

# Metal Table EN - JIS 1

JIS Material No.	EN Material No.	EN Denomination	Material Description	Ø min.	Ø max.	Condition	Re-Rp0,2 in MPa	Rm in MPa	A in %	Hardness Unit	Hardness Value
1.0028	S20561T (Jst.34)	SS330	unalloyed mild steel				195	330-430	26		
1.0034	S20562T (Rst.34)	STKM11A	unalloyed mild steel								
1.0035	S185 (St.33)	SGP	unalloyed construction steel / pipe steel				175-185	290			
1.0035	S185 (St.33)	SGPW	unalloyed construction steel / pipe steel / galvanized					290			
1.0038	S235JRG2 (Rst.37.2)	STKM12(A/C)	unalloyed mild steel			killed	215	340-470		HB	120
1.0040	Ust.42.2	SS400(D)	unalloyed structural steel			unkilled		400-510			
1.0042	Rst.42.2	SS400(D)	unalloyed mild steel					400-510			
1.0050	E295 (St.50.2)	SS490	unalloyed mild steel				265-295	470-610	20		
1.0060	E335 (St.60.2)	SS540	unalloyed mild steel					>540			
1.0136	St.42.3	SS400(D)	unalloyed mild steel					400-510			
1.0254	S235 (St.37)	STPG370	unalloyed construction steel / pipe steel								
1.0255	St.37-4	STPT370	unalloyed construction steel / pipe steel for high temperature			(<350°C)					
1.0301	C10	S10C	unalloyed construction steel / for case hardening				290-380	400-650			
1.0303	C4C (Qst.32.3)	SWRCH	cold formed steel / for steel wires								
1.0305	P235G1TH (St.35.8)	STPT370	unalloyed construction steel / pipe steel for high temperature			(<350°C)					
1.0320	St.22	SPHC	unalloyed steel / deep drawable / [hot coiled]					270	27-31		
1.0330	DC01 (St.12)	SPCC(SD)	unalloyed steel / deep drawable / [solid drawn]				140-280	270-410	28-39	HB	90-120
1.0401	C15R	S15C	unalloyed construction steel / for case hardening				430	600-750			
1.0402	C22	S20C	unalloyed construction steel / for quenching and tempering / for heat treatment		16		340	470-620	22		
1.0406	C25	S20C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	370	500-650	23		
1.0480	H240LA	STKM13A	unalloyed construction steel / pipe steel				240-310	340	27		
1.0501	1C35 (C35)	S35C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	QT	430	630-780			
1.0503	C45	S45C	unalloyed construction steel / for quenching and tempering / for heat treatment			case hardened		650-800		HRc	49-55
1.0503	C45	S45C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	305-340	580	16		
1.0503	C45	S45C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	40	QT	340-390	640-790		
1.0511	C40	S40C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	320	580			
1.0511	C40	S40C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	QT	460	650-800	16		
1.0535	C55	S55C	unalloyed construction steel / for quenching and tempering / for heat treatment				550	800-950			
1.0601	C60	S58C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	340-380	670-710	11		
1.0702	U10S10	SUM11	unalloyed steel / free cutting steel								
1.0710	15S10	SUM31(L)	unalloyed steel / free cutting steel					400-560			
1.0711	9S20	SUM21	unalloyed steel / free cutting steel					370-450		HB	100-130
1.0715	9SMn28	SUM22(L)	unalloyed steel / free cutting steel							HB	110-170
1.0718	9SMnPb28	SUM24L	unalloyed steel / free cutting steel					390-580		HRc	35-41
1.0723	15S20	SUM32	unalloyed steel / free cutting steel								
1.0736	9SMn36	SUM25	unalloyed steel / free cutting steel					<500			
1.1121	2C10 (C10E; Ck10)	S09CK	unalloyed construction steel / for case hardening				295-390	490-640	16		
1.1133	20Mn5	SMnC420(H)	structural / heat treatment steel [increased Carbon content]					<800			
1.1141	C15E (Ck15)	S15C	unalloyed construction steel / for case hardening			case hardened	355	590-780	14	HRc	49-55
1.1149	3C22 (Cm22/C22R)	S22C	unalloyed construction steel / for quenching and tempering / for heat treatment				340	470-620			
1.1151	C22E (Ck22)	S20C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	QT	290-340	470-620	22		
1.1151	C22E (Ck22)	S20C	unalloyed construction steel / for quenching and tempering / for heat treatment				210-340	410-500			
1.1158	C25E (Ck25)	S25C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	QT	370	550-700	21		
1.1160	22Mn6	SMn420(H)	structural / heat treatment steel [increased Carbon content]								
1.1165	30Mn5	SMn433(H)	structural / nitriding steel / heat treatment steel [increased Carbon content]					<900			
1.1166	34Mn5	SMn433(H)	structural / nitriding steel / heat treatment steel [increased Carbon content]					750-950			
1.1167	36Mn5	SMn438(H)	structural / heat treatment steel [increased Carbon content]					800			
1.1175	41Mn4	SMn443(H)	structural / heat treatment steel [increased Carbon content]								
1.1178	C30	S30C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	280	510			
1.1178	C30	S30C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	QT	400	600-750			
1.1181	C35E (Ck35)	S35C	unalloyed construction steel / for quenching and tempering / for heat treatment			annealed	270-300	520	19		
1.1191	C45E (Ck45)	S45(CD)	unalloyed construction steel / for quenching and tempering / for heat treatment [cold drawn]		16	QT	490	700-850	14		
1.1191	C45E	S45-D	unalloyed construction steel / for quenching and tempering / for heat treatment								
1.1203	C55E (Ck55)	S55C	unalloyed construction steel / for quenching and tempering / for heat treatment				550	800-950			
1.1206	C50E (Ck50)	S50C	unalloyed construction steel / for quenching and tempering / for heat treatment				520	750			
1.1207	C10R	S10C	unalloyed construction steel / for case hardening					400			
1.1210	C53E (Ck53)	S53C	unalloyed construction steel / for quenching and tempering / for heat treatment		16	40	QT	370	630-780		
1.1213	C50	S50C	unalloyed construction steel / for quenching and tempering / for heat treatment					640			
1.1221	C60E (Ck60)	S58C	unalloyed construction steel / for quenching and tempering / for heat treatment			QT	580	850-1000			
1.1223	C60R	S58C	unalloyed construction steel / for quenching and tempering / for heat treatment			case hardened	450-580	800-950	13	HRc	49-55
1.1262	C82D2	SUP3	alloyed construction steel / for quenching and tempering / for heat treatment								
1.1525	C80W1	SK5	unalloyed tool steel for cold work								
1.1545	C105W1	SK3	unalloyed tool steel for cold work							HRc	52-58
1.1625	C80W2	SK6	unalloyed tool steel for cold work							HRc	52-58
1.1645	C105W2	SK3	unalloyed tool steel for cold work								
1.1740	C60W	SK7	unalloyed tool steel for cold work					1000			
1.1830	C85W	SK5	unalloyed tool steel for cold work								
1.2008	140Cr3 (---)	SKS8	unalloyed tool steel for cold work								
1.2067	102Cr6	SUJ2	unalloyed tool steel / ball bearing steel			annealed		675		HB	230
1.2080	X210Cr12	SKD1	unalloyed tool steel								
1.2083	X42Cr13	SUS420J2	alloyed stainless steel / acid proof			C1		850-1000	10	HRc	>68
1.2343	X38CrMoV5-1	SKD6	alloyed tool steel for cold work					1550			
1.2344	X40CrMoV5-1	SKD61	unalloyed tool steel for cold and hot work					1180-1770		HRc	>68
1.2363	X100CrMoV5-1	SKD12	unalloyed tool steel for cold work							HRc	>68
1.2365	X32CrMoV3-3	SKD7	unalloyed tool steel for hot work								
1.2379	X155CrMo12-1	SKD11	unalloyed tool steel for cold work							HRc	>68
1.2419	105WCr6	SKS2/3/31	unalloyed tool steel for cold work			hardened		<1000		HRc	58-64
1.2510	100MnCrW4 (---)	SKS3	unalloyed tool steel for cold work								
1.2541	35WCrV7	SKS41	unalloyed tool steel for cold work								
1.2542	45WCrV7	SKS41	unalloyed tool steel for cold work								
1.2552	80WCrV8	SKS42	unalloyed tool steel for cold work								
1.2567	X30WCrV5-3	SKD4	unalloyed tool steel for hot work								
1.2581	X30WCrV9-3	SKD5	unalloyed tool steel for hot work								

JIS denomination is binding for orders. EN denominations are started as comparative material. (Partly there is no existing equivalent EN material for JIS material existing or contrary).

JIS Material No.	EN Material No.	EN Denomination	Material Description	Ø min.	Ø max.	Condition	Re-Rp0,2 in MPa	Rm in MPa	A in %	Hardness Unit	Hardness Value
1.2713	55NiCrMoV6	SKT3/SKT4	unalloyed tool steel for cold and hot work								
1.2833	100V1	SKS43	unalloyed tool steel for cold work					930-1420		HRc	55-60
1.3202	S12-1-4-5	SKH10	alloyed high speed steel with Co					<1000			
1.3207	S10-4-3-10	SKH57	alloyed high speed steel with Co								
1.3243	S6-5-2-5	SKH55	alloyed high speed steel with Co								
1.3247	S2-10-1-8	SKH59	alloyed high speed steel with Co								
1.3343	S6-5-2	SKH51/SUH3	alloyed high speed steel without Co			hardened		≤1000		HRc	60-68
1.3344	S6-5-3	SKH52/SKH53	alloyed high speed steel without Co								
1.3355	S18-0-1	SKH2	alloyed high speed steel without Co								
1.3505	100Cr6	SUJ2	unalloyed tool steel / ball bearing steel			annealed		675		HB	230
1.3505	100Cr6	SUJ2	unalloyed tool steel / ball bearing steel			hardened		≤850		HRC	58-65
1.3565	48CrMo4	SNC836	unalloyed bearing steel					1080			
1.4000	X6Cr13	SUS403	alloyed stainless steel / acid proof			F		600			
1.4001	X7Cr14	SUS429	alloyed stainless steel / acid proof			F		530-680			
1.4002	X6CrAl13	SUS405	alloyed stainless steel / acid proof / heat resistant			F			10		
1.4005	X12CrS13	SUS416	alloyed stainless steel / acid proof			M		540	25		
1.4006	X10Cr13	SUS410	alloyed steel / stainless and acidproof / for cold extrusion			C1		730	20		
1.4006	X10Cr13	SUS410	alloyed steel / stainless and acidproof steel / for cold extrusion			QT		1200	7	HRc	37
1.4006	X10Cr13	SUS410	alloyed steel / stainless and acidproof steel / for cold extrusion					380	45		
1.4016	X6(Cr)17	SUS430	alloyed stainless steel / acid proof / heat resistant			F1	240	450-630	12-20	HB	130-170
1.4021	X20Cr13	SUS420J	alloyed stainless steel / acid proof			C1		800-1000	8-12	HRc	40
1.4024	X15Cr13	SUS410J1	alloyed steel / stainless and acidproof steel / for cold extrusion								
1.4029	X29CrS13	SUS420	alloyed stainless steel / acid proof								
1.4029	X29CrS13	SUS420F	alloyed stainless steel / acid proof			M					
1.4031	X38Cr13	SUS420J2	alloyed stainless steel / acid proof			C1		800			
1.4034	X46Cr13	SUS420J2	alloyed stainless steel / acid proof			C1			11		
1.4057	X17CrNi16-2	SUS431	alloyed stainless steel / acid proof			C3		800-950	12-14		
1.4057	X17CrNi16-2	SUS431	alloyed stainless steel / acid proof					280	980	HB	280
1.4104	X12CrMoS17-2	SUS430F	alloyed stainless steel / acid proof / heat resistant			F		840			
1.4112	X90CrMoV18	SUS440B	alloyed stainless steel / acid proof			C				HRc	>68
1.4113	X6CrMo17-1	SUS434	alloyed steel / stainless and acidproof steel / for cold extrusion			F1		450-630	18		
1.4125	X105CrMo17	SUS440C	alloyed stainless steel / acid proof			C3 QT		780	15	HRc	50
1.4131	X1CrMo26-1	SUSXM27	alloyed stainless steel					570	25		
1.4301	X5CrNi18-10	SUS304	alloyed stainless steel / acid proof			A2	190	540-750	45		
1.4301	X5CrNi18-10	SUS304-CSP	alloyed stainless steel / acid proof / spring steel / cold coiled								
1.4301	X5CrNi18-10	SUS304-D	alloyed stainless steel / acid proof								
1.4301	X5CrNi18-10	SUS304-H	alloyed stainless steel / acid proof								
1.4301	X5CrNi18-10	SUS304-TP	alloyed stainless steel / acid proof								
1.4301	X5CrNi18-10	SUS304-WPC	alloyed stainless steel / acid proof								
1.4301	X5CrNi18-10	SUS304-WPB	alloyed stainless steel / acid proof / spring steel			(>180 °C)		700			
1.4301	X5CrNi18-10	SUS316-TP	alloyed stainless steel / acid proof								
1.4303	X4CrNi18-12	SUS305[J1]	alloyed stainless steel / acid proof			A2		500/650	45		
1.4305	X10CrNiS18-9	SUS303	alloyed stainless steel / acid proof			A1		520	40	HRc	>68
1.4305	X8CrNi18-9	SUS303	alloyed stainless steel / acid proof			A1	190	500-750	35		
1.4306	X2CrNi19-11	SUS304L	alloyed stainless steel / acid proof			A2		520-670	40-45		