Material comparison table

Name of Metal	GB	ASTM	BS	JIS	NF	DIN
Aluminum& Aluminum Alloy	1A99	1199				A199.99W
	1A97					A199.98R
	1A95					
	1A80		1080(1A)	1080	1080A	A199.90
	1A50	1050	1050(1B)	1050	1050A	A199.50
	5A02	5052	NS4	5052	5052	AlMg2.5
	5A03		NS5			
	5A05	5056	N86	5056	5057	A1Mg5
	5A30	5456	NG61	5556	5957	
	2A01	2036		2117	2117	AlCu2.5Mg0.5
	2A11		HF15	2017	2017S	AlCuMg1
	2A12	2124		2024	2024	AlCuMg2
	2B16	2319				
	2A80				2N01	
	2A90	2218			2018	
	2A14	2014		2014	2014	AlCuSiMn
	7A09	7175		7075	7075	AlZnMgCu1.5
	ZAlSi7Mn	356.2	LM25	AC4C		G-AlSi7Mg
	ZAlSi12	413.2	LM6	AC3A	A-S12-Y4	G-AlSi12
	ZAlSi5Cu1Mg	355.2				
	ZAlSi2Cu2Mg1	413		AC8A		G-AlSi12(Cu)
	ZAlCu5Mn					
	ZAlCu5MnCdA	201				
	ZAlMg10	520.2	LM10		AG11	G-AlMg10
	ZAlMg5Si	520.2				G-AlMg5Si

Material comparison table

Name of Metal	GB	ASTM	EN	ISO	JIS	DIN
copper& copper alloys	TU2	C10100	Cu-OFE	CW008A	Cu-OF	C1011
	-	C10200	Cu-OF	CW009A	-	SE-Cu
	-	C10300	Cu-OFE	CW010A	-	SE-Cu
	T2	C11000	Cu-ETP	CW004A	Cu-ETP	C1100
	TP2	C12200	Cu-DHP	CW024A	Cu-DHP	C1220
	-	C12200	Cu-DHP	CW024A	Cu-DHP	C1220
	-	C12200	Cu-DHP	CW024A	Cu-DHP	C1220
	TP1	C12000	Cu-DLP	CW023A	Cu-DLP	C1201
	H96	C21000	Cu-Zn5	CW501L	Cu-Zn5	C2100
	H90	C22000	Cu-Zn10	CW502L	Cu-Zn10	C2200
	H85	C23000	Cu-Zn15	CW503L	Cu-Zn15	C2300
	H80	C24000	Cu-Zn20	CW504L	Cu-Zn20	C2400
	H70	C26000	Cu-Zn30	CW505L	Cu-Zn30	C2600
	H68	C26800	Cu-Zn33	CW506L	Cu-Zn35	C2680
	H65	C27000	Cu-Zn36	CW507L	Cu-Zn35	C2700
	H63	C27200	Cu-Zn37	CW508L	Cu-Zn37	C2720
	HPb63-3	C35000	Cu-Zn37Pb3	CW600N	Cu-Zn36Pb3	C3501
	HPb63-3	C34200	Cu-Zn35Pb2	CW601N	Cu-Zn36Pb2.5	C3421
	H62	C28000	Cu-Zn40	CW509L	Cu-Zn40	C3712
	H60	C35000	Cu-Zn38Pb2	CW600N	Cu-Zn37Pb2	-
	HPb63-3	C36000	Cu-Zn36Pb3	CW603N	Cu-Zn36Pb3	C3601
	HPb59-1	C37700	Cu-Zn39Pb2	CW612N	Cu-Zn39Pb2	C3771
	HPb58-2.5	C38500	Cu-Zn39Pb3	CW614N	Cu-Zn39Pb3	C3603
	-	C38500	Cu-Zn39Pb3	CW614N	Cu-Zn39Pb3	C3771
	-	C38800	Cu-Zn39Pb1	CW708R	Cu-Zn39Pb1	C4430
	-	C44300	Cu-Zn28Sn1	CW706R	Cu-Zn30Sn1	C4430
	-	C68700	Cu-Zn20Al2	CW702R	Cu-Zn20Al2	C6870
	QSn4-0.3	C51100	CuSn4	CW450K	CuSn4	C5111
	-	C51000	CuSn5	CW451K	CuSn5	C5102
	QSn6.5-0.1	C52100	CuSn6	CW452K	CuSn6	C5191
	QSn8-0.3	C52400	CuSn8	CW453K	CuSn8	C5210
	BZn2-24	C75700	CuNi12Zn2	CW402J	CuNi12Zn18Sn	CuNi12Zn24
	BZn12-26	C77000	CuNi18Zn27	CW410J	CuNi18Zn20	C7701
	BZn18-18	C76400	CuNi18Zn20	CW409J	CuNi18Zn20	C7521
	-	C70600	CuNi10Fe1Mn	CW352H	CuNi10Fe1Mn	C7060
	-	C71500	CuNi30Mn1Fe	CW354H	CuNi30Mn1Fe	C7150

Name of Metal	GB	ASTM	EN	ISO	JIS	DIN	SS14
stainless steel	201	S20100	30101	—	A-3	SUS201	—
	202	S20200	30102	284516	Z15CMN16-01	A-3	SUS202	81CrMoV13	2267
	204Cu	—	—	—	—	—	—	—	—
	301	S30100	30103	284516	Z15CN17-07	A-3	SUS301	81CrMoV13	2331
	301L	S30103	30104	284516	Z15CN18-07	12	SUS301L	X12CrNi17.7	2331
	302	S30200	30200	284516	Z10CN18-09	12	SUS302	X12CrNi18.8	2331
	302HQ	—	—	—	—	12	SUS302B	X12CrNi18.8	2346
	303Cu	S30323	30300a	303Cu	—	17	SUS303Cu	—	—
	303Se	S30300	30308	—	—	—	SUS303E	X12CrNiS18.9	2346
	304	S30400	30304	304S15	Z6CN18-09	11	SUS304	X5CrNi18.9	2332
	304H	S30409	30309	304S31	Z6CN18-09	10	SUS304	X5CrNi18.9	—
	304N	S30451	30306	304S52	Z5CN18-09	10	SUS304L	X2CrNiN18.9	2371
	304N1	S30452	—	—	—	—	SUS304N1	X2CrNiN18.10	—
	304N2	S30453	—	304N2	—	—	SUS304N2	X2CrNiN18.10	—
	304LN	—	—	—	—	—	—	—	—
	305	S30500	30305	305S19	Z10CN18-12	13	SUS305	X5CrNi18.11	—
	309S	S30908	30309	—	Z8CN18-12	—	SUS309	X5CrNi18.12	—
	310S	S31008	30310	310S24	Z8CN25-20	20	SUS310S	X5CrNi25.20	2361
	316	S31600	30316	316S16	Z6CND17-12	35.36a	SUS316	X5CrNiMo17.12.2	2347
	316H	S31609	—	—	—	—	—	—	—
	316L	S31603	30316L	316S12	Z2CND17-12	35.34a	SUS316L	X2CrNiMo17.12.2	2353
	316N	S31651	—	—	Z6CND17-12	—	SUS316N	—	—
	316LN	S31653	—	316N61	Z2CND17-12	—	SUS316LN	X2CrNiMoN17.12.2	2375
	316Ti	—	—	—	—	—	—	—	—
	317	S31700	30317	317S16	Z3CND19-13	36	SUS317	X5CrNiMo19.14	2348
	317L	S31703	30317L	317S12	Z2CND19-13	36	SUS317L	X2CrNiMo19.14	2367
	321	S32100	30321	321S20	Z6CNT18-10	19	SUS321	X10CrNiTi18.9	2337
	321H	S32109	30321	321S51	Z6CNT18-10	19	SUS321	X10CrNiTi18.9	—
	347	S34700	30347	347S17	Z6CNNb18-10	18	SUS347	X10CrNiNb18.9	2338
	348	S34800	30348	—	—	—	SUS347A	—	—
	329	S32900	—	—	—	—	SUS329J	X5CrNiMo27.5	2324
	330	N08330	—	—	Z6CNS18-10	—	SUS330	X10CrNiSi18.15	—
	904L	N08904	—	—	—	—	SUS890L	X1CrNiMoCu25.20.5	—
	409	S40900	30409	—	—	—	—	—	—
	410	S41000	30410	410S21	Z12C13	2	SUS403	X12Cr13	2302
	410S	S41008	30408	—	Z8C13	1	SUS405	X6Cr13	2301
	416	S41600	30416	416S21	Z11CF13	3	SUS416	X12CrS13	2380
	420	S42000	30420	420S37	Z20C13	4	SUS420J1	X20Cr13	2303
	420F	S42020	30420F	420S45	Z29C13	5	SUS420J2	X30Cr13	2304
	430	S43000	30430	430S17	Z8C17	8	SUS430	X6Cr17	2320
	430F	S43020	30430F	—	Z9CF17	8a	SUS430F	X12CrMoS17	2383
	434	S43400	30434	434S17	Z8CD17-01	9a	SUS434	X6CrMo17	2325
	436	S43600	—	—	—	—	SUS436	—	—
	439	S43932	—	—	—	—	SUS444	—	—
	441	S44600	51446	—	—	—	—	4BQ28	2322
	444	S44400	30444	—	Z01CDNb	—	SUS444	X2CrMoTi18.2	—
	447J1	S44700	—	—	—	—	SUS447J1	—	—
	450	S45000	51450	450S17	—	—	SUS450	—	—
	453	S45300	—	—	—	—	SUS453	—	—
	465	S46500	—	—	—	—	SUS465	—	—
	470	S47000	51470	470S17	—	—	SUS470	—	—
	409L	S40903	30409L	—	—	—	—	—	—
	410L	S41003	30410L	410S21	Z2C13	2	SUS410L	X2CrNi12	2302
	429	S42900	51429	429S19	—	—	SUS429	—	—
	430LX	S43035	51439	439S17	Z3CT18	8	SUS430LX	X3CrTiNb18	2326
	430LN	S43036	51440	430S18	Z2CN18-02	8	SUS430LN	X2CrTiNb18	2326
	439	S43900	51441	439S17	Z3CT18	8	SUS439	X3CrTi17	2326
	441	S44100	51442	441S29	Z2CNDNb18	8	SUS441	X2CrTiNb18	2326
	444	S44400	51444	444S29	Z2CDT18-02	8	SUS444	X2CrMoTi18.2	2326
	445J1	S44535	51445	445S22	Z2CDNbTi22	8	SUS445J1	X2CrTiNb22	2326
	445J2	S44600	51446	446S24	Z2CDNbTi24	8	SUS445J2	X2CrNiMoNb28.4	2326
	447J1	S44700	51447	447S24	Z2CDNbTi27	8	SUS447J1	X2CrNiMoNb30.2	2326
	447J2	S44800	51448	448S24	Z2CDNbTi30	8	SUS447J2	X2CrNiMoNb32.3	2326

Material comparison table

Name of Metal	GB	ASTM	BS	JIS	DIN	FOCT
Carbon Steel	Q195	Gr.B Gr.C	040 A10 245	S185	S235J	10 330 3/PSC 235	S185	CT1КП CT2КП~2
	Q215A	Gr.C Gr.D	040 A12	E235B	S235JR	10 330 3/PSC		CT2СП~2
	Q235A	D-D	080A15			10450 St460A	S235J0	CT3КП~2 CT3СП~2
	Q235B	D-D	120A8 120A16	S235JR S235JRG1	E275A	10450 St460A 10450 St460A	S235JR S235JRG1	CT3КП~2 CT3СП~2 CT3СП~2
	Q235A	-	040A99	-	-	10450 St460A	-	CT3СП~2
	Q275	-	-	-	-	-	-	-
	08F	1008 1010	040A10	3C10	C10	SPHD SPHE	C10	10
	10	1010	040A12	10C4 Fe360B	C10E4	S10C 1C10	C45 Fe360B	15
	15	1015	080A15	C22	C15E4	S15C S17C	C22	20
	20	1020	C25	C25	C25E4	S20C S22C	C25	25
	25	1025	C25	C45	C45E4	S25C S28C	C40	40
	40	1040	K40 080M40	C45	C45E4	S40C S43C	C45	45
	45	1045	K45 080A47	C50	C50E4	S45C S48C	C50	50
	50	1050	K50 080M50	C55	C55E4	S50C S53C	—	15г
	15Mn	1019	080A15	—	—	-	—	—
	T7(A)	0504/07 T72301	C70E2U	TC70	SK7	C70W2	γ7	
	T8(A)	T72301 W1A~8	C80E2U	TC80	SK5 SK6	C80W1	γ8	
	T8Mn(A)	0601	C80E4U	Y75	SK5	C85W	γ8г	
	T10(A)	T72301 W1A~8/2	1407 C105E2U	TC105	SK3 SK4	C105W1	γ10	
	T11(A)	T72301 W1A~8	1407 C105E2U	TC105	SK3	C105W1	γ11	
	T12(A)	T72301 W1A~8	1407 C130E3U	TC120	SK2	C125W2	γ12	
Carbon Steel	Cr2	T20403(UNS)	803	X210Cr12	210Cr2	SKD	X210Cr12	γ12
	CrDMoWV	T30402(UNS)	802	160CrMoV12	1H2A	SKD	X155CrVMo12 1	γ12
	SCrMnNi					SKT4		SXTM
	SCrNiMo	TS1206UN S	BA2/BA3	S5NiCrMo4		SKT4	S5NiCrMoV6	SXTM
	3Cr2WBV	T20821	BH21	X30WCrV9	30WCrV5	SKD5		3Х2В8Ф
	W1SiCrV	T12001(UNS T)(TL)	BT1	HSB~0.1	HSB~1 (TL)	SKH2	SKH2	P18
	W6Mo5Cr4V2	T12001(UNS T)(TL)	BT4	HSB~0.1	HSB~1 (TL)	SKH51	S18~1-2-5	P6М5
	W18Cr4V	T12001(UNS T)(TL)	BM2	HSS-1-2	HSB~1	SKH51	S6-5-2	18Т1К5Ф2
	1Cr18Ni9	S30200(UNS S)	302S31 302S25	212CR9R SUS302	-	SUS302	X10CrNi18.9	12Х18Н9
	1Cr18Ni9Ti	S32100(UNS S)	321S20 321S31	X6CrNiTi 18-10	SUS321	SUS321	X6CrNiTi18-11	12Х18Н10Т
	2Cr13	S42000(UNS S)	420S37 420S45	X20Cr13	4	SUS420J1 SUS420J2	X20Cr13	20Х13
	40Mn	1043	080A40 080M40	C45	SI, SM	SWRH47B	C45	40Г
	45Mn	1046	080A47 2C45	C45	SI, SM	SWRH47B	C45	45Г
	60Mn	1065	317S19	C60	SI, SM TypeSC	-	-	65Г
	Y12	3211 (11171106)	510M15	13MF4	10S20 10S20Pb	SUM12 SUM21	10S20	A12
	Y12Pb	3213			11SMn35	SUM22L	10SPb20	
	Y20	1117 (11141106)	C22 080M20	C22		SUM32	C22	A20
	Y40Mn	1214 (11141014)	220M44	45MF3	44Mn28	SUM43	C45	A40Г
	Y45Ca	1145	C45		C45		C45	—
	Y12Pb9	-	303S21 303S31	-	17	SUS303	68CrNi28~9	—
	Q255A	Gr.42-Gr.A	E295	E295	St52-3	SPPC490	E295	—
	Q295B	Gr.42-Gr.A	527L8	527L8	St52-3	SPPC490	527L8	295
	Q345C	Gr.50-Gr.A Gr.C - Gr.D	503S30	503S30	St52-3	SPPC590	503S30	345
	Q345E	TypeC Gr.50	530S44 530S44	530S44 530S44	E355E E355D	SPPC590	530S44	345
	Q420B	C460 Gr.F	620S42	620S42	St52-3	SPPC590	620S42	420
	Q420C	Gr.B TypeA	542S94 542S94	542S94 542S94	HS420J E420D2	SEV295 SM570	542S94 545S94	345K 345KW
	Q460D	Gr.B	546S94 546S94	546S94 546S94	E460D2 F460E	SEV355 SM570W	546S94 545S94	390K 390KW
	20Mn2	1524	020S04	P355GH	22Mn6	SMA490	P355GH	—
	15Cr	5115	527A17			SUP13	17Cr3	15Х
	20Cr	5120	590M17		20Cr4	SCr420	20Cr4	20Х
	30Cr	5130	34Cr4	34Cr4	34Cr4	SCr430	34Cr4	30Х
	40Cr	5140	41Cr4	41Cr4	41Cr4	SCr440	41Cr4	40Х
	45Cr	5145	41Cr4	41Cr4	41Cr4	SCr445	41Cr4	45Х
	35CrMo	4130	25CrMo4	25CrMo4	25CrMo4	SCM430	25CrMo4	30ХМ
	35CrMo	4317	34CrMo4	34CrMo4	34CrMo4	SCM435	34CrMo4	35ХМ
	42CrMo	4140	42CrMo4	42CrMo4	42CrMo4	SCM440	42CrMo4	38ХМ
	38CrMoAl		905M39		41CrAlMo7-10	SCM945	41CrAlMo7	38х2МюА
	50CrVA	6150	51CrV4	51CrV4	50CrV4	SUP10	50CrV4	50ХФА
	40CrMnMo	4140 (11421106)	708M40 (11421106)	42CrMo4	42CrMo4	SCM440	42CrMo4	—

	1084		FMR88	TypeCS	SUP3	100C6	WW1
55SiMn	9260 HS260	251H60	565C7	565CrT	SUP6 SUP7	60Si7	55С2
60Si2Mn		250H60	615C7	615CrT	SUP6 SUP7	60Si2Mn	60С2
55CrMnA	H51550 (51550)	525A58 527M60	55Cr3	55Cr3	SUP9	55Cr3	55ХГА
60Si2CrVA							
50CrV	H51500 (51500)	735A51	50CrV4	50CrV4	SUP10	50CrV4	50хФА
Gr.9	5115				SUP9	100Cr6	WW1
50CrMo	4150	708A47 (11441106)	42CrMo4	42CrMo4	SCM440	42CrMo4	—
60Si2Mn	9260	250A61	250A61	250A61	SUP6 SUP7	60Si7	60С2
50CrMnMo	4161	708A47	50CrMo4	50CrMo4	SUP9	50CrMo4	50ХГМ
50CrMnVA	6150	735A50	50CrV4	50CrV4	SUP10	50CrV4	50ХГФА
30CrMnSiA	4130	625A40	30CrMnSi4	30CrMnSi4	SUP11	30CrMnSi4	30ХГСА
1Cr13	5115	527A17			SUP13	17Cr3	15Х
2Cr13	5120	590M17		20Cr4	SCr420	20Cr4	20Х
3Cr13	5130	34Cr4	34Cr4	34Cr4	SCr430	34Cr4	30Х
4Cr13	5140	41Cr4	41Cr4	41Cr4	SCr440	41Cr4	40Х
5Cr13	5145	41Cr4	41Cr4	41Cr4	SCr445	41Cr4	45Х
9Cr18Mo	440C		Z100CD17	2I	SUS440C		95Х18
20Cr13	3873ZM	M250~35A	M250~35A	M250~35A	SUS3 SUP5	35X250	2413
27SiMn	27Si1Mn	M310~27Mn2	M310~27Mn2		27Mn2	27Mn2	30Г2
27QiSiMn	27Si1Mn	M310~27Mn2	M310~27Mn2		27Mn2	27Mn2	30Г2