

MAGNATECH

ORBITAL WELDING SYSTEMS

PIPEMASTER Model 516



PIPEMASTER Model 516

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)
- Current programming and pulsing controlled by Pipemaster Controller – **not** the power supply
- Amperage Output determined by power source selection
- Autoranging power 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 purposes*
- Transfer programs and QC data to PC using USB flash drive “Memory Key”
- AutoTack automatically generates tack weld programs*
- Large color LCD Pendant display
- Stainless steel case
- Help Files provide immediate information/assistance
- Password protection of key functions
- Waterproof Remote Pendant
- 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
- Bluetooth Printer Option
- Detachable coolant recirculator with integral flow switch protection
- Meets applicable NEMA, CE, CSA standards

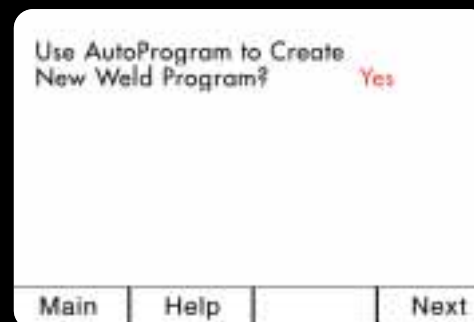


AutoProgram*

Startup display



...automatically create a new weld program



...simply fill in t



* Future Availability

Options



Remote Pendant



the blanks

...for a perfect weld, every time



D
06.625
0.280
CS
06.625

Next

Coolant Recirculator

Detachable coolant recirculator mounts beneath the controller with integral flow switch protection.



Teach Mode

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

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

Entering 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.

Sealed Module

All critical electronics are mounted in a completely sealed (IP-65) slide-out module.



Weld Monitoring/QC*

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

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		Next

* Future Availability

Specifications

Application	For use with many Magnatech weld Head models* (GTAW process), Welding Lathes, and dedicated Weld Systems
Functions Controlled	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
Output Power	Power Source dependent
Input Power Requirements (Rated Load)	110 – 230 VAC, 1 Ø, 4.0 KVA, 50/60 Hz Autoranging (No modifications necessary)
Protection Level	Controller IP-23; Pendant IP-65
Internal Memory Capacity	100 Weld Programs
Units of Measurement	Metric and Inch (selectable)
Program Transfer	Solid State Digital Media (Disk-on-Key, Memory Key)
Language (Selection)	English, Spanish, German, French, others
Settable Override Limits	Individually scalable overrides on each function 0 – 100%
Water and Gas Flow Switches	Standard. Prevent damage to equipment and workpiece
Data Recording/Printout	Operator ID, Weld ID Number, Program Number, Material, OD, Wall Thickness, Date, Time, Weld Head Model, Project, Drawing, Programmed Parameters
Printer	(Optional) Freestanding. Bluetooth. Integral rechargeable battery with charger. IP-54 Rating
QC-Parameter Monitoring/* Recording/Printout	Records actual parameters and deviations from preprogrammed limits
Arc Start Type	High Voltage Impulse (500 Amp Arc Starter)
Operating/Storage Temperature	Operating: -18 to 50°C (0 to 120°F) Storage: -25 to 60°C (-20 to 140°F)
Humidity	To 98% RH (Non-Condensing)

* Future Availability

Dimensions

	Model 516 Controller	Model 905 Circulator
Length	51cm (20")	48cm (19")
Width	35cm (14")	35cm (14")
Height	43cm (17")	27cm (11")
Weight	41 Kgs (91 Lbs)	15 Kgs (34 Lbs)
Weight	36 Kgs (79 Lbs) (including Pendant/Cable)	15 Kgs (34 Lbs)

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



D/T Model Pipe Weld Heads



T-Head



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

MAGNATECH

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