

EN 10028 16Mo3

16Mo3 is a EN10028 specified pressure vessel grade molybdenum steel alloy for use in elevated working temperatures.

The material is used as a weldable steel in the fabrication of industrial boilers and steel pressurised vessels found in the oil, gas and chemical industry. Due to the materials molybdenum content, 16Mo3 has excellent heat resistance and corrosion resistant characteristics.

Grade 16Mo3 is available ex-stock from Gnee and the material comes with test certification and stamping. Please refer to technical information for this grade below.

Mechanical Properties of 16Mo3

Grade	Thickness	Temperature (Deg C)									
	(mm)	50	100	150	200	250	300	350	400	450	500
		MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa
16Mo3	< 16	273	264	250	233	213	194	175	159	147	141
	> 16 < 40	268	259	245	228	209	190	172	156	145	139
	> 40 < 60	258	250	236	220	202	183	165	150	139	134
	> 60 < 100	238	230	216	200	182	163	145	130	120	115
	> 100 < 150	218	211	200	186	171	153	135	120	110	105
	>	208	200	190	176	161	143	125	110	100	95

Grade	Thickness	Temperature (Deg C)									
	150 < 250		2	1	8	3	8	4	1	3	8

Chemical Composition of 16Mo3

	%
Carbon (C)	0.12/0.20
Silicon (Si)	0.35
Manganese (Mn)	0.40/0.90
Phosphorus (P)	0.025
Sulphur (S)	0.010
Chromium (Cr)	0.030
Molybdenum (Mo)	0.25/0.35
Nickel (Ni)	0.30
Nitrogen (N)	0.012
Copper (Cu)	0.30