00	.	.	.	
302	<0.15	<2.00	<0.045	<0.03	<1.00	.	8.00-10.00	17.00-19.00	.	.	.	
302B	<0.15	<2.00	<0.045	<0.03	2.00-3.00	.	8.00-10.00	17.00-19.00	.	.	.	
303	<0.15	<2.00	<0.20	>0.15	<1.00	.	8.00-10.00	17.00-19.00	<0.60*	.	.	Zr: <0.60*
304	<0.08	<2.00	<0.045	<0.03	<1.00	.	8.00-10.50	18.00-20.00	.	.	.	
304L	<0.03	<2.00	<0.045	<0.03	<1.00	.	8.00-12.00	18.00-20.00	.	.	.	
305	<0.12	<2.00	<0.045	<0.03	<1.00	.	10.00-13.00	17.00-19.00	.	.	.	
308	<0.08	<2.00	<0.045	<0.03	<1.00	.	10.00-12.00	19.00-21.00	.	.	.	
309	<0.20	<2.00	<0.045	<0.03	<1.00	.	12.00-15.00	22.00-24.00	.	.	.	
310	<0.25	<2.00	<0.045	<0.03	<1.50	.	19.00-22.00	24.00-26.00	.	.	.	
314	<0.25	<2.00	<0.045	<0.03	1.50-3.00	.	19.00-22.00	23.00-26.00	.	.	.	
316	<0.08	<2.00	<0.045	<0.03	<1.00	.	10.00-14.00	16.00-18.00	2.00-3.00	.	.	
316	<0.08	<2.00	<0.045	<0.03	<1.00	.	10.00-14.00	16.00-18.00	2.00-3.00	.	.	
316L	<0.03	<2.00	<0.045	<0.03	<1.00	.	10.00-14.00	16.00-18.00	2.00-3.00	.	.	
321	<0.08	<2.00	<0.045	<0.03	<1.00	.	9.00-12.00	17.00-19.00	.	.	.	Ti: >5xC
347	<0.08	<2.00	<0.045	<0.03	<1.00	.	9.00-13.00	17.00-19.00	.	.	>10xC	
348	<0.08	<2.00	<0.045	<0.03	<1.00	.	9.00-13.00	17.00-19.00	.	.	>10xC	Ta: <0.10
384	<0.08	<2.00	<0.045	<0.03	<1.00	.	17.00-19.00	15.00-17.00	.	.	.	
385	<0.08	<2.00	<0.045	<0.03	<1.00	.	14.00-16.00	11.50-13.50	.	.	.	
403	<0.15	<1.00	<0.04	<0.03	<0.50	.	.	11.50-13.00	.	.	.	
405	<0.08	<1.00	<0.04	<0.03	<1.00	.	.	11.50-14.50	.	.	.	Al: 0.10-0.30
409	<0.08	<1.00	<0.04	<0.01	<1.00	.	<0.50	10.50-11.75	.	.	.	Ti: 6\mtC-0.75
410	<0.15	<1.00	<0.04	<0.03	<1.00	.	.	11.50-13.50	.	.	.	
414	<0.15	<1.00	<0.04	<0.03	<1.00	.	1.25-2.50	11.50-13.50	.	.	.	
416	<0.15	<1.25	<0.06	>0.15	<1.00	.	.	12.00-14.00	<0.60*	.	.	Zr: <0.60*
420	>0.15	<1.00	<0.04	<0.03	<1.00	.	.	12.00-14.00	.	.	.	
422	0.20-0.25	<1.00	<0.04	<0.03	<0.75	<0.50	0.50-1.00	11.00-12.50	0.75-1.25	.	.	V: 0.15-0.30
422	continued											W: 0.75-1.25
430	<0.12	<1.00	<0.04	<0.03	<1.00	.	.	16.00-18.00	.	.	.	
430F	<0.12	<1.25	<0.06	>0.15	<1.00	.	.	16.00-18.00	<0.60*	.	.	Zr: <0.60*
431	<0.20	<1.00	<0.04	<0.03	<1.00	.	1.25-2.50	15.00-17.00	.	.	.	
440A	0.60-0.75	<1.00	<0.04	<0.03	<1.00	.	.	16.00-18.00	<0.75	.	.	
440B	0.75-0.95	<1.00	<0.04	<0.03	<1.00	.	.	16.00-18.00	<0.75	.	.	
440C	0.95-1.20	<1.00	<0.04	<0.03	<1.00	.	.	16.00-18.00	<0.75	.	.	
450	<0.05	<1.00	<0.03	<0.03	<1.00	1.25-1.75	5.00-7.00	14.00-16.00	0.50-1.00	.	8\mtC	
455	<0.05	<0.50	<0.04	<0.03	<0.50	1.50-2.50	7.50-9.50	11.00-12.50	<0.50	.	0.10-0.50	Ti: 0.80-1.40
501	>0.10	<1.00	<0.04	<0.03	<1.00	.	.	4.00-6.00	0.40-0.65	.	.	
502	<0.10	<1.00	<0.04	<0.03	<1.00	.	.	4.00-6.00	0.40-0.65	.	.	
Duplex	<0.05	<3.00	<0.035	<0.03	<1.50	<2.50*	4.00-7.00	18.00-25.00	0.20-5.50	<0.40	.	

Number C Mn P S Si Cu Ni Cr Mo N Nb Other

These are specifications, not samples for sale.