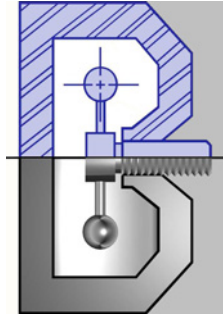


BIACH INDUSTRIES

Engineered Tooling Systems



Full Classroom Operator Training Packages

Site specific training for your Biach equipment

Designed to suit the specific piece of equipment used by the site, these packages go into greater detail giving a true classroom training class to operators expecting to use the equipment. It is also highly valuable to previous students since they may not have operated the equipment since the previous outage 9, 18 or 24 months ago.

The training packages for consist of the following components:

- Instructor Lesson Plan
- Student Classroom Guide
- Computer Based Training
- Flip Charts
- Job Aids

Classroom Material

All materials are designed to be complimentary. Consistency in language and use of images/illustrations facilitates comprehension and retention. The materials will provide the equipment user the opportunity to learn all necessary detail, and on-the-job reference material. The components of each training package are designed for use in different environments.

Computer Based Training

The Computer Based Training module covers the same material as the classroom training, but gives the student the choice of going through the program sequentially or going to specific segments for a refresher.

Each CBT includes a testing feature to help the student know how well they comprehended the material. This testing feature can also be used as a basis for operator qualification.

Subject matter examples

- QD and QDH tensioner
- Thread-On w/ Puller bar drives
- Standard Air Pump
- High Capacity Air Pump
- EPN Pump
- Stud Removal Tool
- SEMS
- Polar Crane
- Refuel Crane



Further innovation from Biach to provide the latest technologies to make your work easier!

Lesson plans are guides which tell the instructors:

- What material will be covered
- What the student is expected to learn and be able to do
- What support materials are required
- How long the segment should take to complete

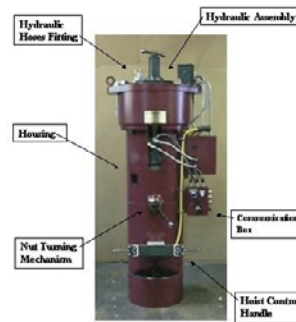
Operating Procedures: Instructor Guidelines

Learning Objectives	<ul style="list-style-type: none"> • Identify the various job responsibilities of the Tensioner Operator. • Describe the process for Tensioning and De-Tensioning. • Identify the operating controls for the QD-H Tensioners. • Describe the major Tensioner operating procedures.
Key Points To Cover	<ul style="list-style-type: none"> • Pre-Start Check List (page 34) • Describe the Tensioning process (page 35) • Describe the Tensioning and De-Tensioning Sequence (page 36) <ul style="list-style-type: none"> • Describe other peoples role in the overall Tensioning operation • Positioning and Latching the Tensioners (page 37) • Verifying Piston Return (page 38) • Seating or Loosening Nuts (page 39) • Removing Tensioners from Studs (page 40) • By-pass Operation (page 42)
Group Discussion	Have class discuss their previous experiences.
Time	45-50 minutes
Training Aids	<ul style="list-style-type: none"> • Flip Chart • Transparencies / Photos • Job Aids

Student Classroom Guide book provides:

- Media to support the class discussion
- Site specific review and reference material
 - Basics
 - Safety
 - How it Works
 - Parts & Functions
 - Initial Setup
 - Operation
 - Troubleshooting

Typical Nuclear Stud Tensioner

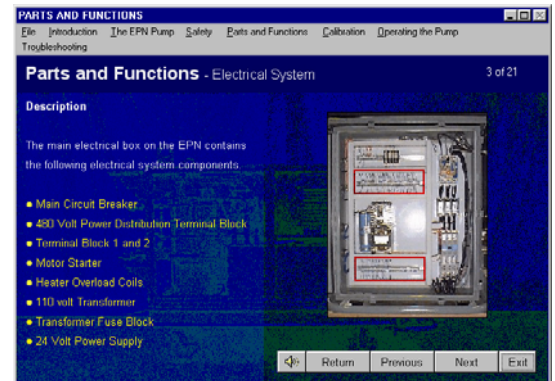


Key Parts to a Tensioner

Part	Function
Housing	Contains the Nut Turning mechanism and supports the hydraulic system.
Hydraulic Assembly	Takes the hydraulic pressure generated by the EPN Pump and translate it into a linear force used to stretch the RPV studs.
Nut turning mechanism	Engages with and rotate the RPV nut clockwise or counter clockwise.
Hydraulic Hoses Fitting	Transfers pressurized hydraulic fluid from the pump to the tensioner.
Hoist Control Handle	Provide a mounting location for the Tractor & Hoist controls.
Communications Box	The Communication Box Assembly is to house the: <ul style="list-style-type: none"> • Latch/Unlatch selector switch and indicator lights. • Target Pressure Indicator Light, and • Dump Pressure Pushbutton.

Power point presentation supports the instructor by:

- giving visual structure to the classroom presentation
- provides large visual aids for instructors use
- access to support media such as video clips and sound



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