

MATERIAL GRADE DATA SHEET

ASTM A 194M 8RA



NUT MATERIAL FOR HIGH TEMPERATURE SERVICE

ASTM A 194M 8RA is a very good corrosion resistant austenitic steel and strenght properties. It maintains strenght at high temperatures, even sub-zero and when welded. Very low magnetic permeability. Non-magnetic even after cold work hardening. ASTM A 194M 8RA have Excellent resistance to atmosphere and to wide variety of salts, organic acids and foodstuffs. Moderate resistance to weak solutions of reducing acids. Superior to Cr-Mo grades in halides and seawater. It is impervious to integranular corrosion.

Chemical Properties

С	Si	Mn	P	S	Cr	Мо	Ni	V	N	Cb+Ta
0.06 Max	1.00 Max	4.0-6.0	0.045 Max	0.030 Max	20.5-23.5	1.50-3.00	11.5-13.5	0.10-0.30	0.20-0.40	0.10-0.30

Mechanical Properties

Proof Load Using Threaded Mandrel- METRIC (kN)

Hardness

TYPE	M6	M8	M10	M12	M14	M16	BHN	HRB	HRC
HEAVY HEX	11.1	20.1	31.9	46.4	63.3	86.4		Min	Max
HEX	10.4	18.8	29.9	43.4	59.2	80.9	183-271	88	25

TYPE	M20	M22	M24	M27	M30	M36
HEAVY HEX	134.8	166.7	194.2	252.5	308.6	449.4
HEX	126.2	156	181.8	236.4	288.9	420.8

Heat Treatment

Carbide Solution Treated in the finished condition.

Equivalent Designation

UNS S20910

CUSTOMER ASSISTANCE : customer@TorqBolt.com