

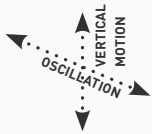


PIPELINER II 609

MAGNATECH

TORCH OSCILLATION (WEAVE)

Width, speed, and endpoint "dwell" independently programmable. Torch "cross seam" steering electronica.

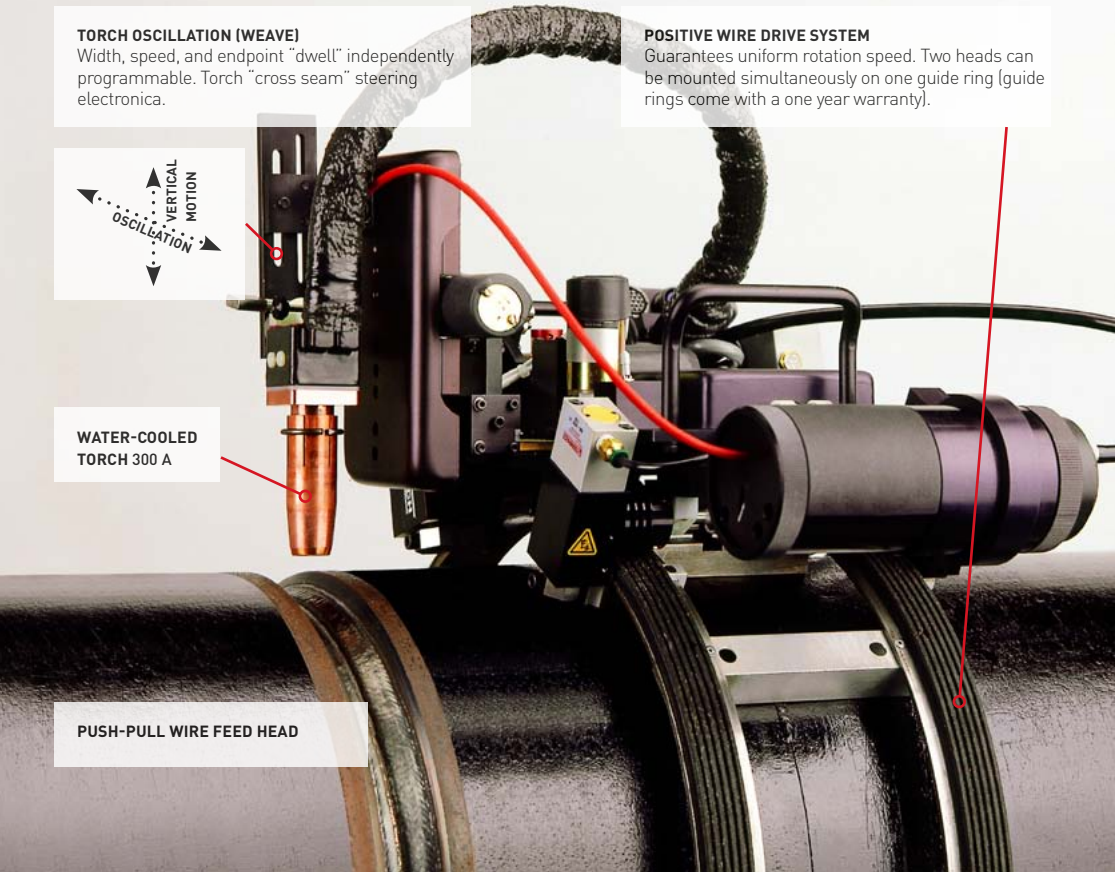


POSITIVE WIRE DRIVE SYSTEM

Guarantees uniform rotation speed. Two heads can be mounted simultaneously on one guide ring (guide rings come with a one year warranty).

WATER-COOLED
TORCH 300 A

PUSH-PULL WIRE FEED HEAD



ORBITAL WELD HEAD FOR MULTI PASS GMAW/FCAW PIPE WELDING

The Magnatech Pipeliner II 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 168 – 1524 mm (6” – 60”) and larger. The Pipeliner II improves productivity by increasing duty cycle, reducing repair rates, and producing welds of consistent quality.



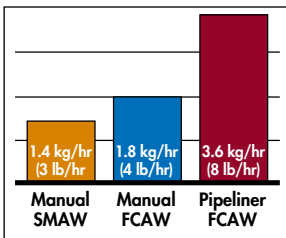
Features

- 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 – AUTOMATICALLY

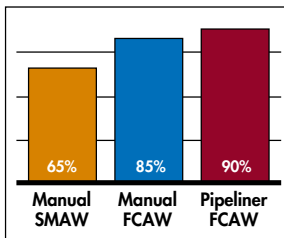
DEPOSITION RATE*

Weld metal deposition per hour



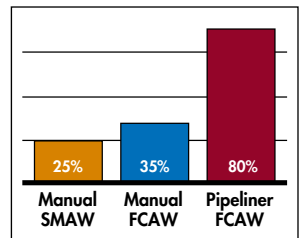
DEPOSITION EFFICIENCY

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)



PIPELINER TYPICAL PARAMETERS

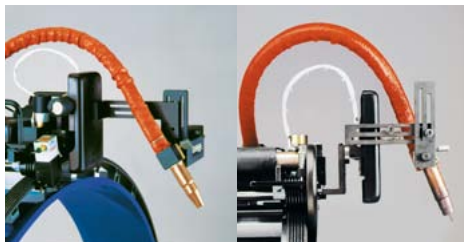
- 24–26V; 220–260A
- 5.1–7.6m/min. (200–300 ipm)

PIPELINER II 609

Options

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

LEFT Optional Pendular Oscillator positioned for fillet welds
RIGHT 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.

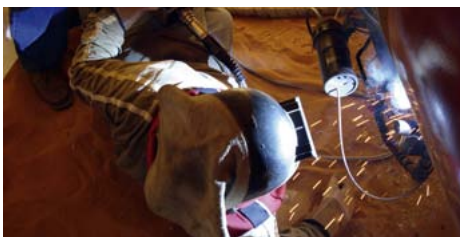
- Flexible track allows mounting on complex curved surfaces
- Standard 2.3m (7-1/2') Track sections bolt together for longer lengths
- Magnetic or Vacuum attachment

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



Applications

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



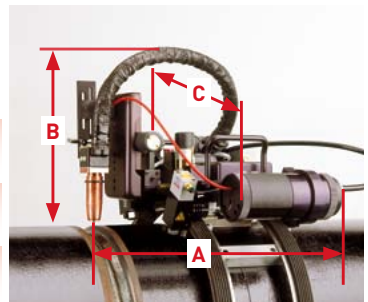
609 PIPELINER II

Specifications

Application	Pipe size – 168 mm (6.625”) and larger Pipe wall thickness – unlimited Flx-Track™ for welding on fl at and curved surfaces
OSCILLATION MODULE (LINEAR)	
Output rating	0 – 51 mm (2”)
Oscillation speed	0 – 2540 mm/min. (100 ipm)
Oscillation dwell	0 – 1 second. Independently adjustable at both stroke endpoints
Cross seam adjustment	± 25 mm (1.0”)
OSCILLATION MODULE (PENDULAR)	
Cross seam adjustment	± 20 degrees
Torch vertical motion module	Stroke: 66 mm (2.625”) (motorized) Speed: 1520 mm/min. (60 ipm) maximum
Tractor module	Poly-Track® propulsion (patented)
Speed capability	0 – 762 mm/min. (30 ipm). Higher speed motors available
Travel direction	Switch selectable (on head)
Wire	Wire diameter: 0.8 – 1.6 mm (0.03 – 0.62”) Wire feed speed: 0.5 – 22 m/min. (20 – 866 ipm) Wire spool size: 15/16 kg (25/33 lbs)
Water-cooled torch	Amperage capability: 300 amps continuous. Uses standard torch components
Torch adjustment capability	Torch lead/lag adjustment: ± 15 degrees (manual) Torch tilt adjustment: ± 10 degrees (manual) Angle bracket (optional): ± 45 degrees (manual)

Dimensions/weights

	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)



PIPELINER MPS 4000

MAGNATECH



SYNERGIC OPERATION

Of electrode speed/power output.

400 AMP OUTPUT

AUTORANGING POWER INPUT

Eliminates all internal modifications.

CART WITH BOTTLE RACK

FACTORY OPTIMIZED STORED PROGRAMS

For most materials.

INTEGRAL SWITCH

Prevents welding without torch gas flow.

COOLANT RECIRCULATOR

Coolant recirculator with integral flow switch protection.

4000 PIPELINER MPS

PROGRAMMABLE POWER SOURCE FOR MULTI-PASS ORBITAL GMAW/FCAW PIPE WELDING

The MPS 4000 is a digital inverter power source for GMAW/FCAW process welding applications. The integral weld head controller operates all Pipeliner weld head models. The MPS 4000 provides synergic control of electrode speed and power output – the welder has only to change electrode speed and the power supply will adaptively change the output parameters to maintain a stable process.



Features

- Multi-pass welding of pipes
- Operates all variants of Magnatech Pipeliner weld Heads (FCAW/GMAW process)
- 400 Amp output
- Autoranging power input eliminates all internal modifications
- Pulsed/spray modes
- Integral switch prevents welding without torch gas flow
- Coolant recirculator with integral flow switch protection
- Meets applicable NEMA, CE, CSA standards
- Pendant allows remote operation
- Synergic operation of electrode speed/power output
- Factory optimized stored programs for most materials
- Program development service available for special alloys
- Outdoor job site usage (IP23 rating)
- Cart with bottle rack

Applications

- Fossil and nuclear power plant construction/maintenance
- Steam generation equipment fabrication
- Gas and oil pipeline construction
- Marine pipeline construction
- Chemical/petrochemical facility construction and maintenance
- Large diameter vessel fabrication
- Shipyard Construction

Options

- Pendular oscillation
- Extension Cables
- Gas mixer kit
- Second bottle rack

SAFETY AND DURABILITY

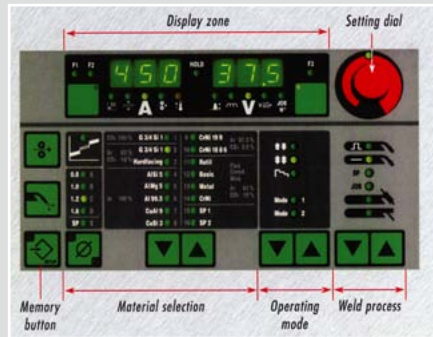
Rated IP23 – suitable and safe for field use without special protection. Field proven reliability.



PIPELINER MPS 4000

AUTOPROGRAM

The MPS 4000 comes with welding expertise already built-in. Power Source Controls stand out for their simplicity and ease of operation. Just set the wire diameter and type of material to access the factory preprogrammed optimized parameters that are stored in memory. The single-knob operation in synergic mode makes this job even easier. Power output is precisely synchronized with wire speed and is adjustable through its full range with the turn of a single knob.



PRECISE ARC LENGTH REGULATION - AUTOMATICALLY

Digital technology maintains a constant arc length with microsecond response to change in stick out. Regulated process eliminates spatter.



CONTROL PANEL - TELLS YOU ALL YOU NEED TO KNOW

- Before welding, programmed values are displayed. During welding, actual values are displayed
- At weld completion, actual values are stored and displayed by "Hold" function
- Single point settings of wire speed and voltage can be stored and recalled allowing instant access to optimized par meters for specific jobs
- Warnings are displayed: Over temperature and low water level
- Error codes allow rapid diagnosis of problems



Dimensions/weights

	POWER MODULE	CONTROLLER	WATER CIRCULATOR	WIRE FEEDER
Length	72.5 cm (28.5")	72.5 cm (28.5")	72.5 cm (28.5")	65 cm (25")
Width	29 cm (12")	29 cm (12")	29 cm (12")	29 cm (12")
Height	47 cm (18.5")	23 cm (9")	23 cm (9")	41 cm (16")
Weight	35 kg (77 lb.)	14.5 kg (32 lb)	13 kg (29 lb)	16 kg (35 lb)

4000 PIPELINER MPS

Specifications

Application	For use with all Pipeliner GMAW/FCAW process weld heads
Functions controlled	Power module power output (standard and pulsed) Electrode feed speed Weld head rotation Weld head torch oscillation (linear standard, pendular optional) Weld head electronic cross-seam adjustment Weld head arc gap control
Internal memory capability	80 synergic programs / 99 single point (voltage/wire speed) programs
MPS 4000 POWER SOURCE	
Output rating	400 A @ 50% duty cycle, 320 A @ 100% duty cycle
Max. open circuit voltage	70 V
Cos phi/efficiency	0.99 / 88%
Input power requirements (Rated load)	Volts – 200/230/400/460 (autoranging); amperes 35 A; KVA 12.7; frequency 50/60 Hz
Degree of protection	IP23
Type of cooling	AF (forced Air)
Insulation class	F
Applicable electrical standards	IEC 974-1 (IP-23S); CSA; EMC 89/336/EEC; EN 60 974-1
MODEL 712 WELD HEAD CONTROLLER	
Pendant cable length	7.6 m (25'). Extension cables available
Degree of protection	IP23 (Excluding Remote Pendant)
MPS 4000R WATER CIRCULATOR	
Pump	Centrifugal
Cooling capacity	2000 – 2300 W (at 20 EC/68° F)
Max. delivery capacity/pressure	3.5 liters/min (0.9 gal/min) at 4.2 bar (60 psi)
Coolant volume	5.54 liters (1.46 gallons)
Degree of protection	IP23
MPS 4000 WIRE FEEDER	
Drive type	4 roll (various groove geometries available)
Wire diameter	0.8 – 1.6 mm (0.03 – 0.62")
Wire feed speed	0.5 – 22 m/min (20 – 866 ipm)
Degree of protection	IP23

REMOTE PENDANT

A handheld control is used to both program and remotely operate the system. The intuitive switch layout allows the welder to make program override corrections without lifting his hood.

