



BIACH PRODUCT BULLETIN

CUSTOM DESIGNED BOLT AND STUD TENSIONERS

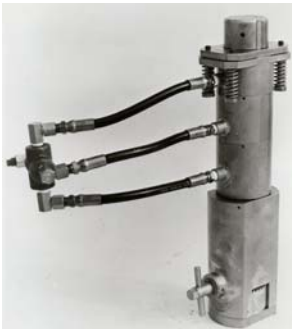
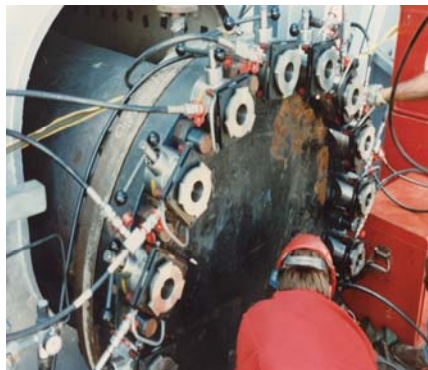
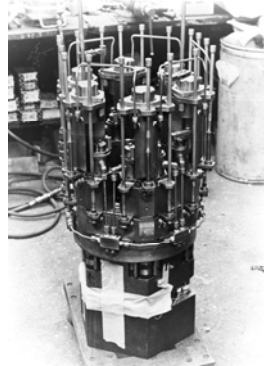
The nature of bolted connections presents many variables. Load requirements differ. Obstructions create challenges. Varying joint lengths of fasteners play a critical role in developing load requirements and tensioner capacity. Stud, bolt and nut materials can affect tensioner loading and pressure ratings.

While Biach has addressed standard ANSI flanges with its "CC" tensioner line and those designs can be utilized on other applications, few other applications share common parameters.



Virtually all Biach designs incorporate a spring powered piston return mechanism and drive gear method of nut rotation and seating.

The illustrations below depict some of the unique designs we've created for difficult projects:



(continued)



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Biach engineers focus on the details of each project to assure:

- adequate load is provided
- all spatial restrictions are cleared
- handling concerns are met
- operator use is simplified
- design integrity and long life are achieved

Design review focuses on specific data of the application. Below is *one* form of our data sheets:

FLANGE DATA SHEET

2690-B
REVISION: 7/10/92

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Nearest Obstruction

ITEM NO.	STUD DIAMETER	LOAD REQUIRED	TPI	NO. OF STUDS	FIG. NO.	"A" DIAMETER	"B" DIAMETER	"C" DIAMETER	"D" DIAMETER

"E"	"F"	"G"	"H"	"J"	"N"-NUT

NOTES:

1. Load required signifies residual stress per stud in PSI or residual load in LBS.
2. If nuts other than heavy hex nuts are used ie; round, combination round hex, regular Std hex provide drawings with full details.
3. TPI-give No. of threads per inch and the type of thread.
4. Indicate if dimensions are metric.

5. "J" is the nearest obstruction above the stud.
6. "F" is approximately 3/4 of the stud diameter.
7. Washers not required for tensioning but can be accommodated, please advise.
8. Indicate if studs are not fully threaded.

For over 50 years, Biach engineers have addressed thousands of difficult bolting projects with custom designs. Visit www.biach.com to view case histories or see other data sheets. Contact Rob Gregory (ext. 215, RobG@biach.com) to discuss your project's specific requirements.