MILL PROCESS EQUIPMENT COIL JOINING TwinLap Seam Welder



Now you can join full-hard and automotive grade materials in a single pass with a near "0" joint



The TwinLap welds and anneals (tempers) the weld in a single pass. Welding cycle times are reduced, weld over-thickness is minimal and weld quality is higher than with conventional seam welding processes. The TwinLap Seam Welder is available with AC, DC and MFDC power.

	Min.	Max.
Coil Width	18″ 457 mm	76″ 1930 mm
Coil Thickness	.006″ 0.15 mm	.138″ 3.5 mm

over-thickness.

Taylor-Winfield Technologies, Inc. is proud to introduce the TwinLap Seam Welder – the newest member of its extensive line of seam welders. This patented process is designed for steel producers that process "automotive grade" and other difficult to join materials.

The TwinLap welds low carbon equivalent steels such as DDQ, EQ, IF, SEDDQ and outperforms other welding processes for full-hard and Advanced/Ultra High Strength Steels (AHSS, UHSS) like Dual Phase, HSLA, Silicon, Stainless, TRIP and other complex phase and martensitic steels.



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Applications:

The TwinLap is a high speed joining process. It is the welder of choice for Anneal & Pickle, Coil Build-Up, Coil Preparation, Galvanizing, Silicon, Recoiling Lines and others. The weld passes through Temper Mills and Tension Levelling equipment without releasing pressure on the strip! When minimal weld over-thickness is required, and the strip thickness is \leq 3.5 mm for full- hard materials (4.0 mm for soft material), the TwinLap is the best solution.

The TwinLap is the welder of choice for companies that want to process automotive grade materials. It is a proven and reliable process that is more cost effective than TIG, MIG, "Mash" seam welding or Laser welding.

Benefits:

- Forgiving welding process compared to Laser and other joining processes.
- Skilled Trade personnel do not need extensive training to operate and maintain the welder.
- No need to release tension in your mill to pass the weld creates a "Rollable Weld".
- Less concern about weld breaking when moving across strip support and tension rolls.
- In many applications, the weld does not have to be removed before subsequent processing – coating, annealing, or galvanizing the strip.
- No damage to seals, rolls or bearings when passing the weld through the line.
- Less waste and scrap.
- Lower initial investment, operating and maintenance costs than TIG, MIG or Laser welding systems.
- Fast cycle time typically less than 60 seconds for the maximum width and thickness.

Mechanical Features:

- Rugged "O" frame configuration.
- Durable "Oil Bath" welding heads with quick-change weld wheel feature.
- High precision pneumatic or hydraulic dual resquaring shear with four sided cutting blades.
- Pneumatic or hydraulic entry and exit clamps with quickchange clamp liners.
- Urethane clamp inserts to prevent strip slippage and separation.
- Precision linear motion control of welding carriage.
- Automatic scrap removal.

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Electrical Features:

- AC, DC and MFDC weld current available.
- Automatic weld parameter set-up with "Upper Level" computer communication.
- Low-voltage or edge sensor weld initiation to prevent strip edge and weld wheel damage.
- Constant current weld control for consistently high weld quality.
- Various PLC's available GE Fanuc, Siemens, Rockwell Automation (Allen Bradley).
- "Upper Level" computer communication via Profibus, Ethernet, or TCP/IP protocol.
- Matrix or algorithmic weld parameter adjustment control.
- Close-coupled transformer, secondary bus bar and welding electrodes - highest weld current density

for any seam welder and lower energy usage!

Options:

- Automatic centering guides
- Automatic strip cross alignment
- Closed loop water chillers
- Notchers for trimming strip edges
- Weld quality "bulge" tester
- · Weld temperature monitoring
- · Weld wheel dresser

World Wide Service!







Technologies, Inc.

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