

BOLTS & STUDS, A449 TY.1

SUBMITTAL SPECIFICATION

"ABSTRACT OF ASTM A449 TY 1"

"QUENCH & TEMPERED STEEL BOLTS & STUDS"

GRADE: 1045 STEEL, ASTM A449 TYPE 1

CHEMICAL REQUIREMENTS (%):

CARBON	0.28-0.55
MANGANESE, MIN	0.60
PHOSPHOROUS, MAX	0.040
SULFUR, MAX	0.050

MECHANICAL REQUIREMENTS:

<u>¼" TO 1" DIA(INCL)</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
TENSILE STRENGTH (KSI)	120	
YIELD STRENGTHS (KSI)	92	
HARDNESS (BRINELL)	255	321
HARDNESS (ROCKWELL)	C25	C34

<u>1 1/8" TO 1 ½" DIA (INCL)</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
TENSILE STRENGTH (KSI)	105	
YIELD STRENGTHS (KSI)	81	
HARDNESS (BRINELL)	223	285
HARDNESS (ROCKWELL)	C19	C30

IDENTIFICATION SYMBOL: THREE RADIAL LINES 120 DEGREES APART

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 HEX BOLTS. UNLESS OTHERWISE SPECIFIED IN THE PURCHASE ORDER, THE HEX BOLT SERIES SHOULD BE USED. ADDITIONAL INFORMATION CAN BE FOUND IN ASTM A449, (QUENCH AND TEMPERED STEEL BOLTS AND STUDS).

NUTS:

NUTS SHALL CONFORM TO ASTM A194-2H, UNLESS OTHERWISE SPECIFIED. ADDITIONAL INFORMATION CAN BE FOUND IN ASTM A194/A194M, (CARBON AND ALLOY STEEL NUTS FOR BOLTS FOR HIGH PRESSURE OR HIGH-TEMPERATURE SERVICE).

FLAT WASHERS: ALL WASHERS SHALL BE SIMILAR MATERIAL AS THE NUTS. (F436)

Pacific Coast Bolt