

INDEX

- ALLOY LISTING 49
ALLOY SPECIFICATIONS 51
ALLOYED CAST IRON 40, 41, 47, 48
ALUMINUM IN STAINLESS STEEL 19
ALUMINUM IN STEEL 2, 6
ANTIMONY IN STEEL 5
ARSENIC IN STEEL 5
- BISMUTH STEEL 5, 8
BORON IN STEEL 2
- CALCIUM IN STAINLESS STEEL 19
CALCIUM IN STEEL 6
CARBON STEEL 2, 3, 4, 44
CARBON STEEL SPECIFICATIONS 51
CAST IRON
 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 48
CAST IRON WITH MAGNESIUM 34, 35, 36
COBALT ALLOY 9
COBALT IN STAINLESS STEEL 21
COPPER IN STAINLESS STEEL 20
Cr-Mo STEEL 6, 7
- DUCTILE IRON 33
- EPMA SETS 6
- GRAY IRON 33
- HIGH ALLOY STEEL 31, 32, 47
HIGH ALLOY STEEL SPECIFICATIONS 54
HIGH CHROMIUM CAST IRON 40, 41, 47, 48
- IRON 2
- LEADED STEEL 8
LOW ALLOY STEEL
 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 45, 46
LOW ALLOY STEEL SPECIFICATIONS 52
LOW ALLOY STEEL WITH 0.13 % < C < 0.3 % 13, 14
LOW ALLOY STEEL WITH C < 0.13 % 15
LOW ALLOY STEEL WITH C > 0.3% 11, 12
- LOW ALLOY STEEL WITH EXTENSIVE ANALYSIS 13
- MAGNETIC ALLOY 9
MANGANESE STAINLESS STEEL 22
MANGANESE STEEL 8
MARAGING STEEL 21
- NICKEL BINARY 22
NITROGEN IN STEEL 6
NODULAR IRON 33
- PERMENDUR 2V 9
PHOSPHORUS IN STAINLESS STEEL 23
- RESULFURIZED STAINLESS STEEL 23
RESULFURIZED STEEL 9, 44
RESULFURIZED STEEL SPECIFICATIONS 51
- SELENIUM IN STAINLESS STEEL 23
SET 2, 6, 8, 9, 16, 30, 32
Si-Mo CAST IRON 33
SILICON STEEL 10, 44
SOLUBLE ALUMINUM 2
SOLUBLE BORON 2
STAINLESS STEEL
 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 47
STAINLESS STEEL SPECIFICATIONS 54
STAINLESS STEEL WITH C < 0.05 % 28, 29
STAINLESS STEEL WITH C > 0.05% 26, 27
STAINLESS STEEL WITH NI < 5.0 % 24, 25
SULFUR IN STAINLESS STEEL 23
- TOOL STEEL 16, 17, 18, 45, 46
TOOL STEEL SPECIFICATIONS 53
TUNGSTEN IN STAINLESS STEEL 21
- WHITE IRON 36
- XRF 2, 6, 8, 9, 16, 30, 32

PURE IRON

= class, where 1 = CRM and 2 = RM

* Provisional Analysis

17025

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	.
2	CZ LA-0B	(0.003)	0.038	0.0037	0.0023	(0.0043)	0.0074	0.0070	0.009	(0.0016)	(0.0010)	(0.0017)	0.0027	.
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
1	BS LC-7B	0.0025	0.024	0.013	0.0029	(0.005)	0.0033	0.0081	0.0090	0.0034	0.0194	0.0018	0.0043	0.0020
1	BS LC-7A	0.0025	0.023	0.013	0.0030	0.0056	0.0038	0.0058	0.0074	0.0034	0.0194	0.0017	0.0043	(0.005)
1	BS 50G	0.0023	0.010	0.0088	0.0033	0.009	0.007	0.0045	0.008	(0.001)	0.008	0.0011	0.0019	0.0030
1	VS RG24/1	0.0022	0.015	0.0027	0.0069	0.017	0.011	0.037	0.037	0.0013	.	0.012	.	.
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	BS 50D	0.0020	0.0008	0.0014	0.00024	0.0018	0.0004	0.0012	0.0003	(0.00004)	(0.0040)	0.0026	0.0024	0.0220
1	ECRM 098-1D	0.00051	0.00008	(0.00006)	0.00031	0.00048	.	.	0.00571	0.00085	.	.	0.00024	.
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	0.0004	(0.0003)	(0.0050)	disc 35 mm Ø x -7 or 19+ mm
CZ LA-0A	(0.0015)	.	.	Sb:(0.0007)	(0.001)	(0.001)	0.001	.	.	.	disc -37 mm Ø x 25 mm
CZ LA-0B	0.0024	.	.	.	.	(0.0013)	.	.	.	.	disc -39 mm Ø x -25 mm
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
BS LC-7B	0.0026	(0.0001)	(0.00008)	0.0007	(0.0003)	(0.0007)	(0.0001)	(0.0004)	(0.0006)	.	disc 38 mm Ø x 38 mm Fe:99.9
BS LC-7A	0.0024	(0.0001)	(0.0001)	(0.0005)	(0.0004)	(0.0007)	0.0004	(0.0004)	(0.0005)	.	disc 35 mm Ø x 38 mm Fe:99.9
BS 50G	0.0034	(0.0001)	(0.0002)	(0.0004)	(0.00007)	Sb:0.0005	(0.003)	(0.0003)	.	.	disc 38 mm Ø x 38 mm Fe:99.9
VS RG24/1	.	.	.	.	.	.	0.0010	.	.	.	disc -45 mm Ø x -28mm last
TL 1669 **	0.0017	0.00038	.	0.00046	0.00013	0.0071	0.0504	(0.0006)	.	.	disc 38 mm Ø x 25 mm
BS 50D	(0.0001)	0.00004	0.00005	0.0002	0.00005	<0.0001	0.0001	0.0004	(0.0002)	.	disc 35 mm Ø x -7 to 19+mm last
ECRM 098-1D	.	.	.	.	.	.	.	.	.	.	octagon 35 mm Ø x 25 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)
1018	BS 1018	0.195	0.79	0.012	0.024	0.237	0.130	0.104	0.177	0.044	0.029	0.0041	0.0058	0.0079	0.0099	0.0009
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
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)

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 HS93703-1a	0.59	0.58	0.036	0.034	1.04	2.10	0.023	0.030	0.650	0.033	0.063	4.05	0.0088	0.0040
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 HS93703-1a	0.034	0.0013	(0.0001)	0.300	(0.0001)	(0.0004)	0.0035	0.069	0.021	0.313	(0.0005)
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	BS 54H	0.737	0.829	0.0030	0.0044	0.521	0.046	0.373	0.369	0.032	.	0.0036	(0.0001)	(0.0001)	0.0030	0.0106
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	SS 435/1	0.52	0.41	0.033	0.031	0.54	.	0.060	0.14	.	.	.	.	.	.	.
1	SS 435/2	0.489	0.390	0.037	0.042	0.328	.	0.133	0.184	.	.	.	.	.	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 1045	0.458	0.796	0.0069	0.023	0.215	0.190	0.060	0.108	(0.001)	.	0.0050	(0.0003)	0.0013	0.0056	0.0170
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	NM 306	0.44	0.80	0.043	0.042	0.34	.	.	0.26	.	.	.	.	.	.	.
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)	.	.	.	.	.	0.033
1	ECRM 084-1D	0.391	0.860	.	0.029	0.265	0.267	0.154	.	.	.	.	.	.	.	0.043
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	0.362	0.758	0.0100	0.028	0.246	0.241	0.123	0.151	0.0008	.	0.0051	(0.0002)	0.0017	0.0073	0.049
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	0.91	0.054	0.0032	0.42	0.188	0.135	1.53	0.88	.	.	.	.	0.071	0.222
1	SS 434/2	0.275	1.54	0.061	0.0141	0.51	.	0.037	0.238	.	.	.	.	.	.	.
1	IRSID 1654	0.270	0.979	0.036	(0.047)	0.354	0.441	0.241	0.328	.	.	0.040	.	.	.	(0.043)
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 I0180C	0.171	0.803	0.0150	0.0200	0.147	0.0500	0.0284	0.0793	0.0198	.	0.0029	.	.	.	0.0047
1	12X I0180B	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							

CARBON STEEL													CONTINUED FROM THE PREVIOUS PAGE												
Number	N	Nb	O	Pb	Sb	Sn	Ti	V	W	Zn	Zr	Units													
IRSD 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										
BS 54H	0.0039	(0.0003)	(0.001)	(0.001)	(0.001)	0.0030	0.0009	0.0008	(0.003)	Fe:97.0	(0.0008)	44 mm Ø x 19+ mm	17025												
VS RG28	.	0.029	.	.	.	.	0.0041	0.022	0.006	.	.	~45 mm Ø x ~28 mm										
VS RG28/1	.	0.041	.	.	.	.	0.022	0.035	0.0041	.	.	~45 mm Ø x ~28 mm										
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										
SS 435/1	.	0.039	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm										
SS 435/2	.	0.134	.	.	.	.	.	.	.	.	.	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 to 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 1045	0.0113	0.026	0.0040	(0.0005)	0.0017	0.0084	0.0011	(0.002)	(0.0007)	Fe:98.1	(0.0009)	38 mm Ø 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 ~25 mm										
IRSID 1657	.	.	.	.	.	.	.	(0.001)	.	.	.	42 mm Ø x 30 mm										
NM 306	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm	last									
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)	last	(0.0003)	41 mm Ø x ~7 - 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 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 ~28 mm										
BS 1035	0.0105	(0.001)	0.0036	(0.001)	(0.002)	0.0027	0.0007	0.026	0.0020	Fe:97.9	(0.0009)	40 mm Ø x ~7 or 19+ mm	17025												
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	last	(0.0002)	38 mm Ø x ~7 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										
SS 434/2	0.0104	0.038	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm										
IRSID 1654	.	.	.	.	.	0.030	.	.	.	.	.	40 mm Ø x 34 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 ~28 mm										
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 1F2B	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 mm													
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										
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 ~28 mm										
VS UG124	0.0072	.	.	.	.	.	.	0.0043	.	.	.	~45 mm Ø x ~25 mm										
VS UG109	.	.	.	.	.	.	0.071	.	.	.	.	~45 mm Ø x ~25 mm										
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 mm													
SS 456/2	.	0.0057	.	0.0189	0.0172	.	.	0.0221	.	.	(0.014)	38 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	.	0.059	.	.	.	.	.	.	.	.	.	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 ~28 mm										
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										
NM 305	.	.	.	.	.	.	.	.	.	.	.	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	.	0.0052	.	.	~45 mm Ø x ~28 mm										
SS 431/2	0.0052	0.0040	.	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm										
VS UG2/11	(0.007)	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~28 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										
BS 1005	0.0044	0.0008	0.0058	(0.0003)	(0.0007)	0.0009	0.0010	(0.0007)	(0.0003)	Fe:99.6	(0.0008)	38 mm Ø x ~7 or 19+ mm	17025												
BS 1009	0.0043	(0.0008)	0.0060	(0.0004)	(0.0009)	0.0007	0.0007	(0.0006)	(0.001)	Fe:99.6	(0.0006)	38 mm Ø x ~7 or 19+ mm	17025												
SS 111/1	0.0025	.	.	.	.	0.0006	0.0004	0.0002	.	.	.	44 mm Ø x 19 mm										
VS 005</																									

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
2	CZ CM-2B	0.12	0.020	0.247	0.894	0.082	0.0114	1.95	0.99	1.20	1.53	0.046	.	0.45	0.33	0.091	0.342
1	12X 12749X	0.081	.	0.176	1.41	0.023	0.066	0.48	0.253	0.47	0.453	0.202	.	0.426	0.195	0.018	0.0178
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	12X 350C	0.057	.	0.159	0.758	0.0296	0.040	0.467	0.196	0.160	0.335	0.290	.	0.030	0.147	0.0382	0.076
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 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	BS 1762	0.025	(0.02)	0.363	2.04	0.032	0.037	0.38	0.133	1.16	0.929	0.049	.	0.064	0.347	0.079	0.096
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 357D	0.0127	0.018	0.312	0.219	0.0101	0.066	0.211	0.203	0.188	0.21	0.138	.	0.198	0.025	0.0145	0.074
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	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
CZ CM-2B	0.0010	.	.	.	.	0.0062	(0.58)	.	0.087	.	.	0.109	0.22	.	0.013	~39 mm Ø x ~25 mm
12X 12749X	.	.	.	.	.	.	.	.	0.016	.	.	0.068	0.036	.	.	~40 mm Ø x ~15 mm
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
12X 350C	.	.	.	.	.	.	.	.	.	.	.	0.0115	0.260	.	.	~40 mm Ø x ~15 mm
IRSID 1656	.	.	.	.	.	.	.	.	.	.	.	(0.002)	.	.	.	40 mm Ø x 35 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
BS 1762	0.0048	.	(20)	.	(3)	0.017	0.074	64	(0.011)	Fe:93.9	(0.03)	0.193	0.029	(0.01)	(0.01)	37 mm Ø x 25 mm 17025
ECRM 055-2D	.	.	.	.	.	0.01069	.	.	.	.	.	0.00245	0.0166	.	.	38 mm Ø x 25 or 30 mm
12X 357D	0.0036	0.0024	.	.	.	0.011	.	0.040	0.0057	.	.	0.127	0.0213	.	0.0049	~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	last	(0.0002)	38 mm Ø x ~7 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
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

RM

BISMUTH STEEL

Number	Bi	C	Mn	P	S	Si	Cu	Ni	Cr	Al	As	Co	Mo	N
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
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
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
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

Number	Ca	O	Pb	Sn	Ti	V	Units
BS 4140A	(0.0003)	(0.0025)	(0.001)	0.011	(0.003)	0.004	38 mm Ø x ~7 tp 19+ mm
BS 53MOD	(0.001)	(0.002)	0.0005	0.008	.	0.005	38 mm Ø x ~7 or 19+ mm
BS 4140B	(0.0002)	(0.002)	0.004	(0.002)	0.003	0.005	38 mm Ø x 12 mm
BS 4150MOD	0.0010	(0.003)	0.0010	0.013	(0.002)	0.008	38 mm Ø x ~7 mm last

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	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	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
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
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
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
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
SS 116	.	.	.	.	.	0.00012	.	.	0.00171	.	.	44 mm Ø x 19 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
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
HRT FE2009-N	.	.	.	.	.	.	.	.	.	.	Zn: 0.004	40 mm Ø x 40 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 - 19 mm
BS 4150MOD	0.005	.	0.070	.	(0.003)	0.0010	.	0.013	(0.002)	.	.	38 mm Ø x ~7 or 19 mm last
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
BS 4942	0.005	.	.	.	(0.0021)	.	.	0.014	.	.	.	38 mm Ø x ~7 or 19+ mm last
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
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

CRM Al, Ca, AND N IN LOW ALLOY STEEL

Number	Al	Ca	N	Units
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
1	2.25Cr-1Mo	F-22	BS 46B	0.126	0.472	0.0087	0.0187	0.219	0.128	0.081	2.28	1.00	0.020	0.0074	0.0100	0.0073	0.0073
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	13X 90901A	8.43	0.905	0.102	0.447	0.0148	0.0009	0.429	0.039	0.249	0.021	.	.	0.0472	0.0020	0.208
2	HRT FE2012-H	5.13	2.78	0.37	0.41	0.019	0.002	0.42	0.07	0.20	.	.	.	.	.	0.42
1	BS H-13A	5.11	1.32	0.391	0.445	0.0187	(0.003)	1.13	0.083	0.139	(0.03)	0.0050	0.033	0.034	(0.005)	0.92
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
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	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	1.79	0.421	0.386	0.853	0.010	0.0026	0.58	0.106	0.131	0.0123	0.0062	0.0093	0.0079	0.0074	0.0056
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	TL 1100	1.664	0.3349	0.3487	0.6284	0.0124	0.0049	0.2839	0.1767	3.727	0.0374	.	0.0283	0.0116	0.0083	.
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	0.010	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	.	0.0058	0.0049	(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

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
13X 90901A	.	.	0.070	.	.	.	.	(0.0025)	0.009	.	-40 mm Ø x ~15 mm
HRT FE2012-H	.	.	(0.007)	.	.	.	.	.	.	.	40 mm Ø x 20 mm
BS H-13A	(0.0007)	(0.0006)	0.0052	(0.016)	(0.0004)	(0.002)	.	(0.03)	0.100	(0.002)	38 mm Ø x ~7 or 19+ mm 17025 Fe: 90.2
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
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
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	(0.0003)	0.0016	<0.01	0.0015	<0.01	0.0026	.	0.0044	(0.029)	<0.01	38 mm Ø x ~7 or 19+ mm 17025 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
ECRM 129-3D	.	.	.	.	.	0.00059	.	0.0030	.	.	39 mm Ø x 25 mm
TL 1100	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 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 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	(

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 74D *	0.28	0.070	1.0	0.075	0.27	0.008	0.006	0.012	0.018	0.014	0.006	0.005	0.006	0.004	0.001	0.0015
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	0.206	0.86	0.0111	0.031	0.280	0.025	0.56	0.574	0.028	0.0035	0.0028	0.180	0.0040	(0.002)	0.0031
1	IARM Fe86L20-18	0.20	0.175	0.794	0.009	0.015	0.29	0.242	0.458	0.53	0.025	.	0.0085	0.203	0.0052	0.014	0.0016
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	0.133	0.387	0.90	(0.009)	0.020	0.27	0.123	0.247	0.99	0.019	0.007	0.0086	0.202	0.0079	0.008	0.0026

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 74D *	<0.005	<0.005	<0.05	<0.05	<0.05	* Provisional Analysis			12L14	41 mm Ø x ~7 or 19+ 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 ~7 or 19+ mm	17025 last of stock
BS 73C	(0.0002)	(0.0005)	(0.002)	0.0013	(0.002)	0.0024	(0.006)	.	86L20	38 mm Ø x ~7 or 19+ mm	17025 Fe:[97.0]
IARM Fe86L20-18	CRM	.	.	.	.	.	.	.	.	38 mm Ø x ~2 or 19 mm	.
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 ~12 or ~17 mm	25(pre-17025) last
BS 70B	.	.	.	.	.	.	.	.	41L40MOD	41 mm Ø x ~7 or 19+ mm	17025
BS 70C	(0.0003)	.	<0.005	0.0020	(0.003)	0.0020	(0.0006)	.	41L40MOD	41 mm Ø x ~7 or 19+ mm	17025 Fe: 96.7

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:~40Øx-15-17mm BS:32Øx-15-17mm CZ:~39Øx25mm DSZU:39Øx20mm ECRM:35Øx25mm IMN:50-56Øx15mm NCS:36Øx36mm SS:48x42x12mm VS:~38Øx-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)
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	NCS AH37335	18.70	1.30	0.048	0.007	0.457	0.021	0.593	2.00	(0.011)	0.249	0.024	0.077	Ce:0.011	0.201	Ti:0.006
1	VS LG69	18.6	0.45	0.033	0.0048	0.50	0.088	0.178	0.428	2.78	0.020	0.011	.	.	.	.
1	DSZU C011a	17.4	0.45	0.042	0.008	0.43	0.089	0.11	0.36	(2.8)	(0.014)	.	.	.	.	.
1	NCS AH37334	16.90	1.20	0.051	0.011	0.655	0.024	0.200	2.20	0.018	0.180	0.021	0.085	Ce:0.027	0.253	La:0.014 Ti: 0.125
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)	.	.	.	.
2	CZ SP-2C	14.5	1.40	0.037	0.016	0.29	0.35	0.050	1.56	0.030	0.050	0.027	Co:0.044	0.037	0.051	Ti: 0.014 W: 0.033
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	NCS AH37333	12.46	1.23	0.061	0.009	0.428	0.017	3.34	1.72	0.022	0.951	0.024	0.108	Ce:0.029	0.085	La:0.017 Ti: 0.064
1	14X MN2S	12.3	0.80	0.024	0.0080	2.20	0.089	0.726	0.364	0.020	1.08	0.038	0.23	0.015	0.089	Ta:(0.006) Ti: 0.018
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 MN3U	10.2	1.09	0.0239	0.015	1.11	0.135	0.387	0.599	0.045	0.343	0.025	0.398	0.0254	0.022	Ta: 0.010 Ti:(0.10)
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 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</										

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 mm

RESULFURIZED STEEL

= Class, where 1 = CRM and 2 = RM **OBS 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	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	.	0.16	.	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 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	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	0.0821	0.222	1.208	0.0900	0.347	0.266	0.991	2.022	0.0242	0.265	1.039	0.029	0.309	.	0.276
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
1	12X 15217R	0.078	0.166	0.885	0.064	1.392	0.257	0.860	1.011	0.081	0.193	0.311	0.014	0.058	.	0.607
1	NM 307	0.073	1.03	0.52	0.073	0.22	.	.	1.19	.	.	.	.	.	.	.
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 15255R	0.067	0.392	1.09	0.080	1.01	0.288	0.317	1.49	0.161	0.045	0.113	0.0058	0.106	0.052	0.491
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	BS 4150MOD-A	0.062	0.503	1.12	0.0172	0.253	0.192	0.095	0.799	0.0023	0.0070	0.170	0.0081	0.0090	0.0018	0.029
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 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
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 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
BS 1144	0.009	.	.	.	(0.004)	0.0016	(0.001)	.	(0.003)	.	last	38 mm Ø x -16 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 or 19+ mm last
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 -7 or 19+ mm
BS 52D	.	.	.	.	.	(0.002)	.	.	.	.	last	44 mm Ø x -7 to 19+ mm last
12X 15253T	0.0216	.	.	.	0.374	.	.	Ta:0.007	0.276	.	.	~40 mm Ø x -15 mm
BS 4150MOD	0.005	.	0.070	0.0010	.	(0.003)	0.0010	.	.	.	last	38 mm Ø x -7 mm
BS 42A	.	.	.	.	.	.	.	.	.	.	.	37 mm Ø x -7 or 19+ mm
12X 15217R	.	0.0044	.	.	0.102	.	.	.	0.100	.	.	~40 mm Ø x -15 mm
NM 307	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm
BS 42	(0.004)	.	.	.	(0.002)	.	.	.	(0.002)	.	.	44 mm Ø x -7 or 19+ mm 17025
12X 15255R	.	.	.	.	0.203	.	Ta:0.034	.	0.143	.	(0.011)	~40 mm Ø x -15 mm
KUT B2/2	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 39 mm
BS 4150MOD-A	0.0038	(0.0004)	.	(0.0007)	(0.002)	0.0017	(0.0004)	(0.002)	0.0026	Fe:96.7	(0.0005)	38 mm Ø x -7 or 19+ mm 17025
IMZ 125	0.065	.	.	.	.	.	.	0.014	.	.	.	40 mm Ø x 40 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													

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
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)
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	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 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	.	.	.	.	.	.
2	CZ LA-2E	1.725	0.081	0.111	0.060	0.044	0.577	2.015	0.149	0.357	.	0.652	0.0071	0.087	0.343
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
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
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
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-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	0.392	1.23	0.067	0.032	0.109	0.497	0.631	0.087	.	0.361	.	0.071	0.100
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	SS 604/2	0.75	0.199	1.91	0.016	0.072	(0.07)	(0.09)	(0.06)	0.008	.	(0.02)	.	.	.

17025

#	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 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
	SRM 1135	.	.	.	.	.	.	.	.	.	<0.01	.	.	31 mm	Ø x 19 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 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 last
	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
	CZ LA-2E	0.083	0.0043	.	0.268	0.111	.	0.068	0.033	.	0.310	0.307	.	~37 mm	Ø x 25 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	last	38mm	Ø x ~12 or 19mm 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 last
	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
	KUT A11/1	.	.	.	.	0.16	.	.	.	.	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	.	.	.	.	0.117	.	.	~47 mm	Ø x ~30 mm
	DSZU C046	0.0020	(0.0004)	0.0007	0.006	(0.005)	.	0.00015	0.0003	.	0.72	0.47	.	40 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-14A	0.016	0.0062	(0.004)	0.015										

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		0.0022	0.041	0.0052
1	VS UG0/9	1.33	0.208	0.0040	0.0045	0.170	0.307	0.36	0.55	0.139	(0.001)		0.024	0.0120	0.0033	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			0.017	
1	VS UG0/5	1.12	0.272	0.0144	0.0077	0.244	0.265	0.353	0.596	0.101			0.052	(0.01)		0.017	
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			(0.003)	(0.002)	(0.007)		
1	DSZU C066	1.17	0.237	0.0166	0.0147	0.227	0.069	0.044	0.131	(0.005)			(0.003)	(0.002)	(0.007)		
1	RUT A18	1.16	(1.99)	0.014	0.007	0.15	0.066	0.125	0.90	(0.02)					0.035	(0.003)	
1	VS UG0/11	1.16	0.176	0.0078	0.004	0.244	0.265	0.353	0.596	0.101			0.0109	0.011	0.005	0.041	
1	CZ CM-5B	1.09	0.128	0.021	0.012	0.39	0.134	0.23	2.01	0.083			0.022	0.10	0.0135	0.06	
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		
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	
1	VS UG9/9	1.04	0.310	0.0053	0.021	0.319	0.163	0.242	0.310	0.073	(0.003)		0.012	0.308	0.0027	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	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)	0.0060	
1	12X 52986A	1.023	0.372	0.0049	0.0011	0.246	0.077	0.0411	1.43	0.0258	(0.002)		0.008	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		
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	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	
2	BS A485-1	0.98	1.10	0.019	0.004	0.62	0.16	0.13	1.07	0.017			0.010	0.029	0.0060	0.003	
1	RUT 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	0.076	0.201	1.43	(0.11)					(0.01)	(0.01)	
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	
1	VS UG9/11	0.94	0.895	0.027	0.0085	0.312	0.163	0.354	0.985	(0.04)				0.094	0.0119	0.010	
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	1.19	0.026	0.0078	0.60	0.101	0.019	0.138	0.074			0.0042	0.49	0.0159		
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 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	
1	VS UG110	0.91	0.86	0.0063	0.0050	0.342	0.377	0.451	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								
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	(0.004)	0.004	
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	VS UG8/11	0.728	1.97	0.036	0.0019	0.31	0.160	0.291	1.74	(0.01)				0.622	0.0138		
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	
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	0.12	
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	0.025	0.012				0.074	0.0130	(0.0008)	
1	VS UG1/11	0.61	0.667	0.0098	0.011	1.74	0.155	0.080	0.108	0.032			0.0195	0.0067	0.0100	0.0047	
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	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	
1	VS UG119	0.55	0.70	0.012	(0.02)	1.63	0.207	0.142	0.195	0.039				0.0113	0.0047	0.0030	
1	12X 10550	0.549	0.685	0.0184	0.0055	0.281	0.0290	0.0247	0.338	0.0325				0.0086	0.0051		
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	
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	
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	BS 43A	0.49	0.82	0.0074	0.025	0.252	0.18	0.24	0.92	(0.003)			0.008	0.059	0.0072	(0.0017)	
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	
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)	
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		
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		
1	VS UG5/11	0.445	0.64	0.010	0.0037	0.29	0.146	1.40	0.912				0.0195	0.269	0.0119		
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)	
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)	
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	
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	
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)	
1	SRM 1173	0.423	0.19	0.033	0.092	1.28	0.204	4.06	2.70					1.50		(0.0011)	
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)	
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	
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		
#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	Co	Mo	N	Nb	Ti	
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	
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	
1	BS 67C	0.404	0.91	0.015	0.009	0.239	0.173	0.61	0.511								

Number	LOW ALLOY STEEL WITH C > 0.3%						CONTINUED FROM THE PREVIOUS PAGE				Units			
	As	B	Ca	Fe	Mg	O	Pb	Sb	Sn	Ta		V	W	Zr
VS UG0/6	.	.	.	.	.	.	(<0.0005)	(<0.0005)	0.0032	.	0.0046	.	.	~45 mm Ø x ~28 mm last
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)	.	.	~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	.	.	0.10	.	.	30-35mm Ø x 18 mm
VS UG0/11	.	.	.	.	.	.	.	0.0051	.	.	0.0035	0.0032	.	~45 mm Ø x ~28 mm
CZ CM-5B	0.018	0.002	.	.	.	.	0.01	0.006	.	.	0.12	0.03	0.09	~37 mm Ø x 25 mm
14X 72305A	.	.	.	.	.	.	.	0.0101	.	.	0.0045	.	.	~40 mm Ø x ~15 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
IARM 49E	0.0029	.	.	.	.	(0.002)	.	0.0065	.	.	0.066	.	.	31 mm Ø X 2 or 18 mm
12X 52986A	.	.	.	.	.	.	.	0.0063	.	.	0.0615	.	.	~38 mm Ø x ~25 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
NILAB 100LA D	0.004	.	.	.	.	.	.	.	.	.	0.004	.	.	34 mm Ø x 20 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 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 ~25 mm
CZ LA-4C	(0.003)	0.0005	.	.	.	.	.	(0.006)	.	.	(0.010)	0.008	.	~37 mm Ø x 25 mm
VS UG9/11	.	.	.	.	.	.	.	0.0064	.	.	0.048	1.27	.	~45 mm Ø x ~28 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 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
IARM 172A	(0.005)	0.0003	.	.	.	0.0006	(<0.01)	.	0.003	.	0.003	0.038	.	31 mm Ø x 2 mm
SS 403/2	.	.	.	.	.	.	.	.	.	.	0.341	.	.	38 mm Ø x 19 mm
IMZ 64/2	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
VS UG8/11	.	.	.	.	.	.	.	.	0.0058	.	0.181	0.70	.	~45 mm Ø x ~28 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 UG1/11	.	.	.	.	.	.	.	0.0035	.	.	.	.	.	~45 mm Ø x ~28 mm
VS UG96	.	.	.	.	.	.	.	.	.	.	0.0030	.	.	~40 mm Ø x ~28 mm
DSZU C07	(0.0005)	0.005	.	.	.	.	(0.0003)	(0.0005)	(0.0026)	.	0.988	0.140	.	40 mm Ø x 30 mm
VS UG119	.	.	.	.	.	.	.	.	.	.	.	.	.	~45 mm Ø x ~25 mm
12X 10550	0.0059	.	.	.	.	.	.	.	0.0018	.	.	.	Zn:(0.0016)	~40 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	Zn: 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 4941	(0.004)	.	(0.0002)	.	.	0.0017	.	.	0.006	.	0.164	.	.	41 mm Ø x ~7 or 19+ mm
BS 43A	(0.005)	(0.0002)	(0.0006)	[96.8]	(0.0001)	(0.003)	.	(0.002)	0.011	.	0.145	(0.005)	(0.001)	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 mm 17025
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 x ~15 mm
VS UG5/11	.	.	.	.	.	.	.	0.0047	.	.	0.148	0.049	.	~45 mm Ø x ~28 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 last
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 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
Number	As	B	Ca	Fe	Mg	O	Pb	Sb	Sn	Ta	V	W	Zr	Units
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 last
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 mm
BS 67C	.	.	.	.	.	(0.0014)	.	.	0.010	.	0.0022	.	17025	38 mm Ø x 19 mm last
SS 114	0.0025	0.0008	.	.	.	.	.	.	0.041	.	0.0086	.	0.0051	44 mm Ø x 19 mm
IMZ 55/1A	.	0.0018	.	.	.	.	.	.	0.017	.	0.107	.	.	38 mm Ø x 20 mm
IARM 31G	(0.004)	0.0004	.	.	.	.	.	0.0051	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
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
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
VS UG3/10	.	.	.	.	.	.	.	.	0.0057	.	0.0053	.	.	~45 mm Ø x ~28 mm
12X 605M36A	0.0102	.	0.0033	.	.	.	.	.	0.0101	.	0.006	.	.	~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						

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	12X 16604A	0.299	0.444	0.0064	0.0018	0.239	0.131	1.892	1.912	0.0111	.	.	0.0366	0.334	0.0046	0.0060	0.0069
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	ECRM 086-1D	0.297	0.879	0.024	0.037	0.206	0.320	0.168	0.150	.	.	0.023	.	.	.	0.026	.
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
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	0.111
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
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
2	HRT FE2018-N	0.24	0.74	0.012	(0.003)	0.29	0.06	0.43	1.46	0.017	.	.	.	0.75	0.0066	.	0.30
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	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	12X 356D	0.228	0.325	0.057	0.040	0.235	0.402	0.070	0.246	0.031	.	0.025	0.110	0.0299	0.0107	0.0372	0.071
2	DSZU C043A	0.222	2.14	0.060	0.064	0.131	0.51	2.93	0.49	0.066	.	(0.001)	.	0.146	(0.009)	0.0023	0.25
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	BS 8620F	0.212	0.85	0.0090	0.033	0.243	0.234	0.427	0.547	0.040	.	0.0078	0.0089	0.206	0.0106	0.0102	0.0054
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	.
2	TL 1001	0.2108	0.8645	0.0141	0.0236	0.2141	0.1902	0.5378	0.5290	0.0191	.	(0.0051)	(0.0070)	0.1987	0.0102	0.0090	.
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	VS UG4/11	0.21	0.59	0.024	0.0069	0.285	0.074	0.173	1.21	0.032	.	.	0.0108	0.87	0.020	.	0.78
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

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Als	As	Co	Mo	N	Sn	V
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	VS RG29/1	0.202	0.29	.	0.0090	0.22	1.25	4.71	0.89	0.050	.	.	0.115	1.01	.	.	0.40
1	12X 12747V	0.201	1.240	0.0648	0.0275	0.298	0.232	0.494	0.58	0.0271	.	0.0075	0.211	0.606	0.025	0.144	0.0272
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	IMZ 112B #	0.195	0.43	0.022	0.016	0.27	0.055	0.046	0.034	(0.03)	.	.	.	0.043	0.010	0.15	0.045
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
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	BS 51F	0.188	0.519	0.016	0.017	0.24	0.231	1.68	0.156	0.022	.	(0.005)	0.0086	0.224	0.0061	0.008	0.0030
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
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 19MNV56A	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	.
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)
1	VS UG7/11	0.164	0.293	0.0045	0.0062	0.39	0.468	2.09	1.31	0.276	.	.	0.291	0.298	0.014	.	0.208
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										

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
12X 16604A	.	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
SRM 1269	.	.	.	.	.	.	0.005	.	.	.	.	.	.	32 mm Ø x 19 mm
ECRM 086-1D	.	.	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 25 or 30 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
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)	(0.0002)	.	.	(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
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
HRT FE2018-N	(0.0003)	.	.	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 20 mm
IMZ 113	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 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
12X 356D	(0.002)	Ca:0.0063	.	Se:0.010	0.019	.	0.034	0.0203	.	0.016	0.086	0.011	.	~40 mm Ø x ~15 mm
DSZU C043A	(0.001)	0.0004	.	.	0.006	.	.	.	.	0.041	0.092	.	.	40 mm Ø x 25 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 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 20 mm
BS 8620F	(0.0003)	0.0020	97.1	(0.0002)	0.0025	0.0026	(0.002)	(0.002)	17025	0.0016	0.0016	.	(0.0008)	38 mm Ø x ~7 or 19+ mm
DSZU C048	.	(0.0017)	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 25 mm
TL 1001	.	.	.	.	.	.	.	.	.	(0.0134)	.	.	.	40 mm Ø x 20 mm
IPT 502	.	.	.	.	.	.	.	.	.	0.0016	.	.	.	36 mm Ø x 20 mm
VS UG4/11	.	.	.	.	0.071	.	.	.	.	0.034	0.0092	.	.	~45 mm Ø x ~28 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

Number	B	Ca	Fe	Mg	Nb	O	Pb	Sb	Ta	Ti	W	Zn	Zr	Units
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
VS RG29/1	.	.	.	.	0.044	.	.	.	.	0.020	0.62	.	.	~45 mm Ø x ~28 mm
12X 12747V	.	.	.	.	.	.	.	.	.	0.099	0.0276	.	.	~40 mm Ø X ~15 mm
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
IMZ 112B ## BACKORDERED	.	.	.	.	0.013	.	.	.	.	0.010	.	.	.	40 mm Ø x 40 mm
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
IMZ 162	.	.	.	.	.	.	.	.	.	0.12	.	.	.	40 mm Ø x 40 mm
VS UG113	.	.	.	.	.	.	.	.	.	0.006	0.007	.	0.169	~45 mm Ø x ~28 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
BS 51F	(0.0002)	(0.0005)[96.7]	.	(0.0001)	(0.0007)	(0.002)	(0.0008)	(0.003)	(0.005)	0.0012	(0.0024)	17025	(0.0009)	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
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 19MNV56A	.	.	.	.	.	.	.	.	.	.	.	.	.	~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
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
VS UG7/11	.	.	.	.	.	.	.	.	.	0.20	0.385	.	.	~45 mm Ø x ~28 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
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
ECRM 193-1D	.	.	.	.	0.0232	.	.	.	.	(0.0013)	.	.	.	36-41 mm Ø x 28-35 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
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LOW ALLOY STEEL XRF SET

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

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 4330MOD	0.316	0.92	0.0052	0.0010	0.269	0.105	1.83	0.848	0.478	0.031	0.0038	(0.001)	0.034	0.0031	0.0062	0.083
4340	BS 4340	0.418	0.695	0.0119	0.0187	0.279	0.149	1.79	0.807	0.231	0.028	0.0043	0.0005	0.0068	0.0080	0.0063	0.0033
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	0.49	0.82	0.0074	0.025	0.252	0.18	0.24	0.92	0.059	(0.003)	(0.005)	(0.0006)	0.008	0.0072	0.011	0.145
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
 ## this item sold out, most BS are available as XRF

CRM SOLUBLE ELEMENTS IN LOW ALLOY STEEL SET

available in set/7 only -S = Soluble, -T = Total 38 mm Ø x 30 mm

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al-S	Al-T	B-S	B-T	Mo
NCS HS11717a-1	0.0023	0.018	0.012	0.0027	0.0054	0.0036	0.011	0.023	0.0069	0.0078	0.0002	0.0004	0.0053
NCS HS11717a-2	0.0028	0.104	0.014	0.011	0.077	0.049	0.045	0.042	0.024	0.026	0.0011	0.0012	0.304
NCS HS11717a-3	0.032	0.303	0.018	0.067	1.55	0.403	0.563	0.236	0.295	0.298	0.0018	0.0020	0.034
NCS HS11717a-4	0.096	0.669	0.012	(0.050)	1.09	0.316	0.400	0.102	0.214	0.216	0.0085	0.0096	0.144
NCS HS11717a-5	0.243	1.04	0.030	0.042	0.769	0.248	0.393	0.106	0.101	0.104	0.0071	0.0074	0.105
NCS HS11717a-6	0.387	1.47	0.038	0.030	0.436	0.167	0.206	0.409	0.050	0.051	0.0047	0.0049	0.071
NCS HS11717a-7	0.498	2.10	0.050	0.022	0.176	0.075	0.107	0.612	0.022	0.024	0.0031	0.0033	0.196

Number	As	Bi	Co	N	Nb	Pb	Sb	Sn	Ti	V
NCS HS11717a-1	0.0034	(<0.00001)	0.0015	0.0016	(<0.0005)	(<0.0001)	0.00041	0.00020	0.0002	(0.0001)
NCS HS11717a-2	0.011	(<0.00001)	0.058	0.0017	0.031	(<0.0001)	0.00031	0.00073	0.020	0.011
NCS HS11717a-3	0.019	(<0.00001)	0.099	0.0032	0.079	(<0.0001)	0.00041	0.016	0.049	0.052
NCS HS11717a-4	0.073	(0.00001)	0.146	0.0031	0.223	(<0.0001)	0.00044	0.049	0.202	0.098
NCS HS11717a-5	0.071	(0.00001)	0.296	0.0048	0.318	(<0.0001)	0.00052	0.099	0.178	0.257
NCS HS11717a-6	0.045	(0.00001)	0.248	0.0049	0.106	(<0.0001)	0.00048	0.151	0.124	0.201
NCS HS11717a-7	0.034	(0.00001)	0.198	0.0063	0.153	(<0.0001)	0.00050	0.197	0.088	0.147

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
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TOOL STEEL

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= 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 PML5	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 107	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	2.32	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	0.82	0.24	(0.010)	1.53	.	.	(0.004)	<0.0005	0.006
1	IARM 251A	1.398	0.33	0.014	0.058	1.58	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	1.10	0.29	0.024	0.019	0.55	0.106	0.192	4.25	0.011	5.39	.	.	3.59	4.33	.
1	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	1.16	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	1.18	.	(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	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	0.08	0.228	4.36	0.028	4.85	.	.	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	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 FeTi-18	0.80	0.295	0.026	(<0.0010)	0.30	0.034	0.14	3.98	0.096	0.124	0.0195	0.026	1.05	18.0	0.054
1	BS 30D	0.745	0.348	0.029	0.010	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
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	<0.0005	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
#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Ti	V	W	Al
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	BS 481/1	0.68	0.25	0.023	0.022	0.15	0.10	(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

ALUMINUM IN STAINLESS AND HIGH ALLOY STEEL

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#	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	IARMPe177PH-18	1.09	7.11	17.08	0.080	0.730	0.020	(0.0005)	0.51	0.36	0.048	0.350	0.0153	0.009	0.083	0.062
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
1	IARM 21D	1.03	8.29	12.69	0.032	0.052	0.008	(0.0014)	0.039	0.017	0.078	2.23	0.0037	(0.0005)	0.016	0.017
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	(0.0006)	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
CT X92834	.	0.0009	.	.	0.002	.	.	<0.001	30-35 mm Ø x x ~19 mm
IARMPe177PH-18	.	(0.0017)	.	.	(0.006)	.	(0.011)	.	31 mm Ø x 2 or 18 mm
13X PH13800A	.	.	.	.	0.0051	.	.	.	~38 mm Ø x ~15 mm
IARM 21D	.	.	.	.	.	.	(0.012)	.	31 mm Ø x 2 or 18 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
IARM 152C	(0.004)	0.0029	(0.0005)	(0.001)	0.007	(0.005)	0.026	.	31 mm Ø x 2 mm

CALCIUM IN STAINLESS AND HIGH ALLOY STEEL

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#	Number	Ca	Ni	Cr	C	Mn	P	S	Si	Cu	Co	Mo	N	Nb	V	W
1	BS Ca304-4	0.0075	8.77	18.26	0.096	0.783	0.0205	0.0070	0.887	0.143	(0.007)	0.0041	0.061	0.063	0.0686	0.0056
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)
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 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

Number	Al	As	B	O	Pb	Sb	Sn	Ti	Zn	Units
BS Ca304-4	0.017	0.0063	0.0031	0.013	0.0008	(0.0002)	0.0024	0.0046	Zr:0.0036	~38 mm Ø x ~38mm Fe: 70.7 17025
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
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 to 19 mm last
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 87F	0.004	0.005	(0.0006)	0.005	.	.	0.004	0.004	.	41 mm Ø x ~7 or 19+ mm

COPPER IN STAINLESS AND HIGH ALLOY STEEL

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* Provisional Analysis

#	Number	Cu	Ni	Cr	C	Mn	P	S	Si	Co	Mo	N	Nb	Ti	V	W
1	13X PH 3N	5.83	3.03	16.0	0.110	0.39	0.0136	0.019	1.25	0.306	0.74	0.111	0.45	0.0193	0.246	.
1	13X PH 4P	5.53	4.07	15.5	0.033	0.69	0.021	0.019	0.64	0.50	0.255	0.082	0.355	0.075	0.55	.
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)
1	BS 17-4PHB	3.35	4.52	15.60	0.042	0.559	0.022	0.023	0.43	0.040	0.110	0.047	0.315	0.0045	0.061	(0.02)
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	.
1	BS 17-4PHC	3.23	4.24	15.40	0.033	0.81	0.022	0.027	0.399	0.077	0.45	0.027	0.258	(0.001)	0.090	0.121
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	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	0.002	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	.
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	13X NSA 7B	1.53	6.37	25.69	0.013	0.864	0.0160	0.0005	0.278	0.047	3.28	0.232	(0.0009)	.	0.080	0.133
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	BS 450	1.51	6.24	14.4	0.029	0.596	0.016	0.0013	0.323	0.028	0.671	0.022	0.59	<0.008	0.051	0.016
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	.	.	.
2	HRT FE2004-H	1.33	24.25	19.08	0.021	1.83	0.021	0.004	0.47	0.046	4.17	.	0.046	0.005	0.042	.
1	13X PH 7F	0.77	5.41	13.16	0.118	1.487	0.028	0.0057	1.402	0.049	2.52	0.044	0.241	0.0196	0.043	.

Number	Al	Ag	As	B	Ca	Cd	Fe	Mg	O	Pb	Sb	Sn	Ta	Units
13X PH 3N	0.050	.	.	0.0042	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X PH 4P	0.029	.	.	0.0031	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X PH 2M	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	0.034	.	(0.003)	0.0036	(0.0004)	17025	[74.8]	(0.0002)	(0.002)	(0.001)	(0.002)	0.012	(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	.	.	.	.	.	.	.	.	last	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 18 mm
CT 630	.	0.0004	.	0.0018	.	.	.	.	.	0.001	.	0.007	.	30-35 mm Ø x ~16 mm
BS 17-4PHC	0.0023	.	0.0043	0.0026	0.0007	17025	74.8	.	0.010	(0.0001)	.	0.0100	.	44 mm Ø x ~7 or 19+ mm
BS 187A	(0.009)	.	.	0.0022	.	.	.	.	0.0029	last of stock	.	0.003	<0.002	41 mm Ø x ~7 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
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
13X NSA 7B	0.0142	.	.	0.0018	.	.	.	.	.	0.0009	0.0020	.	.	~41 mm Ø x ~15 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
BS 450	(0.003)	.	0.0033	(0.0003)	<0.005	17025	75.5	.	0.0027	<0.005	0.0010	0.0046	.	44 mm Ø x ~7 or 19+ mm
CT 450	.	0.0013	.	.	.	.	.	.	.	0.001	.	0.008	.	30-35 mm Ø x ~15-19 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 last
HRT FE2004-H	0.005	.	.	0.0021	.	.	.	.	.	.	.	.	.	32 mm Ø x 20 mm
13X PH 7F	0.012	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm

MARAGING STEEL AND COBALT IN STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM, 2 = RM

#	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)
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	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
2	DSZU C55	5.75	1.32	2.24	14.9	(0.19)	0.73	(0.042)	.	0.68	.	.	.	(0.11)	0.27	.
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)
2	DSZU C53	5.20	1.71	1.47	14.8	(0.26)	0.82	(0.036)	.	0.29	.	.	.	.	0.13	.
2	DSZU C54	5.19	1.47	1.88	18.5	(0.06)	0.60	(0.036)	.	0.56	.	.	.	.	(0.13)	0.40
2	DSZU C51	4.07	0.68	1.67	10.8	(0.16)	0.40	(0.019)	.	0.25	.	.	.	.	(0.09)	0.10
2	DSZU C52	3.35	1.08	1.68	11.0	(0.17)	0.24	(0.018)	.	0.12	.	.	.	.	.	0.15
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 mm Fe: 49.6
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 mm
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 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)	(0.002)	38 mm Ø x -12 or 19 mm last
CT 300	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x -16 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 (last) mm
ECRM 285-2D	.	.	.	.	.	.	.	.	.	.	0.0050	38 mm Ø x 25 or 30 mm
CT 250	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x -19 mm
DSZU C55	.	.	.	.	.	.	.	.	0.29	(1.17)	.	42 mm Ø x 25 mm
DSZU C092	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x 17 mm
DSZU C53	.	.	.	.	.	.	.	.	0.33	(0.59)	.	42 mm Ø x 25 mm
DSZU C54	.	.	.	.	.	.	.	.	0.47	(0.71)	.	42 mm Ø x 25 mm
DSZU C51	.	.	.	.	.	.	.	.	0.15	(0.32)	.	42 mm Ø x 25 mm
DSZU C52	.	.	.	.	.	.	.	.	0.10	(0.91)	.	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	3.68	8.81	21.64	0.119	0.166	0.032	0.0386	2.47	0.611	0.1090	0.520	0.0055	0.550	.	0.1175
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	0.0047	0.35	0.060	0.031	0.12	0.0222	0.010	(0.003)	0.086
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	.	.	.	.	.	.	.	-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 mm
IMZ 161	.	.	.	.	.	.	.	40 mm Ø x 40 mm

MANGANESE STAINLESS STEEL

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

#	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)
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	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
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 NSC2Q	8.02	3.63	20.95	0.574	.	0.014	1.02	1.01	0.339	0.37	.	0.299	2.03	0.293	0.063
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 NSC4G	7.78	7.52	31.7	0.470	.	0.0065	1.53	0.208	1.31	0.26	0.238	0.90	2.37	0.224	0.208
1	NM 303	7.21	1.59	12.68	0.16	0.035	0.050	0.40	0.68	0.17	.	0.063	.	.	0.071	.
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	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	IARM FeN50-18	5.27	11.90	21.0	0.030	0.026	(0.0013)	0.24	0.28	2.01	(0.006)	0.081	0.26	0.18	0.121	0.023
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	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 NSC7B	3.55	7.50	23.9	0.397	0.019	0.0098	0.88	0.220	0.435	0.204	0.297	0.429	0.82	0.167	0.041
1	13X NSC5C	2.06	4.42	21.6	0.524	.	0.024	1.18	0.84	0.472	0.24	0.093	0.265	2.31	0.102	0.050

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 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
13X NSC6A	40 mm Ø x 13 mm HIP
VS RG23/1	0.21	.	-45 mm Ø x -30 mm
BS 181A	.	0.0009	.	0.0010	.	.	0.005	.	.	0.007	last	38 mm Ø x ~7 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 NSC2Q	-40 mm Ø x ~15 mm
13X 21800A	.	(0.001)	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~15 mm
13X NSC4G	-40 mm Ø x ~15 mm
NM 303	35 mm Ø x 20 mm
SRM 1297	32 mm Ø x 19 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
IARM FeN50-18	.	.	.	(0.006)	.	.	(0.007)	.	.	(0.002)	.	31 mm Ø x 2 or 18 mm
13X NSA10A	.	0.0031	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~15 mm
BS 180A	.	(0.0023)	.	0.003	.	.	(0.002)	.	last	(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 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
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 NSC7B	-40 mm Ø x ~15 mm
13X NSC5C	-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	51.5	0.0245	0.057	0.0168	0.16	0.151	0.089	0.066	0.319	0.416	.	.	.	.	.	.
14X FeNi45C	45.88	0.0082	0.0222	0.026	0.0015	0.77	0.089	0.076	0.98	0.572	.	.	.	.	.	.
14X FeNi40C	40.1	0.012	0.031	0.0148	1.03	0.050	0.081	0.64	2.00	1.057	.	.	.	.	.	.
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 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	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
1	NCS HS41751A	0.16	0.035	8.07	17.41	0.075	1.70	0.71	0.26	.	0.13	0.33	0.077	.	.	0.068
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 12536T	0.090	0.0449	12.12	16.09	0.146	0.374	0.546	0.0793	0.108	0.280	2.48	0.0084	0.060	0.444	0.0513
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	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	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
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 19004C	0.0135	0.074	17.90	22.77	0.075	2.01	0.35	0.0112	0.030	0.0501	3.43	.	0.152	.	0.041

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
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
NCS HS41751A	38 mm Ø x 38 mm
BS 155	.	.	.	0.0048	.	(0.003)	.	.	36 mm Ø x ~7 or 19+ mm
13X 12536T	.	.	0.0214	.	.	0.0068	0.104	.	~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
VS LG58	0.21	.	~47 mm Ø x ~30 mm
13X 18004B	40 mm Ø x 15 mm last
13X 19004B	~40 mm Ø x ~15 mm
13X 19004C	.	.	(0.001)	.	.	(0.001)	0.011	.	~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, ~12 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 mm
CT ISO124A	.	50.65	.	.	.	.	.	.	44-47 mm Ø x ~11 or ~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

** Provisional Analysis

Table with 17 columns: #, Number, C, Mn, P, S, Si, Cu, Ni, Cr, Co, Mo, N, Nb, Ti, V, W. Rows include various stainless steel grades like CZ SL-4A, BS 156, NCS HS41752, etc.

Table with 17 columns: #, Number, C, Mn, P, S, Si, Cu, Ni, Cr, Co, Mo, N, Nb, Ti, V, W. Rows include various stainless steel grades like SRM 1223, ECRM 296-1D, BS 416, etc.

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		
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]		
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		
13X 44004B	0.0160	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 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
HRT FE2018-H	0.010	.	(0.0004)	.	.	.	.	.	.	.	.	.	.	36 mm Ø x 20 mm
13X 14122A	(0.002)	.	.	.	.	.	.	.	.	0.0041	.	.	.	~40 mm Ø x ~15 mm
13X 40900A	0.0311	.	.	.	.	.	.	.	.	0.0080	.	.	.	~40 mm Ø x ~15 mm
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 to 19+ mm
BS 152	(0.002)	.	.	.	.	.	.	.	.	0.003	.	.	.	41 mm Ø x 19+ mm
IRSID 1825	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 30 mm
13X 42027A	0.004	.	.	.	.	.	.	.	.	0.0026	.	.	.	~40 mm Ø x ~15 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
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 477	.	.	.	.	.	.	.	.	.	.	.	.	.	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 mm
IMZ 167	(0.018)	.	.	.	.	.	.	.	.	0.009	.	.	.	40 mm Ø x 40 mm
SS 473	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
13X 41800A	(0.003)	.	.	.	.	.	.	.	.	0.0040	.	.	.	~38 mm Ø x ~15 mm
BS 183A	0.002	(0.002)	(<0.0005)	20	.	.	0.0065	(0.001)	.	0.003	.	.	.	38 mm Ø x ~7 or 19+ mm		
IARM Fe418-18	(0.004)	.	.	.	.	.	(0.004)	.	.	(0.005)	.	.	.	31 mm Ø x 2 or 18 mm
13X 15024X	0.0049	.	.	.	.	.	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm
13X 43100A	.	.	.	.	.	.	.	.	.	0.004	.	.	.	~38 mm Ø x ~15 mm
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 or 19+ mm last		
SRM 1219	.	.	.	.	.	.	.	.	.	.	.	.	.	34 mm Ø x 19 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
IARM Fe410-18	(0.003)	.	.	.	.	.	(0.009)	.	.	.	.	.	.	31 mm Ø x 2 or 18 mm
NCS HS28747	.	0.0063	.	.	.	.	1	.	.	0.0057	.	.	.	38 mm Ø x 35 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 002I	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	.	.	.	31 mm Ø x 2 or 18 mm		
Number	Al	As	B	Ca*	Mg*	Pb*	O	Sb	Se	Sn	Ta	Zn	Zr	Units		
SRM 1223	.	.	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
ECRM 296-1D	0.0275	0.0139	(0.0003)	.	.	.	.	.	.	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]		
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	.	.	.	.	.	.	.	.	0.006	.	.	.	30-35 mm Ø x ~16 mm Ag: 2 ppm
IMZ 156	(0.034)	.	.	.	.	.	<10	.	.	.	.	.	.	40 mm Ø x 40 mm
SS 471	.	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
NCS HS11721-4	0.124	0.022	.	.	.	(2)	.	.	.	0.034	.	.	.	38 mm Ø x 30 mm last		
IMZ 158	1.56	.	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm
BS 151	(0.002)	.	.	.	.	.	.	0.009	.	0.328	.	.	.	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		
BS 430	0.0015	0.0037	(0.0004)	(3)	(2)	(6)	0.0075	(0.001)	.	0.0084	(0.001)	17025	(0.001)	44 mm Ø x ~7 or 19+ mm Fe:81.7		
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		
IMZ 163A	0.018	(0.0035)	.	.	.	(10)	.	.	.	(0.003)	.	.	.	40 mm Ø x 40 mm last		
BS 94C	0.004	.	.	.	.	.	0.0061	.	.	0.006	.	.	.	44 mm Ø x 19+ mm
BS 0022	0.078	0.003	0.0007	8	<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	0.034	(0.003)	0.0036	(4)	(2)	(10)	(0.002)	(0.002)	.	0.012	(0.002)	17025	(0.002)	41 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)	.											

STAINLESS STEEL WITH C > 0.05 %

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= 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	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	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	.	0.015	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)
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	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	13X NSA2J	0.132	1.03	0.0252	0.0275	0.739	0.259	10.08	17.82	.	2.013	0.131	0.155	.	0.139	.
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
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 12855N	0.107	0.918	0.0020	0.0063	0.863	0.340	11.79	16.29	0.155	2.96	0.0078	0.098	0.083	.	0.199
1	13X 14828A	0.104	1.52	0.0268	0.0067	2.19	0.409	11.25	19.3	0.143	0.301	0.037	0.016	.	0.080	0.0167
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	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	13X 17004B	0.084	0.497	0.018	0.039	1.23	0.0449	16.04	21.37	0.055	0.455	0.0086	0.179	0.034	.	.
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	13X 12854M	0.081	1.84	0.038	0.028	0.89	0.205	11.38	15.64	0.344	2.00	0.0097	0.33	0.052	.	0.141
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

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
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	.
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	NM 301	0.073	1.38	0.037	0.021	0.39	0.41	7.89	18.0	0.17	0.36	.	.	.	0.07	.
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	NM 302	0.072	1.06	0.031	0.018	0.49	0.40	10.12	16.92	0.19	2.03	.	.	.	0.066	.
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	IARM 18D	0.069	8.1	0.032	0.0025	3.68	0.421	8.39	16.7	0.086	0.325	0.170	(0.031)	0.012	0.064	(0.026)
1	13X 12853L	0.069	1.156	0.0053	0.0062	0.994	0.092	12.31	17.13	0.0415	2.718	0.0086	0.180	0.0455	.	0.089
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	.	.
1	SRM 1171	0.067	1.81	(0.019)	(0.013)	0.536	1.205	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 465/1															

STAINLESS STEEL WITH C > 0.05 %

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Number	Al	As	B	Bi	Ca	Ce	O	Pb	Sb	Sn	Ta	Zr	Units
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 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 mm
SRM C1153a	.	.	.	.	.	.	.	0.006	.	.	.	.	32 mm Ø x 19 mm
13X 18001B	0.0157	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 mm
KUT H6/1	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 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 18002D	0.0617	.	.	.	.	.	.	.	.	.	.	.	-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
13X NSA2J	.	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 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 mm
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 12855N	0.048	.	0.0098	.	.	.	.	.	0.093	.	0.122	.	-40 mm Ø x -15 mm
13X 14828A	0.008	.	.	.	.	.	.	.	.	0.0128	.	.	-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 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
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
13X 17004B	0.043	.	0.0066	.	.	.	.	.	.	.	0.057	.	-40 mm Ø x -15 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
13X 12854M	.	.	0.0101	0.0052	.	.	.	.	0.068	.	0.020	0.0146	-40 mm Ø x -15 mm
VS LG35/5	0.087	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x -25 mm
Number	Al	As	B	Bi	Ca	Ce	O	Pb	Sb	Sn	Ta	Zr	Units
13X 17001C	0.0312	.	0.0085	.	.	.	.	.	.	.	0.0124	.	-40 mm Ø x -15 mm
KUT S26	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 mm
NCS HS41750	0.009	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 35 mm
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
NM 301	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 20 mm
VS LG72	0.089	.	.	.	.	.	.	.	.	.	.	.	-45 mm Ø x -28 mm
NM 302	.	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 20 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
IARM 18D	(0.006)	.	(0.0011)	.	.	.	.	.	.	(0.007)	.	.	31 mm Ø x 18 mm
13X 12853L	0.18	.	0.0018	.	.	.	.	.	.	.	0.034	.	-40 mm Ø x -15 mm
VS LG63	0.45	.	.	.	.	.	.	.	.	.	.	.	-47 mm Ø x -30 mm
KUT S25	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 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 465/1	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
IMZ 152A	(0.004)	(0.002)	0.0022	.	.	.	.	.	.	(0.001)	.	.	38 mm Ø x 20 mm
VS LG71	0.072	.	.	.	.	.	.	.	.	.	.	.	-45 mm Ø x -28 mm
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 to 19 mm last
13X 31008A	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x -15 mm
KUT H7/1	.	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 18 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
BS 321D	0.103	0.0040	0.0012	.	(0.0003)	.	0.0009	(0.0003)	(0.001)	0.0091	17025	(0.001)	44 mm Ø x -7 or 19+ mm Fe,Mg
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 mm
SRM 1172	.	.	.	.	.	.	.	.	.	.	<0.001	.	32 mm Ø x 19 mm
VS LG82	0.076	.	.	.	.	.	.	.	.	.	.	.	-45 mm Ø x -28 mm
BS 87F	0.004	0.005	(0.0006)	.	0.0007	.	0.005	.	.	0.004	.	.	41 mm Ø x -7 or 19+ 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
IARM Fe304H-18	(0.005)	0.0076	.	.	.	.	(0.008)	.	.	(0.014)	.	.	31 mm Ø x 2 or 18 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
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	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 14211R	0.047	0.787	0.0093	0.008	1.73	0.336	12.64	24.48	0.034	0.395		0.150	0.206	0.039	2.99
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	IARM FE303-18	0.046	1.55	0.033	0.35	0.47	0.61	8.12	17.2	0.140	0.42	0.069	0.015		0.072	0.029
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	0.325	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 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	
1	13X 14207L	0.0388	0.597	0.0061	0.0060	1.448	0.186	12.43	19.63	0.0089	0.573	0.0099	0.258	0.0119	0.0043	2.99
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	IMZ 153A	0.037	1.49	0.021	0.0073	0.73	0.102	13.57	16.45	0.015	2.61	0.107	0.034	0.036	0.020	
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		0.92	
1	13X 65286A	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	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	13X 31400A	0.033	1.60	0.026	0.0006	2.23	0.210	18.76	24.38	0.129	0.240	0.0288	0.018		0.092	0.015
1	BS 9812	0.031	0.485	0.018	0.004	1.65	6.61	14.82	11.0	0.76		0.0195	0.645	(0.005)	0.088	0.025
1	13X NSA9B	0.030	1.52	0.0237	0.0009	0.290	0.154	5.75	22.39	0.033	3.27	0.184	0.021		0.060	0.033
1	13X 30403B	0.0277	1.820	0.0321	0.0266	0.288	0.497	8.13	18.30	0.178	0.313	0.083	0.0201	0.0013	0.0700	0.035
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		
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
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		
#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Co	Mo	N	Nb	Ti	V	W
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	BS 317L	0.025	1.17	0.029	0.0017	0.67	0.23	13.51	18.2	0.14	3.07	0.055	0.031	0.0034	0.091	0.017
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 FE304L-18	0.024	1.39	0.034	0.029	0.43	0.54	8.17	18.34	0.156	0.462	0.081	0.013	0.0056	0.076	0.056
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	IARM Fe316L-18	0.021	1.70	0.033	0.029	0.438	0.550	10.12	16.7	0.209	2.02	0.067	(0.027)	(0.003)	(0.067)	(0.06)
1	IRSID 1820	0.021	1.61	(0.021)	0.0079	0.428	0.045	9.07	19.51	0.151	0.115	0.064				
1	BS 2205A	0.021	1.48	0.029	0.0006	0.53	0.300	5.26	22.73	0.071	3.17	0.157	0.010	(0.002)	0.083	(0.02)
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 NSA8B	0.0206	0.596	0.0248	0.0007	0.285	0.589	7.48	25.49	0.0448	3.49	0.232	0.026		0.0583	0.599
1	13X NSA13A	0.020	0.761	0.0249	0.0005	0.257	0.156	6.73	25.27	0.032	3.73	0.269	0.028		0.0712	0.035
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	13X 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	IARM 212D	0.019	1.21	0.024	0.0007	0.34	1.125	5.53	22.60	0.049	3.27	0.182	(0.009)	(0.002)	0.063	0.014
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	IARM FE2205-18	0.018	1.18	0.023	(0.0013)	0.46	0.208	5.57	22.6	0.104	3.20	0.17	0.011	(0.003)	0.063	0.024
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	SS 476	0														

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)					(0.008)	(0.01)	31 mm Ø x 2 or 18 mm
IARM 61	0.084	(0.005)	0.0034	(0.0004)	0.0012			(0.0060)		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 14211R	0.089								0.0152	~40 mm Ø x ~15 mm
13X 32100A	0.0247		0.0025					0.0115		~38 mm Ø x ~15 mm
IARM Fe303-18		0.007	(0.0012)		(0.006)			(0.015)		31 mm Ø x 2 or 18 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 last
IARM 81	(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 HS28741		0.0035				0.0001		0.0051		38 mm Ø x 35 mm
13X 14207L	0.0226								0.082	~40 mm Ø x ~15 mm
IRSID 1821										47 mm x 47 mm x 30 mm
IMZ 153A	0.036									38 mm Ø x 20 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
SS 462/1										38 mm Ø x 19 mm
SRM C1151a						0.0039				32 mm Ø x 19 mm
13X 31400A	0.022			0.0024						~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)
13X NSA9B			0.0018							~40 mm Ø x ~15 mm
13X 30403B	0.0056			0.0027				0.0139		~40 mm Ø x ~15 mm
HRT FE2014-H										35mm Ø x 20 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
HRT FE2013-H										40 mm Ø x 20 mm last of stock
Number	Al	As	B	Ca	O	Pb	Sb	Sn	Ta	Units
13X 32900A	0.007		0.0028	0.0033						~40 mm Ø x ~15 mm
BS 317L	0.0044	(0.003)	0.0012	0.0017	(0.006)	(0.0002)	(0.002)	0.0049	(0.002)	37 mm Ø x ~7 or 19+ mm 17025
IARM 162D	(0.0026)	0.0072	0.0027	(0.003)	0.005		(0.0019)	0.0102	(0.005)	31 mm Ø x 2 mm
IARM Fe304L-18	(0.003)	0.007	(0.0012)		(0.006)			(0.013)		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)
IARM Fe316L-18	(0.006)				(0.005)			(0.013)		31 mm Ø x 18 mm
IRSID 1820			(0.0013)							47 mm x 47 mm x 30 mm
BS 2205A	(0.004)	0.0072	0.0022	0.0007	0.0046			0.0058		38 mm Ø x ~7 or 19+ mm 17025 Fe: 66.2
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 mm
13X NSA8B			0.0017	0.0011						~38 mm Ø x ~15 mm
13X NSA13A	(0.007)		0.0030			(0.0008)		0.0046		~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) last
13X NSA12A	0.0169		0.0020							~40 mm Ø x ~15 mm
IARM 212D	(0.005)	(0.01)	0.001	(0.001)	0.0034	(0.001)		(0.003)	(0.003)	31 mm Ø x 2 mm last of stock
13X FV520BA										~40 mm Ø x ~15 mm
HRT FE2000-H			0.0013							40 mm Ø x 20 mm
IARM Fe2205-18	(0.007)				(0.004)			(0.006)		31 mm Ø x 2 or 18 mm
NCS HS28745		0.0055				0.0001		0.0073		38 mm Ø x 35 mm
SS 476		0.0053		0.0028				0.0059		38 mm Ø x 19 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					(0.003)	(0.004)	31 mm Ø x 2 or 18 mm
IARM FeZ100-18	(0.017)		0.002		(0.003)			(0.006)		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
BS 316F	(0.002)	0.0067	0.0019	0.0018	0.0055	(0.0002)		0.0092	Fe:68.1	38 mm Ø x ~7 or 19+ mm 17025
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
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
13X 30600A	0.020				Mg:0.0016					~32 mm Ø x ~20 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 IS0123A	0.027		0.0021							44-47 mm Ø x ~16 mm Fe: 74.72
13X 46500A	0.069		0.0016					0.0030		~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

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 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 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 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 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 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	0.064	0.041
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	BS 316F	0.015	1.46	0.029	0.026	0.55	0.437	10.09	16.79	0.126	2.10	0.061	0.011	0.062	0.045
317 L	BS 317L	0.025	1.17	0.029	0.0017	0.67	0.23	13.51	18.2	0.14	3.07	0.055	0.031	0.091	0.017
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
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
BS 303	0.0019	0.0013	(0.0015)	.	0.0091	0.017
BS 81P	(0.003)	0.0026	(0.0004)	.	0.007	0.003
BS 82E	0.006	0.0024	0.0014	.	0.006	0.003
BS 83G	(0.004)	(0.001)	O: 0.0064	.	0.003	(0.003)
BS 316F	(0.002)	0.0019	0.0018	.	0.0092	0.011
BS 317L	0.0044	0.0012	0.0017	.	0.0049	0.0034
BS 85D	0.13	(0.001)	0.0004	.	0.0062	0.48
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
BS 184A	1.00	(0.0004)	(0.0003)	.	(0.002)	0.051
O: 0.0020						
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
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
3	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
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
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	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	BS CD4MCU	0.045	0.568	0.025	0.021	0.71	2.93	5.62	24.46	0.0063	(0.03)	1.98	0.229	(0.004)	0.021	0.108
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	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
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
1	13X 17005E	0.0217	0.209	0.0040	0.0431	1.739	0.120	20.06	24.65	0.049	0.0265	0.599	0.0097	0.101	0.0073	.
2	CT IS0139A	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)
1	BS CD4MCU-A	0.021	0.38	(0.008)	0.0072	0.31	2.92	5.18	24.6	(0.009)	(0.005)	1.92	0.0112	(0.009)	0.021	(0.006)
2	CT IS0141A	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
2	CT IS0136A	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	0.30	0.761	17.69	19.79	0.003	0.159	6.14	0.2243	0.007	0.006	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	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
1	NCS HS41753a	0.012	0.973	0.021	0.013	0.480	1.26	24.28	19.16	.	0.180	4.25	0.041	0.812	0.004	0.075
2	CT IS0124A	0.011	0.73	0.007	0.006	0.40	0.015	48.07	0.079	.	0.012	0.009	.	.	.	.
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
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
1	IARM 26D	0.038	0.224	0.013	(0.0008)	(0.05)	0.047	24.6	14.29	0.29	0.040	1.23	0.0035	(0.007)	2.17	0.223
2	CT IS0138A	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
IARM 242A	.	(0.0005)	.	.	.	0.0006	.	(0.001)	0.008	<0.01	.	Fe: (36.6)
SRM 1246	(0.004)	<0.001	Ga: (0.004)	.	.	(0.003)	.	.	.	(0.004)	.	31 mm Ø x 2 mm
23X DS5E	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm
	.	.	.	.	.	.	.	.	.	.	.	Fe: 46.2
NCS HS41747	.	.	.	.	.	.	.	.	.	.	.	38 mm Ø x 30 mm
HH 5157A	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 12 mm
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
BS CD4MCU	0.0040	0.0028	(0.001)	.	(0.0003)	0.019	17025	(0.03)	.	0.024	(0.002)	36 mm Ø x 26 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, -12 or 19 mm
DSZU C102	.	.	.	.	.	.	.	.	.	(0.020)	(0.003)	38 mm Ø x 18 mm
HH 5196A	.	.	.	.	.	.	.	.	.	.	.	44 mm Ø x 12 mm
HH 5300A	.	.	.	.	.	.	.	.	.	.	.	41 mm Ø x 12 mm
SRM 1158	.	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm
	.	.	.	.	.	.	.	.	.	.	.	sale price
DSZU C101	.	.	.	.	.	.	.	.	.	(0.011)	(0.003)	38 mm Ø x 18 mm
BS 187A	.	0.0022	.	(0.025)	.	0.0029	.	0.003	<0.002	(0.02)	.	41 mm Ø x -7 mm
13X 17005E	.	0.0030	.	.	.	.	.	.	0.015	.	.	last
CT IS0139A	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 mm
SRM 1247	(0.003)	0.002	Ga: (0.011)	.	.	(0.005)	.	.	.	(0.005)	.	30-35 mm Ø x -16 mm
	.	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm
	.	.	.	.	.	.	.	.	.	.	.	Fe: 57.10
	.	.	.	.	.	.	.	.	.	.	.	Fe: 26.5
BS CD4MCU-A	0.0022	(0.0008)	(0.001)	.	(0.0003)	0.0061	17025	0.0024	.	(0.009)	(0.002)	44 mm Ø x 19+ mm
CT IS0141A	.	.	.	.	0.0002	.	.	.	.	.	.	Fe: 64.5
CT IS0136A	.	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x -16 mm
IARM 157D	.	0.0007	.	.	.	.	.	.	.	.	.	Fe: 52.12
ECRM 299-1D	0.0054	0.0002	.	.	.	.	.	0.0036	.	0.036	.	30-35 mm Ø x -16 mm
</								

HIGH ALLOY STEEL XRF SET

Part Number:	BS HAS-12	RM except CRM as noted, available as set or individually											* Provisional Analysis				~7 mm Ø 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 CRM	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
		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 183B Greek Ascology CRM	0.181	0.344	0.018	0.0042	0.41	0.074	1.96	12.45	0.33	0.0009	(0.0007)	0.032	0.044	(0.0075)	0.0046	(0.0016)	0.165	3.5	(0.0054)
		17025																	
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 188B A-286 CRM	0.046	0.247	0.016	(0.0007)	0.266	0.120	24.81	14.32	1.30	0.168	0.0047	0.274	0.0021	0.099	0.0051	2.20	0.264	0.043	0.0006
		17025																	
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	.

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	.	.	.	.

RM GRAY IRON as cast (not chill cast) CONTAINS FREE GRAPHITE OBS 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	.	.	.	0.083	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 285BH	3.43	0.732	0.0470	0.0128	1.93	0.321	1.38	1.05	0.0168	.	0.0034	0.052	0.238	0.0429	0.122
1	BS 286CT	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.052	0.258	0.052	0.150
1	BS 285BG	3.44	0.731	0.0469	0.0126	1.93	0.321	1.39	1.05	0.0165	.	0.0038	0.051	0.238	0.0427	0.122
1	BS 286CH	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.051	0.258	0.052	0.150
1	BS 285BF	3.43	0.732	0.0472	0.0127	1.93	0.320	1.386	1.047	0.0164	.	0.0033	0.050	0.238	0.0424	0.122
1	BS 286CG	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.050	0.258	0.052	0.150
1	BS 285BE	3.45	0.732	0.0474	0.0128	1.93	0.321	1.38	1.047	0.0162	.	(0.003)	0.049	0.238	0.0428	0.122
1	BS 286CF	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.049	0.258	0.052	0.150
1	BS 285BD	3.45	0.730	0.0471	0.0126	1.93	0.322	1.39	1.047	0.0160	.	0.0036	0.048	0.238	0.0427	0.121
1	BS 286CE	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.048	0.258	0.052	0.150
1	BS 286CD	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.047	0.258	0.052	0.150
1	BS 286CC	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.046	0.258	0.052	0.150
1	BS 291GK *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.044	.	0.004	0.046	0.030	0.027	0.033
1	BS 291GJ *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.043	.	0.004	0.045	0.030	0.027	0.033
1	SCRM 670/22	3.55	0.300	0.040	0.009	2.25	0.96	0.87	0.49	.	0.013	.	0.044	0.014	0.104	0.019
1	BS 291GI *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.043	.	0.004	0.044	0.030	0.027	0.033
1	BS 286CB	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.043	0.258	0.052	0.150
1	BS 291GH *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.042	.	0.004	0.043	0.030	0.027	0.033
1	BS 286CA	3.27	0.714	0.20	(0.012)	2.00	0.363	1.43	0.349	0.012	(0.03)	0.027	0.042	0.258	0.052	0.150
1	BS 291GG *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.041	.	0.004	0.042	0.030	0.027	0.033
1	BS 291GF *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.040	.	0.004	0.041	0.030	0.027	0.033
1	BS 291GE *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.039	.	0.004	0.040	0.030	0.027	0.033
1	BS 291FE	3.35	0.500	0.023	0.017	2.33	0.208	0.097	0.020	0.040	.	0.0035	0.039	0.035	0.025	0.017
1	BS 291GD *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.039	.	0.004	0.039	0.030	0.027	0.033
1	BS 291FD	3.35	0.500	0.023	0.017	2.33	0.208	0.097	0.020	0.040	.	0.0035	0.038	0.035	0.025	0.017
1	BS 291GC *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.038	.	0.004	0.038	0.030	0.027	0.033
1	BS 291GB *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.037	.	0.004	0.037	0.030	0.027	0.033
1	BS 291GA *	3.34	0.50	0.034	0.014	2.31	0.23	0.098	0.069	0.036	.	0.004	0.036	0.030	0.027	0.033
2	BAS SIMO 1/5	2.72	0.330	0.031	0.014	3.94	0.005	0.035	0.889	0.029	.	0.004	0.034	0.738	0.008	0.004
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 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 669/15	3.09	0.52	0.041	0.0108	2.41	0.217	0.48	0.260	.	0.040	.	0.023	0.057	0.058	0.50
1	SCRM 668/14	3.77	0.702	0.045	0.0220	1.72	0.65	0.096	0.99	.	0.023	.	0.009	0.0179	0.086	0.195
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 285BH	0.0007	0.0084	0.0010	90.54	Sb:(0.2)	0.0040	0.0009	0.0017	0.0612	0.0055	~35 mm Ø x ~30 mm 17025
BS 286CT	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 285BG	0.0008	0.0084	0.0010	90.54	Sb:(0.2)	0.0039	0.0009	0.0017	0.0611	0.0055	~35 mm Ø x ~30 mm 17025
BS 286CH	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 285BF	0.0009	0.0084	0.0010	90.54	Sb:(0.2)	0.0039	0.0008	0.0018	0.0608	0.0054	~35 mm Ø x ~30 mm 17025
BS 286CG	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 285BE	0.0010	0.0084	0.0009	90.53	Sb:(0.2)	0.0038	0.0007	0.0016	0.0607	0.0054	~35 mm Ø x ~30 mm 17025
BS 286CF	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 285BD	0.0010	0.0084	0.0009	90.54	Sb:(0.2)	0.0039	0.0007	0.0017	0.0608	0.0055	~35 mm Ø x ~30 mm 17025
BS 286CE	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 286CD	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 286CC	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 291GK *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 291GJ *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
SCRM 670/22	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
BS 291GI *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 286CB	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 291GH *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 286CA	(0.002)	0.0086	0.0012	91.1	(0.005)	(0.005)	(0.0007)	(0.01)	0.0025	(0.003)	~35 mm Ø x ~30 mm 17025
BS 291GG *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 291GF *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 291GE *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 291FE	(0.002)	0.014	0.0008	93.1	.	(0.002)	(0.001)	(0.06)	(0.002)	(0.001)	~35 mm Ø x ~25 mm 17025
BS 291GD *	0.005	0.016	0.001	[93.1]	Sb:0.003	0.004	<0.005	0.048	0.004	0.002	~33-35 mm Ø x ~28-32 mm
BS 291FD	(0.002)	0.014	0.0008	93.1	.	(0.002)	(0.001)	(0.06)	(0.002)	(0.001)	~35 mm Ø x ~25 mm 17025
BS 291GC *	0.005	0.0									

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)	.	.	.	0.008	0.014	(0.004)	.	0.067	0.038	Zn:0.013	.
CZ SPL17 42A	.	0.0036	(0.002)	.	.	.	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
SCRM 668/14	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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 4510251B-16	.	0.0044	.	.	.	0.016	.	.	.	.	0.030	.	.	last
CZ 02033 3c	(0.007)	0.0044	(0.002)	.	.	.	.	0.005	.	.	0.009	(0.003)	.	.
SCRM 666/12	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Y 4510058B-18	0.0021	0.024	.	.	.	.	.	.	.	.	.	.	.	.
Y 4510058C-18	0.0021	0.024	.	.	.	.	.	.	.	.	.	.	.	.
Y 4510058D-18	0.0021	0.024	.	.	.	.	.	.	.	.	.	.	.	.
Y 4510058E-18	0.0021	0.024	.	.	.	.	.	.	.	.	.	.	.	last
SCRM 670/22	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CZ SPL17 31A	.	(0.0004)	.	.	.	.	.	.	.	.	(0.003)	(0.005)	.	.
CZ 20034 15b	(0.003)	0.0033	0.010	.	.	.	.	.	0.058	.	0.005	0.007	.	.
CZ SPL17 34A	.	0.0076	(0.005)	.	.	.	0.014	(0.006)	0.007	.	0.051	0.016	Zn:0.007	.
CZ 20034 15c	(0.003)	0.0057	0.008	.	.	.	.	.	0.056	.	0.006	0.004	.	.
CZ SPL17 32A	.	(0.0005)	(0.007)	.	.	.	.	0.022	0.023	.	(0.012)	(0.008)	Zn:0.011	.
CZ 02033 3b	.	0.0042	0.001	.	.	.	.	0.009	.	.	0.019	.	.	.

Number	As	B	Bi	Ca	Fe	La	Nb	Pb	Sb	Se	Sn	W	Zr	Other
CZ SPL17 40A	.	0.0008	.	.	.	.	.	.	.	.	(0.004)	.	Zn:(0.002)	.
VS ChG 28	.	.	.	.	.	.	.	.	0.015	.	0.0017	.	.	.
CZ 20034 14b	0.034	0.0100	0.007	.	.	.	.	(0.005)	0.016	.	0.028	(0.005)	0.014	Zn: 0.009
CZ 02033 3d	(0.018)	0.0071	(0.002)	.	.	.	.	0.005	0.007	.	0.009	.	.	.
CZ 02033 1f	.	0.0043	(0.001)	.	.	.	.	0.009	.	.	0.030	0.022	(0.008)	.
CZ 20034 13c	(0.002)	.	.	.	.	.	.	.	(0.002)	.	0.014	(0.003)	(0.02)	.
CZ 20034 14c	0.035	0.0123	.	.	.	.	.	.	0.020	.	0.025	(0.003)	0.013	Zn: 0.010
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	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BS CC-11A	0.0018	0.0008	(0.005)	(0.0009)	93.6	(0.004)	(0.007)	(0.002)	(0.01)	Zn:0.0032	(0.004)	(0.017)	(0.0025)	17025
BS CC-11B	0.0074	0.0033	(0.016)	(0.002)	93.2	(0.008)	0.043	0.014	0.026	Zn:0.008	0.021	0.028	0.0165	17025
VS ChM6/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
VS ChM8/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CZ SPL17 36A	.	0.022	(0.007)	.	.	.	.	0.016	.	.	(0.002)	.	Zn:(0.002)	.
VS ChM13	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SCRM 669/14	.	.	.	.	.	.	.	.	.	.	.	.	.	.
VS ChG 26	.	.	.	.	.	.	.	.	.	.	0.031	.	.	.
VS ChM10	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SRM C1137a	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CZ SPL17 33A	.	0.0064	(0.002)	.	.	.	0.032	0.010	0.019	.	0.039	0.079	Zn:0.009	.
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
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BS: 28-35 mm Ø x 17-35 mm

CZ: 40 mm Ø x 18 mm
SCRM: 48 mm x 42 mm x 12 mmSRM: 32 mm Ø x 19 mm
Y: 30-35 mm Ø x 18-30 mmVS ChM: ~39 mm Ø x ~39 mm
VS ChG: ~34 mm x ~35 mm X ~22 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	X
0.005 - 0.009	0.005	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	.
0.025 - 0.034	0.03	.	.	.	X	.	X	.	X	X	X	X	.
0.035 - 0.044	0.04	.	.	.	X	.	X	.	X	X	X	X	.
0.045 - 0.054	0.05	.	.	.	X	.	X	.	X	X	X	X	.
0.055 - 0.064	0.06	.	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	X	X	.
0.085 - 0.094	0.09	.	X	X	.	.	X	X	X	X	X	X	.
0.095 - 0.104	0.10	.	.	.	.	.	X	X	X	X	X	X	.
0.105 - 0.114	0.11	.	.	.	.	.	X	X	X	X	X	X	.
0.115 - 0.124	0.12	.	.	.	.	.	X	X	X	X	X	X	.
0.125 - 0.134	0.13	.	.	.	.	.	X	.	X	X	X	X	.
0.135 - 0.144	0.14	.	.	.	.	.	X	.	.	X	X	X	.
0.145 - 0.154	0.15	.	.	.	.	.	.	.	.	.	X	X	.
0.155 - 0.164	0.16	.	.	.	.	.	.	.	.	.	X	X	.
0.165 - 0.174	0.17	.	.	.	.	.	.	.	.	.	X	X	.
0.175 - 0.184	0.18	.	.	.	.	.	.	.	.	.	X	X	.

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 0.08 % Mg, order as part number CTIF 8018 0.08

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 CII45	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 CII45	(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 ~40 mm
VS ChG 10/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~40 mm
VS ChG 11/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~40 mm
VS ChG 9/6	.	(0.003-0.006)	.	.	.	.	.	.	.	.	.	.	~38 mm Ø x ~40 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
2	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	
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	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	11X C6W	3.80	0.967	0.088	0.064	0.81	0.952	0.072	0.396	0.021	0.046	1.32	0.010	0.030	0.195	0.045	0.0045
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	
2	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 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 HPC4Q	3.48	1.19	1.63	0.102	1.70	0.078	2.03	0.788			0.101				0.029	
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 C3AD	3.45	0.896	0.539	0.180	1.06	0.351	4.34	1.669	0.0104	0.240	0.235	0.021	0.166	0.127	0.605	0.007
2	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	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	
2	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 C10D	3.38	0.754	0.104	0.086	1.89	0.643	0.873	0.429	0.024	0.059	0.288		0.035	0.0474	0.1048	
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	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											
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	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	
1	11X HPC3K	3.24	1.00	2.52	0.078	1.37	0.132	1.52	1.19			0.172				0.042	
2	BAS NCRM3	3.24	0.67	0.125	0.090	0.29	1.21	3.64	3.95			0.78				0.02	
#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	Nb	Sn	Ti	V	Zn
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	11X C2V	3.17	1.23	0.256	0.077	1.180	0.191	1.803	1.126	0.104	0.116	0.116	0.0160	0.0627	0.0870	0.328	0.0115
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	SCRM 657/9	3.157	0.112	0.101	0.0401	3.209											
1	KUT 204	3.15	0.80	0.023	(0.009)	1.79	0.64	1.09	1.22			1.38		(0.215)			
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	
2	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.	

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)	.	.	.	.	.	.	(0.002)	.	.	.	(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)	.	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 18 mm
SCRM 659/9	.	.	.	.	.	.	.	.	.	0.007	.	.	.	.	48 mm x 42 mm x 12 mm
Y 2582-7	0.043	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 18-30 mm
DSZU CH04	.	(0.0007)	.	(7)	.	.	(0.0001)	.	(0.007)	.	.	.	(<0.0002)	.	-30 mm x -35 mm x -19mm
DSZU CH05	.	(0.03)	.	(20)	.	.	(0.001)	.	.	.	.	.	.	.	-30 mm x -35 mm x -19mm
CZ 02033 4b	.	.	.	.	.	.	.	.	0.004	(0.001)	.	.	.	.	40 mm Ø x 18 mm
VS ChG 2/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~40 mm
DSZU CH06	.	(0.02)	.	(10)	.	.	.	.	.	.	.	.	0.1	.	-35 mm x -35 mm x -19mm
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
11X C5W	0.0544	0.0043	0.007	Cd:(0.0003)	Ag:0.0042	.	.	0.0070	0.007	0.058	0.006	0.013	0.0242	.	-40 mm Ø x -15 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	.	.	.	.	.	.	.	.	.	.	.	-37 mm x -37 mm x -24 mm
SCRM 674/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
Y 2582-4	0.0017	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 18-30 mm
CZ SPL17 39A	.	0.0195	0.008	.	.	.	.	.	0.017	0.037	.	.	.	.	40 mm Ø x 18 mm
Y 2582-5	0.0022	.	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 18-30 mm
VS ChG 1/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~40 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 x -16mm
VS ChG 3/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~40 mm
VS ChG 27	.	.	.	.	.	.	.	.	.	0.029	.	.	.	.	-35 mm x -35 mm x -22 mm
SCRM 660/10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
VS ChG 5/9	(0.003)	.	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x -40 mm
11X HPC4Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 mm
Y 2863-5	.	0.060	.	.	.	.	.	.	.	.	.	.	0.158	.	30 mm Ø x 18-30 mm
11X C3AD	0.086	0.0253	0.0124	.	.	.	.	0.0075	0.0170	0.243	0.028	.	0.040	.	-40 mm Ø x -15 mm
CZ SPL17 41A	.	(0.0004)	(0.007)	.	.	.	.	.	0.010	0.016	.	.	0.012	.	40 mm Ø x 18 mm
VS ChL1/1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-38 mm Ø x -38 mm
CZ SPL17 38A	.	0.0027	(0.002)	.	.	.	.	.	(0.003)	0.018	.	.	(0.005)	.	40 mm Ø x 18 mm
11X C10D	0.019	0.0030	.	Cd:(0.0004)	.	.	.	0.0057	0.006	0.040	.	.	0.308	.	-40 mm Ø x -15 mm
VS ChG 35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-34 mm Ø x -37 mm
KUT 120	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm
Y 2863-3	.	0.056	.	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 18-30 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
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 18-30 mm
11X HPC1H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 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 -40 mm
11X HPC3K	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-40 mm Ø x -15 mm
BAS NCRM3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
Number	As	B	Bi	Ca*	Ce	La	Mg	N	Pb	Sb	Se	Te	W	Zr	Units
NCS HS11782	0.0065	.	.	.	.	.	.	.	.	.	.	.	.	.	31 mm Ø x 28 mm
KUT 125	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm
VS ChG 31	.	.	0.068	.	.	.	.	.	.	.	.	.	.	.	-37 mm x -37 mm x -24 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
11X C2V	0.0541	0.0098	0.0084	.	.	.	.	0.0096	0.0133	0.115	0.0157	.	0.0228	.	-40 mm Ø x -15 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
SCRM 657/9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 mm x 42 mm x 12 mm
KUT 204	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 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 SPL17 37A	.	0.0124	(0.002)	.	.	.	.	.	(0.002)	.	.	.	0.026	.	40 mm Ø x 18 mm
VS ChG 30	.	.	0.082	.	.	.	.	.	.	.	.	.	.	.	-37 mm x -37 mm x -24 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 x -19mm
VS ChG 39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-34 mm Ø x -37 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 18-30 mm
BAS LARM5/1	.	0.0016	0.0012	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
BAS NCRM2	.	.	.	.	.	.	.	.	<0.001	.	.	.	.	.	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-34 mm Ø x -37 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 ChG 34	.	.	0.223	.	.	.	.	.	.	.	.	.	.	.	-37 mm x -37 mm x -24 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
11X C5Y	0.0203	0.0058	0.005	.	.	.	.	0.0094	0.0108	0.030	0.0072	(0.0022)	0.0072	(0.0024)	-40 mm Ø x -15 mm
KUT 201	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30 x 30 x 13 mm
Number	As	B	Bi	Ca*	Ce	La	Mg	N	Pb	Sb	Se	Te	W	Zr	Units

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	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	2.60	0.394	1.00	0.204	1.643	0.310	0.275	0.148	0.086	0.126	0.148	0.0217	0.1063	0.235	0.064	0.0068
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	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 673/1	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	11X C4S	1.954	0.565	0.1014	0.096	2.98	0.095	3.21	1.382	0.006	0.0210	0.177	0.0233	0.0140	0.080	0.0165	0.0037
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	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
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Number	As	B	Bi	Ca*	Ce	Mg	N	Pb	Sb	Se	Te	W	Zr	Units
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 ~40 mm
DSZU CH01	.	(0.03)	.	(10)	.	(0.0005)	.	.	.	.	.	(0.02)	.	~30 mm x ~35 mm
VS ChG 40	.	.	.	.	.	.	.	.	.	.	.	.	.	~34 mm Ø x ~37 mm
11X C8V	0.0812	0.0366	0.014	.	.	.	0.0065	0.0052	0.069	0.0210	0.0049	0.0258	0.0064	~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
Y 2863-2	.	0.0025	.	.	.	.	.	.	.	.	.	.	.	30 mm Ø x 18-30 mm
VS ChG 37	.	.	.	.	.	.	.	.	.	.	.	.	.	~34 mm Ø x ~37 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	.	.	.	.	.	.	.	.	.	.	.	.	.	~34 mm Ø x ~37 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 x ~19mm
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
11X C4S	0.0235	0.0351	0.0070	.	.	.	0.0126	0.034	0.0055	0.009	.	0.099	.	~40 mm Ø x ~15 mm
SCRM 675	0.035	.	.	.	.	.	.	.	.	.	.	.	.	40 mm x 37 mm x 10 mm
SCRM 655/4	48 mm x 42 mm x 12 mm
Y 2863-1	.	0.0024	30 mm Ø x 18-30 mm

Number	As	B	Bi	Ca*	Ce	Mg	N	Pb	Sb	Se	Te	W	Zr	Units
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ALLOYED CAST IRON, CHART 1 of 2

= 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	DSZU CH021	3.93	3.66	0.064	0.009	0.52	0.369	5.86	9.07	0.168	4.42	.	.	0.093	0.61	.	.
1	VS CHG41/1	3.88	1.23	0.037	0.090	1.77	0.56	5.84	8.7	.	0.50	.	.	0.21	0.25	.	.
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	VS CHG 48	3.44	0.100	0.0070	0.0039	0.923	0.90	0.280	22.79	0.049	0.591	.	0.0018	0.0022	0.0016	0.072	.
1	VS CHG44/1	3.25	1.91	0.018	0.029	1.28	2.46	0.210	25.4	.	0.028	.	.	0.43	0.106	.	.
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	.	.
2	58A SC01141	3.08	0.62	0.045	0.036	0.56	0.77	1.21	15.32	.	2.70	.	.	0.020	0.28	.	.
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	58A ZS01036	2.95	0.719	0.077	0.024	0.970	0.448	0.806	13.89	.	0.683	.	0.048	0.035	0.135	.	.
2	BAS NIRM2/2	2.94	2.01	0.096	0.007	1.43	5.93	13.69	1.48	.	.	.	.	.	.	0.044	.
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	DSZU CH022	2.90	1.76	0.033	0.018	0.43	2.53	2.19	14.85	0.053	2.65	.	.	0.078	0.45	.	.
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 15294W	2.76	0.451	0.082	0.029	0.36	0.103	0.309	29.3	(0.147)	0.091	0.012	0.036	.	0.132	.	.
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	.	.
1	VS CHG42/1	2.69	2.78	0.068	0.034	0.411	1.37	0.26	14.8	.	1.87	.	.	0.131	0.48	.	.
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 15310B	2.63	0.97	0.070	0.029	0.99	2.37	4.59	20.7	0.018	0.92	.	.	0.034	0.096	.	.
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
2	BAS NIRM6/1	2.53	4.07	0.225	0.049	2.68	0.11	26.9	1.02	.	0.51	.	.	.	.	.	.
2	BAS NIRM3	2.51	0.51	0.208	0.096	2.21	1.00	17.8	2.43	.	.	.	.	.	.	.	.
1	VS CHG 47	2.43	0.949	0.099	0.083	2.73	0.0104	0.149	14.45	0.0056	0.0019	.	0.093	0.041	0.129	.	.
1	VS CHG45/1	1.96	0.59	0.021	0.0091	3.08	0.056	0.95	33.8	.	0.209	.	.	.	0.21	.	.
1	VS CHG43/1	0.87	1.02	0.063	0.076	4.44	0.171	0.439	23.7	.	0.107	.	.	0.033	0.040	.	.

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Pb	Sn	Ti	V	Mg	N
	Number	B	Ce	Co	Nb	W	Zr	Units					Other				
	DSZU CH021	.	.	.	.	.	.	.	35	mm x 35	mm x 16	mm					
	VS CHG41/1	.	.	.	.	.	.	.	-37	mm Ø x	-22	mm					
	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	0.177	.	.	0.018	0.015	.	.	30	mm Ø x	18-30	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		
	VS CHG 48	As:0.0021	.	0.044	.	.	Sb:0.0017	-35	mm Ø x	-17	mm						
	VS CHG44/1	.	.	.	.	.	.	.	-37	mm Ø x	-22	mm					
	Y 451052-7	0.015	.	.	0.010	0.175	.	.	30	mm Ø x	18-30	mm					
	58A SC01141	.	.	.	.	.	.	.	-35	mm Ø x	-30	mm					
	SRM C1290	.	.	.	.	.	.	.	32	mm Ø x	19	mm					
	Y TSK205	.	.	.	.	.	.	.	35	mm Ø x	18-30	mm					
	Y 451054-2	.	.	.	.	.	.	.	30	mm Ø x	18-30	mm					
	NCS HS11788	0.0008	.	(0.0063)	.	(0.0002)	.	.	31	mm Ø x	28	mm	As: 0.014				
	Y 451052-2	0.142	.	.	0.182	1.99	.	.	30	mm Ø x	18-30	mm					
	BAS NIRM5/1	.	0.016	.	0.15	.	.	.	48	mm x 42	mm x 12	mm					
	58A ZS01036	.	.	0.024	0.025	0.172	.	.	-32	mm Ø x	-30	mm	As: (0.003)				
	BAS NIRM2/2	.	0.018	.	.	.	.	.	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 15294W	.	.	0.128	.	0.265	.	.	-40	mm Ø x	-15	mm					
	Y 451054-3	.	.	.	.	.	.	.	30	mm Ø x	18-30	mm					
	VS CHG45	.	.	.	.	.	.	.	-36	mm x	-36	mm Ø x	-18	mm	last		
	VS CHG42/1	.	.	.	.	.	.	.	-37	mm Ø x	-22	mm					
	DSZU CH022	.	.	.	.	.	.	.	35	mm x 35	mm x 16	mm					
	11X 20002J	.	.	.	.	.	.	.	40	mm Ø x	15	mm					
	BAS NCRM4	.	.	.	.	.	.	.	40	mm x 37	mm x 10	mm					
	NCS HS11787	0.0007	.	(0.0054)	.	(0.0002)	.	.	31	mm Ø x	28	mm	As: 0.0075				
	11X 15310B	.	.	0.157	.	0.188	.	.	-40	mm Ø x	-15	mm					
	Y TSK201	.	.	.	.	.	.	.	35	mm Ø x	18-30	mm					
	BAS NIRM6/1	.	0.006	.	.	.	.	.	48	mm x 42	mm x 12	mm					
	BAS NIRM3	.	0.007	.	0.09	.	.	.	40	mm x 37	mm x 10	mm					
	VS CHG 47	As:0.014	.	0.0042	.	.	Sb:0.040	-35	mm Ø x	-17	mm						
	VS CHG45/1	-37	mm Ø x	-22	mm					
	VS CHG43/1	-37	mm Ø x	-22	mm					

Number	B	Ce	Co	Nb	W	Zr	Units	Other
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ALLOYED CAST IRON, CHART 2 of 2

= Class, where 1 = CRM and 2 = RM

#	Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Mo	Pb	Sn	Ti	V	Mg	N
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	.	.
2	DSZU CH023	2.33	0.43	0.023	0.073	0.98	0.054	0.715	23.45	0.255	1.46	.	.	0.38	0.288	.	.
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	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	DSZU CH024	2.01	1.22	0.102	0.037	2.18	0.88	0.222	27.84	0.096	3.86	.	.	0.099	0.164	.	.
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	.	.
1	VS ChG 46	1.87	0.067	0.0106	0.108	3.24	0.0109	5.44	8.58	.	0.63	.	.	.	0.109	.	.
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
2	DSZU CH025	1.80	0.387	0.030	0.026	2.70	1.23	1.77	35.14	0.351	0.302	.	.	0.117	0.044	.	.
2	BAS CRRM1/2	1.70	1.43	0.16	0.099	1.84	1.97	2.03	11.28	0.140	3.06	.	.	0.054	0.063	.	.
2	DSZU CH026	1.62	0.305	0.050	0.032	1.14	0.288	3.63	35.87	0.059	0.96	.	.	0.013	0.067	.	.
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	.	.
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	B	Ce	Co	Nb	W	Units			Other							
	Y 451052-3	0.102	.	.	0.149	1.57	30 mm Ø x 18-30 mm										
	BAS CRRM3/2	.	.	.	.	.	40 mm x 37 mm x 10 mm										
	DSZU CH023	.	.	.	.	.	35 mm x 35 mm x 16 mm										
	Y 451054-4	.	.	.	.	.	30 mm Ø x 18-30 mm										
	Y TSK200	.	.	.	.	.	35 mm Ø x 18-30 mm										
	BAS NIRM1	.	0.018	.	.	.	40 mm x 37 mm x 10 mm										
	DSZU CH024	.	.	.	.	.	35 mm x 35 mm x 16 mm										
	Y 451052-4	0.086	.	.	0.071	1.05	30 mm Ø x 18-30 mm										
	BAS NIRM4	.	0.011	.	0.37	.	40 mm x 37 mm x 10 mm										
	NCS HS11789	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										
	VS ChG 46	.	.	.	.	Sb:0.140	~35 mm Ø x ~17 mm										
	BAS CRRM1/1	.	.	.	.	.	40 mm x 37 mm x 10 mm			last							
	Y 451054-5	.	.	.	.	.	30 mm Ø x 18-30 mm										
	Y TSK202	.	.	.	.	.	35 mm Ø x 18-30 mm										
	DSZU CH025	.	.	.	.	.	35 mm x 35 mm x 16 mm										
	BAS CRRM1/2	.	.	.	.	.	40 mm x 37 mm x 10 mm										
	DSZU CH026	.	.	.	.	.	35 mm x 35 mm x 16 mm										
	Y 451052-5	0.076	.	.	0.022	0.694	30 mm Ø x 18-30 mm										
	BAS NIRM8/2	.	0.013	.	.	.	48 mm x 42 mm x 12 mm										
	Y 451054-6	.	.	.	.	.	30 mm Ø x 18-30 mm										
	VS ChG44	.	.	.	.	.	~36 mm x ~36 mm Ø x ~18 mm			last							
	Y TSK203	.	.	.	.	.	35 mm Ø x 18-30 mm										
	Y 451052-6	0.055	.	.	0.014	0.370	30 mm Ø x 18-30 mm										
	Y TSK204	.	.	.	.	.	35 mm Ø x 18-30 mm										
	Number	B	Ce	Co	Nb	W	Units			Other							

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 F019	4.04	1.05	1.05	0.032	0.057	.	.	.	.	.	.	.	.	.	.
CTIF F012	3.71	1.86	0.44	0.038	0.004	0.77	.	.	0.008	.	.	0.011	.	.	.
CTIF F08	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 F06	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 F010	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 F011	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 F018	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 F05	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 FFA 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 F017	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 F04	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 F09	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 F07	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
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CAST IRON MUSHROOMS

CONTINUED FROM THE PREVIOUS PAGE

Number	As	B	Bs	Bi	Ce	N	Nb	Pb	Sb	Te	Zn
CTIF F019	0.0005	.
CTIF F012
CTIF F08
CTIF FCR7
CTIF F06
CTIF F010
CTIF NH3
CTIF F011
CTIF F018	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 F05
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 FFA 1	0.0109	.	.	.	.	0.0125	.	.	.	.	.
CTIF NR 8S
CTIF F017
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 F04
CTIF FCR2
CTIF FL5	.	(0.002)	.	(0.0005)	.	.	.	.	.	.	.
CTIF FCR Ni3
CTIF NH6
CTIF F09
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 F07
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 Nil

last of stock

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

= Class, where 1 = CRM and 2 = RM

* Provisional Analysis

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
1 VS UG128	0.816	0.405	0.014	0.0139	0.324	0.0235	0.032	0.038	0.0078	.	.	0.0088	0.0046	.
1 BS 54J *	0.77	0.78	0.009	0.011	0.55	0.079	0.04	0.17	0.002	0.004	0.015	<0.05	0.002	<0.05
1 VS UG129	0.728	.	.	0.013	.	.	.	.	0.0014	.	.	.	.	.
1 NM 309	0.57	0.80	0.037	0.046	0.20	.	0.034	0.081	.	.	.	.	.	.
1 IARM Fe1050-18	0.499	0.79	0.0045	0.027	0.223	0.179	0.068	0.100	(0.003)	0.0056	0.018	0.0097	0.0270	.
1 NM 306A	0.46	0.71	0.085	0.043	0.28	.	0.023	0.13	.	.	.	.	.	.
1 VS UG131	0.39	0.56	0.0100	0.0031	0.207	0.030	0.026	0.853	.	.	.	0.0070	.	.
1 BS 1030A *	0.34	0.75	0.006	0.015	0.26	0.19	0.14	0.11	0.002	0.006	0.029	<0.05	0.026	<0.005
1 SS 452/1	0.323	1.30	0.035	0.017	0.055	0.22	0.19	0.067	.	.	0.054	.	.	0.054
1 VS UG121	(0.3)	0.55	0.014	0.027	0.244	0.180	0.078	0.126	0.023	.	.	0.0068	0.0018	.
1 BS 1026A *	0.27	0.76	0.007	0.021	0.18	0.095	0.081	0.12	0.009	0.005	0.05	<0.05	0.026	0.001
1 IARM Fe1020-18	0.226	0.547	0.006	0.024	0.235	0.198	0.078	0.125	(0.003)	0.0065	0.0252	0.0098	0.036	.
1 IMZ 71A	0.212	0.471	0.0055	0.0188	0.257	0.068	0.055	0.099	0.017	0.080	0.054	0.0058	0.043	0.072
2 BS 57F	0.196	0.554	0.009	0.027	0.202	0.197	0.070	0.120	(0.002)	0.007	0.018	0.0077	0.063	.
2 BS 2971	0.187	1.01	0.015	0.024	0.237	0.065	0.111	0.152	0.022	.	0.040	0.0084	(0.002)	.
1 VS UG132	0.180	0.466	0.0075	0.0030	0.201	0.039	0.024	0.035	.	.	.	0.0054	.	.
1 12X 10180D	0.179	0.807	0.014	0.025	0.286	0.066	0.053	0.0251	(0.003)	0.007	0.0026	0.007	.	.
1 IMZ 71A	0.126	0.493	0.0126	0.0075	0.494	0.90	0.036	0.505	0.019	0.025	0.018	0.0065	0.055	0.023
1 NM 308	0.11	0.47	0.013	0.008	0.067	.	0.009	0.032	.	.	.	.	.	.
1 VS UG122	(0.1)	0.433	(0.02)	(0.02)	0.396	0.288	0.378	0.72	.	.	.	0.0038	0.0040	.
1 VS UG120	0.096	0.685	0.027	(0.02)	0.96	0.447	0.634	0.75	0.011	.	.	(0.008)	0.0078	.
1 DSZU C041a	0.085	1.35	0.021	0.0092	0.59	0.046	0.032	0.035	0.029	0.010	0.0038	(0.008)	0.0033	(0.003)
1 IARM Fe1215-18	0.043	0.96	0.059	0.29	(0.006)	0.164	0.055	0.051	.	0.0055	0.016	0.0109	0.0020	.
1 BS XCAS	0.024	0.471	0.008	0.0064	0.339	0.020	0.031	0.035	(0.027)	0.0086	0.0069	0.0055	0.020	(0.006)
1 BS XCAS-2 *	0.021	0.58	0.006	0.006	0.40	0.047	0.099	0.038	0.073	0.015	0.015	<0.5	0.018	0.021

Number	As	B	Fe	Nb	O	Sb	Sn	Ti	Alloy	Units	Others
VS UG128	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~20 mm	.
BS 54J *	<0.05	<0.005	[97.5]	0.002	<0.05	<0.005	0.006	0.002	1070	38 mm Ø x 19 mm	.
VS UG129	.	.	.	.	.	.	.	.	.	-38 mm Ø x ~20 mm	.
NM 309	.	.	.	.	.	.	.	.	1060 + P	40 mm Ø x 20 mm	.
IARM Fe1050-18	(0.0030)	(0.0005)	98.0	(0.0013)	0.0026	0.0015	0.0103	0.0008	1050	31 mm Ø x 2 or 18 mm	.
NM 306A	.	.	.	.	.	.	.	.	1045 + P	40 mm Ø x 20 mm	.
VS UG131	.	.	.	.	.	.	.	.	.	-39 mm Ø x ~25 mm	.
BS 1030A *	0.006	<0.005	[98.0]	0.001	<0.05	0.001	0.016	0.001	1030	38 mm Ø x ~7 or 19+ mm	.
SS 452/1	0.015	.	.	.	.	.	0.094	0.031	.	38 mm Ø x 19 mm	.
VS UG121	.	.	.	.	.	.	.	.	.	-45 mm Ø x ~25 mm	.
BS 1026A *	<0.05	<0.005	[98.3]	0.001	<0.05	<0.05	0.008	<0.005	1026	38 mm Ø x ~7 or 19+ mm	.
IARM Fe1020-18	0.0044	.	98.5	(0.0012)	(0.007)	0.0018	0.0080	.	1020	31 mm Ø x 2 or 18 mm	.
IMZ 112A	0.023	0.0010	.	0.0123	Pb:0.008	0.021	0.162	0.0138	1023	38 mm Ø x 20 mm	Zn: 0.0020
BS 57F	(0.006)	.	Ca:(0.0003)	.	(0.006)	.	0.008	.	1020	44 mm Ø x 17 or 19+ mm	last
BS 2971	0.003	.	.	.	.	(0.005)	.	.	LF-2	44 mm Ø x ~7 or 19+ mm	last
VS UG132	.	.	.	.	.	.	.	.	.	-39 mm Ø x ~25 mm	.
12X 10180D	0.0068	.	.	.	.	.	0.0033	.	1018	-40 mm Ø x ~15 mm	.
IMZ 71A	0.016	0.0009	.	0.0100	.	0.013	0.015	0.0041	1010 - 1013	35 mm Ø x 20 mm	Zr: 0.0065
NM 308	.	.	.	.	.	.	.	.	1010	40 mm Ø x 20 mm	.
VS UG122	.	.	.	.	.	.	.	.	.	-45 mm Ø x ~25 mm	.
VS UG120	.	.	.	.	.	.	.	.	.	-45 mm Ø x ~25 mm	.
DSZU C041a	(0.004)	(0.0005)	.	(0.002)	.	.	(0.004)	0.0049	.	40 mm Ø x 25 mm	.
IARM Fe1215-18	0.0043	.	.	0.0012	.	0.0018	0.0083	0.0007	1215	-38 mm Ø x ~3 or ~19 mm	.
BS XCAS	0.0016	(0.0002)	99.0	(0.0015)	0.008	0.0006	0.0017	0.0010	1008	38 mm Ø x 30 mm	17025
BS XCAS-2 *	<0.05	0.020	[98.6]	0.003	<0.05	0.002	0.002	0.011	1006 + Al	-37 mm Ø x ~30 mm	Ca: 0.003 Ta: 0.027

RESULFURIZED STEEL

= Class, where 1 = CRM and 2 = RM

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
1 IARM 307B	0.162	1.45	(0.012)	0.094	(0.30)	0.191	0.195	0.105	0.034	0.0101	0.045	(0.011)	(0.003)	.
2 CZ CM-22A	0.154	1.443	0.086	0.084	0.248	0.419	3.10	0.167	(0.004)	0.130	0.132	0.0065	0.653	0.59

Number	As	Nb	Sn	Ti	Alloy	Units
IARM 307B	.	(0.0013)	0.010	(0.003)	1118	31 mm Ø x 2 or 18 mm
CZ CM-22A	0.057	0.019	0.069	0.0038	.	-39 mm Ø x ~25 mm

SILICON STEEL

= Class, where 1 = CRM and 2 = RM

Number	Si	C	Mn	P	S	Cu	Ni	Cr	Al	Co	Mo	N	V	W
2 CZ CM-12C	3.7	0.038	0.275	0.0103	0.0110	0.175	0.046	0.081	0.145	0.0044	0.012	0.0056	0.027	(0.004)
1 ECRM 191-3C	3.226	0.0027	0.153	0.0097	0.0005	0.0097	0.0124	0.0242	0.81	.	0.00127	0.00105	0.00043	.
2 CZ CM-20A	1.74	0.63	0.594	0.0383	0.020	0.237	1.007	0.97	0.076	0.124	0.365	0.0086	0.225	0.104
1 SS 405/1	1.71	0.032	1.28	0.018	0.069	0.013	0.22	0.15	.	.	(0.002)	.	0.28	.
1 SS 409/1	1.46	0.082	0.44	0.025	0.021	0.048	3.06	0.94	.	0.014	0.65	.	0.09	.
1 IMZ 52/1	1.38	0.41	0.25	0.012	(0.009)	0.094	2.35	0.12	.	.	(0.041)	.	.	.
2 CZ LA-3G	1.29	0.626	0.68	0.047	0.035	0.236	1.01	1.377	0.047	0.127	0.326	0.011	0.232	0.105

Number	As	B	Nb	Pb	Sb	Sn	Ti	Zr	Units	Others
CZ CM-12C	0.0030	0.0033	0.0066	.	.	(0.005)	0.0128	.	-39 mm Ø x ~25 mm	Ca: 0.0010
ECRM 191-3C	0.0014	0.00024	.	.	.	0.0013	0.0020	.	-30 mm Ø x ~39 mm	Mg: 0.0036
CZ CM-20A	0.073	0.0071	0.074	0.015	0.025	0.033	0.175	0.083	-37 mm Ø x ~25 mm	Zn: 0.007
SS 405/1	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm	.
SS 409/1	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm	.
IMZ 52/1	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm	.
CZ LA-3G	0.051	0.0039	0.071	0.0098	0.024	0.031	0.143	0.068	-39 mm Ø x ~25 mm	Ca: 0.0016

LOW ALLOY AND TOOL STEEL, CHART 1 of 2

= Class, where 1 = CRM and 2 = RM

* Provisional Analysis

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
2 BS 37D	1.54	0.28	0.021	0.015	0.29	0.063	0.21	11.07	.	0.07	1.09	0.016	0.80	0.16
1 IARM FeM4-18	1.42	0.298	0.013	0.062	0.60	0.104	0.127	4.16	.	0.080	5.07	0.042	3.97	5.55
1 IARM FeM62-18	1.32	0.27	0.016	0.015	0.37	0.115	0.129	3.86	(0.006)	0.105	10.2	0.045	2.02	6.31
1 BS E52100 *	1.00	0.37	0.012	0.005	0.27	0.090	0.065	1.54	0.019	0.007	0.021	0.007	0.005	0.002
2 BS 36C	0.96	0.46	0.023	0.027	0.31	0.18	0.19	5.01	.	0.03	0.99	.	0.11	(0.04)
2 BS TM1	0.86	0.23	0.007	0.012	0.46	0.054	0.057	3.72	.	0.45	8.4	.	1.05	1.7
1 IARM FeM2-18	0.853	0.337	0.025	(0.0010)	0.26	0.098	0.182	4.23	(0.014)	0.28	4.92	0.0148	1.90	5.81
1 IARM FeM1-18	0.85	0.318	0.013	(0.003)	0.44	0.091	0.104	3.67	0.007	0.226	8.0	0.037	1.19	1.98
1 BS 33F	0.569	0.295	0.0134	0.0009	0.76	0.039	0.211	1.31	0.019	0.017	0.202	0.0124	0.25	2.28
2 BS TS7	0.529	0.70	0.016	0.010	0.27	0.05	0.10	3.18	.	0.043	1.34	.	0.35	0.19
1 BS TS-7A	0.527	0.74	0.013	0.016	0.84	0.127	(0.031)	3.35	0.061	(0.005)	1.62	0.0124	0.265	(0.0014)
1 IARM FeS7-18	0.51	0.271	0.021	0.0032	0.47	0.128	0.170	3.28	(0.015)	0.0106	1.39	0.0102	0.233	(0.016)
1 BS D-6A	0.47	0.78	0.0076	0.0010	0.232	0.136	0.60	0.99	0.038	0.013	1.00	0.0031	0.123	(0.0019)
1 12X 41400B	0.452	0.764	0.0095	0.041	0.32	0.161	0.156	0.999	0.0137	.	0.177	0.0124	.	.
1 BS 4140C	0.43	0.922	0.010	0.026	0.29	0.260	0.131	0.94	0.0215	0.0078	0.169	0.0064	0.0026	(0.003)
2 PV 101/1	0.424	0.798	0.014	0.027	0.177	0.108	0.091	1.013	.	.	0.099	.	.	.
2 BS TH11	0.423	0.31	0.016	0.005	0.88	0.041	0.11	5.04	.	(0.008)	1.27	.	0.46	(0.01)
1 BS 300A **	0.416	0.716	0.0049	0.0008	1.71	0.118	1.87	0.798	0.098	0.0087	0.38	0.0023	0.070	<0.01
1 IARM I70B	0.400	0.821	(0.005)	(0.004)	0.21	(0.005)	0.197	0.009	0.230	(0.005)	(0.003)	.	(0.002)	.
2 BS 34D	0.395	0.38	0.017	0.005	1.06	0.049	0.10	5.15	.	0.031	1.24	.	0.94	0.10
1 BS 8740	0.39	0.86	0.011	0.023	0.25	0.16	0.55	0.49	0.037	0.0086	0.27	0.0073	0.0024	0.0023
2 BS 68C	0.38	0.60	0.018	0.008	0.305	0.178	0.166	1.77	1.06	0.011	0.36	0.0045	0.007	.
1 IARM Fe5140H-18	0.37	0.93	0.014	0.022	0.187	0.253	0.266	0.67	0.13	0.0081	0.031	0.007	(0.0024)	(0.003)
2 BS TH12	0.372	0.40	0.020	0.005	0.92	0.064	0.16	5.02	.	0.07	1.41	.	0.62	1.06
1 BS 4330MOD	0.316	0.92	0.0052	0.0010	0.269	0.105	1.83	0.848	0.031	0.034	0.478	0.0031	0.083	(0.001)
1 IARM 378A	0.274	1.38	0.018	0.037	0.307	0.299	0.142	0.187	(0.0029)	0.013	0.031	(0.02)	0.0844	(0.006)
2 BS 9325	0.25	0.91	0.008	0.007	0.32	0.13	3.29	1.48	0.030	0.010	0.31	0.0089	0.004	(0.003)
1 IARM 169B	0.232	0.75	(0.004)	(0.004)	(0.32)	(0.005)	(0.010)	0.010	0.36	(0.003)	(0.004)	.	(0.002)	(0.003)
2 BS 8822	0.228	0.92	0.011	0.025	0.26	0.17	0.47	0.52	0.022	0.019	0.34	0.0085	0.003	(0.003)
1 IARM Fe8620-18	0.211	0.857	0.012	0.026	0.23	0.197	0.446	0.536	0.0246	0.0085	0.197	0.007	0.0061	(0.004)
1 BS 8822A *	0.21	0.85	0.021	0.033	0.28	0.032	0.57	0.56	0.011	0.005	0.38	0.008	0.003	<0.05
1 BS 4820B	0.199	0.67	0.0081	0.0113	0.269	0.221	3.32	0.116	0.038	0.012	0.251	0.0075	0.0016	(0.003)
2 BS 1931	0.194	0.84	0.007	0.018	0.235	0.116	0.42	0.50	0.021	0.012	0.168	0.0079	0.002	.
1 IARM Fe4820-18	0.192	0.541	(0.011)	0.0018	0.26	0.167	3.51	0.144	0.022	0.0107	0.287	0.007	0.0015	(0.004)
2 PV 102/1	0.186	1.226	0.024	0.018	0.184	0.109	0.140	0.995	.	.	0.030	.	.	.
2 BS 8620A	0.184	0.80	0.008	0.079	0.21	0.15	0.44	0.48	0.016	0.010	0.16	0.0107	0.004	.
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	0.003	.
2 BS 58D	0.127	0.45	0.010	0.005	0.32	0.156	3.02	1.35	0.042	0.009	0.14	0.0147	0.005	.
1 IARM FeE9310-18	0.121	0.62	0.009	0.0128	0.256	0.158	3.07	1.09	0.036	0.009	0.086	0.0070	0.0030	.
1 IARM FeDP1080-18	0.110	1.88	0.014	(0.006)	0.11	0.042	0.554	0.554	(0.002)	0.069	0.445	(0.009)	(0.0043)	(0.030)
1 BS 3310	0.104	0.54	0.0092	0.0144	0.257	0.199	3.49	1.55	0.035	0.0096	(0.052)	0.0075	0.0029	(0.003)
2 HRT FE2003-H	0.104	0.46	0.013	0.002	0.43	0.05	0.26	8.66	(0.004)	0.013	0.93	.	0.217	.
1 IARM FeF9-18	0.104	0.459	(0.011)	0.0036	0.345	0.093	0.148	8.72	.	0.013	0.94	0.0323	0.214	0.0030
1 IARM Fe91-18	0.099	0.453	0.015	(0.002)	0.27	0.041	0.187	8.24	(0.006)	0.013	0.94	0.046	0.198	(0.003)
1 IARM FeP92-18	0.092	0.737	(0.005)	(0.005)	0.20	0.074	0.82	9.4	(0.005)	0.036	0.52	(0.0036)	0.188	1.97
2 BS 74B	0.08	0.91	0.087	0.316	0.002	0.006	0.012	0.019	(0.002)	.	0.008	.	.	.
1 IARM FeT23-18	0.068	0.82	0.012	0.006	0.18	0.046	0.53	2.47	.	0.085	0.261	(0.003)	0.238	1.60

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
BS 37D	.	.	.	.	0.0031	.	0.004	.	.	D-2	37 mm Ø x -7 or 19+ mm	.	.	.
IARM FeM4-18	0.0058	.	79.0	.	.	.	0.0050	0.0018	.	M-4	-38 mm Ø x -3 or -19 mm	.	.	.
IARM FeM62-18	.	(0.003)	.	(0.017)	(0.003)	.	.	(0.003)	.	M-62	31 mm Ø x 2 or 18 mm	.	.	.
BS E52100 *	0.003	.	[96.6]	0.001	<0.005	<0.005	0.005	0.001	.	E52100	38 mm Ø x 19 mm	.	.	.
BS 36C	.	.	.	.	.	.	.	.	.	A-2	38 mm Ø x -7 or 19+ mm	.	.	last
BS TM1	.	.	.	.	.	.	.	.	.	M-1	41 mm Ø x -7 or 19+ mm	.	.	last
IARM FeM2-18	(0.008)	.	81.4	(0.021)	(0.0016)	.	(0.007)	(0.0016)	.	M-2	31 mm Ø x 2 or 18 mm	.	.	.
IARM FeM1-18	.	.	.	.	.	.	0.0041	0.0044	.	M-1	-38 mm Ø x -3 or -19 mm	.	.	Zr: 0.0013
BS 33F	(0.003)	(0.0007)	94.0	(0.002)	0.0024	(0.01)	(0.004)	(0.002)	.	S-1 MOD	38 mm Ø x -7 to 19+ mm	.	.	17025
BS TS7	.	.	.	.	.	.	.	.	.	S-7	38 mm Ø x -7 or 19+ mm	.	.	last
BS TS-7A	(0.005)	0.0021	92.3	<0.01	(0.005)	<0.01	(0.004)	(0.003)	.	S-7	36 mm Ø x 25 mm	17025	.	Ca: 0.0004
IARM FeS7-18	(0.005)	.	(93.6)	(0.005)	0.0023	(0.0016)	(0.006)	0.0014	.	S-7	31 mm Ø x 2 or 18 mm	.	.	Pb: 0.0003
BS D-6A	0.0101	0.0004	95.6	<0.01	0.0009	0.0014	(0.009)	0.0024	.	D-6	38 mm Ø x -7 or 19+ mm	.	.	17025 Ca: 0.0011
12X 41400B	0.015	.	.	.	.	.	0.0099	.	.	4140	-38 mm Ø x -20 mm	.	.	Zn: 0.0012
BS 4140C	0.0052	(0.0007)	96.8	0.0019	0.0011	0.0021	0.0095	0.0009	.	4140	38 mm Ø x -7 or 19+ mm	.	.	Ca: 0.0010 17025
PV 101/1	.	.	.	.	.	.	.	.	.	42CrMo4	40 mm Ø x 25 mm	.	.	.
BS TH11	.	.	.	.	.	.	.	.	.	H-11	38 mm Ø x -7 or 19+ mm	.	.	last
BS 300A **	0.0029	(0.00032)	93.8	(0.002)	<0.01	0.0011	0.0065	0.0095	.	300M	38 mm Ø x -7 or 19+ mm	.	.	17025
IARM I70B	.	(0.0004)	.	(0.004)	.	.	(0.002)	(0.19)	.	CLA7	31 mm Ø x 2 or 18 mm	.	.	.
BS 34D	.	.	.	.	.	.	.	.	.	H-13	41 mm Ø x -7 or 19+ mm	.	.	last
BS 8740	0.0051	0.0003	96.91	(0.0007)	(0.001)	0.0017	0.008	0.0012	.	8740	38 mm Ø x -7 or 19+ mm	.	.	17025
BS 68C	(0.004)	.	.	.	.	.	0.008	.	.	P-20 + Al	37 mm Ø x -7 or 19+ mm	.	.	last
IARM Fe5140H-18	(0.011)	.	.	(0.002)	.	.	0.0089	0.0015	.	5140H	31 mm Ø x 2 or 18 mm	.	.	.
BS TH12	.	.	.	.	.	.	.	.	.	H-12	38 mm Ø x -7 or 19+ mm	.	.	last
BS 4330MOD	0.0038	(0.0009)	95.1	0.007	(0.001)	(0.0007)	0.0062	0.0027	.	4330MOD	44 mm Ø x -7 or 19+ mm	.	.	Zr: 0.0016 17025
IARM 378A	.	(0.0006)	.	(0.003)	.	.	0.0236	(0.003)	.	A615-75	31 mm Ø x 2 or 18 mm	.	.	.
BS 9325	0.004	Ca: 0.0049	.	.	0.0010	.	0.009	.	.	9325	38 mm Ø x -7 or 19+ mm	.	.	last
IARM 169B	.	0.0003	.	(0.004)	.	.	(0.002)	0.23	.	CLA6	31 mm Ø x 2 or 18 mm	.	.	.
BS 8822	0.007	.	.	.	0.0022	.	0.011	.	.	8822	47 mm Ø x -7 or 19+ mm	.	.	last
IARM Fe8620-18	0.009	.	.	.	.	.	0.0072	0.0015	.	8620	31 mm Ø x 2 or 18 mm	.	.	.
BS 8822A *	<0.05	0.0005	[97]	0.002	<0.05	0.002	0.004	0.002	.	8822	37 mm Ø x 25 mm	Ta: 0.007	.	.
BS 4820B	0.0055	Ca: 0.0004	94.8	0.0022	(0.0015)	0.0028	0.0098	0.0013	.	4820	38 mm Ø x -7 to 19+ mm	.	.	17025
BS 1931	0.007	.	.	.	(0.0052)	.	0.007	.	.	8620	41 mm Ø x -7 or 19+ mm	.	.	last
IARM Fe4820-18	(0.006)	.	.	(0.003)	(0.003)	.	.	.	.	4820	31 mm Ø x 2 or 18 mm	.	.	.
PV 102/1	.	.	.	.	.	.	.	.	.	16MnCr5	40 mm Ø x 25 mm	.	.	.
BS 8620A	0.007	Bi: 0.073	.	.	(0.004)	.	0.009	(0.002)	.	8620 + Bi	38 mm Ø x -7 or 19+ mm	.	.	last
BS 1982	0.007	.	.	(0.003)	0.0017	0.002	0.013	(0.001)	.	F-22	39 mm Ø x -7 or 19+ mm	.	.	last
BS 58D	.	.	.	.	.	.	0.012	.	.	9310	41 mm Ø x -7 or 19+ mm	.	.	last
IARM FeE9310-18	.	.	94.6	0.285	(0.0017)	.	0.008	.	.	9310	31 mm Ø x 2 or 18 mm	.	.	.
IARM FeDP1080-18	.	.	.	0.014	(0.0055)	.	(0.0064)	(0.0013)	.	DP1080	31 mm Ø x 2 or 18 mm	.	.	.
BS 3310	0.0058	(0.0008)	93.7	(0.0009)	(0.0008)	0.0019	0							

LOW ALLOY AND TOOL STEEL, CHART 2 of 2

= Class, where 1 = CRM and 2 = RM

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
2 HRT FE2019-H	1.54	0.39	0.025	(0.003)	0.51	0.08	0.14	11.89	0.015	.	0.86	.	0.80	.
2 CZ LA-4D	1.143	1.266	0.028	0.0091	0.181	0.066	0.367	1.83	0.067	0.037	0.136	0.0064	0.103	0.025
1 ECRM 268-1D	1.134	0.293	0.0209	0.0154	0.373	0.123	0.143	4.57	.	0.0290	3.20	2.03	8.47	3.70
1 VS UG127	0.962	0.93	0.020	0.029	0.427	0.145	0.151	0.188	0.0051	.	.	0.0155	0.141	.
1 VS UG126	0.856	0.78	0.0128	0.0077	0.348	0.030	0.029	0.591	0.0015	.	.	0.0123	0.075	.
1 VS UG130	0.80	0.228	0.0078	0.0071	0.226	0.252	0.104	0.258	.	.	.	.	.	.
2 CZ CM-1D	0.735	1.80	0.0218	0.026	0.341	0.186	0.547	0.456	0.024	0.029	0.100	0.0124	0.089	0.063
1 12X LA4C	0.657	0.374	0.050	0.0258	0.482	0.265	0.485	0.526	0.183	0.099	0.405	0.0116	0.372	0.091
1 NCS HSL3752	0.51	0.99	0.027	0.011	0.21	.	.	0.67	.	.	0.27	.	0.09	.
1 DSZU C051	0.443	0.795	0.0162	0.029	0.293	0.140	0.041	0.048	(0.010)	(0.003)	.	.	(0.002)	.
2 CZ LA-5C	0.439	1.87	0.017	0.0088	0.394	0.138	2.59	3.815	0.081	0.088	0.86	0.024	0.536	0.631
1 IMZ 54/1	0.43	0.14	(0.009)	0.010	0.17	(0.034)	4.01	0.12	.	.	(0.007)	.	0.19	.
1 SS 214/2	0.39	1.61	0.032	0.043	0.18	0.21	0.15	0.09	.	.	0.26	.	.	.
1 SS 408/1	0.285	0.51	0.037	0.028	0.23	0.66	4.45	0.102	.	.	0.09	.	0.031	.
2 CZ CM-8B	0.185	1.95	0.015	0.014	0.112	0.081	0.032	1.22	0.0028	0.007	0.011	0.0075	0.0078	(0.009)
1 IRSID 1658	0.180	0.618	0.014	0.032	0.160	0.345	0.241	0.147	0.029	.	0.046	.	(0.002)	.
2 HRT FE2019-N	0.17	1.27	0.015	(0.001)	0.30	0.03	0.33	0.75	0.068	(0.003)	0.40	0.0040	(0.003)	.
1 VS RG31	0.169	0.291	0.0048	0.006	0.39	0.46	2.08	1.31	.	.	0.28	0.306	0.207	0.39
1 DSZU C042a	0.132	0.488	0.0091	0.0062	0.286	0.137	0.195	0.995	0.018	0.009	0.31	(0.01)	0.189	(0.006)
1 12X 12746V	0.048	1.19	0.034	0.064	0.156	0.646	0.226	0.374	0.459	0.142	0.658	0.0208	0.105	.
1 VS UG102	0.045	1.78	0.0082	.	0.222	0.172	0.277	0.0143	0.036	.	0.209	.	.	.
1 12X LA6D	0.009	0.086	0.0041	0.0057	0.075	0.0250	0.033	0.099	0.174	0.0051	0.0110	0.0070	0.0033	.

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
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Number	As	B	Fe	Nb	O	Sb	Sn	Ti	Units	Others
HRT FE2019-H	.	.	.	0.071	.	.	.	0.012	40 mm Ø x 20 mm	
CZ LA-4D	0.010	.	.	0.0046	.	.	0.014	0.0154	~39 mm Ø x ~25 mm	Pb:0.040
ECRM 268-1D	0.0062	0.0009	.	.	.	0.0017	0.0078	.	38 mm Ø x 25 mm	
VS UG127	.	.	.	.	.	.	.	0.0094	~38 mm Ø x ~20 mm	Bi:0.011 Pb:0.0049
VS UG126	.	.	.	.	.	.	.	.	~38 mm Ø x ~20 mm	Bi:0.0055 Pb:0.009
VS UG130	0.0093	.	.	.	.	.	.	.	~39 mm Ø x ~25 mm	
CZ CM-1D	.	0.0017	.	0.050	.	0.0112	0.0144	0.054	~39 mm Ø x ~25 mm	
12X LA4C	0.018	.	.	.	.	.	.	.	~40 mm Ø x ~15 mm	Zn:0.006
NCS HSL3752	.	.	.	.	.	.	.	0.006	38 mm Ø x 38 mm	
DSZU C051	(0.002)	.	.	(0.001)	.	.	(0.004)	(0.001)	40 mm Ø x 25 mm	
CZ LA-5C	0.026	.	.	0.057	Pb:0.015	0.018	0.031	0.048	~37 mm Ø x 25 mm	
IMZ 54/1	.	.	.	.	.	.	.	.	40 mm Ø x 40 mm	
SS 214/2	.	.	.	.	.	.	.	.	42 mm Ø x 19 mm	
SS 408/1	.	.	.	.	.	.	.	.	38 mm Ø x 19 mm	
CZ CM-8B	0.0035	0.0023	.	(0.002)	.	(0.004)	0.0126	0.0008	~39 mm Ø x 25 mm	
IRSID 1658	0.034	.	.	.	.	.	0.022	(0.002)	40 mm Ø x 30 mm	
HRT FE2019-N	.	0.0016	.	0.029	.	.	.	0.004	40 mm x 40 mm x 20 mm	Ca:0.0014
VS RG31	.	.	.	.	.	.	.	0.21	~45 mm Ø x ~28 mm	
DSZU C042a	0.0069	(0.0005)	.	0.0025	.	.	0.0079	0.0029	40 mm Ø x 25 mm	
12X 12746V	0.051	.	.	.	.	.	0.264	0.088	~40 mm Ø x ~15mm	
VS UG102	.	.	.	0.071	~45 mm Ø x ~25 mm	Ca:0.0018
12X LA6D	~40 mm Ø x ~15 mm	Zn:0.0083

Number	As	B	Fe	Nb	O	Sb	Sn	Ti	Units	Others
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STAINLESS AND HIGH ALLOY STEEL

= Class, where 1 = CRM and 2 = RM

* Provisional Analysis

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
2 BS 93E	1.02	0.52	0.022	0.0010	0.90	0.12	0.35	17.33	0.009	0.048	0.50	0.0359	0.24	0.11
2 BS 98	0.309	0.48	0.019	0.0014	0.72	0.098	0.21	13.35	0.003	0.020	0.034	0.0181	0.075	0.009
1 IARM FeA100-18	0.222	(0.013)	(0.004)	(<0.0010)	(0.039)	(0.010)	11.2	2.98	(0.007)	13.4	1.19	(0.0010)	(0.007)	(0.006)
2 BS 97	0.216	0.71	0.021	0.0004	0.39	0.066	0.76	11.82	0.018	0.041	1.05	0.030	0.21	0.95
1 BS 183B	0.181	0.344	0.018	0.0042	0.41	0.074	1.96	12.45	0.0009	0.032	0.33	0.044	0.165	3.5
1 BS 183C	0.173	0.368	0.015	0.0040	0.427	0.060	1.87	12.72	0.0020	0.027	0.189	0.039	0.109	2.83
1 BS 431A	0.159	0.53	0.019	0.0036	0.31	0.111	2.21	15.78	(0.0012)	0.041	0.172	0.058	0.079	0.021
1 IARM Fe309-18	0.066	1.61	0.029	(0.002)	0.30	0.430	12.2	22.42		0.248	0.357		0.073	0.063
2 BS 91E	0.066	0.42	0.017	0.002	0.52	0.05	0.17	16.58	(0.002)	0.02	0.035	0.032	0.09	0.01
1 BS 309	0.062	1.61	0.028	0.0011	0.24	0.349	12.16	22.40	(0.0025)	0.200	0.193	0.073	0.075	(0.031)
1 BS 347C	0.051	1.67	0.022	0.022	0.677	0.110	10.08	17.27	(0.003)	0.072	0.27	0.039	0.097	0.013
2 CZ SP-1B	0.050	1.67	0.039	0.30	0.505	0.47	8.32	17.42	(0.003)	0.161	0.40	0.063	0.060	0.032
2 BS 188A	0.050	0.139	0.015	0.0049	0.15	0.099	24.61	14.04	0.19	0.18	1.10	0.0029	0.24	0.055
2 PV 112/1	0.047	1.577	0.018	0.023	0.515	0.102	11.14	17.56			2.03			
1 IARM Fe174PH-18	0.041	0.47	0.024	(<0.0040)	0.52	3.33	4.73	15.10	0.007	0.047	0.315	0.0436	0.051	0.015
1 13X 41500A	0.038	0.596	0.021	0.0101	0.402	0.129	3.52	13.00		0.099	0.504	0.0504	0.091	
2 BS 95A	0.035	0.58	0.026	0.004	0.46	1.50	6.42	14.72	0.002	0.081	0.73	0.0255	0.052	0.02
1 13X 41008B	0.034	0.684	0.013	0.0070	0.761	0.267	0.338	12.36	0.028	0.053	0.042	0.0088	0.061	
1 BS 2507	0.026	0.79	0.023	(0.0005)	0.32	0.222	6.94	25.3	(0.004)	0.040	3.75	0.273	0.064	0.074
2 TL 2001D	0.0244	0.679	0.022	0.0006	0.27	0.612	7.5	25.58		0.046	3.49	0.279	0.079	0.57
1 IARM FeKovar-18	0.024	0.26	(0.004)	(0.0055)	(0.09)	0.077	29.0	0.068		17.3	0.062			(0.020)
2 PV 111/1	0.0226	1.538	0.019	0.026	0.485	0.105	8.57	18.49			0.173			
1 BS 186B	0.022	0.288	(0.0027)	0.0016	0.254	0.057	36.1	0.11	0.0080	0.041	0.025	0.0033	(0.002)	(0.007)
1 BS 160B *	0.021	0.26	0.003	0.003	0.11	0.060	29.1	0.07	0.007	17.2	0.05	<0.005	0.004	0.013
1 IARM FeN40-18	0.019	9.13	0.025	0.0012	0.31	0.421	6.42	19.45		0.122	0.343	0.348	0.086	0.030
1 BS 254	0.019	0.95	0.026	0.0009	0.312	0.612	18.47	20.2	<0.01	0.08	6.07	0.210	0.062	(0.02)
1 BS 179A	0.017	1.04	0.021	0.001	0.44	1.94	5.84	25.45	(0.009)	0.58	3.24	0.184	0.070	(0.2)
1 IARM Fe155PH-18	0.015	0.616	0.021	(0.0004)	0.430	3.35	4.79	15.13	0.014	0.024	0.129	0.0494	0.055	0.019
2 TL 2002D	0.0149	1.30	0.022	0.0206	0.53	0.438	11.0	16.7		0.087	2.05	0.0341	0.068	
2 BS 96A	0.009	0.04	0.007	0.004	0.06	2.07	8.38	11.62	0.08	0.03	0.021		0.07	
1 IARM 99D	(0.006)	(0.013)	(0.004)	0.0011	(0.03)	(0.045)	18.4	(0.12)	0.117	9.24	4.8	0.0014	(0.037)	(0.010)
1 BS 161B *	0.003	0.010	0.004	<0.05	0.01	0.011	18.6	0.03	0.072	9.3	4.8	<0.005	<0.005	0.01

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Mo	N	V	W
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Number	As	B	Fe	Nb	O	Sb	Sn	Ti	Alloy	Units
BS 93E	.	.	.	0.005	0.0040	.	0.003	0.007	440C	41 mm Ø x ~7 or 19+ mm last
BS 98	(0.003)	(0.0002)	.	0.003	0.0038	.	0.006	0.002	420	38 mm Ø x ~7 or 19+ mm last
IARM FeA100-18	.	.	.	0.070	(0.0009)	.	(0.004)	(0.008)	Aermet 100	31 mm Ø x 2 or 18 mm last
BS 97	.	.	.	0.007	.	.	(0.003)	(0.002)	422	35 mm Ø x ~7 or 19+ mm last
BS 183B	(0.005)	(0.0007)	80.4	(0.0075)	(0.0054)	0.0009	0.0046	(0.0016)	Greek Ascoloy	38 mm Ø x ~7 or 19+ mm 17025
BS 183C	0.0041	(0.0008)	81.1	0.0054	(0.005)	0.0007	0.0039	(0.002)	Greek Ascoloy	38 mm Ø x ~7 or 19+ mm 17025 Ca: 0.0006
BS 431A	0.0033	0.0002	80.5	0.0062	0.0067	0.0012	0.0047	0.0010	431	38 mm Ø x ~7 or 19+ mm 17025 Zr: 0.0012
IARM Fe309-18	0.0065	.	.	0.021	.	0.0018	0.012	.	309	-38 mm Ø x ~3 or ~19 mm last
BS 91E	.	.	.	(0.004)	.	.	0.004	(0.002)	430	41 mm Ø x ~7 or 19+ mm last
BS 309	0.0048	(0.0004)	62.6	0.0090	0.0027	(0.0017)	0.0089	0.0020	309, 309H	38 mm Ø x ~7 or 19+ mm 17025 Ca: 0.0010
BS 347C	(0.003)	0.0018	69.1	0.58	0.0053	(0.002)	0.0034	(0.004)	347	44 mm Ø x ~7 or 19+ mm 17025
CZ SP-1B	(0.003)	0.0007	.	(0.012)	.	.	0.013	(0.002)		-37 mm Ø x ~25 mm last
BS 188A	.	0.0065	.	0.050	0.0012	.	0.002	2.21	A-286	38 mm Ø x ~7 or 19+ mm last
PV 112/1	.	.	.	.	.	.	.	0.394	316 Ti	40 mm Ø x 25 mm last
IARM Fe174PH-18	.	.	.	(0.0015)	0.0035	.	0.0069	.	17-4 PH	31 mm Ø x 2 or 18 mm last
13X 41500A	.	.	.	0.040	.	.	.	0.0012	415	-40 mm Ø x ~15 mm last
BS 95A	.	0.0010	.	0.55	.	.	0.008	(0.003)	450	38 mm Ø x ~7 or 19+ mm last
13X 41008B	.	.	.	0.019	.	.	0.0081	.	410	-40 mm Ø x ~15 mm Zr: 0.047
BS 2507	0.0046	0.0021	62.3	(0.011)	0.0038	0.0008	0.0050	0.0028	2507	38 mm Ø x ~7 or 19+ mm 17025
TL 2001D	.	.	.	0.024	.	.	.	.	Super Duplex	40 mm Ø x 20 mm last
IARM FeKovar-18	.	.	53.3	.	.	.	0.0021	.	Kovar	31 mm Ø x 2 or 18 mm last
PV 111/1	.	.	.	.	.	.	.	.	304 L	40 mm Ø x 25 mm last
BS 186B	0.0022	(0.0006)	63.0	(0.002)	0.0011	(0.0007)	0.0025	0.0028	Invar 36	43 mm Ø x ~7 or 19+ mm 17025 Zr: 0.0020
BS 160B *	<0.005	<0.005	[53.0]	0.002	<0.005	0.002	<0.05	<0.05	Kovar	38 mm Ø x ~7 or 19+ mm last
IARM FeN40-18	.	.	.	0.032	.	.	0.0081	.	Nitronic 40	-38 mm Ø x ~3 or ~19 mm last
BS 254	(0.006)	0.0018	52.9	(0.03)	0.0038	0.0014	0.0063	0.0019	254 SMO	38 mm Ø x ~7 or 19+ mm 17025 Zr: 0.0026
BS 179A	(0.003)	(0.001)	.	0.030	.	.	0.005	0.006	Ferralium 255	31 mm Ø x ~7 or 19+ mm last
IARM Fe155PH-18	(0.0026)	(0.0005)	75.03	0.273	0.0028	.	0.0021	.	15-5PH	31 mm Ø x 2 or 18 mm last
TL 2002D	.	.	.	.	.	.	.	0.0098	316 MOD	40 mm Ø x 20 mm last
BS 96A	.	(0.0017)	.	0.26	.	.	.	1.18	455	38 mm Ø x ~7 or 19+ mm last
IARM 99D	.	0.0026	.	(0.011)	.	.	.	0.67	Maraging 300	31 mm Ø x 2 or 18 mm last
BS 161B *	.	0.003	[66.5]	<0.05	<0.005	.	<0.05	0.65	Maraging 300	41 mm Ø x ~7 or 19+ mm Zr: 0.006

Number	As	B	Fe	Nb	O	Sb	Sn	Ti	Alloy	Units
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CRM CAST IRON

Number	C	Mn	P	S	Si	Cu	Ni	Cr	Al	Co	Ce	La	Mg	Se	Te
NCS AH11112	3.95	0.511	0.055	0.014	2.30	0.487	0.141	0.251	0.014	.	.	.	0.032	.	.
NCS HS11799	3.95	0.511	0.055	0.014	2.30	0.487	0.141	0.251	0.014	.	0.012	0.0064	0.032	.	.
VS ChG 56	(3.8)	(0.2)	(0.8)	(0.01)	(0.5)	(0.4)	(0.1)	(0.1)	(0.01)	(0.005)	.	.	.	.	.
VS ChG 57	(3.8)	(0.2)	1.17	(0.03)	(0.6)	(0.3)	(0.3)	(0.4)	(0.06)	(0.01)	.	.	.	.	.
NCS HS11798	3.78	0.606	0.053	0.020	2.73	0.526	0.856	0.700	0.042	.	0.0097	0.0042	(0.034)	.	.
SCRM 660/11	3.62	0.444	0.137	0.115	1.74	.	.	.	.	.	.	.	.	.	.
NCS HS92744c	3.59	0.435	0.047	0.020	1.68	0.268	0.595	0.526	.	.	0.022	.	0.042	.	.
NCS HS92746a	3.59	0.226	0.046	0.012	2.25	0.263	0.501	0.097	0.014	.	.	.	0.029	.	.
SCRM 658/12	3.33	0.55	0.243	0.076	2.03	.	.	.	.	.	.	.	.	.	.
11X C7P	3.24	2.21	0.058	0.0081	0.604	0.072	0.0273	0.61	0.029	0.006	.	.	.	.	.
NCS AH11353	3.15	0.47	0.020	0.0006	2.30	0.029	0.59	0.025	0.023	0.015	.	.	0.029	.	.
BS CC-23	2.96	0.73	0.53	0.082	0.43	0.307	0.56	0.467	0.060	0.090	(0.0006)	(0.0008)	(0.0006)	.	(0.03)
CKD 242A	1.84	0.060	0.039	0.036	3.06	0.055	0.039	0.029	0.036	0.002	(0.00)	(0.00)	0.000	(0.000)	(0.08)

continued

Number	As	B	Bi	Fe	Mo	Nb	Pb	Sb	Sn	Ti	V	W	Zn	Zr	Units in mm
NCS AH11112	.	.	.	.	0.474	.	.	.	0.055	0.117	0.312	.	.	.	31 Ø x 30
NCS HS11799	.	.	.	.	0.474	.	.	.	0.055	0.117	0.312	.	.	.	31 Ø x 30
VS ChG 56	0.18	(0.001)	.	.	(0.01)	(0.002)	.	0.014	.	(0.06)	(0.02)	(0.004)	.	.	-37 Ø x -17
VS ChG 57	0.095	(0.002)	.	.	(0.01)	(0.004)	.	(0.001)	(0.01)	(0.08)	(0.04)	(0.01)	.	.	-37 Ø x -17
NCS HS11798	.	.	.	.	0.359	.	.	0.025	0.032	0.117	0.018	.	.	.	31 Ø x 30
SCRM 660/11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 x 42 x 12
NCS HS92744c	0.0021	0.024	.	.	0.180	.	.	.	.	0.044	0.174	.	.	.	35 Ø x 30
NCS HS92746a	(0.003)	0.0086	.	.	0.214	.	.	.	.	0.040	0.033	.	.	.	35 Ø x 30
SCRM 658/12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	48 x 42 x 12
11X C7P	0.0110	0.0099	N:0.0153	.	0.040	0.0195	0.0106	0.009	0.0110	0.064	0.0079	0.053	0.0152	.	-40 Ø x -15
NCS AH11353	0.008	0.004	.	.	0.002	N:0.003	.	0.0005	0.003	0.027	0.032	0.003	.	.	30 Ø x 25
BS CC-23	0.016	0.067	.	(92.8)	0.267	(0.002)	0.008	0.17	0.052	0.091	0.195	(0.002)	17025	0.057	-32 Ø x -17
CKD 242A	0.015	0.008	(0.015)	(92.9)	1.13	0.013	(0.012)	0.007	0.010	0.19	0.37	(0.007)	(0.00)	(0.000)	37x37x ~18-20 last

ALLOY	ISO?	NUMBER	ALLOY	ISO?	NUMBER	ALLOY	ISO?	NUMBER
1.0812		ECRM 191-2D	15-5PH		BS 9621	314		IMZ 166A
1.2344		ECRM 271-1D	15-5PH		BS 9622	316 H		13X NSA2
1.2367		HRT FE2012-H	15-5PH		IARM Fe155PH-18	316 H		CT 316
1.4435, 1.4436		JK 27B	15-5PH		ECRM 273-1D	316 H		IARM 339A
1.4765		ECRM 299-1D	15-5PH		IARM 22C	316 H		NILAB 500HAD
1.5415		HRT FE2012-N	16MnCr5		PV 102/1	316 L	17025	BS 316F
1.6587		HRT FE2013-N	17-4PH		13X PH2	316 L		CZ SL-2A
1.7149 20MnCrS5		ECRM 187-2D	17-4PH		BS 17-4PHA	316 L		IARM Fe316L-18
1.7160		ECRM 194-1D	17-4PH	17025	BS 17-4PHB	316 L		IARM 163E
1.8550		ECRM 129-3D	17-4PH	17025	BS 17-4PHC	316 L		SRM 1155A
1.8519		HRT FE2010-N	17-4PH		IARM Fe174PH-18	316 L		SS 466/2
1.8928		ECRM 194-2D	17-4PH		SRM C2400	316 MOD		TL 2002
1005	17025	BS 1005	17-7PH		13X PH17700	316 Ti		IRSID 1821
1005		ECRM 064-2D	17-7PH 25(preceeded 17025)		BS 192	316 Ti		PV 112/1
1005		RM Fe 1/5	17-7PH 25(preceeded 17025)		BS 192A	316 Ti		VS LG72
1005		SRM 1765	17-7PH		IARM 152C	317 L	17025	BS 317L
1005		SRM 1766	17-7PH		IARM Fe177PH-18	317 L	25(pre-17025)	BS 9941
1005		SS 111/1	182FM		BS 150	317 L	25(pre-17025)	BS 9942
1008	17025	BS XCAS	18Cr2Ni12Mn		CT ISO035A	317 L		IARM 153C
1008		ECRM 057-2D	201		BS 191	318	17025	BS 2205
1009	17025	BS 1009	201		SRM 1297	318		BS 2205A
100C6		IRSID 1747	20Cb3		BS 187A	321		13X 32100
1010		IMZ 111	20Cb3		CT 20 Cb-3	321	17025	BS 85D
1010		NM 308	20MoCr4		ECRM 197-1D	321	17025	BS 321D
1011		IMZ 73	2101		IARM 292A	321		IARM 6i
1012, 1013		IMZ 71A	21Cr6Ni9Mn		CT ISO129A	321		IARM 6J
1016	17025	BS 1016	2205	17025	BS 2205	321		SRM 1171
1017		IMZ 112B	2205	17025	BS 2205A	321		SS 465/1
1017		IRSID 1664	2205		IARM 212D	321 - Ti		IMZ 152
1018		12X 10180B	2205		IARM Fe2205-18	32750		13X NSA13
1018		12X 10180C	2304		IARM 317A	3310		BS 3310
1018	17025	BS 1018	2507	17025	BS 2507	347		13X 34700
1018		ECRM 087-1D	2507		IARM 301B	347		BS 347A
1018		IARM 28K	253 MA	25(pre-17025)	BS 253	347		BS 347B
1020	17025	BS 1020	253 MA		IARM 316A	347		BS 347C
1020		BS 57F	254 SMO	17025	BS 254	347		IARM 8G
1020		IARM Fe1020-18	254 SMO		NILAB 501HAD	347		IARM 8H
1023		IMZ 112A	255, Duplex		IARM 239B	347		IARM 8i
1026	17025	BS 1026	255, Duplex		IARM 239C	347 H		BS 87F
1026		IARM 359A	300M		12X 44220	348		SRM 1172
1030	17025	BS 1030	300M	17025	BS 300	355	17025	BS 355
1030		IARM 209D	300M	17025	BS 300A	355		IARM 335A
1033		IRSID 1663	300M		IARM 340A	35MV7		IRSID 1750
1035	17025	BS 1035	301		IARM 289A	405		SRM 1295
1035		IARM 360A	301		IARM 289B	409		13X 40900
1039		IRSID 1637	301		IRSID 1819	409		13X 40930
1040		12X 10400	302		IARM 241D	409 + Cr		NCS HS20743
1040	17025	BS 3941	302 HQ		IARM 234C	410		13X 41008
1040		IARM 210D	303		13X 30300	410		BS 0021
1040		IRSID 1657	303	17025	BS 303	410, F6NM	25(pre-17025)	BS 0022
1042		IRSID 1656	303		CT 303	410	17025	BS 410C
1042		NM EN-8	303		CZ SP-1A	410		CT 410
1043		IRSID 1652	303		IARM Fe303-18	410		IARM Fe410-18
1045	17025	BS 1045	303 Se		IARM 253A	410 + Mo		ECRM 296-1D
1045		BS 56E	303 Se		IARM 253B	410 + Mo		IMZ 161
1045		IARM 200D	304 H		13X NSB1	410 H		13X 41001
1045		IPT 503	304 H + Ca	17025	BS CA304-4	4130	17025	BS 4130
1045 + P		NM 306A	304 H		CT 304	4130		IARM 143F
1050		IARM Fe1050-18	304 H		IARM Fe304H-18	4130		SRM 1225
1060		IARM 373A	304 H		SS 468/1	4130 H		IPT 501
1060 + P		NM 309	304 L		13X 30403	4140		12X 41400
1069		ECRM 059-2D	304 L	17025	BS 304B	4140	25(pre-17025)	BS 1962
1070	17025	BS 54H	304 L		IARM 162D	4140	17025	BS 4140C
1070		BS 54J	304 L		IARM Fe304L-18	4140		IARM 30H
1078		ECRM 056-2D	304 L		ECRM 287-1D	4140		IARM 30J
1078		SRM 1224	304 L		ECRM 292-1D	4140 Bi		BS 4140A
1090		SS 602/2	304 L		IARM 162C	4140 Bi		BS 4140B
1095		BS 64C	304 L		PV 111/1	41L40MOD	17025	BS 70B
1095		SRM 1227	304 L		SS 463/1	41L40MOD	17025	BS 70C
1117 25(preceeded 17025)		BS 3993	305		ECRM 297-1D	4150 Bi & S		BS 4150MOD
1117		BS 65C	306		13X 30600A	4150 S	17025	BS 4150MOD-A
1117		IARM 29E	308		DSZU C017	4150 S	17025	BS 42
1118		IARM 307A	309		BS 82E	4150 S		BS 42A
1118		IARM 307B	309	17025	BS 309	415		13X 41500A
1140 P		BS 52D	309		IARM Fe309-18	416		BS 90F
1141		BS 66B	310		13X 31008	416	17025	BS 416
1141		IARM 348A	310		BS 83G	416		CT 416
1144	17025	BS 1144	310	25(pre-17025)	BS 9841	416		IARM 10D
1144	17025	BS 1144A	310	25(pre-17025)	BS 9842	416		SRM 1223
1144		IARM 199C	310		CZ SL-3A	416 H		13X 41600
11L17	17025	BS 75F	310		IARM 4E	416 Se		BS 151
11L17	17025	BS 75G	310		IARM 4F	418		IARM Fe418-18
1215		BS 66K	310		IARM 4G	41CAD7		IRSID 1749
1215	17025	BS 66L	310		SS 464/1	41L40	17025	BS 70B
1215		IARM Fe1215-18	3115		BS XCCT	41L50	17025	BS 72B
12L14		BS 74B	314		IMZ 165	42		CT ISO138A
12L14	17025	BS 74C				CT ISO139A		CT ISO139A
12L14		BS 74D				PV 101/1		PV 101/1
12L14		IARM 183C				420		BS 98
12Mn18Cr		BS 193				420		BS SS4951
1345		BS XCCV				420		BS SS4952
13-8PH		13X PH13800				420		ECRM 272-1D
13-8PH		BS 184A				420		IARM 154C
13-8PH		CT X92834				420		SS 469
13-8PH		IARM 21D				420 F		BS 152
1429		ECRM 058-2D				420 F S		IARM 352A
1513		IMZ 76				422		13X 42200
1526 MOD		SRM 1269				422		BS 97
1541		IARM 349A				422	17025	BS 422
1541		IPT 504				422		IARM 205D
1541		IRSID 1648				430		BS 91E
1544		IRSID 1644				430	17025	BS 430
15-5PH		BS 185A				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	ALLOY	ISO?	NUMBER	ALLOY	ISO?	NUMBER
430		NCS HS20742	A-36		IARM 213D	Invar-36 + Se		IARM 24B
430 F		BS 153	A-36		SRM 1767	Invar 42		14X 94100
430 F		BS 154	A-485-1		BS A485-1	ISO 898-1		SS 457/2
430 F S		IARM 355A	A-6		BS 40B	Kovar	17025	BS 160A
431	17025	BS 431	A-6		IARM 40B	Kovar		BS 160B
431		BS 92B	A-6		IARM 40C	Kovar		IARM 98B
431		IARM 12C	A615-75		IARM 378A	Kovar		IARM FeKovar-18
431		HRT FE2010-H	A706-60		IARM 380A	L-2	17025	BS 43A
431		SRM 1219	A706-60		IARM 380B	L-6	17025	BS 39B
4320		BS 3961	A706-80		IARM 381A	LDX2101		13X 32101
4330 MOD		BS 4330MOD	Aermet 100		CT ISO045A	LF-2		BS 2971
4330 MOD		IARM 330B	Aermet 100		IARM 242A	LF-2	17025	BS LF2B
4340	17025	BS 4340	Aermet 100		IARM FeA100-18	LF-2		SS 601/2
4340	17025	BS 4340A	AL6XN	17025	BS 189A	LF-3		BS LF3
4340		IARM 31G	AL6XN		IARM 157D	M-1		BS TM1
439 MOD		NCS HS11721-4	C-.5Mo		BS 3952	M-1		CT M1
440 C		13X 44004	C-.5Mo		IARM 229B	M-1		IARM 304A
440 C		BS 93E	C-250		IARM 308A	M-1		IARM FeM1-18
440 C	17025	BS 93F	C-350		IARM 309A	M-10		CT M10
440 C		IARM 13D	CA6NM		HRT FE2009-H	M-10		IARM 324A
440 F		BS 155	CA6NM		IARM 327A	M-152		13X 64152
440 F Se		BS 156	CD3MN		ECRM 298-1D	M-152		IARM 291A
440 F Se		IARM 353A	CD4MCU	17025	BS CD4MCU	M-2		BS 32D
441		NCS HS11721-4	CD4MCU	17025	BS CD4MCU-A	M-2		CT M2
446		BS 94C	CD6MN		VS LG58	M-2		IARM 44C
450		BS 95A	CF-3		IRSID 1820	M-2		IARM FeM2-18
450	17025	BS 450	CLA6		IARM 169B	M-2		SRM 1157
450	25(pre-17025)	BS 9811	CLA7		IARM 170B	M-35		IARM 320A
450	25(pre-17025)	BS 9812	CLA11		IARM 180A	M-4		IARM 251A
450		IARM 15C	CLA5		IARM 168A	M-4		IARM FeM4-18
450		CT 450	CLA9		IARM 172A	M-42		SS 487/1
455		13X 45500	CPM15V	17025	BS PML15	M-47	17025	BS M-47
455		BS 96A	D-2		BS 37G	M-50	17025	BS M-50
455		BS SS1962	D-2		CT D2	M-50		IARM 306B
455		CT 455	D-2		IARM 41D	M-65		IARM FeM62-18
455		IARM 16C	D-3, D-4		ECRM 288-1D	M-7		CT M7
446		IARM 14C	D-6	17025	BS D-6	Maraging 250		CT 250
4615		BS 3962	D-6	17025	BS D-6A	Maraging 250		ECRM 285-2
4620		BS 4620	D6-AC		IARM 299A	Maraging 300	25(pre17025)	BS 161A
4620	17025	BS 51F	DP1080		IARM FeDP1080-18	Maraging 300		BS 161B
4620		IARM 33D	Duplex		13X NSA9	Maraging 300		CT 300
465		13X 46500	Duplex	17025	BS 2205	Maraging 300		IARM 99D
465		IARM 354A	Duplex		IMZ 163A	Mold Steel	17025	BS PP20
465		CT ISO123A	Duplex		IMZ 164	NIT 135M		IARM 305B
4820	17025	BS 4820A	Duplex		TL 2001	Nitriding 135G		BS 68B
4820		BS 4820B	E52100		BS 53G	Nitriding 135G	17025	BS 68E
4820		IARM 155F	E52100		BS E52100	Nitronic 40		13X NSC6
4820		IARM Fe4820-18	E52100		IARM 49E	Nitronic 40		BS 190
5140H		IARM Fe5140H-18	E52100 Bi		BS 53MOD	Nitronic 40		IARM FeN40-18
5160		IMZ 116	Elect./ Magnetic		SRM 1159	Nitronic 50		BS 180A
6150	17025	BS 43A	Electrolytic		SRM 1265a	Nitronic 50	17025	BS 180B
6150		BS 4941	F-11		BS 45A	Nitronic 50		IARM 17D
6150		IARM 34C	F-11	17025	BS 45B	Nitronic 50		IARM FeN50-18
630		CT 630	F-11		IARM 35L	Nitronic 60		13X 21800
6418		BS 6418	F-2		CT X27081	Nitronic 60		BS 181A
6418		BS 69B	F-22	17025	BS 46B	Nitronic 60	17025	BS 181B
6526		BS 9-4-30	F-22	25(preceded 17025)	BS 1982	Nitronic 60		IARM 18D
709		CT X67975	F-22		IARM 36C	NMS 100		IARM 214A
8620		BS 1931	F-22		SRM 1270	NMS 140		IARM 295A
8620 + Bi		BS 8620A	F-22 + Cr		HRT FE2009-N	NMS J38		IARM 294A
8620	17025	BS 8620F	F-5		BS 47A	O-1	17025	BS 35D
8620		IARM Fe8620-18	F-5		BS 47B	O-1		CT O1
8620		IPT 502	F-5		IARM 37C	O-6	17025	BS 41
86L20	25(preceded 17025)	BS 73B	F-51	17025	BS 2205	O-6	25(preceded 17025)	BS 41A
86L20		BS 73C	F-51		BS 2205A	O-6		IARM 45A
86L20		IARM 182B	F-9	17025	BS 48B	O-6		IARM 45B
8630	17025	BS 8630	F-9		IARM FeF9-18	P-20	17025	BS 55G
8740	17025	BS 67C	F-91		13X 90901	P-20 + Al		BS 68C
8740	17025	BS 8740	F-91	17025	BS 9905A	PP-20	17025	BS PP20
8740		IARM 252C	F-91		HRT FE2003-H	Permendur 2V		IARM 326A
8740		IARM 252D	F-91		IARM Fe91-18	RA330		BS 86F
8740		IARM 252E	Ferrallium 255		BS 179A	Railroad Steel	17025	BS 54H
8740		IARM 252F	Ferrallium 255	17025	BS 179B	S-1		BS 33D
8822		BS 8822	Ferrallium 255	17025	BS 179C	S-1		BS 33E
8822		BS 8822A	F6NM	25(preceded 17025)	BS 0022	S-1		IARM 46B
904L		13X NSA12	Greek Ascoloy		BS 183A	S-1 MOD	17025	BS 33F
904L		ECRM 295-1D	Greek Ascoloy	17025	BS 183B	S-5		BS 38C
9310		BS 58C	Greek Ascoloy	17025	BS 183C	S-5		IARM 47B
9310		BS 58D	Greek Ascoloy		IARM 20C	S-7		BS TS7
9310		BS 58E	H-10		BS 49	S-7	17025	BS TS-7A
9310		IARM Fe9310-18	H-11		BS TH11	S-7		IARM 259A
9325		BS 9325	H-11		ECRM 276-2D	S-7		IARM FeS7-18
9325	17025	BS 9325A	H-11		IARM 255A	S-7		SRM 1772
9-4-30		IARM 341A	H-11		IARM 255B	S42027		13X 42027A
A-10		BS A-10	H-11		IMZ 173	SA213-T22		IMZ 159
A-11		BS 10V	H-12		BS TH12	SA213-T22		IMZ 160
A-11	17025	BS A-11	H-13		BS 34D	SA213-T22		IMZ 169
A-106 Gr B		SRM 1228	H-13	17025	BS H-13A	SAE G2500		BS 20E
A-193 B16		BS 4942	H-13		CT H13	STA 361		IARM 268B
A-193 B16	17025	BS 4942A	H-13		IARM 42C	T-1		14X HS1
A-2		BS 36C	H-13		IMZ 174	T-1	17025	BS 30D
A-2		BS 36D	H-19	17025	BS H-19	T-1		IARM FeT1-18
A-2		CT A2	HC 250+V		SRM C1290	T-4		IARM 281A
A-2		IARM 39B	High Perm		CT ISO124A	T-15	17025	BS TS15
A-2		IARM 39C	High Perm		CT ISO136A	T23		IARM FeT23-18
A-242		IPT 500	High Perm 49		CT ISO141A	VM12		IMZ 196
A-242 Mod		SRM C1285	HSLA 100		SRM 1271	W-5		14X 72305
A-286		BS 188A	HY 130		SRM 1226	Z30C13		IRSID 1825
A-286	17025	BS 188B	HY 80		SRM 1286	Zeron 100, Duplex		13X NSA8
A-286		IARM 26D	Hy-Tuff		IARM 342A	Zeron 100, Duplex		IARM 319A
A-286		SRM 1230	Invar		14X 93603	Zeron 100, Duplex		IARM FeZ100-18
A-36		IARM 213C	Invar-36	17025	BS 186B			
			Invar-36 + Se		BS 186A			

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

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	0.80-1.20	.	4.00-4.75	4.00-4.50	0.30-0.55	1.75-2.20	3.75-4.50	4.00-5.25
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	.	0.15-0.60	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
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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	<1.00	.	.	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	.	

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