MEGALAP SEAM WELDER

FOR CONTINUOUS STEEL PROCESSING LINES



- HIGH-SPEED COIL JOINING PROCESS
- SAFE, RELIABLE OPERATION
- QUICK CHANGE WELDING WHEELS
- AUTOMATIC SCRAP REMOVAL

- FULLY AUTOMATIC OPERATION
- CONSISTENT AND REPEATABLE
 WELDING PROCESS

Taylor-Winfield Technologies has a long and substantial history of providing the highest quality coil joining welding machines to the metals processing industry. Our MegaLap Seam Welder is no exception. Designed and built to join thickness ranges of 0.01" - 0.25" (0.25 mm -6.35 mm) and widths up to 76" (1930 mm), the MegaLap is the solution for joining a wide variety of material grades including those with yield strengths ≥ 1200 MPA.





FOR CONTINUOUS STEEL PROCESSING LINES

Strip Material Specifications:

- Steel Grades: AHSS, Stainless, IF, High Carbon Steels, HSLA and Silicon Steels
- Strip Thickness: 0.01" to 0.25" (0.25 mm to 6.35 mm)
- Strip Width: 18" to 76" (457 mm to 1930 mm)
 - ≤0.150" (≤3.81 mm) Single pass
 - ≥0.151" (≥3.83 mm) Dual pass of the planish and one pass welding sequence with strip

*Gauge retraction (PrepLap Feature) is used for heavy gauges to minimize weld over-thickness.

Automatic Prep/Lap Seam Welding Sequence



mill to pass the weld

support and tension rolls

or galvanizing the strip

Creates a "Rollable Weld" - no need to release tension in your

Less concern about weld breakage when moving across strip

In many applications, the welded joint does not have to be

removed before subsequent processing - coating, annealing,

Benefits:

- Lower initial investment, operating and maintenance costs than TIG, MIG or Laser welding systems
- Fast cycle times typically less than 60 seconds for the maximum strip width and thickness
- More forgiving welding process compared to laser and other joining processes
- No specialized skilled training required to operate and/or maintain the welder

Mechanical Features:

- Dual re-squaring shear with automatic scrap extraction
- Entry and exit adjustable overlap clamps allows for weld compensation in both welding directions

Electrical Features:

- Single phase AC, DC or MFDC weld control options
- Constant current weld control for consistently high weld quality
- Automatic weld parameter set-up with "Upper Level" computer communication via Profibus, Ethernet, or TCP/IP protocol 250 KVA welding transformer

Weld quality destructive "bulge" tester

Off-line weld wheel dresser

good/bad weld notification

Weld seam monitor - machine diagnosis and monitoring system with

Strip edge notchers

Single pair HD weld heads with

Two pair planish wheels with one pair located before and after welding heads

hydraulic nut

Optional Machine Features Available:

- Induction pre/post weld heat treatment (PWHT)
- Single and dual entry pass-line systems
- Entry/Exit centering tables, with pinch and looper Rolls

AUTOMATED ASSEMBLY







Single Pair HD Welding Heads With Hydraulic Nut and Two Pairs Planish Wheels For Single or Dual Pass Welding



Sequence Entry Side - Movable Carriage In Post Weld Position





COIL JOINING

Allows for single or dual pass welding sequence with over-thickness reduction