

## MATERIAL GRADE COMPARISON TABLE

Material No.	Germany DIN	GB BS	USA	JAPAN
<b>STEEL</b>				
<b>PLAIN STEEL, CAST STEEL, FREE-MACHINING STEEL</b>				
1.0332	St14	14491CR	1008	
1.1121	Ck10	040A10	1010	S10C
1.0721	10S20	210M15	1108	
1.0401	C15	080M15	1015	S15C
1.0402	C22	050A20	1020	S20C, S22C
1.1141	Ck15	080M15	1015	S15C
1.0036	USt37-3			
1.0715	9SMn28	230M07	1213	SUM22
1.0718	9SMnPb28		12L3	SUM22L
1.0501	C35	060A35	1035	S35C
1.0503	C45	080M46	1045	S45C
1.1158	Ck25	070M25	1025	S25C
1.1183	Cf35	060A35	1035	S35C
1.1191	Ck45	080M46	1045	S45C
1.1213	Cf53	060A52	1050	S50C
1.5415	15Mo3	1501-240	ASTMA204GrA	
1.5423	16Mo5	1503-245-420	4520	SB450M
1.0050	St50-2			SM50YA
1.7242	16CrMo 4			
1.7337	16CrMo 4 4		A387Gr.12Cl	
1.7362	12CrMo 19 5	3606-625		
1.0060	St60-2			SM570
1.0535	C55	070M55	1055	S55C
1.0601	C60	080A62	1060	S60C
1.1203	Ck55	070M55	1055	S55C
1.1221	Ck60	080A62	1060	S58C
1.1545	C1051			SK3
1.1545	C105W1			SK3
1.0070	St70-2			
1.7238	49CrMo4			
1.7561	42CrV6			
1.7701	51CrMoV4			

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<b>LOW-ALLOY STEEL, CAST STEEL, FREE-MACHINING STEEL</b>				
1.2067	100Cr6	BL3	L3	SUJ2
1.2210	115CrV3		L2	
1.2241	51CrV4			
1.2419	105WCr6			SKS31
1.2419	105WCr6			SKS31
1.2542	45WCrV7	BS1	S1	
1.2550	60WCrV7		S1	
1.2713	55NiCrMoV6		L6	SKH1;SKT4
1.2721	50NiCr13			
1.2762	75CrMoNiW67			
1.2762	75CrMoNiW67			
1.2842	90MnCrV8	B02	O2	
1.3505	100Cr6	534A99	52100	SUJ2
1.5622	14Ni6		ASTMA350LF5	
1.5732	14NiCr10		3415	SNC415(H)
1.5752	14NiCr14	655M13	3415;3310	SNC815(H)
1.6511	36CrNiMo4	816M40	9840	SNCM447
1.6523	21NiCrMo2	805M20	8620	SNCM220(H)
1.6546	40NiCrMo22	311-TYPE7	8740	SNCM240
1.6582	35CrNiMo6	817M40	4340	SNCM447
1.6587	17CrNiMo6	820A16		
1.6657	14NiCrMo34	832M13		
1.7033	34Cr4	530A32	5132	SCR430(H)
1.7035	41Cr4	530M40	5140	SCR440(H)
1.7045	42Cr4	530A40	5140	SCr440
1.7131	16MnCr5	(527M20)	5115	SCR415
1.7176	55Cr3	527A60	5155	SUP9(A)
1.7218	25CrMo4	1717CDS110	4130	SM420;SCM430
1.7220	34CrMo4	708A37	4137;4135	SCM432;SCCRM3

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1.7223	41CrMo4	708M40	4140:4142	SCM440
1.7225	42CrMo4	708M40	4140	SCM440(H)
1.7262	15CrMo5			SCM415(H)
1.7335	13CrMo4 4	1501-620-Gr27	ASTMA182	SPVAF12
1.7361	32CrMo12	722M24		
1.7380	10CrMo9 10	1501-622Gr31:45	ASTMA182F.22	SPVA, SCMV4
1.7715	14MoV6 3	1503-660-440		
1.8159	50CrV4	735A50	6150	SUP10
1.8159	50CrV4	735A50	6150	SUP10
1.3501	100Cr2		E50100	
1.5710	36NiCr6	640A35	3135	SNC236
1.5736	36NiCr10		3435	SNC631(H)
1.5755	31NiCr14	653M31		SNC836
1.7733	24CrMoV55			
1.7755	GS-45CrMoV104			
1.8070	21CrMoV511			
1.8509	41CrALMo7	905M39		SACM645
1.8523	39CrMoV139	897M39		
1.2311	40CrMnMo7			
1.4882	X50CrMnNiNbN219			
1.5864	35NiCr18			
<b>HIGH-ALLOY STEEL, CAST STEEL</b>				
1.2343	X38CrMoV51	BH11	H11	SKD6
1.2344	X40CrMoV51	BH13	H13	SKD61
1.2379	X155CrVMo121	BD2	D2	SKD11
1.2436	X201CrW12			SKD2
1.2581	X30WCrV93	BH21	H21	SKD5
1.2601	X165CrMoV12			
1.2606	X37CrMoW 51	BH12	H12	SKD62
1.5662	X8Ni9	1501.509;50	ASTMA353	SL9N53
1.5680	12Ni19		2515	
1.3202	S12-1-4-5	BT15		
1.3207	S10-4-3-10	BT42		SKH57
1.3243	S6-5-2-5		T15	SKH55
1.3246	S7-4-2-5			
1.3247	S2-10-1-8	BM42		SKH51
1.3249	S2-9-2-8	BM34	M42	
1.3343	S6-5-2	BM2	M35	SKH9;SKH51

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Material No.	Germany DIN	GB BS	USA	JAPAN
<b>STAINLESS STEEL, CAST STEEL</b>				
1.4000	X6Cr13	403S17	403	SUS403
1.4001	X6Cr14			410S, 429
1.4002	X6CrAl13	405S17	405	SUS405
1.4006	(G-)X10Cr13	410S21	SUS410	SUS410
1.4016	X8Cr17	430S15	430	SUS430
1.4021	X20Cr13	420S37	420	SUS420J1
1.4027	G-X20Cr14	420C29		SCS2
1.4086	G-X120Cr29	452C11		
1.4104	X12CrMoS17	441S29	430F	SUS430F
1.4113	X6CrMo17	434S17	434	SUS434
1.4340	G-X40CrNi274			
1.4417	X2CrNiMoSi195		S31500	
1.4720	X20CrMo13			
1.4724	X10CrA113	403S17	405	SUS405
1.4742	X10CrA118	430S15	430	SUS430
1.4762	X10CrA124		446	SUH446
1.4034	X46Cr13	420S45		
1.4057	X20CrNi17	431S29	431	SUS431
1.4125	X105CrMo17			SUS440C

## MATERIAL GRADE COMPARISON TABLE

Material No.	Germany DIN	GB BS	USA	JAPAN
<b>STAINLESS STEEL AND CAST IRON</b>				
<b>AUSTENITIC STAINLESS STEEL</b>				
1.4301	X5CrNi189	304S15	304	SUS304
1.4310	X12CrNi177	301S21	301	SUS301
1.4311	X2CrNiN1810	304S62	304LN	SUS304LN
1.4312	G-X10CrNi188	302C25		
1.4350	X5CrNi189	304s31	304	
1.4362	X2CrNiN234		S32304	
1.4401	X5CrNiMo17122	316S16	316	SUS316
1.4404	X2CrNiMo1810	316S12	316L	SUS316
1.4410	G-X10CrNiMo189			
1.4429	X2CrNiMoN17133	316S63	316LN	SUS316LN
1.4435	X2CrNiMo18143	316S13	316L	SCS16
1.4436	X5CrNiMo17133	316S33	316	SUS316
1.4438	X2CrNiMo18164	317S12	317L	SUS317L
1.4500	G-X7NiCrMoCuNb2520			
1.4541	X10CrNiMoTi1810	321S12	321	SUS321
1.4450	X10CrNiNb	347S17	347	SUS347
1.4552	G-X7CrNiNb189	347C17		
1.4571	X10CrNiMoTi1810	320S17	316Ti	SUS316Ti
1.4583	X10CrNiMoNb1812		318	
1.4585	G-X7CrNiMoCuNb1818			
1.4828	X15CrNiSi2012	309S24	309	SUH309
1.4845	X12CrNi2521	310S24	310S	SUH310:SUS310S
<b>AUSTENITIC/FERRITIC STAINLESS STEEL (DUPLEX)</b>				
1.4460	X8CrNiMo275		S32900	SUS329J1
1.4462	X2CrNiMoN2253			
1.4821	X20CrNiSi254			
1.4823	G-X40CrNiSi274			
<b>GRAY CAST IRON</b>				
0.6010	GG10		CLASS20	FC100
0.6015	GG15		CLASS25	FC150
0.6020	GG20		CLASS30	FC200
0.6025	GG25		CLASS35	FC250
0.6030	GG30		CLASS45	FC300
0.6035	GG35		CLASS50	FC350
0.6040	GG40		CLASS55	FC400

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Material No.	Germany DIN	GB BS	USA	JAPAN
<b>GRAY CAST IRON WITH NODULAR GRAPHITE</b>				
0.7033	GGG35.3			FCD350
0.7040	GGG40	SNG420/12	60-40-18	FCD400
0.7043	GGG40.3	SNG370/17		FCD400
0.7050	GGG50	SNG500/7	80-55-06	FCD500
0.7060	GGG60	SNG600/3		FCD600
0.7070	GGG70	SNG700/2	100-70-03	FCD700
<b>WHITE MALLEABLE CAST IRON</b>				
0.8040	GTW-40	W410/4		
0.8045	GTW-45			
0.0855	GTW-55			
0.8065	GTW-65			
0.8135	GTS-35	B340/12	32510	
0.8145	GTS-45	P440/7	40010	
0.8035	GTW-35	W340/3		
0.8155	GTS-55	P510/4	50005	
0.8165	GTS-65	P570/3	70003	
0.8170	GTS-70	P690/2	90001	

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Material No.	Germany DIN	GB BS	USA	JAPAN
<b>HARDENED MATERIALS</b>				
<b>WHITE CAST IRON</b>				
0.9620	G-X260NiCr42	Grade 2A	Ni-Hard 2	
0.9625	G-X330NiCr42	Grade 2B	Ni-Hard 1	
0.9630	G-X300CrNiSi952		Ni-Hard 4	
0.9635	G-X300CrMo153			
<b>HARDENED CAST IRON</b>				
0.9640	G-X300CrMoNi1521			
0.9645	G-X260CrMoNi2021			
0.9650	G-X260Cr27	Grade 3D	A532IIIA25%Cr	
0.9655	G-X300CrMo271			
0.9655	G-X300CrMo271	Grade 3E	A532IIIA25%Cr	

## MATERIAL GRADE COMPARISON TABLE

Material No.	Germany DIN	GB BS	US TRADE DESIGNATION	USA	JAPAN
<b>HIGH-TEMP ALLOYS</b>					
<b>SUPER-ALLOYS Fe-BASED</b>					
1.4558	X2NiCrAlTi3220	NA15	Incoloy 800	N08800	
1.4562	X21NiCrMoCu32287			N08031	
1.4563	X21NiCrMoCuN31274			N08028	
1.4864	X12NiCrSi			330	SUH330
1.4864	X12NiCrSi3616	NA17		N08330	SUH330
1.4958	X5NiCrAlTi3120				
1.4977	X40CoCrNi2020				
			A-286	S66286	
			Greek Ascology	S41800	
			Haynes 556 (HS556)	R30556	
			N155	R30155	
<b>SUPER-ALLOYS Co-BASED</b>					
			Haynes 188	R30188	
			L605 (Haynes 25)	R30605	
			MARM-302, 322, 509		
			Stellite 6, 21, 31		
<b>SUPER-ALLOYS Ni-BASED</b>					
2.4360	NiCu30Fe	NA13	Monel 400		
2.4610	NiMo16Cr16Ti		Hastelloy C-4		
2.4630	NiCr20Ti	HR5,203-4	Nimonic 75	N06075	
2.4642	NiCr29Fe		Inconel 690		
2.4810	G-NiMo30		Hastelloy C	N10276	
2.4856	NiCr22Mo9Nb	NA21	Inconel 625	N06625	
2.4858	NiCr21Mo	NA16	Incoloy 825	N08825	
2.4375	NiCu30Al	NA18	Monel K-500		
2.4668	NiCr19FeNbMo		Inconel 718	N07718	
2.4669	NiCr15Fe7TiAl		Inconel X-750	N07750	
2.4685	G-NiMo28		Hastelloy B	N10001	
2.4694	NiCr16Fe7TiAl		Inconel 751	N00751	
<b>TITANIUM AND TITANIUM ALLOYS</b>					
3.7025	Ti1	2TA1		R50250	
3.7124	TiCu2	2TA21-24			
3.7195	TiAl3V2.5				
3.7225	Ti1Pd	TP1		R52250	
3.7115	TiAl5Sn2				
3.7145	TiAl6Sn2Zr4Mo2Si			R54620	
3.7165	TiAl6V4	TA10-13;TA28	TA10-13;TiAl6V4	R56400	
3.7175	TiAl6V6Sn2		Ti6V6Al2Sn	R56620	
3.7185	TiAl4Mo4Sn2	TA45-51;TA57			