MAGNATECH

ORBITAL WELDING SYSTEMS

PIPELINER

Model 609

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

Use with

- *MPS-4000 Power Source*

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

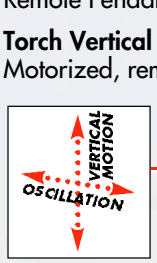
Precision Tools for Perfect, Repeatable Welds

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

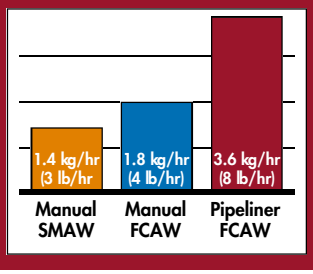
Push-Pull Wire Feed Head

Features

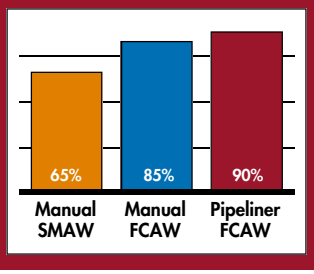
- Full Function Capability (Torch Rotation, Filler Wire Feed, Motorized Arc Gap Control, Electronic Oscillation)
- Broad Pipe Size Range with change of single component – the Guide Ring
- Water-Cooled Torch uses standard Expendables

High Deposition Rate without Sacrificing Quality

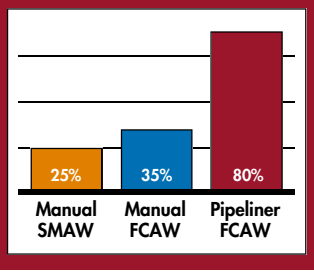
DEPOSITION RATE*
Weld metal deposition per hour



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)



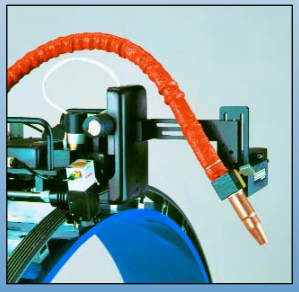
*Based on Electrode Size:
- SMAW–4mm (5/32″) Electrode E6010
- Manual FCAW–1.1mm (0.45″) Flux Core Electrode

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

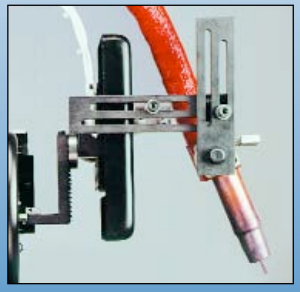
The Pipeliner System welds pipe in all gravity positions - meeting both ASME IX and API 1104 code requirements.

Options

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



Optional Pendular Oscillator positioned for fillet welds

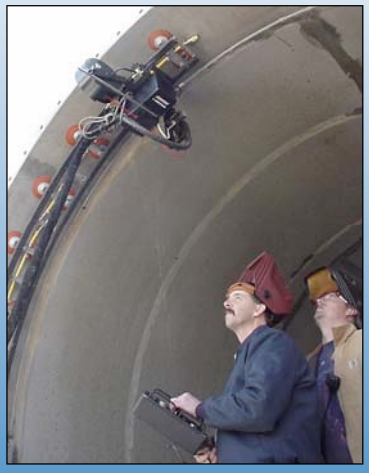


Optional Torch Angle Bracket for fillet and socket weld applications

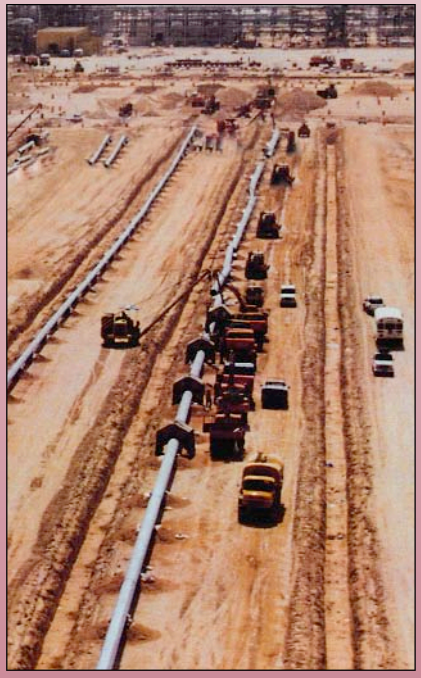
Flx-Track™

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

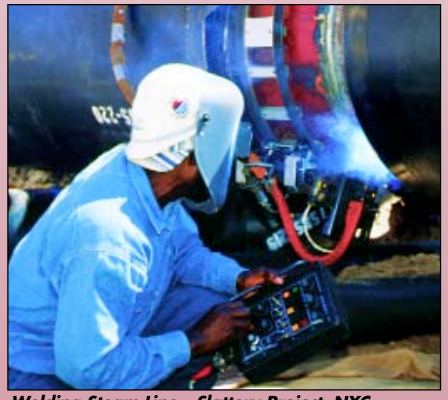
- Flexible track allows mounting on complex curved surfaces
- Standard 2.3m (7-1/2') Track sections bolt together for longer lengths
- Magnetic or Vacuum attachment



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

Applications

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

Offshore Platform Topside Module – Swecomex Project, Mexico

27cm (10")Gas Pipeline – Estonia

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

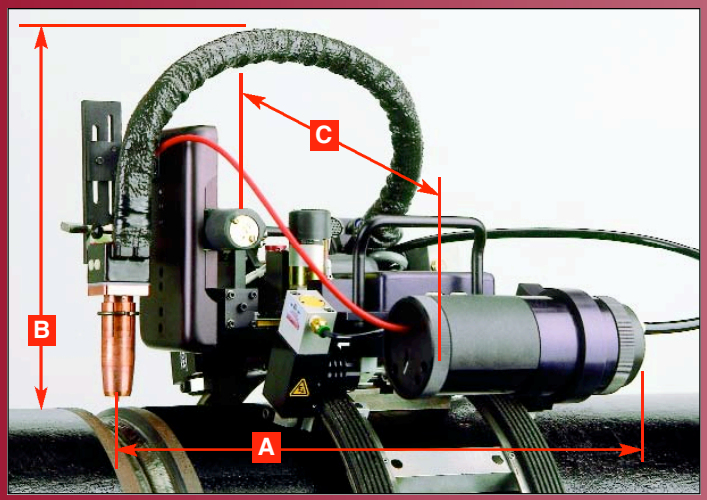
120cm (48") Water Pipeline – Hidd Project, Bahrain

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

Weld Head/Controls Specifications

Application	Pipe Size – 168 mm (6.625") and larger Pipe Wall Thickness – unlimited Flx-Track™ for welding on flat and curved surfaces	
Oscillation Module (Linear)		
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")	
Oscillation Module (Pendular)		
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°	
Torch Vertical Motion Module	Stroke: 6.6 cm (2.625") (motorized) Speed: 152 cm/min. (60 ipm) maximum	
Tractor Module	Poly-Track® Propulsion (Patented)	
Speed Capability	0 – 76.2 cm/min. (30 ipm). Higher speed motors available	
Travel Direction	Switch selectable (on Head)	
Wire	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, WFPP; 5 kg (10 lb) WFOH
Water-Cooled Torch	Amperage Capability: 300 Amps Continuous. Uses standard components	
Cable Length	Wire Feeder on Head – 15m (50') Standard Wire Feeder Push-Pull – 8m (25') Standard Wire Feeder on Floor – 4.6m (15') Standard	
Torch Adjustment Capability	Torch Lead/Lag Adjustment:	± 15 degrees (manual)
	Torch Tilt Adjustment:	± 10 degrees (manual)
	Angle Bracket (Optional):	± 45 degrees (manual)

Dimensions/Weights



Model	Axial Length A [1]	Minimum Radial Clearance B [2]	Overall Width C	Weight [3]
609 WFOF	38.7cm (15.25″)	24.8cm (9.75″)	30.5cm (12″)	9.8 kgs (21.5 lbs)
609 WFPP	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)

[1] Center of oscillation stroke
[2] Center of vertical stroke
[3] Weight without wire spool (WFOH). Includes 1.6 kg (3.5 lb.) of Torch Cable Weight (Partial)

Represented By:

MAGNATECH

Headquarters: **MAGNATECH LIMITED PARTNERSHIP**
6 Kripes Road, P.O. Box 260, East Granby, CT 06026-0260
Telephone: (+1) 860 653-2573 • Fax: (+1) 860 653-0486
E-Mail: info@magnatech-lp.com
Web Site: www.magnatech-lp.com

European Office: **MAGNATECH EUROPE BV**
Ambachtshof 15, 8251 KV Dronten, The Netherlands
Telephone: (+31) 321 38 6677 • Fax: (+31) 321 31 4165
E-Mail: info@magnatech-europe.com
Web Site: www.magnatech-europe.com