

FOR CONTINUOUS STEEL PROCESSING LINES



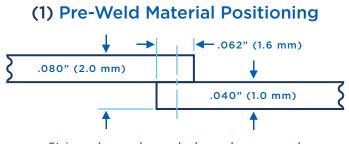
HIGH-SPEED COIL JOINING PROCESS
QUICK CHANGE WELDING WHEELS
AUTOMATIC SCRAP REMOVAL
FULLY AUTOMATIC OPERATION AVAILABLE

Taylor-Winfield has a long and substantial history of providing the highest quality coil joining welding machines to the metals processing industry. Our C-Flat Narrow Lap Seam Welder is no exception. This "C" frame machine performs a high-speed, single pass, narrow overlap seam weld followed by pressurized planishing rolls that flatten and smooth the weld. The C-Flat welder is ideally suited for process lines that require a thin, high quality weld with minimal weld overthickness.



Strip Material Specifications:

- Steel Grades: LCS, DDQ, EQ, SEDDQ, HSLA, Silicon, Stainless Steel, Uncoated and Conductive Coated Materials and more
 - Strip Thickness: .006" to .100" (0.15 mm to 2.54 mm) • Strip Width: 18" to 76" (457 mm to 1930 mm)



Strip ends are clamped, sheared square and overlapped, ready for the welding sequence.

Mechanical Features

- Pneumatic or hydraulic operation
- Entry and exit side clamps with strip anti-slip pressure pads
- Entry clamp with longitudinal strip cross alignment and horizontal overlap movements
- Exit clamp with strip pivot movement
- Dual resquaring shear
- Resquaring shear blades with four (4) cutting edges
- Oil bath weld heads with quick-change weld wheels
- Hardened planish rolls

(2) Post-Weld Seam Profile .043" (1.1 mm) .040" (1.0 mm)

Upper and lower welding wheels close and travel across the overlapped strip material, followed by hardened planishing rolls to create a welded seam with minimum overthickness.

- Weld identification hole punch (single or dual with selectable on/off)
- Welding carriage with motor driven drive screw
- Automatic scrap removal
- Automatic lower weld wheel height adjustment



- Operator HMI with machine operation feedback and alerts
- Siemens, Allen-Bradley or other PLC and control interface
- Automatic, semi-automatic and manual operation
- Remote I/O with Profibus/Profinet
- Ethernet level 2 connectivity
- Weld results and machine data acquisition with uploading to level 2 system

Optional Machine Features Available

- Automatic strip cross alignment
- Weld temperature pyrometer feedback
- Inline Induction Post Weld Heat Treatment (PWHT)
- Remote access and connectivity for monitoring of machine operation

Optional Peripheral Equipment Available

- Entry/exit strip support tables, centering guides and strip looper roll
- Dual pass strip entry pre-loader with 3 high pinch roll
- Entry and/or exit pinch rolls
- Strip edge notcher
- Free-standing Induction Post Weld Heat Treatment (PWHT) station
- Closed-looped water-cooled chiller or heat exchanger
- Weld quality destructive "Bulge" tester
- Off-line weld wheel dresser











Entry and Exit Clamp Arrangement

& Dual Resquaring Shear



Oil Bath Welding Heads

