

ASTM A 194M 3

ALLOY STEEL

NUT MATERIAL FOR HIGH TEMPERATURE SERVICE

ASTM A 194M 3 specification covers alloy steel Type Molybdenum-chromium hexagon nut intended for use with bolts or stud bolts. ASTM A194M 3 where high temperature service is required. It is typically compatible to use with Bolts ASTM A193 Gr.B5 where high temperature service and corrosive resistant is required. Occasionally determined as stainless steel best in high-temperature and/or high-pressure service. Heat-treated and annealed at minimum temperature of 1,050 °F (565 °C).

Chemical Properties

C	Si	Mn	P	S	Cr	Mo
0.10 Min	1.00 Max	1.00 Max	0.040 Max	0.030 Max	4.0-6.0	0.40-0.65

Mechanical Properties

Proof Load Using Threaded Mandrel- METRIC (kN)

Hardness

TYPE	M6	M8	M10	M12	M14	M16	BHN	HRB	HRC
HEAVY HEX	29.2	44.1	69.9	101.6	138.6	189.2		Min	
HEX	20.8	37.9	60	87.3	119	162.5	248-352	-	24-38

TYPE	M20	M22	M24	M27	M30	M36
HEAVY HEX	295.2	365.1	425.4	553.4	676	984.5
HEX	253.6	313.6	365.4	475.1	580.6	845.6

Heat Treatment

Quenched & Tempered@565°C.

Equivalent Designation

UNS S50100
W.Nr. 1.7362

CUSTOMER ASSISTANCE : customer@TorqBolt.com