

# MATERIAL CROSS REFERENCE LIST

## CARBON STEEL

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
A570.36	STKM 12A STKM 12C	1.0038	RSt.37-2	4360 40 C	–	E 24-2 Ne	–	–	1311	15
1015	–	1.0401	C15	080M15	–	CC12	C15, C16	F.111	1350	15
1020	–	1.0402	C22	050A20	2C	CC20	C20, C21	F.112	1450	20
1213	SUM22	1.0715	9SMn28	230M07	1A	S250	CF9SMn28	F.2111 11SMn28	1912	Y15
12L13	SUM22L	1.0718	9SMnPb28	–	–	S250Pb	CF9SMnPb28	11SMnPb28	1914	–
–	–	1.0722	10SPb20	–	–	10PbF2	CF10Pb20	10SPb20	–	–
1215	–	1.0736	9SMn36	240M07	1B	S300	CF9SMn36	12SMn35	–	Y13
12L14	–	1.0737	9SMnPb36	–	–	S300Pb	CF9SMnPb36	12SMnP35	1926	–
1015	S15C	1.1141	Ck15	080M15	32C	XC12	C16	C15K	1370	15
1025	S25C	1.1158	Ck25	–	–	–	–	–	–	25
A572-60	–	1.8900	StE380	4360 55 E	–	–	FeE390KG	–	2145	–
1035	–	1.0501	C35	060A35	–	CC35	C35	F.113	1550	35
1045	–	1.0503	C45	080M46	–	CC45	C45	F.114	1650	45
1140	–	1.0726	35S20	212M36	8M	35MF4	–	F210G	1957	–
1039	–	1.1157	40Mn4	150M36	15	35M5	–	–	–	40Mn
1335	SMn438(H)	1.1167	36Mn5	–	–	40M5	–	36Mn5	2120	35Mn2
1330	SCMn1	1.1170	28Mn6	150M28	14A	20M5	C28Mn	–	–	30Mn
1035	S35C	1.1183	Cf35	060A35	–	XC38TS	C36	–	1572	35Mn
1045	S45C	1.1191	Ck45	080M46	–	XC42	C45	C45K	1672	Ck45
1050	S50C	1.1213	Cf53	060A52	–	XC48TS	C53	–	1674	50
1055	–	1.0535	C55	070M55	9	–	C55	–	1655	55
1060	–	1.0601	C60	080A62	43D	CC55	C60	–	–	60
1055	S55C	1.1203	Ck55	070M55	–	XC55	C50	C55K	–	55
1060	S58C	1.1221	Ck60	080A62	43D	XC60	C60	–	1678	60Mn
1095	–	1.1274	Ck101	060A96	–	XC100	–	F.5117	1870	–
W1	SK3	1.1545	C105W1	BW1A	–	Y105	C36KU	F.5118	1880	–
W210	SUP4	1.1545	C105W1	BW2	–	Y120	C120KU	F.515	2900	–

## ALLOY STEEL

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
A573-81	SM400A, SM400B SM400C	1.0144	St.44.2	4360 43 C	–	E28-3	–	–	1412	–
–	SM490A, SM490B SM490C	1.0570	St52-3	4360 50 B	–	E36-3	Fe52BFN Fe52CFN	–	2132	–
5120	–	1.0841	St52-3	150M19	–	20MC5	Fe52	F.431	2172	–
9255	–	1.0904	55Si7	250A53	45	55S7	55Si8	56Si7	2085	55Si2Mn
9262	–	1.0961	60SiCr7	–	–	60SC7	60SiCr8	60SiCr8	–	–
ASTM 52100	SUJ2	1.3505	100Cr6	534A99	31	100C6	100Cr6	F.131	2258	Gr15, 45G
ASTM A204Gr.A	–	1.5415	15Mo3	1501-240	–	15D3	16Mo3KW	16Mo3	2912	–
4520	–	1.5423	16Mo5	1503-245-420	–	–	16Mo5	16Mo5	–	–
ASTM A350LF5	–	1.5622	14Ni6	–	–	16N6	14Ni6	15Ni6	–	–
ASTM A353	–	1.5662	X8Ni9	1501-509-510	–	–	X10Ni9	XBNi09	–	–
3135	SNC236	1.5710	36NiCr6	640A35	111A	35NC6	–	–	–	–
3415	SNC415(H)	1.5732	14NiCr10	–	–	14NC11	16NiCr11	15NiCr11	–	–
3415, 3310	SNC815(H)	1.5752	14NiCr14	655M13	36A	12NC15	–	–	–	–
8620	SNCM220(H)	1.6523	21NiCrMo2	805M20	362	20NCD2	20NiCrMo2	20NiCrMo2	2506	–
8740	SNCM240	1.6546	40NiCrMo22	311-Type 7	–	–	40NiCrMo2(KB)	40NiCrMo2	–	–
–	–	1.6587	17CrNiMo6	820A16	–	18NCD6	–	14NiCrMo13	–	–
5015	SCr415(H)	1.7015	15Cr3	523M15	–	12C3	–	–	–	15Cr

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
5140	SCr440	1.7045	42Cr4	–	–	–	–	42Cr4	2245	40Cr
5155	SUP9(A)	1.7176	55Cr3	527A60	48	55C3	–	–	–	20CrMn
–	SCM415(H)	1.7262	15CrMo5	–	–	12CD4	–	12CrMo4	2216	–
ASTM A182 F11, F12	–	1.7335	13CrMo4 4	1501-620Gr27	–	15CD3.5 15CD4.5	14CrMo45	14CrMo45	–	–
ASTM A182 F.22	–	1.7380	10CrMo910	1501-622 Gr31, 45	–	12CD9 12CD10	12CrMo9 12CrMo10	TU.H	2218	–
–	–	1.7715	14MoV63	1503-660-440	–	–	–	13MoCrV6	–	–
–	–	1.8523	39CrMoV13 9	897M39	40C	–	36CrMoV12	–	–	–
9840	–	1.6511	36CrNiMo4	816M40	110	40NCD3	38NiCrMo4(KB)	35NiCrMo4	–	–
4340	–	1.6582	34CrNiMo6	817M40	24	35NCD6	35NiCrMo6(KB)	–	2541	40CrNiMoA
5132	SCr430(H)	1.7033	34Cr4	530A32	18B	32C4	34Cr4(KB)	35Cr4	–	35Cr
5140	SCr440(H)	1.7035	41Cr4	530M40	18	42C4	41Cr4	42Cr4	–	40Cr
5115	–	1.7131	16MnCr5	(527M20)	–	16MC5	16MnCr5	16MnCr5	2511	18CrMn
4130	SCM420 SCM430	1.7218	25CrMo4	1717CDS110 708M20	–	25CD4	25CrMo4(KB)	55Cr3	2225	30CrMn
4137 4135	SCM432 SCCRM3	1.7220	34CrMo4	708A37	19B	35CD4	35CrMo4	34CrMo4	2234	35CrMo
4140 4142	SCM 440	1.7223	41CrMo4	708M40	19A	42CD4TS	41CrMo4	42CrMo4	2244	40CrMoA
4140	SCM440(H)	1.7225	42CrMo4	708M40	19A	42CD4	42CrMo4	42CrMo4	2244	42CrMo 42CrMnMo
–	–	1.7361	32CrMo12	722M24	40B	30CD12	32CrMo12	F.124.A	2240	–
6150	SUP10	1.8159	50CrV4	735A50	47	50CV4	50CrV4	51CrV4	2230	50CrVA
–	–	1.8509	41CrAlMo7	905M39	41B	40CAD6 40CAD2	41CrAlMo7	41CrAlMo7	2940	–
L3	–	1.2067	100Cr6	BL3	–	Y100C6	–	100Cr6	–	CrV, 9SiCr
–	SKS31 SKS2, SKS3	1.2419	105WCr6	–	–	105WC13	100WCr6 107WCr5KU	105WCr5	2140	CrWMo
L6	SKT4	1.2713	55NiCrMoV6	BH224/5	–	55NCDV7	–	F.520.S	–	5CrNiMo
ASTM A353 2515	–	1.5662	X8Ni9	1501-509	–	–	X10Ni9	XBNi09	–	–
–	–	1.5680	12Ni19	–	–	Z18N5	–	–	–	–
–	–	1.6657	14NiCrMo134	832M13	36C	–	15NiCrMo13	14NiCrMo131	–	–
D3 ASTM D3	SKD1	1.2080	X210Cr12	BD3	–	Z200C12	X210Cr13KU X250Cr12KU	X210Cr12	–	Cr12
H13 ASTM H13	SKD61	1.2344	X40CrMoV51 X40CrMoV51	BH13	–	Z40CDV5	X35CrMoV05KU X40CrMoV51KU	X40CrMoV5	2242	40CrMoV5
A2	SKD12	1.2363	X100CrMoV51	BA2	–	Z100CDV5	X100CrMoV51KU	X100CrMoV5	2260	100CrMoV5
–	SKD2	1.2436	X210CrW12	–	–	–	X215CrW121KU	X210CrW12	2312	–
S1	–	1.2542	45WCrV7	BS1	–	–	45WCrV8KU	45WCrSi8	2710	–
H21	SKD5	1.2581	X30WCrV93	BH21	–	Z30WCV9	X28W09KU	X30WCrV9	–	30WCrV9
–	–	1.2601	X165CrMoV12	–	–	–	X165CrMoV12KU	X160CrMoV12	2310	–
W210	SKS43	1.2833	100V1	BW2	–	Y1105V	–	–	–	V
T4	SKH3	1.3255	S 18-1-2-5	BT4	–	Z80WKCV	X78WCo1805KU	HS18-1-1-5	–	W18Cr4VCo5
T1	SKH2	1.3355	S 18-0-1	BT1	–	Z80WCV	X75W18KU	HS18-0-1	–	–
–	SCMnH/1	1.3401	G-X120Mn12	Z120M12	–	Z120M12	XG120Mn12	X120MN12	–	–
HW3	SUH1	1.4718	X45CrSi93	401S45	52	Z45CS9	X45CrSi8	F.322	–	X45CrSi93
D3	SUH3	1.3343	S6-5-2	4959BA2	–	Z40CSD10	15NiCrMo13	–	2715	–
M2	SKH9, SKH51	1.3343	S6/5/2	BM2	–	Z85WDCV	HS6-5-2-2	F.5603	2722	–
M7	–	1.3348	S 2-9-2	–	–	–	HS2-9-2	HS2-9-2	2782	–
M35	SKH55	1.3243	S6/5/2/5	BM35	–	6-5-2-5	HS6-5-2-5	F.5613	2723	–

# MATERIAL CROSS REFERENCE LIST

## STAINLESS STEEL (FERRITIC, MARTENSITIC)

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
403	SUS403	1.4000	X7Cr13	403S17	–	Z6C13	X6Cr13	F.3110	2301	Ocr13 1Cr12
–	–	1.4001	X7Cr14	–	–	–	–	F.8401	–	–
416	SUS416	1.4005	X12CrS13	416S21	–	Z11CF13	X12CrS13	F.3411	2380	–
410	SUS410	1.4006	X10Cr13	410S21	56A	Z10C14	X12Cr13	F.3401	2302	1Cr13
430	SUS430	1.4016	X8Cr17	430S15	60	Z8C17	X8Cr17	F.3113	2320	1Cr17
–	SCS2	1.4027	G-X20Cr14	420C29	56B	Z20C13M	–	–	–	–
–	SUS420J2	1.4034	X46Cr13	420S45	56D	Z40CM Z38C13M	X40Cr14	F.3405	2304	4Cr13
405	–	1.4003	–	405S17	–	Z8CA12	X6CrAl13	–	–	–
420	–	1.4021	–	420S37	–	Z8CA12	X20Cr13	–	2303	–
431	SUS431	1.4057	X22CrNi17	431S29	57	Z15CNi6.02	X16CrNi16	F.3427	2321	1Cr17Ni2
430F	SUS430F	1.4104	X12CrMoS17	–	–	Z10CF17	X10CrS17	F.3117	2383	Y1Cr17
434	SUS434	1.4113	X6CrMo17	434S17	–	Z8CD17.01	X8CrMo17	–	2325	1Cr17Mo
CA6-NM	SCS5	1.4313	X5CrNi134	425C11	–	Z4CND13.4M	(G)X6CrNi304	–	2385	–
405	SUS405	1.4724	X10CrA113	403S17	–	Z10C13	X10CrA112	F.311	–	Ocr13Al
430	SUS430	1.4742	X10CrA118	430S15	60	Z10CAS18	X8Cr17	F.3113	–	Cr17
HNV6	SUH4	1.4747	X80CrNiSi20	443S65	59	Z80CSN20.02	X80CrSiNi20	F.320B	–	–
446	SUH446	1.4762	X10CrA124	–	–	Z10CAS24	X16Cr26	–	2322	2Cr25N
EV8	SUH35	1.4871	X53CrMnNiN219	349S54	–	Z52CMN21.09	X53CrMnNiN219	–	–	5Cr2Mn9Ni4N
S44400	–	1.4521	X1CrMoTi182	–	–	–	–	–	2326	–
–	–	1.4922	X20CrMoV12-1	–	–	–	X20CrMoNi1201	–	2317	–
630	–	1.4542	–	–	–	Z7CNU17-04	–	–	–	–

## STAINLESS STEEL (AUSTENITIC)

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
304L	SUS304L	1.4306	X2CrNi1911	304S11	–	Z2CN18.10	X2CrNi18.11	–	2352	Ocr19Ni10
304	SUS304	1.4350	X5CrNi189	304S11	58E	Z6CN18.09	X5CrNi1810	F.3551 F.3541 F.3504	2332	Ocr18Ni9
303	SUS303	1.4305	X12CrNiS188	303S21	58M	Z10CNF18.09	X10CrNiS18.09	F.3508	2346	1Cr18Ni9MoZr
–	SUS304L	–	–	304C12	–	Z3CN19.10	–	–	2333	–
304L	SCS19	1.4306	X2CrNi189	304S12	–	Z2CrNi1810	X2CrNi18.11	F.3503	2352	–
301	SUS301	1.4310	X12CrNi177	–	–	Z12CN17.07	X12CrNi1707	F.3517	2331	Cr17Ni7
304LN	SUS304LN	1.4311	X2CrNiN1810	304S62	–	Z2CN18.10	–	–	2371	–
316	SUS316	1.4401	X5CrNiMo1810	316S16	58J	Z6CND17.11	X5CrNiMo1712	F.3543	2347	Ocr17Ni11Mo2
–	SCS13	1.4308	G-X6CrNi189	304C15	–	Z6CN18.10M	–	–	–	–
–	SCS14	1.4408	G-X6CrNiMo1810	316C16	–	–	–	F.8414	–	–
–	SCS22	1.4581	G-X5CrNiMoNb1810	318C17	–	Z4CNDNb1812M	XG8CrNiMo1811	–	–	–
316LN	SUS316LN	1.4429	X2CrNiMoN1813	–	–	Z2CND17.13	–	–	2375	Ocr17Ni13Mo
316L	–	1.4404	–	316S13	–	Z2CND17.12	X2CrNiMo1712	–	2348	–
316L	SCS16 SUS316L	1.4435	X2CrNiMo1812	316S13	–	Z2CND17.12	X2CrNiMo1712	–	2353	Ocr27Ni12Mo3
316	–	1.4436	–	316S13	–	Z6CND18-12-03	X8CrNiMo1713	–	2343, 2347	–
317L	SUS317L	1.4438	X2CrNiMo1816	317S12	–	Z2CND19.15	X2CrNiMo1816	–	2367	O0Cr19Ni13Mo
UNS V 0890A	–	1.4539	X1NiCrMo	–	–	Z6CNT18.10	–	–	2562	–
321	SUS321	1.4541	X10CrNiTi189	321S12	58B	Z6CNT18.10	X6CrNiTi1811	F.3553 F.3523	2337	1Cr18Ni9Ti
347	SUS347	1.4550	X10CrNiNb189	347S17	58F	Z6CNNb18.10	X6CrNiNb1811	F.3552 F.3524	2338	1Cr18Ni11Nb
316Ti	–	1.4571	X10CrNiMoTi1810	320S17	58J	Z6CNDT17.12	X6CrNiMoTi1712	F.3535	2350	Cr18Ni12Mo2T
318	–	1.4583	X10CrNiMoNb1812	–	–	Z6CNDNb1713B	X6CrNiMoNb1713	–	–	Cr17Ni12Mo3Mb

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
309	SUH309	1.4828	X15CrNiSi2012	309S24	–	Z15CNS20.12	X6CrNi2520	–	–	1Cr23Ni13
310S	SUH310	1.4845	X12CrNi2521	310S24	–	Z12CN2520	X6CrNi2520	F.331	2361	OCr25Ni20
308	SCS17	1.4406	X10CrNi18.08	–	58C	Z1NCDU25.20	–	F.8414	2370	–
–	–	1.4418	X4CrNiMo165	–	–	Z6CND16-04-01	–	–	–	–
17-7PH	–	1.4568 1.4504	–	316S111	–	Z8CNA17-07	X2CrNiMo1712	–	–	–
NO8028 S31254	–	1.4563	–	–	–	Z1NCDU31-27-03 Z1CNDU20-18-06AZ	–	–	2584 2378	–
321	SUS321	1.4878	X12CrNiTi189	321S32	58B, 58C	Z6CNT18.12B	X6CrNiTi18 11	F.3523	–	1Cr18Ni9Ti

### HEAT RESISTANT STEELS

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
330	SUH330	1.4864	X12NiCrSi3616	–	–	Z12NCS35.16	–	–	–	–
HT, HT 50	SCH15	1.4865	G-X40NiCrSi3818	330C11	–	–	XG50NiCr3919	–	–	–

### GRAY CAST IRON

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
–	–	–	–	–	–	–	–	–	0100	–
No 20 B	FC100	–	GG 10	–	–	Ft 10 D	–	–	0110	–
No 25 B	FC150	0.6015	GG 15	Grade 150	–	Ft 15 D	G15	FG15	0115	HT150
No 30 B	FC200	0.6020	GG 20	Grade 220	–	Ft 20 D	G20	–	0120	HT200
No 35 B	FC250	0.6025	GG 25	Grade 260	–	Ft 25 D	G25	FG25	0125	HT250
No 40 B	–	–	–	–	–	–	–	–	–	–
No 45 B	FC300	0.6030	GG 30	Grade 300	–	Ft 30 D	G30	FG30	0130	HT300
No 50 B	FC350	0.6035	GG 35	Grade 350	–	Ft 35 D	G35	FG35	0135	HT350
No 55 B	–	0.6040	GG 40	Grade 400	–	Ft 40 D	–	–	0140	HT400
A436 Type 2	–	0.6660	GGL NiCr202	L-NiCuCr202	–	L-NC 202	–	–	0523	–

### DUCTILE CAST IRON

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
60-40-18	FCD400	0.7040	GGG 40	SNG 420/12	–	FCS 400-12	GS 370-17	FGE 38-17	07 17-02	QT400-18
–	–	–	GGG 40.3	SNG 370/17	–	FGS 370-17	–	–	07 17-12	–
–	–	0.7033	GGG 35.3	–	–	–	–	–	07 17-15	–
80-55-06	FCD500	0.7050	GGG 50	SNG 500/7	–	FGS 500-7	GS 500	FGE 50-7	07 27-02	QT500-7
A43D2	–	0.7660	GGG NiCr202	Grade S6	–	S-NC202	–	–	07 76	–
–	–	–	GGG NiMn137	L-NiMn 137	–	L-MN 137	–	–	07 72	–
–	FCD600	–	GGG 60	SNG 600/3	–	FGS 600-3	–	–	07 32-03	QT600-3
100-70-03	FCD700	0.7070	GGG 70	SNG 700/2	–	FGS 700-2	GS 700-2	FGS 70-2	07 37-01	QT700-18

### MALLEABLE CAST IRON

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W.-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	GB
–	FCMB310	–	–	8 290/6	–	MN 32-8	–	–	08 14	–
32510	FCMW330	–	GTS-35	B 340/12	–	MN 35-10	–	–	08 15	–
40010	FCMW370	0.8145	GTS-45	P 440/7	–	Mn 450	GMN45	–	08 52	–
50005	FCMP490	0.8155	GTS-55	P 510/4	–	MP 50-5	GMN55	–	08 54	–
70003	FCMP540	–	GTS-65	P 570/3	–	MP 60-3	–	–	08 58	–
A220-70003	FCMP590	0.8165	GTS-65-02	P 570/3	–	Mn 650-3	GMN 65	–	08 56	–
A 220-80002	FCMP690	–	GTS-70-02	P 690/2	–	Mn 700-2	GMN 70	–	08 62	–