UNDER-PRESSURE PERFORMERS

O-SERIES VALVE CHANGING TOOLS
TBD SERIES VALVE CHANGING TOOLS
FPT SERIES VALVE CHANGING TOOLS
HOT TAP TOOLS
SOLDERING AID TOOLS

Expansion Seal Technologies

(Formerly Expando Seal Tools)
Leaders in Tube Testing and Plugging Technology
O-SERIES VALVE CHANGING TOOLS
Changing valves under low-medium pressure

Easy to use for quick valve change and maintenance operations under fluid or vapor system pressure. Expanded neoprene seal locks sealing element in pipe. The complete selection of O-Series tool sizes is applicable on all types of full flow valves in sizes up to 4". Rugged plated carbon steel construction. Neoprene seals resist temperatures up to 260 °F. Optional materials include stainless steel construction with viton or silicone seals. Available on an off-the-shelf basis for your needs.

TBD SERIES VALVE CHANGING TOOLS
Changing valves under extreme pressure

In-line locking device holds seal securely in place. Ideal for safe, dependable use with high pressure or oily liquid systems. Six hardened grippers engage the inside pipe wall via two locking cones. Cones adjust independently of expansion seal, allowing the locking device to be set prior to sealing off flow. The TBD Series tools are applicable in any high pressure system where there is sufficient length of pipe on the pressure side to accommodate the locking device and seal. Plated or painted carbon steel is standard with neoprene seals. Stainless steel with viton or silicone seals are optional, also with longer or shorter lengths.

FPT SERIES VALVE CHANGING TOOLS
Changing tank valves under extreme pressure

Safe, positive engagements are assured with two main neoprene seals and an in-tank/in-header toggle locking device. Recommended for use with oily liquids or any pressure system with complete safety. Equipped with fittings for easy attachment of a come-along to move sealing element through valve. Special seals are available for use in changing saddle flanged valve or gaskets on pipe taps.
HOT TAP TOOLS
Tap existing lines without shutting off system pressure

Safe, quick way to tap existing lines under pressure without shutting down system pressure. Carbon steel construction. Hole saws are replaceable and good for one dozen hot taps. Models available for electric, air or manual operation.

SEVEN EASY STEPS

1. Bolt saddle to pipe and install a close nipple and gate valve of correct size for extended service.

2. Attach assembly tube and hole saw to valve and thread on.

3. Open valve and push hole saw through until pilot drill touches pipe. Tighten main gland.

4. Attach 1/2" variable speed drill to drill rod. Start drill at proper speed and drill through pipe. When pipe is cut through, coupon will spin back into hole saw.

5. Retract hole saw and coupon out through the valve into assembly tube and close valve.

6. Remove tapping tool.

7. Clear valve briefly by opening to flush out chips or cuttings that weren't washed back into assembly tube. Shut off valve and install piping.
SOLDERING AID TOOLS
Easy way to solder when you encounter residual water

Eliminates the drips when used in conjunction with an inverted clean out "T" - you'll sweat any joint the first time every time. Can be used on vertical runs as well as horizontal runs. Standard materials are plated carbon steel with neoprene seals, stainless steel with viton or silicone seals are optional.

Choose from three Soldering Aid Kits

Kit #1: Includes 1/2" thru 1" tools.

Kit #2: Includes 1/2" thru 2" tools.

Kit #3: Includes 1/2" thru 3" tools.

Available sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"

Three easy steps for horizontal runs

**STEP 1**
Slip an inverted clean out "T" on to the copper service- insert and expand proper size Soldering Aid. Solder at A; water is held back by Soldering Aid.

**STEP 2**
After soldering at A, remove Soldering Aid and solder at B. Water will run out inverted clean out "T" and will not affect any sweat joints beyond point B.

**STEP 3**
After completing job (beyond point B) - Pipe dope the clean out plug and insert in clean out "T". Job is finished.

Four easy steps for vertical runs

**STEP 1**
Insert Soldering Aid through cleanout "T" with plug removed - expand Tool and Solder at A.

**STEP 2**
Remove Soldering Aid and select proper width Ceramic Wick and insert EXTRACTOR wire through the Wick, bend into shape and insert through cleanout "T".

**STEP 3**
Pack first through opening B and then through C. For tighter packing moisten Wick and winding-out damp-dry.

**STEP 4**
When Soldering is complete, remove Wick and screw in cleanout "T" Plug. Job is complete.