

## PLS-24 AUTOMATIC WELDING SYSTEM

The Weldlogic PLS – 24 Automatic Precision Longitudinal Seam Welder blends our standard P.L.S. products together with advanced Micro Processor Controls and Mechanization.

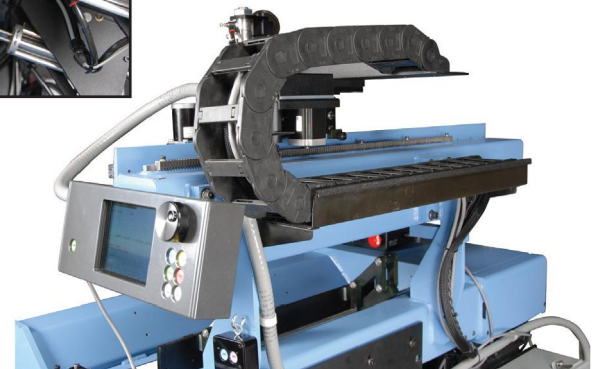
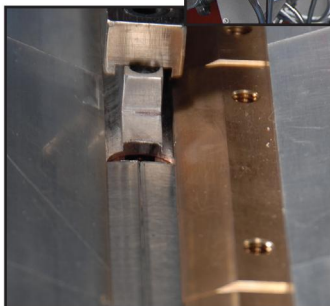
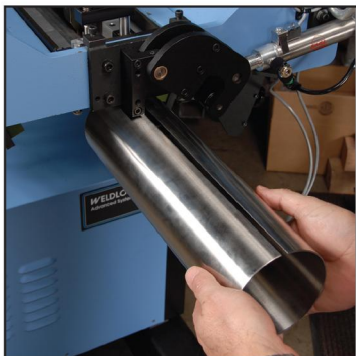
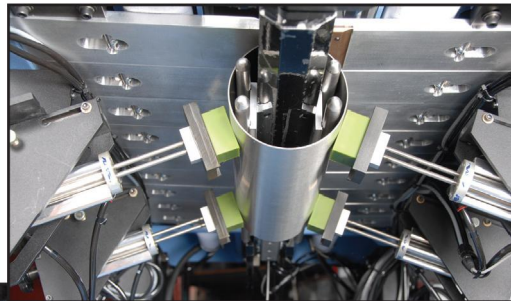
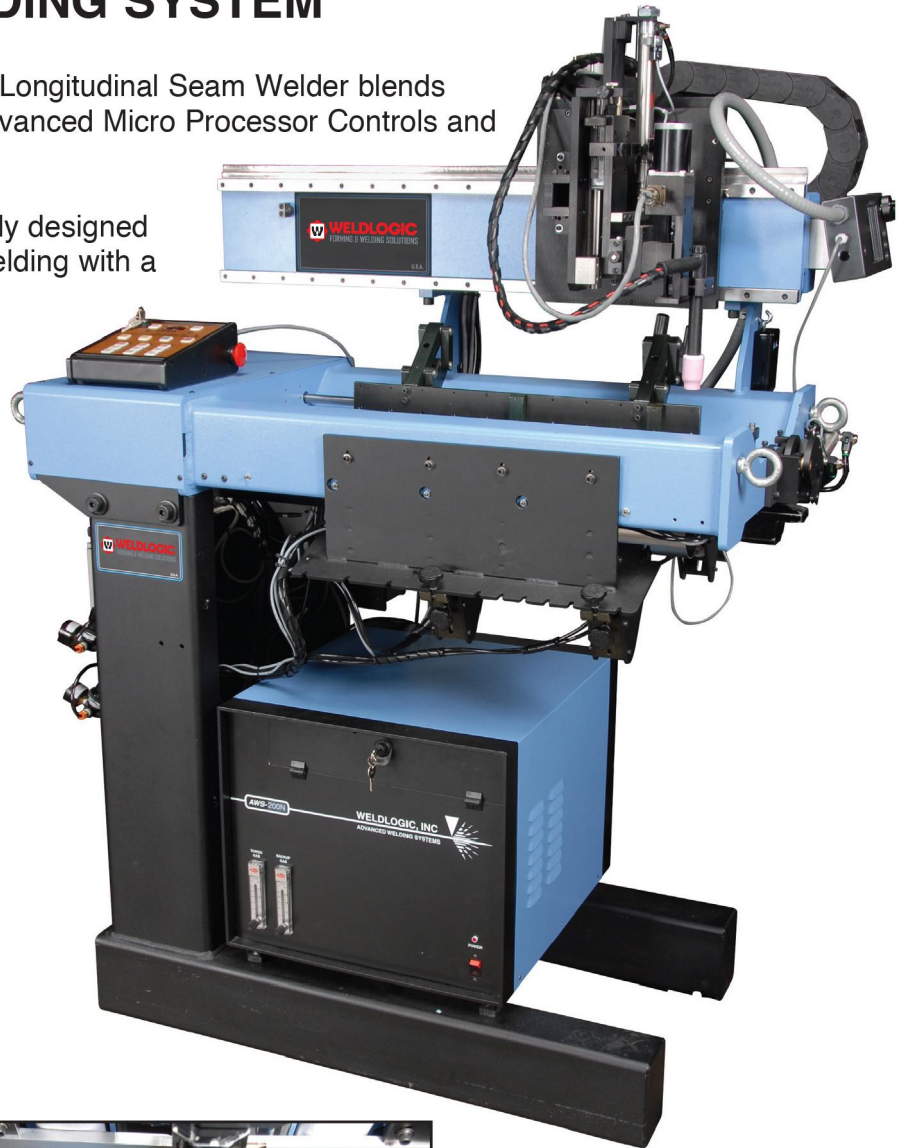
This highly engineered product was specifically designed for companies requiring high volume seam welding with a minimum of operator effort and time.

The PLS - Automatics accommodate 2" - 24" diameters and lengths up to 60". We select the best weld process for the application based on requirements and budget. Tube I.D. /O.D. Tooling is generally designed specific to the application requirements.

Weldlogic's leadership in the field of Manufacturing Precision seam welders make us an ideal partner to engineering a system to meet your specific weld quality and production goals.

### FEATURES

- High Volume Production
- Micro Processor Controlled
- Tig \* Plasma \* Laser \* Mig
- Automatic Material Positioning
- Minimum Skill Operator
- Quick Return on Investment
- Quick Change Over



## **BENEFITS OF THE PLS – AUTOMATIC**

- Low skill level to produce High Volume / High Quality Seam Welds.
- Leaves operator free to perform additional tasks in a cell environment. (Tube rolling + Post Weld processing during weld sequence)
- Weld Development plus Training provided by Weldlogic when the product is ready for acceptance.
- Quick change over tooling to New Diameters, Lengths and Thicknesses (less than 5 minutes)
- Weldlogic Micro-Processor Controller with 5" screen is easy to use and easy for shop personnel to learn.
- Remote Sequencing Pendant – Manually steps the Auto Sequence Forward / Reverse for easy quick set up /adjustment.
- Wide Range of Weldlogic manufactured accessories to enhance performance; Arc Distance Control, Wire Feeder, Arc Oscillator, Tube Rollers and End Formers.



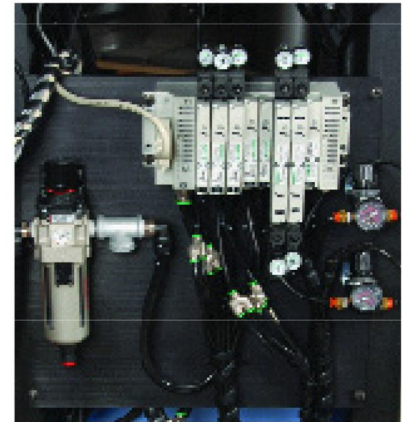
**The outstanding productivity of Weldlogic PLS – Automatic is accomplished by a precisely controlled sequence of operation using regulated Pneumatics, Proximity Sensors and a Micro Processor Controller, all fiber optically isolated for use in an industrial environment.**

## **SEQUENCE OF OPERATION**

With the aligning blade in the lowered position, the operator slides the tube in (seam up) to the rear end stop and the sensor detects the correct part insertion.

The following steps occur automatically:

- Low pressure applied to right / left clamping fingers to secure tube.
- Both “radial” clamp banks close tube seam to alignment blade
- “Axial” pusher squares tube seam
- High pressure applied to “left” side of clamping fingers to secure material
- Seam alignment blade is raised and removed
- Radial clamping force closes seam gap to center line position
- High pressure applied to “right side” of clamping fingers
- Torch pneumatically lowered to seam center home position
- The Arc is automatically initiated and proceeds according to selected program. (All motion, current, voltage, wire and gas are closed loop controlled to provide high accuracy and consistency)
- When the torch reaches the end of the part and weld is complete, the torch is pneumatically raised to upper limit.
- Both sets of clamp fingers (right & left) automatically open for rapid part removal
- The alignment blade is lowered after part removal to ready the system for the next sequence.



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