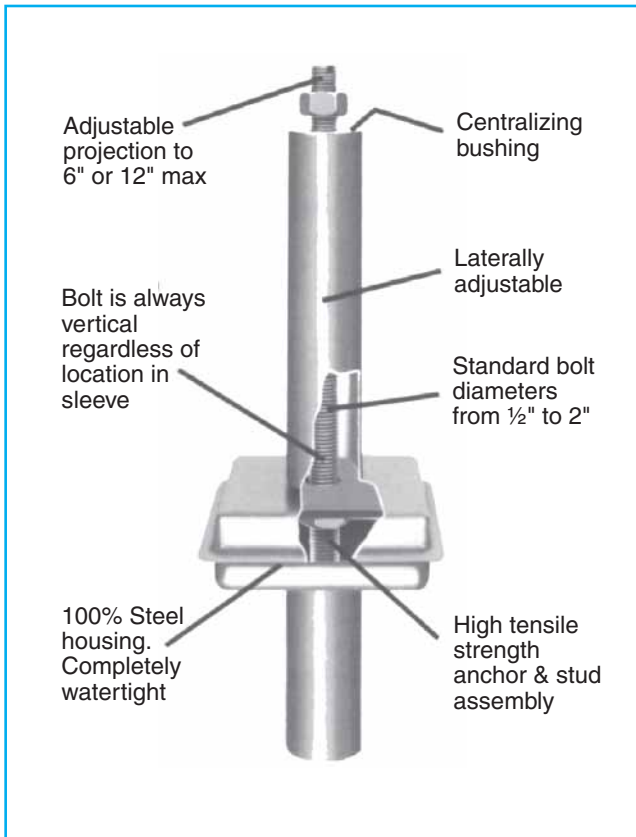


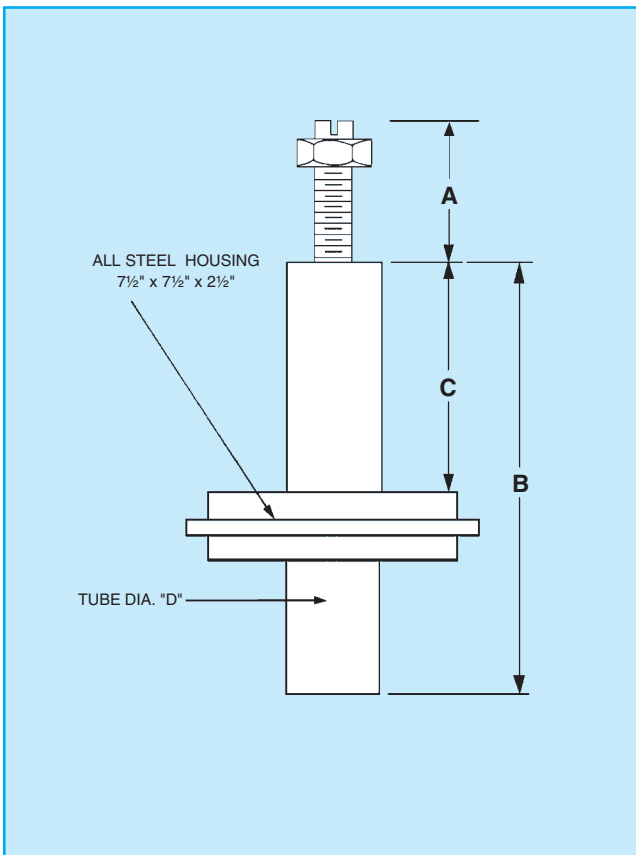
UNISORB® JAKEBOLT® HEAVY DUTY ANCHOR BOLTS



Heavy Duty JAKEBOLTS offer a truly cost effective way to provide strong, problem-free, high quality anchors for virtually any concrete foundation/machinery application. They are designed to be hung from a template or welded directly to reinforcing steel, then cast in place during new foundation construction.

Constructed entirely of steel, the Heavy Duty JAKEBOLTS are tough, durable, and MIG welded watertight to prevent contamination of internal components during installation. Each JAKEBOLT comes supplied with a centralizing bushing which doubles as a seal and protects against contamination during grouting. JAKEBOLTS are manufactured with retractable studs to allow a "Clear Floor" condition at any time. Anchor studs can be adjusted to project above the floor from 0" to 6" or from 0" to 12", depending on the bolt specified for the installation. The entire internal anchor assembly can be adjusted laterally as well as vertically to compensate for normal construction variances in both hole location and machine foot thickness.

The Heavy Duty JAKEBOLT incorporates 90,000 psi tensile strength steel in the bolts. The all-steel anchor assembly is designed for service under the most severe conditions. Special versions of the Heavy Duty JAKEBOLT are available upon request by consulting UNISORB Engineering.



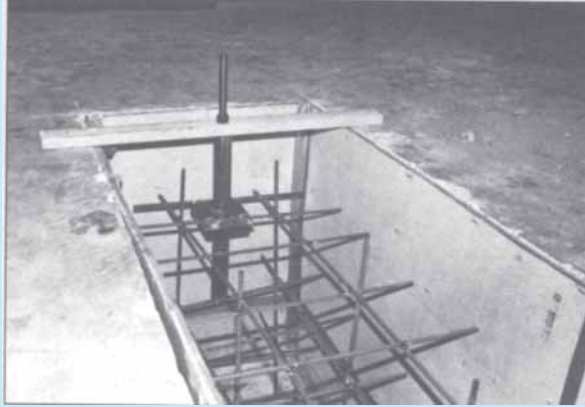
SPECIFICATIONS

Model Bolt Size	Projection Above Floor "A"	Over-All Length "B"	Top Tube Length "C"	Tube Dia. "D"	Total Bolt Centerline Movement
1/2 x 6	0-6	20	11 1/2	2 1/2	1 3/4
5/8 x 6	0-6	20	11 1/2	2 1/2	1 1/2
3/4 x 6	0-6	20	11 1/2	2 1/2	1 1/2
7/8 x 6	0-6	20	11 1/2	2 1/2	1 1/4
1 x 6	0-6	20	11 1/2	2 1/2	1 1/4
1 1/4 x 6	0-6	20	11 1/2	2 1/2	1
1 1/2 x 6	0-6	20	11 1/2	2 1/2	3/4
1 3/4 x 6	0-6	26 1/2	18	3 1/4	1 1/4
2 x 6	0-6	26 1/2	18	3 1/4	1
5/8 x 12	0-12	25 3/4	11 1/2	2 1/2	1 1/2
3/4 x 12	0-12	25 3/4	11 1/2	2 1/2	1 1/2
7/8 x 12	0-12	25 3/4	11 1/2	2 1/2	1 1/4
1 x 12	0-12	25 3/4	11 1/2	2 1/2	1 1/4
1 1/4 x 12	0-12	25 3/4	11 1/2	2 1/2	1
1 1/2 x 12	0-12	25 3/4	11 1/2	2 1/2	3/4
1 3/4 x 12	0-12	32 1/4	18	3 1/4	1 1/4
2 x 12	0-12	32 1/4	18	3 1/4	1

All dimensions in inches.

UNISORB® JAKEBOLT® HEAVY DUTY ANCHOR BOLTS

CASE HISTORY



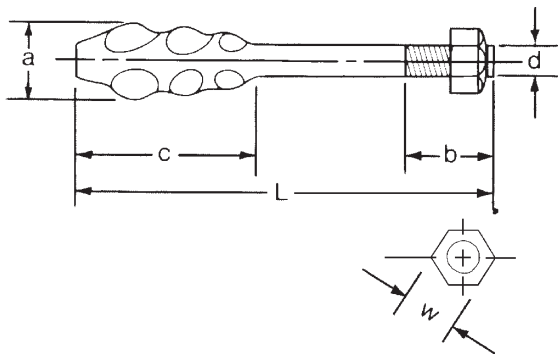
JAKEBOLT ANCHORS

A large metalworking facility involved in the manufacturing of oil field equipment installed their machines using UNISORB Heavy Duty JAKEBOLT Anchors. JAKEBOLTS are installed when the foundations are poured. This approach offered the following advantages over previously used methods:

- No expertise in grouting techniques are required by the installation crew.
- The foundation does not require special preparation such as pre-cast holes and pre-wetting.
- There is no time delay to allow the grout to cure when setting machines.

Several machines have been installed successfully using this method and the company has been very satisfied with the results. Use of all-steel Heavy Duty JAKEBOLTS has become the standard installation method for this company.

UNISORB® VECTOR™ ANCHOR BOLTS



UNISORB® VECTOR™ ANCHOR BOLTS

Made from high quality forged steel, VECTOR BOLTS have a series of angular facets which resolve vertical stress forces into a cone-shaped pressure pattern. An advantage of this unique design is the increased contact area between the bolt and the grout. The wedge shaped design on the bottom of the bolt transfers the tensile load of the stud into a lateral compressional load in the foundation assuring maximum pull out strengths. The increase in load transfer to the foundation results in a reduction of the embedment depth required to obtain full strength of the anchor. This reduction in required embedment depth lowers the installation cost by reducing the core drilling and grouting requirements.

VECTOR BOLTS are available in the diameters and lengths shown below in a 90,000 PSI minimum tensile strength material.



SPECIFICATIONS

TYPE	m m INCH	BASIC DIMENSIONS					STANDARD LENGTH "L"					
		d	b	a	c	w						
EM- 12	mm	12	30	24	70	19	150	200	-	-	-	-
	inch (Ref.)	1/2	1 3/16	1	2 3/4	.75	6	8	-	-	-	-
EM- 16	mm	16	40	32	90	24	150	200	250	300	360	-
	inch (Ref.)	5/8	1 5/8	1 1/4	3 1/2	.94	6	8	10	12	14	-
EM- 20	mm	20	50	40	100	30	200	250	300	360	400	460
	inch (Ref.)	3/4	2	1 1/2	4	1.2	8	10	12	14	16	18
EM- 24	mm	24	60	48	135	36	300	360	400	460	-	-
	inch (Ref.)	1 5/16	2 3/8	1 7/8	5 3/8	1.4	12	14	16	18	-	-
EM- 30	mm	30	75	60	150	46	300	400	460	600	-	-
	inch (Ref.)	1 3/16	3	2 3/8	6	1.8	12	16	18	24	-	-
EM- 36	mm	36	90	72	180	55	400	600	-	-	-	-
	inch (Ref.)	1 7/16	3 1/2	2 7/8	7	2.2	16	24	-	-	-	-

Other sizes & lengths available. Contact UNISORB Engineering.