

All Thread Rod ASTM A449 TY 1

SUBMITTAL SPECIFICATIONS

Abstract of ASTM A449-10

Material Grade: Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength

Chemical Requirements (%):

Carbon:	0.30 – 0.52
Manganese (min):	0.60
Phosphorus (max):	0.04
Sulfur (max):	0.05
Silicon:	0.15 – 0.30

Mechanical Requirements:

SIZE IN INCHES	TENSILE KSI Min	YIELD KSI Min	ELONGATION IN 4D MIN (%)	REDUCTION OF AREA MIN (%)	HARDNESS BRINELL
1/4 to 1	120	92	14	35	253 to 319
1-1/8 to 1-1/2	105	81	14	35	223 to 286
1-5/8 to 3	90	58	14	35	183 to 235

Identification Marking: Manufacturers ID Plus A449

Recommended Hardware:

SIZE INCHES	PLAIN NUTS	HDG NUTS	WASHERS
1/4 to 1-1/2	A563B	A563DH HVY HEX	F436
1-5/8 to 3	A563A HVY HEX	A563DH HVY HEX	F436

Nuts of other grades and styles having specified proof load stresses greater than the specified grade and style of nut are suitable.

Per ASTM A563, A194-2H may be substituted for A563-DH

Finish Options:

Plain

HDG to ASTM A153*F2329