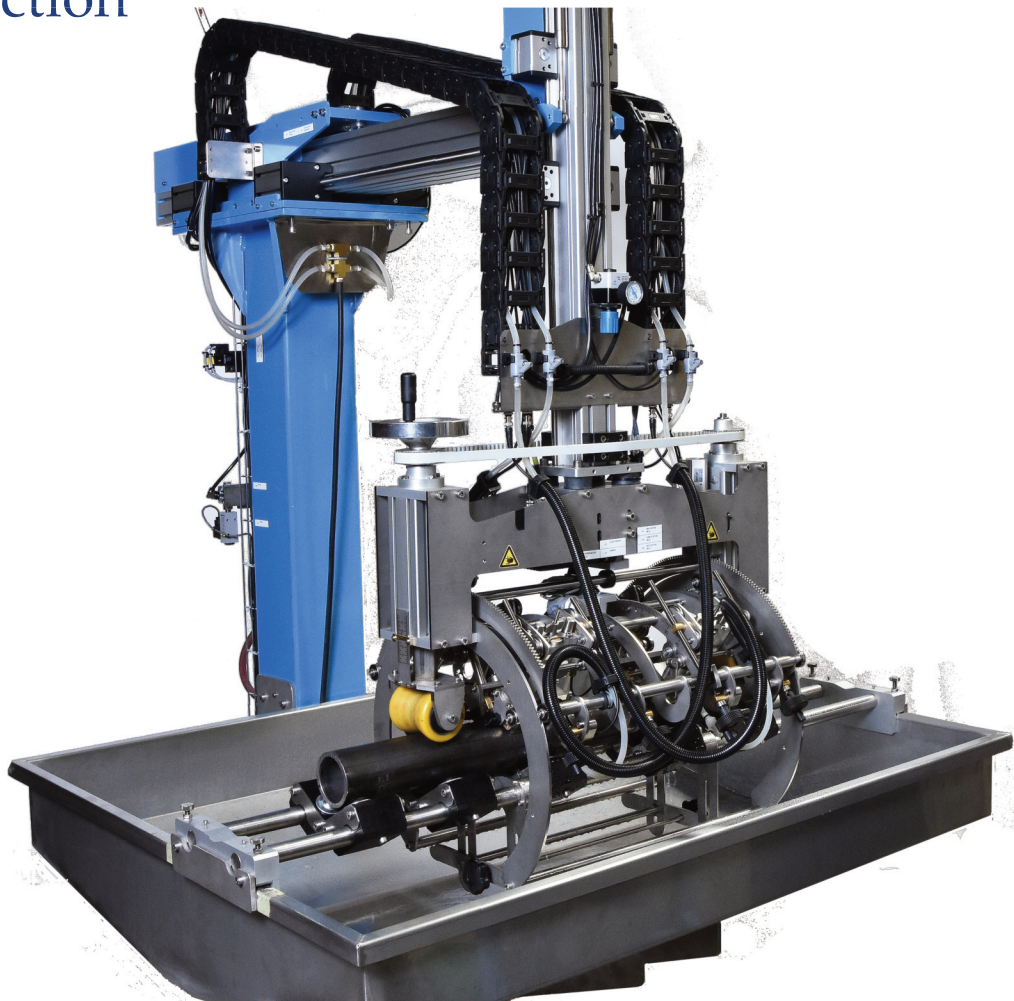


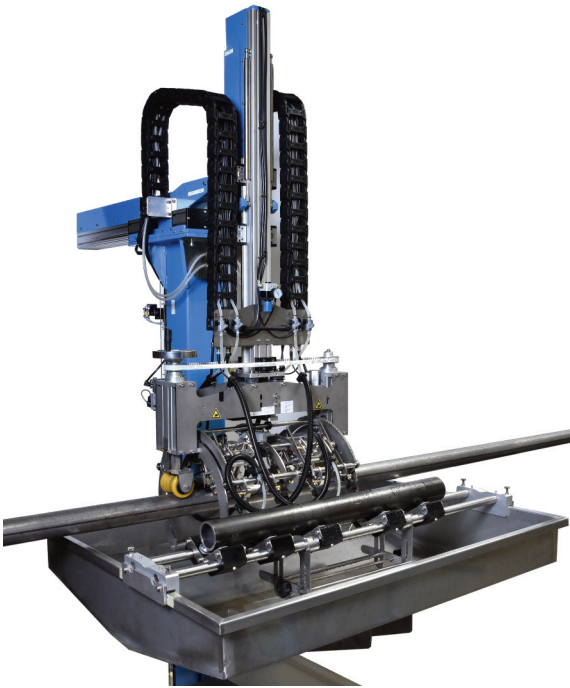


Echomac[®] Weld Line Tester

Ultrasonic Testing of Tube Weld Quality During Production



Monitor Weld Quality as the Tube is being Produced



Weldline Tester with the Test Head conducting on-line production testing of a tube. A separate calibrate tube is shown in the off-line position in the foreground.

- ❑ Test for longitudinally oriented defects that are typical of the ERW welding process.
- ❑ Typically, four channels are used with both CW and CCW sound modes for detection of ID and OD longitudinal defects between 5% and 10% of wall thickness. Additional channels can be added.
- ❑ Operates with Echomac® instrumentation, and a test head incorporating transducer assemblies with irrigated shoes for constant coupling with the tube being tested.
- ❑ Test head is supported by a gantry that allows it to operate on the weld line for mill testing, or off line for easy calibration for a new tube size.

- ❑ Entire test head including the transducer assemblies can be rotated using a convenient “joy stick” to follow the weld to achieve continuous optimal testing over a weld position of 10:00 to 2:00 o’clock.
- ❑ Operator can verify the position by observing a monitor display of a laser beam that must bisect the weld center.
- ❑ Change out individual transducer shoes for size changes in 5 seconds using quick disconnect mechanism.
- ❑ Coupling alarm alerts the operator to any loss of coupling between any transducer and the tube caused by loss of water or improper alignment.
- ❑ System is programmed with the transducer locations, and a spray marker located downstream automatically sprays paint onto the actual defect location to enable sorting of the cut tubes.



The remote operator station contains essential controls including the video monitor for checking transducer positioning with respect to the weld-zone, and the “joystick” for making adjustments.