

# MAGNATECH

ORBITAL WELDING SYSTEMS

## PIPEMASTER Model 515

Programmable Power Source  
For Orbital Weld Heads



*Use with*

- *Orbital Tube Weld Heads*
- *Orbital Pipe Weld Heads*
- *Tube-Tubesheet Heads*
- *Weld Lathes*

# PIPEMASTER Model 515

## Programmable Power Source For Orbital Weld Heads

### Revolutionary, Not Evolutionary

The latest generation of Pipemaster power sources is the result of a new direction in power source design. The Model 515 brings the benefits of digital technology to the orbital welding customer: unparalleled accuracy, repeatability, and reliability. The new model is half the size and weight of previous models. Digital technology forever eliminates the need for periodic weld Head calibration – motor speeds and response characteristics remain accurate and stable regardless of wear, and weld Heads can be interchanged without time-consuming calibration.

Software upgrades can be sent as e-mail attachments and loaded using a standard USB portable flash drive “memory key” (provided). The Model 515 is “internet ready” for future enhancements such as a web-based diagnostic service.

Two autoranging versions are available: a lighter weight 115/230 VAC input model, or with a wider 115/480 VAC input range, to operate on any input voltage worldwide. Both operate on 1 or 3 phase, 50/60 Hz.

### Features

- Multi-pass welding of pipes/tubes/tubesheets
- Full function capability (torch rotation, filler wire feed, electronic arc gap control, electronic oscillation)
- Operates all models of Magnatech weld Heads (GTAW process)
- 200 Amp Output
- Autoranging input eliminates all internal modifications
- Up to 100 levels per program (time-based programs)
- Stores 100 weld programs internally
- AutoProgram automatically generates procedures
- Programming and operation guided by simple prompts
- Teach mode allows rapid program development
- Programmable “override limits” provide supervisory control
- Weld parameter monitoring/out-of-limits reporting for QA/QC purpose
- Transfer programs and QC data to PC using USB flash drive “Memory Key”
- AutoTack automatically generates tack weld programs
- Large color LCD display
- Stainless steel case
- Help Files provide immediate information/assistance
- Password protection of key functions
- Waterproof Remote Pendant (25’/8m cable)
- Auto rewind feature unwraps cable at weld completion
- All weld Head functions capable of synchronization with pulsed current output
- Selectable Position or Time-based programming
- Integral switch prevents welding without torch gas flow
- Integral printer
- Detachable coolant recirculator with integral flow switch protection
- Meets applicable NEMA, CE, CSA standards



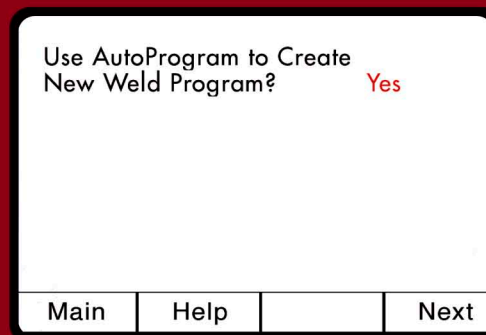
### AutoProgram

Programming is simple and intuitive by manual entry or new AutoProgram which self-generates p

Startup display



...automatically create a new weld program



...simply fill in



## Options

- Cart with bottle rack
- Extension cables
- Rugged storage/ shipping case
- Lighter weight 115/230 VAC version



## Remote Pendant

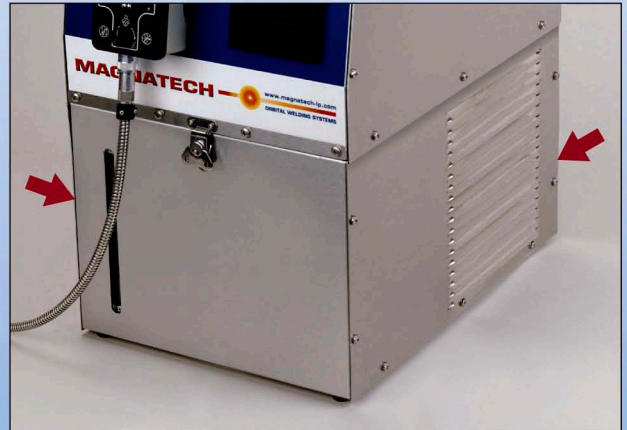
This handheld control is used to both program and remotely operate the power source. Designed to withstand hard use, the pendant incorporates a completely sealed, waterproof silicone rubber panel keypad, impervious to grinding debris and weld spatter. The color LCD display is protected by a tempered glass shield

The intuitive switch layout allows the welder to make program override corrections without lifting his hood.



## Coolant Recirculator

Detachable coolant recirculator mounts beneath power source with integral flow switch protection.



## Teach Mode

Teach Mode speeds program development. Approximate parameter values are entered or copied from an existing program.

A test weld is then made in Teach Mode. Changes made during welding are temporarily stored and can be "saved" as a new weld program.

## Programmable Overrides Provide Supervisory Control

The welder may override programmed parameters but only within preset limits. Password protected override limits are set for each parameter (0-100% of programmed value).

## Simplified Programming

Specifying the weld Head to be used from a "dropdown" menu automatically selects the preferred programming mode – position or time. Time-based programming is generally preferred for weld Heads making simple fusion welds. Multipass pipe weld Heads are operated using position-based programming, eliminating calculations to determine when parameter changes must be made. A sensor in the weld Head provides position information. All welding parameters may be changed at each level.

## Weld Monitoring/QC

Additional documentation and notes can be added to weld programs and QC records, providing traceability to individual drawings, projects, and customers

procedures.

the blanks

...for a perfect weld, every time

D  
06.625  
0.280  
CS  
06.625

Next



Weld No	009	Date	9-11-2003
OD	00.500	Wall Thickness	00.049
Head	C10	Position	5G
Project	P326 03		
Drawing	H220		
Elect Diam	0.062"	Length	00.292"
Shield Gas	AR/H	Flow Rate	020 CFH
Backing Gas	AR	Flow Rate	005 CFH
Tacking	No	Overrides	No

Back

Help

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## Specifications

<b>Application</b>	For use with many Magnatech weld Head models (GTAW process), Welding Lathes, and dedicated Weld Systems
<b>Functions Controlled</b>	Weld Current Output/Current Pulsing, Weld Head Rotation, Weld Head Wire Feed Speed, Electronic Arc Voltage Control, Electronic Torch Oscillation, Electronic Torch Cross-Seam Adjustment
<b>Output Power</b>	0 – 200 Amps
<b>Input Power Requirements (Rated Load)</b>	115/480 VAC, 1or 3Ø, 4.0 KVA, 50/60 Hz Autoranging (No modifications necessary)
<b>Internal Memory Capacity</b>	100 Weld Programs
<b>Units of Measurement</b>	Metric and Inch (selectable)
<b>Program Transfer</b>	Solid State Digital Media (USB Flash Drive/Memory Key)
<b>Language (Selection)</b>	English, Spanish, German, French, others
<b>Settable Override Limits</b>	Individually scalable overrides on each function 0 – 100%
<b>Maximum Open Circuit Voltage</b>	80V
<b>Water and Gas Flow Switches</b>	Standard. Prevent damage to equipment and workpiece
<b>Data Recording/Printout</b>	Operator ID, Weld ID Number, Program Number, Material, OD, Wall Thickness, Date, Time, Weld Head Model, Project, Drawing, Programmed Parameters, User Notes
<b>QC-Parameter Monitoring/Recording/Printout</b>	Records actual parameters and deviations from preprogrammed limits
<b>Arc Start Type</b>	High Voltage Impulse
<b>Operating/Storage Temperature</b>	Operating: -18 to 50°C (0 to 120°F) Storage: -25 to 60°C (-20 to 140°F)
<b>Humidity</b>	To 98% RH (Non-Condensing)

## Dimensions

	<b>Model 515 Power Source</b>	<b>Model 905 Circulator</b>
<b>Length</b>	48cm (19")	48cm (19")
<b>Width</b>	35cm (14")	35cm (14")
<b>Height</b>	43cm (17")	27cm (11")
<b>Weight</b>	41 Kgs (91 Lbs)	15 Kgs (34 Lbs)
<b>Weight - Model 515</b>	35 Kgs (77 Lbs)*	15 Kgs (34 Lbs)*

\*115/230 VAC Input Model

## The Pipemaster Power Supply can be used with many Weld Head models



D/T Model Pipe Weld Heads



Quickclamp



424, 425, 426 Series Tube-to-Tubesheet Weld Heads

Represented By:

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