

Vernon Hydraulic Tube Expansion

Parallel Pin Tube Expansion



The **Vernon Tube Expanding System** uses a PLC to control all operations. A force transducer transmits pressure for roll torque, and signals cycle completion to retract the mandrel. Consistent RPM throughout the expanding cycle increases production, and the hydraulic system eliminates the need to reverse the expander mandrel. Parallel Pin expanders minimize axial flow of tube material, resulting in a better expanded joint. The Parallel Pin expander is specified by some companies to be used when tube to tube sheet welds are required. This can help reduce the stress on the weld.

The **Vernon Tube Expanding System** is an electrically 5 hp driven hydraulic unit that includes electric motor, two hydraulic pumps, hydraulic controls, and electrical controls in a powder coated cabinet on casters.



PNEUMATIC BALANCE ARM





PRECISION POWERHEAD

A single switch starts the cycle and resets for the next cycle. A pause switch allows the operator to stop the cycle at any point and release to continue the cycle. The pneumatic balance arm makes it easy to position the powerhead precisely, ensuring optimal production and quality.



ELECTRICAL CONTROL PANEL

- “E STOP” Button
- “MOTOR START” Button
- “LUBE ON” Button
- “ADVANCE CYCLE” indicator
- “CYCLE COMPLETE” indicator



HYDRAULIC CONTROL PANEL

- Roll torque
- Mandrel advance rate
- Mandrel advance force



DURABLE TOOLING

- Parallel Pin expanders
- Inventory for 1/2” to 2”
- Longer reach expanders available



ELECTRONIC PAPERLESS RECORDER

- Sets torque roll pressure
- Records pressure & time at completion (At completion of cycle)
- Easy to program

