

ASTM A193 B7 STUD

ALLOY STEEL

MECHANICAL PROPERTIES

DIAMETER	MINIMUM TEMPERING TEMPERATURE F	TENSILE STRENGTH,MIN KSI	YIELD STRENGTH,MIN,0.2% OFFSET, KSI	ELONGATION IN 4D,MIN, %	REDUCTION OF AREA,MIN, %	HARDNESS, MAX
2-1/2 AND UNDER	1100	125	105	16	50	321 HB OR 35 HRC
OVER 2-1/2 TO 4	1100	115	95	16	50	321 HB OR 35 HRC
OVER 4 TO 7	1100	100	75	18	50	321 HB OR 35 HRC

CHEMICAL PROPERTIES

ELEMENT	RANGE	PRODUCT VARIATION, OVER OR UNDER
CARBON	0.37-0.49	0.02
MANGANESE	0.65-1.10	0.04
PHOSPHORUS, MAX	0.035	0.005 OVER
SULFUR, MAX	0.040	0.005 OVER
SILICON	0.15-0.35	0.02
CHROMIUM	0.75-1.20	0.05
MOLYBDENUM	0.15-0.25	0.02

B7 STUDS ARE INTENDED FOR USE IN PRESSURE VESSELS, VALVES, FLANGES, AND FITTINGS FOR HIGH TEMPERATURE OR HIGH PRESSURE SERVICE, OR OTHER SPECIAL PURPOSE APPLICATIONS. B7 STUDS ARE SUPPLIED BY CAIN BOLT & GASKET INC. USING END TO END MEASUREMENTS IN LIEU OF 1ST GOOD THREAD TO 1ST GOOD THREAD MEASUREMENTS. THE NUT NORMALLY USED WITH A B7 STUD IS AN A194 GR 2H HEAVY HEX NUT.

NOTE: PROPERTIES AND APPLICATION PARAMETERS ARE TYPICAL AND ARE PRESENTED IN GOOD FAITH BUT NO WARRANTY IS EXPRESSED OR IMPLIED.