

# 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.



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# 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

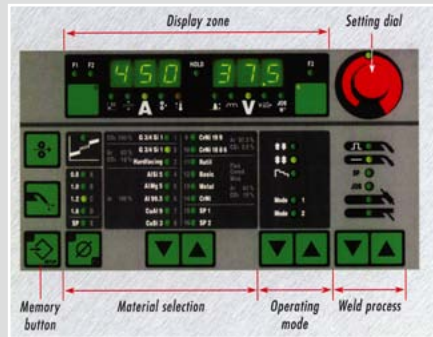
Rated IP23 – suitable and safe for field use without special protection. Field proven reliability.



# 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
<b>Length</b>	72.5 cm (28.5")	72.5 cm (28.5")	72.5 cm (28.5")	65 cm (25")
<b>Width</b>	29 cm (12")	29 cm (12")	29 cm (12")	29 cm (12")
<b>Height</b>	47 cm (18.5")	23 cm (9")	23 cm (9")	41 cm (16")
<b>Weight</b>	35 kg (77 lb.)	14.5 kg (32 lb)	13 kg (29 lb)	16 kg (35 lb)

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## Specifications

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

