



FIG. 190

FABRICATED RISER CLAMP

www.pipingtech.com/fig190

SERVICE:

In situations where the use of a welded lug attachment would create an undesirable crushing effect on the pipe wall, this clamp can transfer the load from the pipe wall to the riser clamp by means of hold-down lugs welded to the pipe.

Clamps may be furnished in either Carbon or Alloy steel with bolting to suit, using an allowable stress of 10,000 PSI. Temperature correction factors listed in "CHART A" are based on allowable stresses listed in MSS-SP-58.

METHODS OF SELECTION:

1. Determine total load to be supported and service temperature of the piping system.
2. Refer to "CHART A" and determine the temperature correction factor for the clamp material being used.
3. Multiply total load by the correction factor to obtain a corrected load.
4. Refer to "CHART C" and locate the point determined by the intersection of the total load coordinate and the pipe size curve. Project this point horizontally until it intersects with the "D" dimension coordinate. Directly above this point is the required stock size.
5. The bolt diameter is obtained by using the uncorrected total load and referring to "CHART B".

ORDERING:

Specify pipe outside diameter, total load, design temperature, material and dimension "D" or center to center of hanger rods.

NOTE:

Pipe clamp can be fabricated to any specified material.

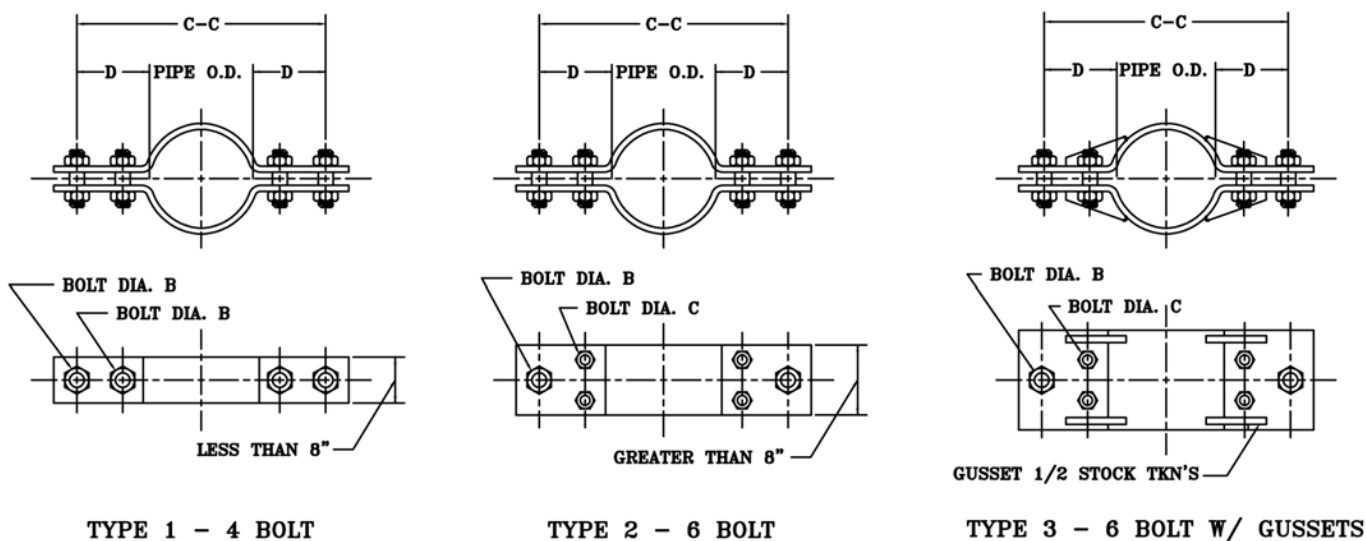


CHART A - STRESS-TEMPERATURE CORRECTION FACTORS

MATERIAL SPECIFICATION		DESIGN TEMPERATURE °F											
ASTM	GRADE	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
A36	-	0.8	0.83	0.89	1.06	-	-	-	-	-	-	-	-
A-387	11	0.66	0.66	0.66	0.66	0.69	0.76	0.91	1.53	-	-	-	-
A-387	22	0.66	0.66	0.66	0.66	0.69	0.76	0.91	1.28	1.72	2.38	-	-
A-240	304	0.94	0.95	0.96	0.97	0.99	1	1.02	1.02	1.11	1.21	1.45	1.81

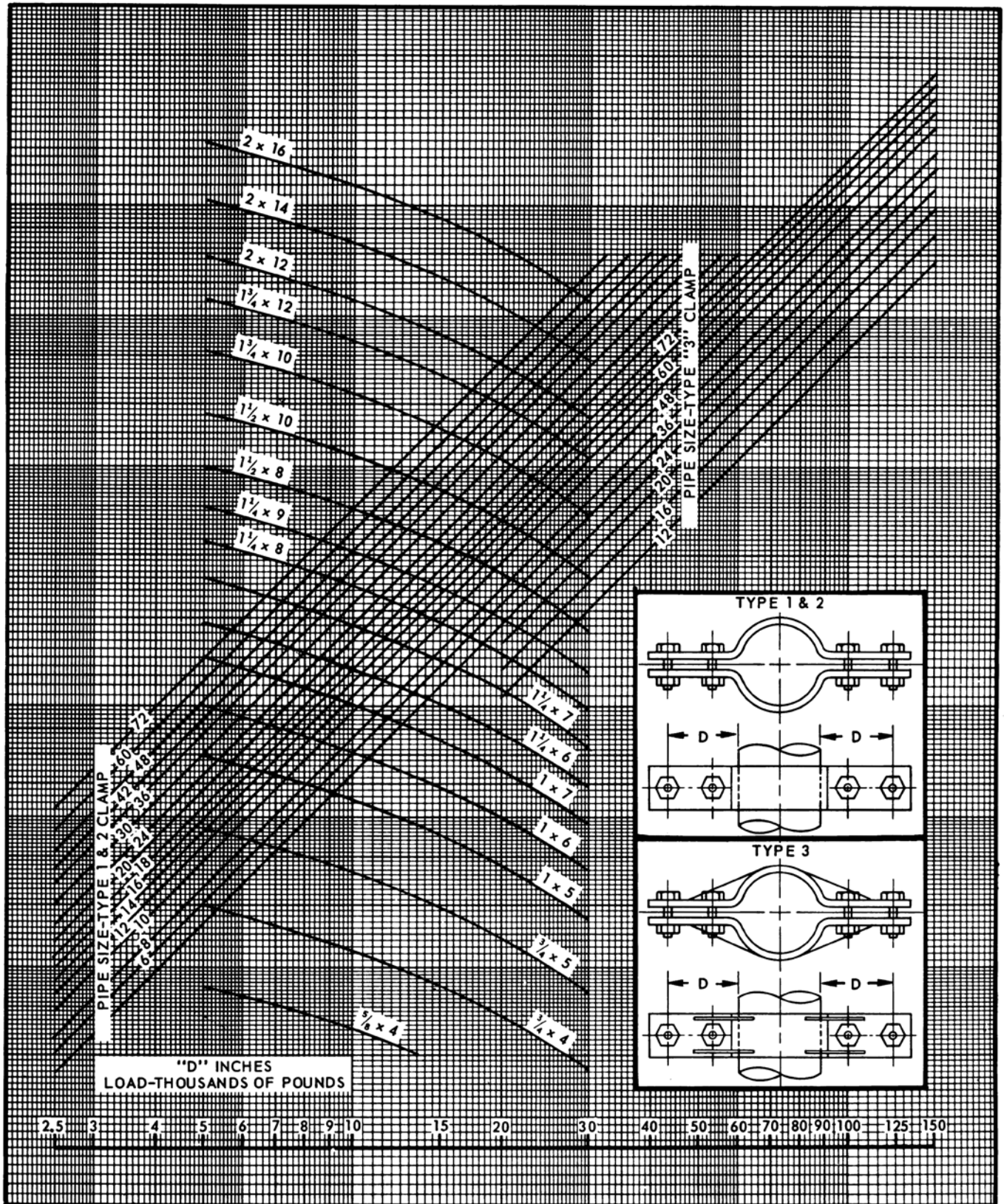
CHART B - CLAMP SPACING AND BOLT SIZES

UNCORRECTED TOTAL LOAD (lb.)	3,400	4,700	6,200	8,000	10,000	12,000	16,000	19,000	25,000	32,000	40,000	55,000	67,000	82,000	96,000	118,000	135,000	154,000
BOLT - B	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4
BOLT - C	-	-	-	3/4	7/8	1	1	1 1/8	1 3/8	1 1/2	1 3/4	2	2	2 1/4	2 1/2	2 3/4	3	3
SPACE - S	7/8	1	1 1/4	1 1/2	1 1/2	1 3/4	1 7/8	2 1/4	2 1/4	2 1/2	3	3 1/4	3 1/2	4	4	4 1/4	4 1/2	4 3/4

SCOMPONENTS01.XLS-07/01/09



CHART - C



SUPPORT ASSEMBLY COMPONENTS

Types 2 and 3 may have single or double inner bolts.