

HEAVY HEX BOLTS / STUDS A193-B7M

SUBMITTAL SPECIFICATION

"ABSTRACT OF ASTM A193"

"ALLOY-STEEL & STAINLESS STEEL BOLTING MATERIALS FOR HIGH TEMPERATURE SERVICE"

MATERIAL / GRADE: CHROMIUM-MOLYBDENUM, AISI 4140/4142, ASTM A193-B7

CHEMICAL REQUIREMENT (%):

CARBON	0.37-0.49
MANGANESE	0.65-1.10
PHOSPHOROUS, MAX	0.035
SULFUR, MAX	0.040
SILICON	0.15-0.35
CHROMIUM	0.75-1.20
MOLYBDENUM	0.15-0.25

MECHANICAL REQUIREMENTS:

2 1/2" & UNDER DIAMETERS

	<u>MINIMUM</u>	<u>MAXIMUM</u>
TENSILE STRENGTH (KSI)	100	
YIELD STRENGTHS (KSI)	80	
ELONGATION IN 4D (%)	18	
REDUCTION OF AREA (%)	50	
HARDNESS (BRINELL)		235
HARDNESS (ROCKWELL)		B99

IDENTIFICATION SYMBOL: B7M (UNDERLINE DENOTES 100% HARDNESS TESTED)

OTHER:

ALL BOLTS & STUDS, UNLESS OTHERWISE SPECIFIED IN THE PURCHASE ORDER SHALL BE THREADED IN ACCORDANCE WITH ANSI/ASME B1.1 UNIFIED INCH SCREW THREADS, CLASS 2A FIT. BOLT HEADS SHALL BE IN ACCORDANCE WITH THE DIMENSIONS OF ANSI/ASME B18.2.1, HEAVY HEX BOLTS. UNLESS OTHERWISE SPECIFIED IN THE PURCHASE ORDER, THE HEAVY HEX BOLT SERIES SHOULD BE USED. ADDITIONAL INFORMATION CAN BE FOUND IN ASTM A193/A193M, (ALLOY STEEL AND STAINLESS STEEL BOLTING MATERIALS FOR HIGH-TEMPERATURE SERVICES).

NUTS:

NUTS SHALL CONFORM TO ASTM A194, UNLESS OTHERWISE SPECIFIED. ADDITIONAL INFORMATION CAN BE FOUND IN ASTM A194/A194M, (CARBON AND ALLOY STEEL NUTS FOR BOLTS FOR HIGH PRESSURE AND HIGH-TEMPERATURE SERVICE).

FLAT WASHERS: UNLESS OTHERWISE SPECIFIED, ALL WASHERS SHALL BE SIMILAR MATERIAL AS THE NUTS.

Pacific Coast Bolt

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