

### PIPELINER

#### Model 609

Orbital Weld Head for Multi-Pass GMAW/FCAW Pipe Welding



Use with  
• MPS-4000 Power Source

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#### Precision Tools for Perfect, Repeatable Welds

The Magnatech Pipeliner is designed to make pipe-to-pipe and pipe-to-fitting welds. Interchangeable guide rings mount the Head on the pipe, allowing a broad workpiece size range from 16.8–152 cm (6"–60") and larger. The Pipeliner improves productivity by increasing duty cycle, reducing repair rates, and producing welds of consistent quality.

**Torch Oscillation (Weave).** Width, speed, and endpoint "Dwell" independently programmable. Torch "Cross Seam" steering electronically controlled using Remote Pendant.

**Torch Vertical Motion.** Motorized, remotely controlled.



The **Weld Head** mounts on one side of the weld joint, allowing pipe-to-fitting welds. The Head is installed and removed from the guide ring in seconds with a push-button switch. Patented guide rings never wear out and easily tolerate weld spatter and grinding debris.

**Positive Drive System** guarantees uniform rotation speed. Two Heads can be mounted simultaneously on one guide ring for faster weldout times.

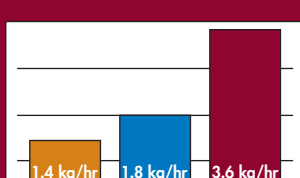
Water-Cooled 300A Torch

#### Features

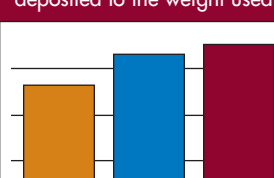
- Full Function Capability (Torch Rotation, Filler Wire Feed, the Motorized Arc Gap Control, Electronic Oscillation)
- Broad Pipe Size Range with change of single component – the Guide Ring
- Water-Cooled Torch uses standard Expendables

#### High Deposition Rate without Sacrificing Quality

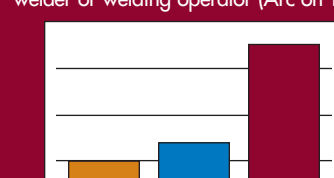
**DEPOSITION RATE\***  
Weld metal deposition per hour



**DEPOSITION EFFICIENCY**  
Ratio of weight of weld metal deposited to the weight used



**DUTY CYCLE FACTORS**  
The ratio of arc hours to clock hours for a welder or welding operator (Arc on Time)



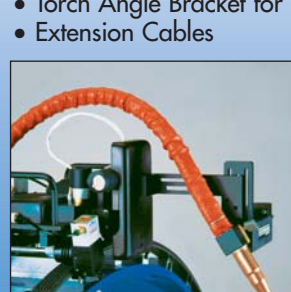
\*Based on Electrode Size:  
• SMAW-4mm (5/32") Electrode E6010  
• Manual FCAW-1.1mm (0.45") Flux Core Electrode

Pipeliner Typical Parameters  
• 24-26V, 220-260A  
• 5.1-7.6m/min. (200-300 ipm)

The Pipeliner System welds pipe in all gravity positions - meeting both ASME IX and API 1104 code requirements.

#### Options

- Pendular Torch Oscillation
- Torch Angle Bracket for Fillet/Socket Welds
- Extension Cables



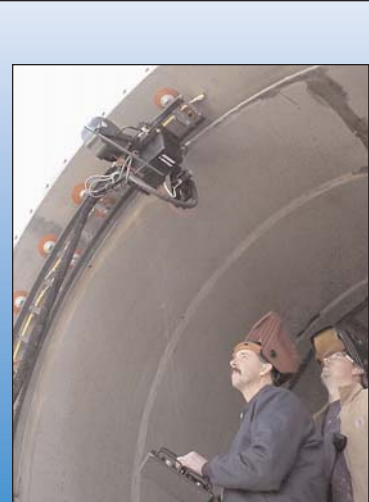
Optional Pendular Oscillator positioned for fillet welds

Optional Torch Angle Bracket for fillet and socket weld applications

#### Flx-Track™

In addition to welding pipework, the Pipeliner is also used for ID and OD welding on larger tanks, vessels, and ductwork.

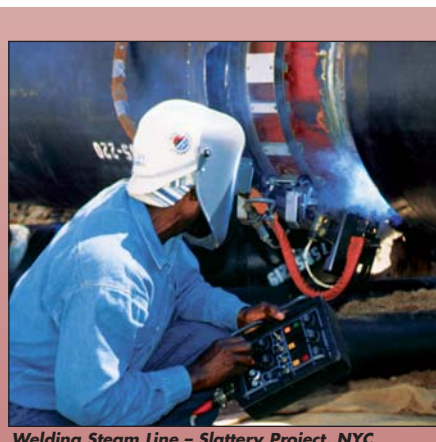
- Flexible track allows mounting on complex curved surfaces
- Standard 2.3m (7-1/2') Track sections bolt together for longer lengths
- Magnetic or Vacuum attachment



Pipeliner mounted on Flx-Track in 3.3m (11 ft.) diameter stainless steel duct



76cm (30") Gas Pipeline - Haradh Project, Saudi Arabia



Welding Steam Line - Slattery Project, NYC



Offshore Platform Topsides Module - Swecorex Project, Mexico

#### Applications

- Gas, Oil, Water Pipelines
- Steam Piping
- Chemical
- Large Diameter Vessels
- Flowlines and Risers
- Offshore Platforms - Jackets and Topsides
- Tubular Structures, Piling



27cm (10") Gas Pipeline - Estonia



76cm (30") Gas Pipeline - Bangkok, Thailand



15.2m (50') Diameter ID Weld Build-up - Refinery, Canada

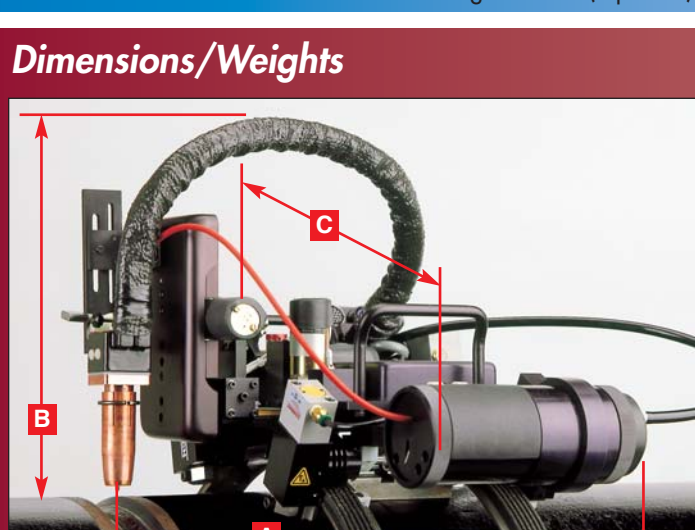


120cm (48") Water Pipeline - Hidd Project, Bahrain

#### Weld Head/Controls Specifications

<b>Application</b>	Pipe Size – 168 mm (6.625") and larger Pipe Wall Thickness – unlimited Flx-Track™ for welding on flat and curved surfaces
<b>Oscillation Module (Linear)</b>	Oscillation Stroke Amplitude: 0 – 5.1 cm (2") Oscillation Speed: 0 – 254 cm/min. (100 ipm) Oscillation Dwell: 0 – 1 second. Independently adjustable at both stroke endpoints Cross Seam Adjustment: ± 2.5 cm (1.0")
<b>Oscillation Module (Pendular)</b>	Oscillation Angular Stroke: 0 – 15° Oscillation Speed: 2.5 Hz maximum Oscillation Dwell: 0 – 1 second. Independently adjustable at both stroke endpoints Cross Seam Adjustment: ± 20°
<b>Torch Vertical Motion Module</b>	Stroke: 6.6 cm (2.625") (motorized) Speed: 152 cm/min. (60 ipm) maximum
<b>Tractor Module</b>	Poly-Track® Propulsion (Patented) Speed Capability: 0 – 76.2 cm/min. (30 ipm). Higher speed motors available Switch selectable (on Head)
<b>Wire</b>	Wire Diameter: 0.8 – 1.6mm (0.03 – 0.62") Wire Feed Speed: 0.5 – 22m/min. (20 – 866 ipm) Wire Spool Size: 15 kg (25/33 lb) WFOF, WFPF; 5 kg (10 lb) WFOH
<b>Water-Cooled Torch</b>	Amperage Capability: 300 Amps Continuous. Uses standard components
<b>Cable Length</b>	Wire Feeder on Head – 15m (50') Standard Wire Feeder Push-Pull – 8m (25') Standard Wire Feeder on Floor – 4.6m (15') Standard
<b>Torch Adjustment Capability</b>	Torch Lead/Lag Adjustment: ± 15 degrees (manual) Torch Tilt Adjustment: ± 10 degrees (manual) Angle Bracket (Optional): ± 45 degrees (manual)

#### Dimensions/Weights



Model	Axial Length <sup>1</sup> A	Minimum Radial Clearance <sup>2</sup> B	Overall Width <sup>3</sup> C	Weight <sup>3</sup>
609 WFOH	38.7cm (15.25")	24.8cm (9.75")	30.5cm (12")	9.8 kgs (21.5 lbs)
609 WFPF	37.5cm (14.75")	24.1cm (9.50")	41.3cm (16.25")	11.6 kgs (26.5 lbs)
609 WFOH	66.7cm (26.25")	26.7cm (10.5")	36.8cm (14.5")	14.4 kgs (31.75 lbs)

<sup>1</sup> Center of oscillation stroke  
<sup>2</sup> Center of vertical stroke  
<sup>3</sup> Weight with wire spool (WFOH). Includes 1.6 kg (3.5 lb.) of Torch Cable Weight (Partial)

Represented By:

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