

MATERIAL GRADE DATA SHEET

# ASTM A 194M 8LNA



NUT MATERIAL FOR HIGH TEMPERATURE SERVICE

ASTM A 194M 8LNA nuts are intended for high-pressure or high-temperature service or both, Austenitic stainless steel may be solution annealed or annealed and strain-hardened. When annealed and strain hardened austenitic stainless steel is ordered in accordance with Supplementary equirement, AISI Type 304N with restricted Carbon, For grades of alloy-steel bolting material suitable for use at lower range of high-temperature applications, reference should be made to ASME Specification SA 354. Use of coated fasteners at temperature above approximately one-half the melting point of coating is not recommended unless consideration is given to the potential for liquid and solid metal embrittlement, or both. Carbide Solution Treated in the finished condition.

## **Chemical Properties**

С	Si	Mn	Mn P		Cr	Ni	N	
0.030 Max	1.00 Max	2.00 Max	0.045 Max	0.030 Max	18.0-20.0	8.0-11.0	0.10-0.16	

## **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			
HEX	10.4	18.8	29.9	43.4	59.2	80.9	126-192	60-90	-

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 S30453

CUSTOMER ASSISTANCE : customer@TorqBolt.com