



Cross reference of STANDARDS for Equivalent Grades of Steel

www.spacersandwashers.com

1. BEARING QUALITY STEEL:

BS	DIN	IS	EN	SAE/AISI
534A99/535A99	100Cr6	103Cr1	EN31	52100

2. ALLOY STEEL:

BS	DIN	IS	EN	SAE/AISI
530A40	37Cr4	40Cr1	EN18	5140
817M40	34CrNiMo6	40NiCr4Mo3	EN24	4340
709M40	-	40Cr4Mo3	EN19C	4140,4142
709M40	42Cr4Mo2	40Cr4Mo3	EN19	4140,4142
530A40	37Cr4	40Cr1	EN18D	5140
530A40	37Cr4	40Cr1	EN18C	5140
815M17	-	15NiCr1Mo12	EN353	-
530A40	37Cr4	40Cr1	EN18A	5140
820M17	-	15NiVCr1Mo15	EN354	4320
-	28Mn6	27C15	-	1527
-	20MnCr5	20MnCr1	-	-
150M28	-	20Mn2	EN14A	1524
-	16MnCr5	17Mn1Cr95	-	5120
523A14	15Cr3	15Cr65	EN206	5015
530A40	37Cr4	40Cr1	EN18B	5140
805M20	-	20NiCrMo2	EN362	SAE8620

3. CARBON STEEL:

BS	DIN	IS	EN	SAE/AISI
150M36	36Mn5	37Mn2, 37C15	EN15B	1536
-	CK15	C14	EN32B	1015,1016,1018
-	CK38	-	-	1038
-	-	C50	EN43C	1050
-	CK45	45C8	1045	-
070M55	CK55	C55	EN9	1055
-	C35	35C8, C35Mn75	-	1035
-	CK75	80C6	EN42	1074
-	C67	65C6	EN42B	1065
080M50	C55	60C6	EN43	1055
080A47	CK45	-	EN43B	1045
150M36	36Mn7	37C15	EN15,15A	SAE1541
080A40	CK45	45C8	EN8	1040,1045
080A40	CK45	45C8	EN8A	1040,1045
080A40	CK45	45C8	45C8	1040,1045
080A40	CK45	45C8	EN8C	1040,1045
080A40	CK45	45C8	EN8D	1040,1045



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4. HIGH CARBON STEEL

EN	SAE/AISI	JIS***
-	1075	SWRH77B
-	1080	SWRH82B
-	1080	SWRH82B
-	1080	SWRH82B
-	1080	SWRH82B
EN5D	1030	SWRH32B
-	1035	SWRH37B
EN8	1040	SWRH42B
EN43B	1045	SWRH47B
-	1050	SWRH52B
EN9	1055	SWRH57B
EN43D	1060	SWRH62B
EN42B	1065	SWRH67B
-	1070	SWRH72B
-	1075	SWRH77B, SUP3
-	1080	SWRH82B
-	1085	SWRH87B
-	1090	3CD95A

5. SPRING STEEL

BS	DIN	IS	EN	SAE/AISI	JIS
-	60Si7	60Si7	EN45A	-	-
-	59Si7	-	EN45A	9260	SUP7
685A57	54SiCr6	-	-	9254	SUP12V
-	55Si7	55Si7	EN45A	-	-
250A53	55Si7	55Si2Mn90	EN45	9255	-
-	65Si7	-	EN45A	9260	-
250A58	-	-	EN45A	9260	-
735A51	50CrV4	50Cr4V2	EN47	6150	SUP10
-	-	-	-	9254	-
-	-	-	-	9260	SUP7N
-	-	-	-	51B60	SUP11A
-	55Cr5	-	-	5155	SUP9



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6. COLD HEADING QUALITY STEEL - CHQ

BS	DIN	IS	EN	SAE/AISI	JIS
070M20	CK22	C20	EN 3A	SAE1020	SWRCH20A
-	-	-	-	SAE1022	-
709M40	42CrMo4	40Cr4Mo3	EN19	SAE4140	SCM440
-	H111	C-15Mn75	EN2C	SAE1018	-
150M36	36Mn7	37C15	EN15,15A	SAE1541	SMn438
-	-	-	-	15B41	-
-	CK45,C45	45C8,C45	-	1045	-
-	CK15	-	EN32B	SAE1015	-
-	CK38	-	-	1038	-
040A12	CK10	C7, C10	2A/1,2B	SAE1012	SWRCH12A
-	-	26C10BT	-	15B25	-
-	CK10	C10	-	SAE1010	-
-	-	21C10BT	-	10B21	-
040A04	C10	C5	2A,2A/1,2B	SAE1008	SWRCH8A

7. FREE CUTTING STEEL

BS	DIN	IS	EN	SAE/AISI	JIS
216M36	-	40Mn15S12	ENI5(AM)	1137	-
220Mo7	9SMn28	11C10S25	EN1A	1213	SUM22
220Mo7Pb	9SMnPb36	-	EN1APB	12L14	SUM24L
212M36	-	40C10S18	EN8M	1I46	-
-	-	40C10S18	EN8M	SAE1146	-

8. LOW CARBON STEEL

BS	DIN	IS	EN	SAE/AISI	JIS
040A04	C10	C5	2A, 2A/1, 2B	SAE1008	SWRCH8A
-	CK15	-	-	SAE1015	-
040A12	CK10	C7, C10	2A/1, 2B	SAE1012	SWRCH12A
-	CK10	C10	-	SAE1010	-
040A04	C10	C5	2A, 2A/1, 2B	SAE1008	SWRCH8A
070M20	CK22	C20	EN 3A	SAE1020	SWRCH20A
-	CK15	C15Mn75	EN32B,EN32C	SAE1018	-



MATERIAL CROSS REFERENCE LIST FOR CARBON STEEL

USA	Japan	Germany		U. K.		France	Italy	Spain	Sweden	China
AISI/SAE	JIS	W-nr.	DIN	BS	EN	AFNOR	UNI	UNE	SS	
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	-	1.890	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	-