

**MARYLAND METRICS P.O. Box 261 Owings Mills, MD 21117 USA**

*The one-stop source for all your METRIC METALS needs!*

phones: (410)358-3130 (800)638-1830 faxes: (410)358-3142 (800)872-9329

web: <http://mdmetric.com> email: [sales@mdmetric.com](mailto:sales@mdmetric.com)

**Comparison of USA Standards to International Standards for Chemistry**

USA	Europe	Germany	Germany	England	Italy	Japan
A.S.T.M. S.A.E. A.I.S.I.	Euronorm	Werkstoff W.-Nr	Kurzname DIN	BS 970	UNI	JIS
<b>CARBON</b>						
1018	C15D	1.1141	CK15	040A15	C15	S15
1018	C18D	1.0401	C15	080M15	C16	S15CK
1018		1.0453	C16.8	080A15	1C15	S15C
1018				EN3B		
1045	C45	1.0503	C45	060A47	C45	S45C
1045		1.1191	CK45	080A46	1C45	S48C
1045		1.1193	CF45	080M46	C46	
1045		1.1194	CQ45	EN8D	C43	
1140/1146	35S20	1.0726	35S20	212M40		
1140/1146	45S20	1.0727	45S20	en8M		
1215	12SMn35	1.0715	9SMn28	230M07	CF9SMn28	SUM 25
1215		1.0736	9SMn36	En1A	CF9SMn36	SUM 22
12114	11SMnPb28	1.0718	9SMnPb28	230M07leaded	CF9SMnPb28	SUM 22L
12114		1.0737	9SMnPb36	En1A leaded	CF9SMnPb36	SUM 23L
12114						SUM 24L
<b>ALLOY</b>						
4130		1.7218	25CrMo4	708A30	25CrMo4 (KB)	SCM 420
4130			GS-25CrMo5	CDS110	30CrMo4	SCM 430
4130					30CrMo4	SCCrM1
4140/4142	42CrMo4	1.7223	41CrMo4	708M40	41CrMo4	SCM 440
4140/4142		1.7225	42CrMo4	708A42	38CrMo4 KB	SCM 440h
4140/4142		1.7227	42CrMoS4	709M40	G40 CrMo4	SNB 7
4140/4142		1.3563	43CrMo4	En19	42CrMo4	SCM 4M
4140/4142				En19C		SCM 4
4340	34CrNiMo6	1.6582	34CrNiMo6	816M40	35NiCrMo6 KB	SNCM 447
4340		1.6562	40 NiCrMo8 4	en24	40NiCrMo7 KB	SNB24-1-5
8620	20NiCrMo2-2	1.6543	21NiCrMo22	805A20	20NiCrMo2	SNCM 220 (H)
8620		1.6523	21NiCrMo2	805M20		
<b>STAINLESS</b>						
303	X8CrNiS18-9	1.4305	X10CrNiS18-9	303S 21	X10CrNiS 18 09	SUS 303
303				303S 22		
303				En58M		
304	X2CrNi19-11	1.4301	X5CrNi 18 9	304S 15	X5CrNi 18 10	SUS 304
304	X2CrNi18-10		X5CrNi 18 10	304S 16		SUS 304-CSP
304			XCrNi 19 9	304S 18		
304				304S 25		
304				304S 31		
304				En58E		
316	X5CrNiMo17-12-2	1.4401	X5CrNiMo17 12 2	316S 29	X5CrNiMo17 12	SUS 316
316	X5CrNiMo18-14-3	1.4436	X5CrNiMo17 13 3	316S 31	X5CrNiMo17 13	SUS 316TP
316			X5CrNiMo 19 11	316S 33	X8CrNiMo17 13	
316			X5CrNiMo 18 11	En58J		
<b>TOOL STEEL</b>						
A-2	X100CrMov5	1.2363	X100CrMov51	BA 2	X100CrMov5 1 KU	SKD 12
D-2	X153CrMov12	1.2379	X155CrvMo12 1	BD 2	X155CrvMo12 1	SKD 11
M-2	HS6-502	1.3343	S 6-5-2	BM 2	hS 6-5-2	SKH 51
M-2	HS6-5-2C					
O-1		1.251	100MnCrW4	BO 1	95MnWCr 5 KU	
W-1	CT105	1.1625	C80W2	BW 1B	110 W4 KU	SKC 3
W-1	CT80	1.1645	C80W1	BW1A	AB2C70 KU	SK 5
W-1	C105U	1.1673	C85W	BW1C	C120 KU	SK 6

Substitution is only possible after a complete examination of the individual specifications.