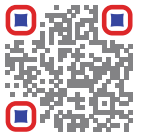


PIPE & PIPELINE WELDING SOLUTIONS



MAGNATECH

AN  GROUP BRAND

BROCHURE

www.MAGNATECHLLC.com



The **Specialized Fabrication Equipment Group** (in short: **S.F.E. Group**) was founded in 2019 after the merger of three world leading OEM's in the field of pipe fabrication tooling and machinery: B&B Pipe and Industrial Tools LLC (USA), Mathey Dearman Inc. (USA) and TAG Pipe Equipment Specialists (UK). In a time span of 5 years, another 4 renowned and market leading companies were acquired and added to the **S.F.E. Group** portfolio: Axxair (France, 2022), Magnatech (USA, 2023), Climax (USA, 2023) and Sumner (USA, 2025).

The vision and philosophy of the **S.F.E. Group** is to offer globally a comprehensive innovative and cost-effective range of specialized fabrication, welding and machining equipment and derived rental solutions, for a wide range of applications within all critical industries, while optimizing performance, efficiency and safety.

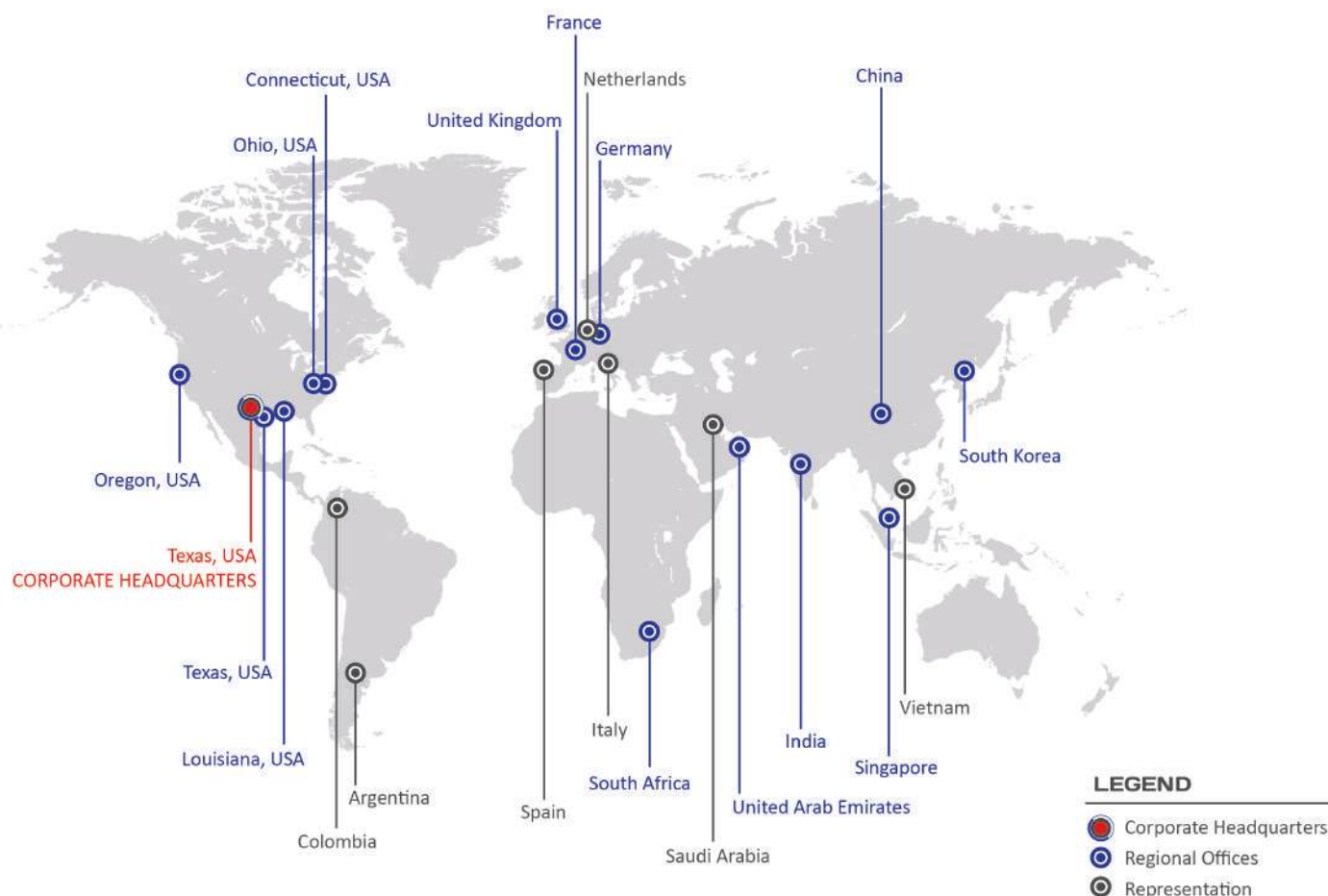
Leveraging over 200 years of combined experience in engineering, manufacturing, and field applications, the **S.F.E. Group** is committed to driving innovation. Through continuous product development and strategic acquisitions, the **S.F.E. Group** is actively growing its portfolio and expanding its global presence to meet the demands of industries around the world. Currently, the **S.F.E. Group** consists of 12 complimentary brands, each supporting the others in delivering cutting-edge solutions.

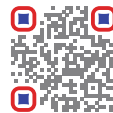
With offices and warehousing on 5 continents, 400+ employees and more than 500 partnerships and distributors worldwide, **S.F.E. Group** prides itself on consistently offering the highest standards of both product quality and service locally to all its customers.

S.F.E. Group looks forward to welcoming you into its global network as a partner, distributor or end user customer and remains at your disposal at any time.

Contact Americas: sales@sfe-brands.com
Contact International: sales-int@sfe-brands.com

S.F.E. GROUP GLOBAL PRESENCE





Ever since its inception in the late 1960's, **Magnatech** has been a class apart in the world of welding, offering top-of-the-line orbital welding systems to numerous critical industries and applications.

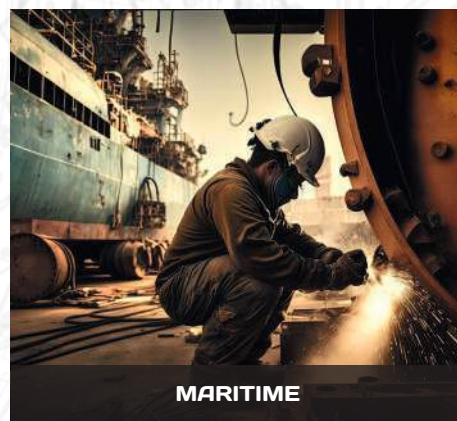
In a world with a rapid decline of skilled welders, it is **Magnatech's** mission as an original equipment manufacturer of specialized equipment for orbital pipe - and pipeline welding systems, using the GTAW, FCAW, and GMAW welding processes, to provide world-class solutions and know-how, emphasizing on simplicity, reliability, repeatability, productivity, cost-efficiency, and ease-of-use.

The **Magnatech** welding equipment uses auto-programming for both fusion-only and multi-pass welding with filler wire addition and reduces the need for onsite technical specialists to laboriously develop the welding parameters by trial and error. All **Magnatech's** orbital systems use interfaces to simplify operations and essentially guarantee repeatable welds.

The key products offered today are the D-Head 420 welding head, T-Head 419 welding head, Pipemaster 515 and 516, the Pipeliner Pro welding machine, including the Pipeliner Pro 616 welding head and its multi-level controller.

Magnatech machines are always nearby available within the S.F.E. Group global network and can be consulted on the dedicated website: www.MAGNATECHLLC.com.

INDUSTRIES SERVED



OUR BRANDS

CLIMAX



H&S TOOL



MAGNATECH



Our group policy is one of continuous improvements and acquisitions. Products and data tables are subject to change and may vary from those illustrated. Copyright © 2025 Specialized Fabrication Equipment Group, All rights reserved.

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INTRODUCTION TO S.F.E. GROUP

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INTRODUCTION TO MAGNATECH

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D-HEAD 420 WELDING HEAD

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T-HEAD 419 WELDING HEAD

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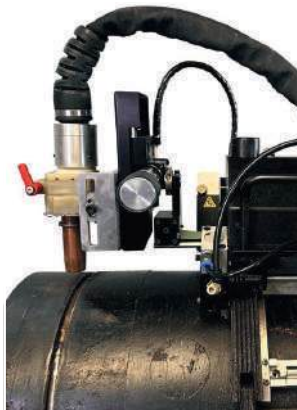
PIPEMASTER 515

23

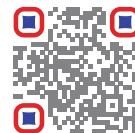
PIPEMASTER 516

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PIPELINER PRO WELDING
MACHINE



D-HEAD 420 WELDING HEAD



0.84 - 14" o/d / 21.34 - 355.6 mm o/d



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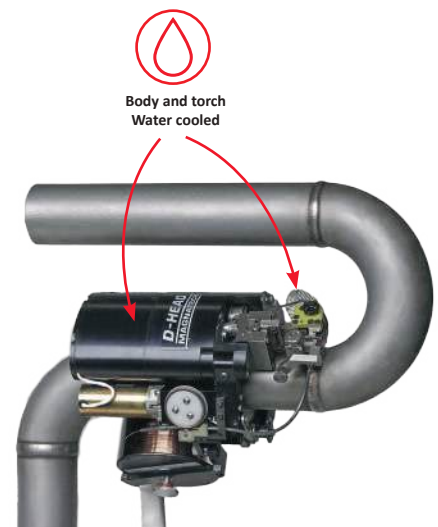
0.84 - 14" / 21.34 - 355.60 mm o/d

- **Function:** multi-pass orbital GTAW pipe-to-pipe, pipe-to-fitting
- **Materials:** carbon based and exotic alloys
- **Power supply compatibility:** Pipemaster 515 and Pipemaster 516

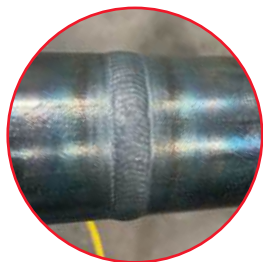
The Magnatech D-Head 420 weld head is designed to make pipe-to-pipe and pipe-to-fittings welds. It reproduces all required functions, motions and flexibility of highly skilled manual welding, reduces repair rates, while offering high repeatability and efficiency.

The D-Head 420's key differentiator is its ability to be used on **applications with radial and axial clearance constraints**. The minimum required clearance is 2" / 51 mm, making it a unique weld head for particular applications across various industries.

The D-Head is positioned on the pipe using interchangeable guide rings (standard 24 guide ring sizes are available). Guide ring insert kits can be used allowing to cover the diameter range of 0.84 - 14" / 21.34 - 355.60 mm o/d.



MAIN FEATURES



TORCH OSCILLATION (WEAVING)

Customize welds with precision: independently program the width, speed, and endpoint "dwell" of the torch oscillation. Control the torch's "cross seam" steering electronically via a remote pendant, and benefit from pulsed current automatically synchronized with the oscillation for flawless results.

FILLER WIRE SPOOL

Supports **standard** 1 kg / 2 lbs spools or 0.5 kg / 1 lbs **low-profile** spool for a reduced radial footprint, enhancing maneuverability in tight spaces.

COMPACT HEAD-MOUNTED WIRE FEEDER

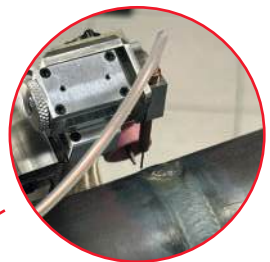
Handles a variety of wire diameters with ease, ensuring flexibility and efficiency in every weld.



WELDING HEAD MOUNTING/ROTATION

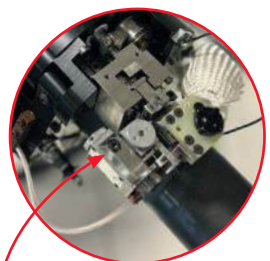
Heavy-duty metal guide rings lock the head firmly onto the pipe. The rugged sprocket drive system provides steady rotation speed, guaranteeing consistent and precise welds every time.

USE ON PREHEATED PIPES : engineered for extreme conditions, the D-Head 420's heat-tolerant components and water-cooled housing make it perfect for welding alloys that require preheating. Tackle high-temperature applications with confidence and precision.



ARC GAP CONTROL (AGC)

AGC allows real time control of the distance between the electrode and the workpiece by maintaining the gap rather than just the voltage alone, ensuring consistent and precise welding performance.



3-AXIS ADJUSTABLE FILLER WIRE NOZZLE

Achieve exact positioning of the filler wire entry into the weld puddle with **multiple adjustment options**, allowing for precise control and optimal weld quality.

MODEL

PART NO.	DESCRIPTION
420PTCB000	Model 420P Weld Head, Standard Profile

Every D-Head 420 welding head comes fully equipped for convenience and optimal weld performance.

Includes :

- a complete wire size kit ranging from 0.020" (0.5 mm) to 0.045" (1.2 mm)
- durable wire conduits
- standard spool kit
- low profile spool kit
- all required accessories to operate the head
- tool kit for mechanical adjustment
- miscellaneous screw package

All securely packed in a rugged, heavy-duty storage case for maximum protection and portability.

ACCESSORIES INCLUDED



DELIVERY AND STORAGE



REQUIRED ACCESSORIES

GUIDE RINGS

Guide rings are available in 24 standard sizes. The guide rings are used to fix the welding head around the pipe and to allow accurate rotation of the head around it. It consists of two hinged segments which closed around the pipe and latch together. Guide rings may be used on smaller pipe diameter than what they are designed for by using insert kits (see below section guide ring insert kits).

PART NO.	DESCRIPTION	PICTURE
103854-1750	Guide ring, chain / link kit, 1.75" tube, 1.750" / 44.45 mm	
103854-1900	Guide ring, chain / link kit, 1.5" pipe, 1.900" / 48.26 mm	
103854-2000	Guide ring, chain / link kit, 2" tube, 2.000" / 50.80 mm	
103854-2125	Guide ring, chain / link kit, 2.125" tube, 2.125" / 53.975 mm	
103854-2250	Guide ring, chain / link kit, 2.25" tube, 2.250" / 57.15 mm	
103854-2375	Guide ring, chain / link kit, 2" pipe, 2.375" / 60.33 mm	
103854-2500	Guide ring, chain / link kit, 2.5" tube, 2.500" / 63.50 mm	
103854-2875	Guide ring, chain / link kit, 2.5" pipe, 2.875" / 73.025 mm	
103854-3000	Guide ring, chain / link kit, 3" tube, 3.000" / 76.20 mm	
103854-3250	Guide ring, chain/link kit, 3.25" tube, 3.250" / 82.55 mm	
103854-3500	Guide ring, chain / link kit, 3" pipe, 3.500" / 88.90 mm	
103854-4000	Guide ring, chain / link kit, 4" tube, 4.000" / 101.60 mm	
103854-4500	Guide ring, chain / link kit, 4" pipe, 4.500" / 114.30 mm	
103854-5000	Guide ring, chain / link kit, 5" tube, 5.000" / 127.00 mm	
103854-5563	Guide ring, chain / link kit, 5" pipe, 5.563" / 141.30 mm	
103854-6000	Guide ring, chain / link kit, 6" tube, 6.000" / 152.40 mm	
103854-6625	Guide ring, chain / link kit, 6" pipe, 6.625" / 168.275 mm	
103853-7250	Guide ring, chain / link kit, 7.25" tube, 7.250" / 184.15 mm	
103853-7750	Guide ring, chain / link kit, 7.75" tube, 7.750" / 196.85 mm	
103853-8000	Guide ring, chain / link kit, 8" tube, 8.000" / 203.20 mm	
103853-8625	Guide ring, chain / link kit, 8" pipe, 8.625" / 219.075 mm	
103853-10750	Guide ring, chain / link kit, 10" pipe, 10.750" / 273.05 mm	
103853-12750	Guide ring, chain / link kit, 12" pipe, 12.750" / 323.85 mm	
103853-14000	Guide ring, chain / link kit, 14" pipe, 14.000" / 355.60 mm	

OPTIONAL ACCESSORIES

GUIDE RINGS INSERT KITS

Guide ring insert kits may be used with larger guide rings on smaller pipe diameters when preheating is required, preventing overheating of the weld head. They are necessary to reach tube/pipe diameters smaller than 1.75" / 44.45mm (down to 0.84" / 21.34mm).



PART NO.	DESCRIPTION	PICTURE
102222-XXX	Guide ring insert kit 8" o/d or less	
102222-XXX-L	Guide ring insert kit 8" o/d or more	

XXX refers to the length of the insert (in inch) under 1 inch (25.4mm)
XXXX refers to the length of the insert (in inch) over 1 inch (25.4mm)

ANGLED AGC KIT

Allows torch to be pivoted up to 60° in and out for socket / fillet welds. Maintains arc length correction motion along the tungsten electrode axis. Please contact us for additional information.

PART NO.	DESCRIPTION	PICTURE
1003943	Angled AGC kit	

EXTENSIONS CABLES

Available extension cable in 25 ft / 7.6 m and 50 ft / 15.2 m.

Maximum extension allowed is 100 ft / 30.4 m, including the 25 ft of standard weld head cable.

PART NO.	DESCRIPTION	PICTURE
1003157-25P	25 ft / 7.6 m extension cable kit for Pipemaster 515 and 516	
1003157-50P	50 ft / 15.2 m extension cable kit for Pipemaster 515 and 516	

VIDEO ARC MONITORING

The Video Arc Monitoring (VAM) system is an optional feature that enhances the D-Head 420 welding head's capabilities. It integrates miniature video cameras with special filtering to allow operators to:

- Inspect fit-up before welding to ensure proper workpiece alignment.
- Monitor the weld and observe the welding puddle during the weld..
- Inspect the completed weld for quality assurance.

Available in single or dual cameras set-up.



PART NO.	DESCRIPTION	PICTURE
Available on request	Video arc monitoring for D-head 420 welding head	

CONSUMABLES

TORCH CONSUMABLE KITS

Torch consumables kit includes all necessary consumables to operate the D-head 420 welding head.

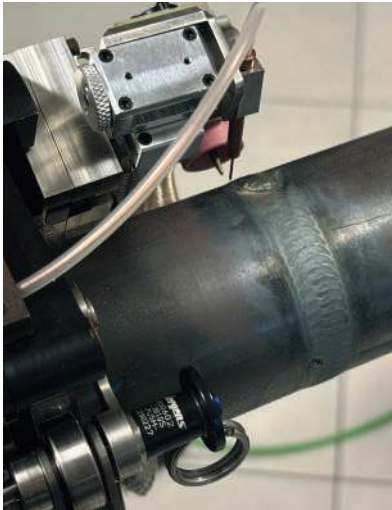
PART NO.	DESCRIPTION	PICTURE
104175-1	Torch consumables kit 420	

WIRE CONSUMABLE KITS

Wire consumables kit includes wire nozzle and tube wire guide and are required according to the configuration. A complete set of conduits is supplied with the machine, however, they are also available for purchase as consumables.

PART NO.	DESCRIPTION	PICTURE
104175-10	Wire consumables kit, large guide ring, low profile, 0.035" wire diameter	
104175-20	Wire consumables kit, small guide ring, low profile, 0.035" wire diameter	
104175-30	Wire consumables kit, small guide ring, standard profile, 0.035" wire diameter	
104175-40	Wire consumables kit, large guide ring, standard profile, 0.035" wire diameter	
104175-50	Wire consumables kit, small guide ring, standard profile, 0.030" wire diameter	
104175-60	Wire consumables kit, large guide ring, standard profile, 0.030" wire diameter	

Small guide ring: 6" pipe and under
Large guide ring: above 6" pipe



TECHNICAL SPECIFICATIONS

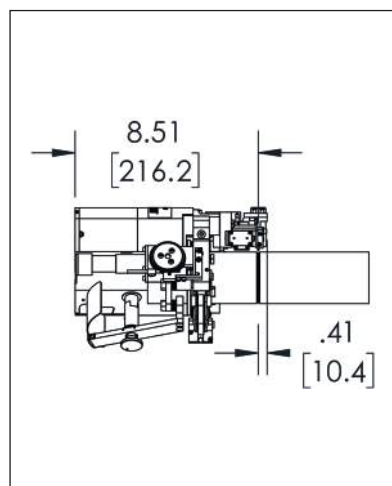
PIPE (TUBE) SIZE RANGE	0.84 - 14" / 21.34 - 355.60 mm	
CABLE LENGTH	25' / 7.6 m standard	
FILLER WIRE MODULE	Wire size	0.020", 0.030", 0.035", 0.040", 0.045" / 0.5, 0.8, 0.9, 1.0, 1.2 mm
	Max. speed capability	2540 mm/min. (100 IPM)
	Spool size	2 lbs / 1 kg standard; 1 lbs / 0.5 kg low profile
OSCILLATION MODULE	Max. oscillation stroke amplitude	0.625" / 16 mm
	Max. oscillation speed	1520 mm/min. (60 IPM)
	Oscillation dwell	0 - 1 second
	Cross seam adjustment	0.5" (12.7 mm)
ARC GAP CONTROL MODULE	0.5" / 12.7 mm stroke. Additional mechanical adjustment allows welding heavier wall pipe up to 1" / 25.4 mm	
TORCH PROPULSION MODULE	25.4 cm/min (10 IPM) maximum rotation speed	
WATER-COOLED TORCH	200 A continuous capability	
TORCH ADJUSTMENT CAPABILITY	Torch lead/lag adjustment	± 15 degrees (manual)
	Torch tilt adjustment	± 10 degrees (manual)

DIMENSIONS/WEIGHTS

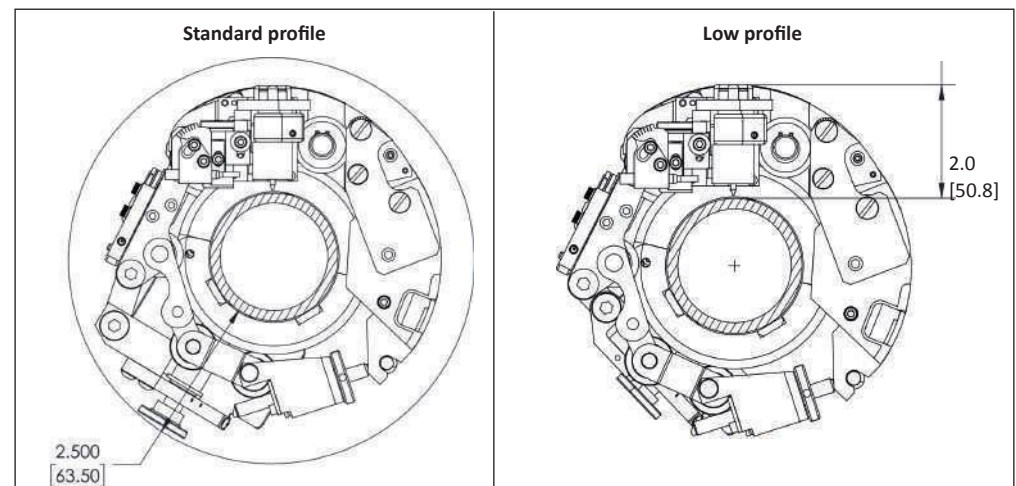
WEIGHT	8 lbs / 3.6 kg (not including the torch cable)
AXIAL CLEARANCE	Torch center line to Rear Extremity: 8.51" / 216.2 mm Torch center line to Front Extremity: 0.41" / 10.4 mm
RADIAL CLEARANCE REQUIREMENT	2.5" / 63.5 mm with standard spool* 2.0" / 50.8 mm with low profile spool*

*For pipe/tube o/d's less than 1.75" / 44.45 mm, radial clearance requirement increases with decreasing diameter. Contact us for more information..

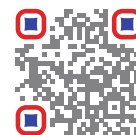
AXIAL CLEARANCE



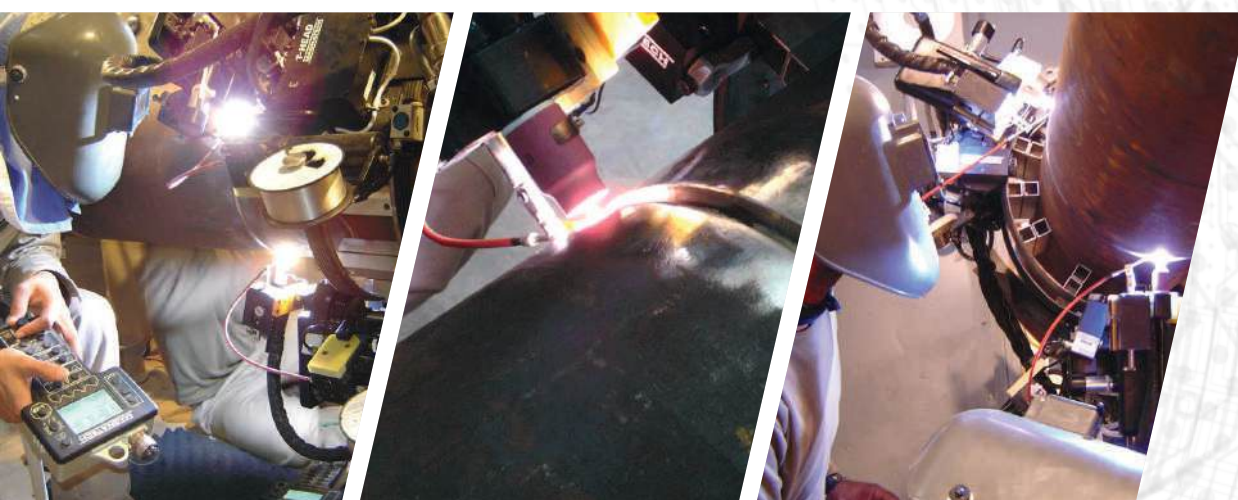
RADIAL CLEARANCE



T-HEAD 419 WELD HEAD



4.5 - 84" / 114.30 - 2,134 mm o/d (larger sizes available on demand)



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4.5 - 84" / 114.30 - 2,134 mm o/d (larger sizes available on demand)

- **Function:** multi-pass orbital GTAW pipe-to-pipe, pipe-to-fitting
- **Materials:** carbon based and exotic alloys
- **Power supply compatibility:** Pipemaster 515 and Pipemaster 516

The Magnatech T-head 419 welding head is designed to make pipe-to-pipe and pipe-to-fitting welds. Its full function capabilities allows it to replicate all the motions of a skilled manual welder.

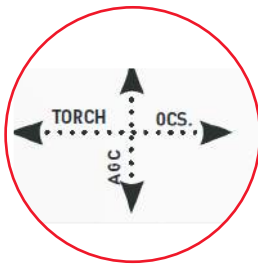
The T-Head 419 welding head is used for larger diameter/ heavy wall applications, requiring GTAW process. Interchangeable guide rings provide mounting on the pipe, and allow the welding head to cover a broad size range.

Mounting the head on an oversize guide ring with adaptor feet allows use on materials requiring preheat. In addition to welding pipe, the T Head 419 is also used for ID and OD welding on larger tanks, vessels, and ductwork. This versatility is made possible by a patented flexible track system, enabling stable installation on complex, curved surfaces.

The T-Head 419 welding head improves productivity by increasing duty cycle and reducing repair rates.



MAIN FEATURES



TORCH OSCILLATION (WEAVING)

Width, speed, and endpoint "dwell" independently programmable. Torch "cross seam" steering electronically controlled using remote pendant. Pulsed current automatically synchronized with torch oscillation.

ARC GAP CONTROL (AGC)

AGC allows real time control of the distance between the electrode and the workpiece by maintaining the gap rather than just the voltage alone, ensuring consistent and precise welding performance.



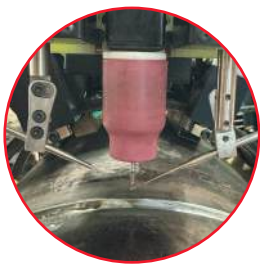
Water
cooled
torch

RAPID REPOSITIONNING SYSTEM

allows for quick and stable torch recentering. Up to 4" (101.6 mm) of motion.

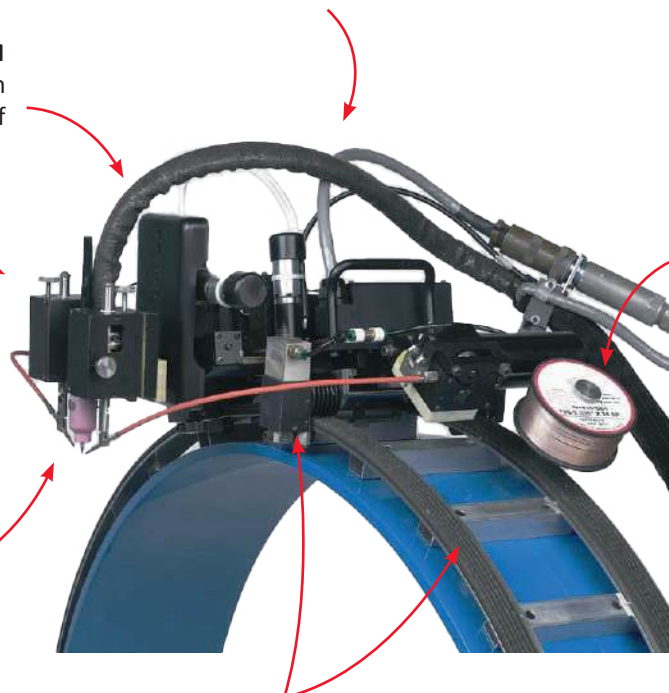
3-AXIS POSITION ADJUSTMENT FOR FILLER WIRE NOZZLE

Multiple adjustments provide precise positioning of filler wire entry into weld puddle.



DUAL WIRE FEEDER CONFIGURATION

To allow for double up welding on larger diameters.



HEADMOUNTED WIRE FEEDER

Accommodates range of wire diameters: 0.030", 0.035", 0.040", 0.045" (0.8, 0.9, 1.0, 1.2 mm).

FILLER WIRE SPOOL

Uses standard 1 kg (2 lbs) spools. Optional 5 kg (10 lbs) available upon request.

WELD HEAD MOUNTING/ROTATION

Patented pneumatic clamping system delivers fast, secure, and tool-free installation. Powered by compressed gas, it ensures precise, repeatable clamping while reducing setup time and enhancing safety. Clutch system allows the head to be positioned on the pipe very quickly.

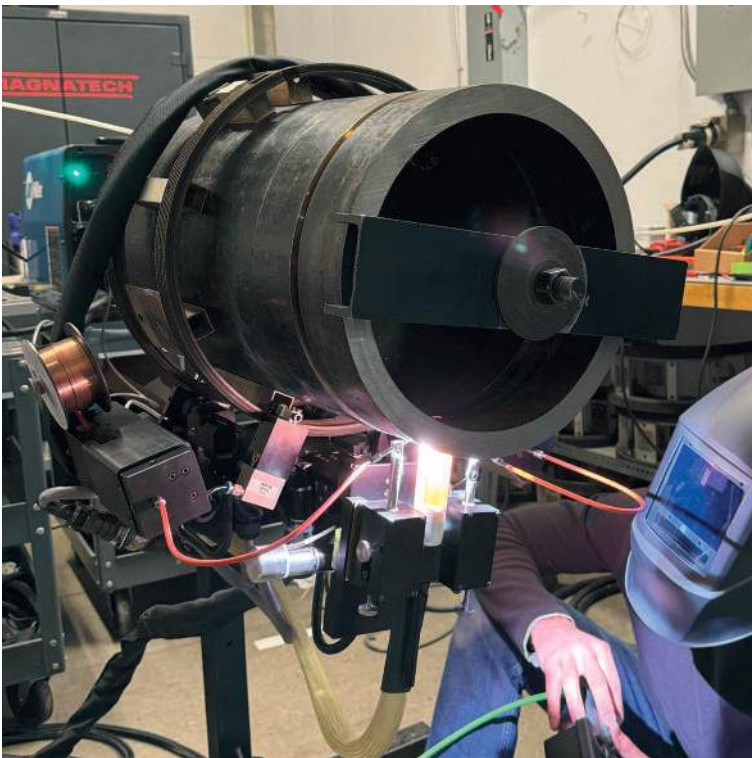
MODEL

PART NO.	DESCRIPTION
419AULBPG0	T-Head 419 welding head, digital, dual wire feeder

Every T-Head 419 welding head comes fully equipped for convenience and optimal weld performance.

- Includes :
- a complete wire size kit ranging from 0.030" (0.8 mm) to 0.045" (1.2 mm)
 - durable wire conduits
 - all required accessories to operate the head
 - position switches to sectorize programming on the tube
 - tool kit for mechanical adjustment
 - miscellaneous screw package

All securely packed in a rugged, heavy-duty storage case for maximum protection and portability.



REQUIRED ACCESSORIES

GUIDE RINGS

The guide rings are used to fix the welding head around the pipe and to allow accurate rotation of the head around it. Rotation of the welding head around the pipe is accomplished by a friction drive system, consisting of the powered V-rollers driving against the two V-belts which are attached to the guide ring surface.

Guide rings consist of two identical half sections which hinge open.

They are available in 38 standard sizes.

Guide rings may be used on smaller pipe diameter than what they are designed for by using adaptor foot kits (see below section adaptor foot kits).



PART NO.	DESCRIPTION
103040-00663	Guide ring, 6" pipe, 6.625" / 168.30 mm
103040-00863	Guide ring, 8" pipe, 8.625" / 219.10 mm
103040-01075	Guide ring, 10" pipe, 10.750" / 273.00 mm
103040-01275	Guide ring, 12" pipe, 12.750" / 323.9 mm
103040-01400	Guide ring, 14" pipe, 14.000" / 355.60 mm
103040-01600	Guide ring, 16" pipe, 16.000" / 406.40 mm
103040-01800	Guide ring, 18" pipe, 18.000" / 457.00 mm
103040-02000	Guide ring, 20" pipe, 20.000" / 508.00 mm
103040-02200	Guide ring, 22" pipe, 22.000" / 559.00 mm
103040-02400	Guide ring, 24" pipe, 24.000" / 610.00 mm
103040-02600	Guide ring, 26" pipe, 26.000" / 660.00 mm
103040-02700	Guide ring, 27" pipe, 27.000" / 686.00 mm
103040-02800	Guide ring, 28" pipe, 28.000" / 711.00 mm
103040-03000	Guide ring, 30" pipe, 30.000" / 762.00 mm
103040-03200	Guide ring, 32" pipe, 32.000" / 813.00 mm
103040-03400	Guide ring, 34" pipe, 34.000" / 864.00 mm
103040-03600	Guide ring, 36" pipe, 36.000" / 914.00 mm
103040-03800	Guide ring, 38" pipe, 38.000" / 965.00 mm
103040-04000	Guide ring, 40" pipe, 40.000" / 1016.00 mm
103040-04200	Guide ring, 42" pipe, 42.000" / 1067.00 mm
103040-04400	Guide ring, 44" pipe, 44.000" / 1118.00 mm
103040-04600	Guide ring, 46" pipe, 46.000" / 1168.00 mm
103040-04800	Guide ring, 48" pipe, 48.000" / 1219.00 mm
103040-05000	Guide ring, 50" pipe, 50.000" / 1270.00 mm
103040-05200	Guide ring, 52" pipe, 52.000" / 1321.00 mm
103040-05300	Guide ring, 53" pipe, 53.000" / 1346.00 mm
103040-05400	Guide ring, 54" pipe, 54.000" / 1372.00 mm
103040-05600	Guide ring, 56" pipe, 56.000" / 1422.00mm
103040-05800	Guide ring, 58" pipe, 58.000" / 1473.00 mm
103040-06000	Guide ring, 60" pipe, 60.000" / 1524.00 mm
103040-06200	Guide ring, 62" pipe, 62.000". / 1575.00 mm
103040-06500	Guide ring, 65" pipe, 65.000" / 1651.00 mm
103040-06600	Guide ring, 66" pipe, 66.000" / 1676.00 mm
103040-06800	Guide ring, 68" pipe, 68.000". / 1727.00 mm
103040-07200	Guide ring, 72" pipe, 72.000". / 1829.00 mm
103040-07600	Guide ring, 76" pipe, 76.000" / 1930.00 mm
103040-07800	Guide ring, 78" pipe, 78.000" / 1981.00 mm
103040-08400	Guide ring, 84" pipe, 84.000" / 2134.00 mm

OPTIONAL ACCESSORIES

ADAPTATOR FOOT KITS

Adaptor foot kits may be used with larger guide rings on smaller pipe diameters when preheating is required, preventing overheating of the weld head. They are necessary to reach pipe diameters smaller than 6.625" / 168.30mm (down to 4.5" / 114.30mm).

Three types of adaptors can be screwed simply to the guide ring:

- 1" (25.4 mm) adaptor square tube
- 2" (50.8 mm) adaptor square tube
- .13 - .5" (3.3-12.7 mm) adaptor solid bar

(Magnatech can provide these in any dimension)

PART NO.	DESCRIPTION	PICTURE
103070-XXXX*	Adaptor foot set	

*The quantity of feet necessary for a complete set is defined by the guide ring size. Contact us for more information.

POSITION SWITCH TRIP KITS

Position switches allow to divide the tube into several sectors whose parameters can be adjusted directly in the welding program.

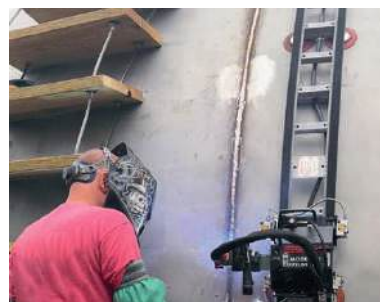
PART NO.	DESCRIPTION	PICTURE
105156-6	Position switch trip kit, 6 positions	
105156-12	Position switch trip kit, 12 positions	

FLX-TRACK™

In addition to welding pipe, the T Head 419 welding head is also used for ID and OD welding on larger tanks, vessels, and ductwork:

- Flexible track allows mounting on complex curved surfaces.
- Standard 2.3 m (7.5') track sections. Multiple sections can be bolted together for longer lengths.
- Magnetic or vacuum attachments are available depending on the pipe material.

PART NO.	DESCRIPTION	PICTURE
SK2460-090	Flex-Track assembly, 90" / 2,286 mm	
SK2474-1	Magnet assembly large diameter, Flex-Track	
104294-1	Vacuum cup kit 90" Flex Track	

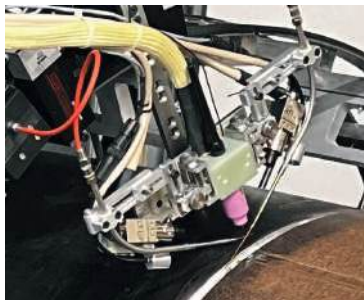


VIDEO ARC MONITORING

The Video Arc Monitoring (VAM) system is an optional feature that enhances the T-Head 419 welding head's capabilities. It integrates miniature video cameras with special filtering to allow operators to:

- Inspect fit-up before welding to ensure proper workpiece alignment.
- Monitor the weld and observe the welding puddle during the weld..
- Inspect the completed weld for quality assurance.

Available in single or dual cameras set-up.

PART NO.	DESCRIPTION	PICTURE
Available on request	Video arc monitoring for T-head 419 welding head	

EXTENSIONS CABLES

Available extension cable in 25 ft / 7.6 m and 50 ft / 15.2 m. Maximum extension allowed is 100 ft / 30.4 m, including the 25 ft of standard weld head cable.

PART NO.	DESCRIPTION	PICTURE
1003157-25P	25 ft / 7.6 m extension cable kit for Pipemaster 515 and 516	
1003157-50P	50 ft / 15.2 m extension cable kit for Pipemaster 515 and 516	

CONSUMABLES

EXPENDABLES PART KIT

The expendables parts kit includes all consumables required to operate the T-head 419 welding head: gas cup ,collet, gas lens collet body, insulator, long back cap, gas nozzle, narrow gap insulator for gas lens, tube-wire guide, wire guide tube and wire nozzle.

PART NO.	DESCRIPTION	PICTURE
EXPEND/419A	Expendables part kit Model 419A	

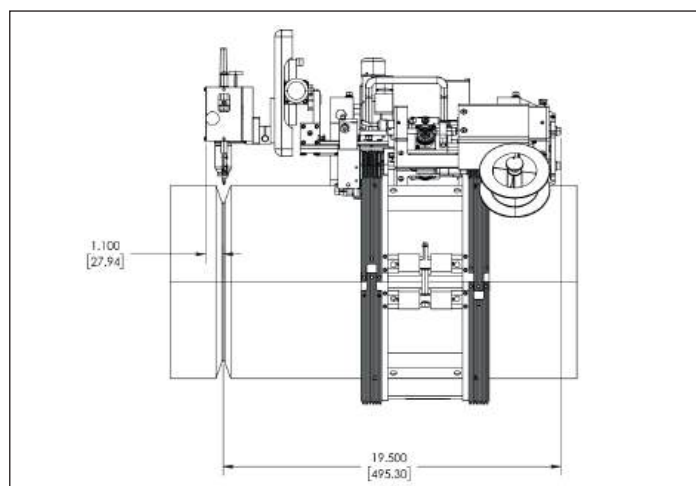
TECHNICAL SPECIFICATIONS

PIPE (TUBE) SIZE RANGE	4.5 - 84" / 114.30 - 2,134 mm	
CABLE LENGTH	25" / 7.6 m standard	
FILLER WIRE MODULE	Wire size	0.030", 0.035", 0.040", 0.045" / 0.8, 0.9, 1.0, 1.2 mm
	Max. speed capability	100 IPM / 2540 mm/min.
	Spool size	2 lbs / 1 kg standard
OSCILLATION MODULE	Max. oscillation stroke amplitude	2" / 50.8 mm
	Max. oscillation speed	60 IPM / 1.52m/min.
	Oscillation dwell	0 – 1 second
	Cross seam adjustment	3" (76.20 mm) course adjustment
ARC GAP CONTROL MODULE	2" / 50.8 mm stroke. Additional mechanical adjustment allows welding heavier wall pipe	
TORCH PROPULSION MODULE	10 IPM / 25.4 cm/min maximum rotation speed	
WATER-COOLED TORCH	300 A continuous	
TORCH ADJUSTMENT CAPABILITY	Torch lead/lag adjustment	± 30 degrees (manual)
	Torch tilt adjustment	± 15 degrees (manual)

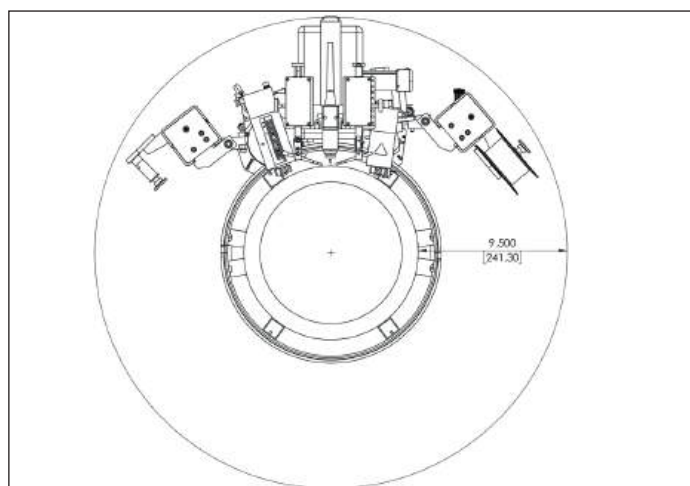
DIMENSIONS/WEIGHTS

WEIGHT	29.5 lbs. / 13.4 kg Dual wire feeders without wire spools (not including torch cable)
AXIAL CLEARANCE	Torch center line to Rear Extremity: 19.5" / 495.3 mm Torch center line to Front Extremity: 1.1" / 28 mm
RADIAL CLEARANCE	9.5" / 241.30 mm

AXIAL CLEARANCE

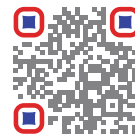


RADIAL CLEARANCE





PIPEMASTER 515 POWER SOURCE AND CONTROLLER



230 VAC, 1 ϕ , 5.0 KVA, 50/60 Hz - 0 - 200 Amps



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The Pipemaster 515 offers unbeatable accuracy, reliability, and consistency under the toughest conditions. Digital tech keeps motor speeds and response rock-solid, even under heavy usage. Built to handle the grind, the Pipemaster 515 is the preferred workhorse for precision orbital welding.

MAIN FEATURES

- **200A output:** the power supply meets industrial demands.
- **Multi-pass welding:** for pipes, tubes, and tubesheets.
- **Full weld head control:** includes torch rotation, filler wire feed, electronic arc gap, oscillation and cross-seam adjustment.
- **Controller-driven:** all programming and current pulsing are controlled by the Pipemaster 515, the power supply is utilized for weld current delivery.

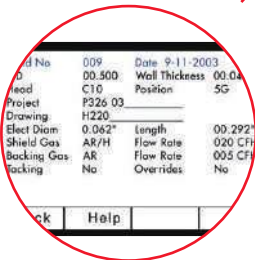
SMART AUTOMATION FEATURES

- **Auto program:** automatically generates optimal weld procedures.
- **Teach mode:** rapidly builds programs using real-time weld adjustments.
- **Programmable limits:** supervisory control with customizable override settings.
- **Auto rewind cable system:** unwraps cable at weld completion.



USER-FRIENDLY INTERFACE

- Color LCD display with intuitive prompts.
- Integrated help files for real-time guidance.
- Waterproof pendant with 25' (7.6 m) cable.
- Internal storage for up to 100 weld programs.
- Password protection for key functions.



DATA ACQUISITION & WELD MONITORING

- Additional documentation and notes can be added to weld programs and QC records, providing traceability to individual drawings, projects, and customers.
- Transfer programs data to PC using standard USB flash drive.
- Store up to 100 additional weld programs on the flash drive for greater flexibility and traceability.
- Integrated printer: printing programs data.

COOLING & SAFETY

- Detachable coolant recirculator: with integral flow switch protection.
- Safety interlock prevents welding without torch gas flow.
- 5 circuit breakers to prevent from overloading AGC, travel, wire, oscillation motors and water pump.



**OPERATES ALL MODELS OF MAGNATECH WELDING HEADS (GTAW PROCESS):
D-HEAD MODEL 420 & T-HEAD MODEL 419**

POWER SOURCE AND CONTROLLER MODELS AND COOLING UNIT

PART NO.	DESCRIPTION	PICTURE
515GCTBAD0	Pipemaster 515G, 230 VAC, Americas, 25 ft	
515GCTBAH0	Pipemaster 515G, 230 VAC, International, 25 ft	
1005832	Water cooler assembly, model 905E	

Americas = North, Central and South America

International = Europe, Africa, Middle East, Asia-Pacific

OPTIONAL ACCESSORIES

EXTENSIONS CABLES

Available extension cable in 25 ft / 7.6 m and 50 ft / 15.2 m.

Maximum extension allowed is 100 ft / 30.4 m, including the 25 ft of standard weld head cable.

PART NO.	DESCRIPTION	PICTURE
1003157-25P	25 ft / 7.6 m extension cable kit for Pipemaster 515 and 516	
1003157-50P	50 ft / 15.2 m extension cable kit for Pipemaster 515 and 516	

REMOTE PENDANT

This handheld control is used to both program and remotely operate the controller.

Designed to withstand hard use, the pendant incorporates a completely sealed, waterproof silicone rubber panel keypad, impervious to grinding debris and weld spatter.

The remote pendant is supplied with the purchase of Pipemaster 515. However, it is still possible to purchase additional ones separately.

PART NO.	DESCRIPTION	PICTURE
1005328	Remote pendant for Pipemaster 515 and 516	

TECHNICAL SPECIFICATIONS

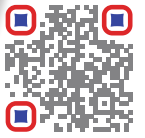
OUTPUT POWER	0 – 200 amps
INPUT POWER REQUIREMENTS (RATED LOAD)	230 VAC, 1 Ø, 5.0 KVA, 50/60 Hz
INTERNAL MEMORY CAPACITY	100 weld programs (per pendant)
UNITS OF MEASUREMENT	Metric and Inch (selectable)
PROGRAM TRANSFER	Solid state digital media (USB flash drive)
LANGUAGE SELECTION	English, Spanish, Czech (other languages available upon request)
SETTABLE OVERRIDE LIMITS	Individually scalable overrides on each function 0 – 100%
MAXIMUM OPEN CIRCUIT VOLTAGE	80 V
WATER AND GAS FLOW SWITCHES	Standard. Prevent damage to equipment and workpiece
ARC START TYPE	High frequency, touch-start
OPERATING/STORAGE TEMPERATURE	Operating: -10 to 40° C (+14 to 104° F) Storage: -20 to 55° C (-4 to 131° F)
HUMIDITY	Less than or equal to 50% at 40° C (104° F) Less than or equal to 90% at 20° C (68° F)
STANDARDS	Meets applicable NEMA, CE, CSA standards

DIMENSIONS/WEIGHTS

	POWER SOURCE PIPEMASTER 515G	COOLING UNIT MODEL 905E	TOTAL
DIMENSIONS (mm / inch)	13.6" x 19.1" x 17.75" 346 x 485 x 451 mm	13.6" x 19.1" x 10.75" 346 x 485 x 273 mm	13.6" x 19.1" x 28.1" 346 x 485 x 714 mm
WEIGHT (kg / lbs)	77 lbs / 35 kg	33 lbs / 15 kg	110 lbs / 50 kg



PIPEMASTER 516 POWER SOURCE CONTROLLER



100/240 VAC, 1 ϕ , 1 KVA, 50/60 Hz autoranging - 0-600 Amps



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The Pipemaster 516 delivers exceptional precision, reliability, and performance stability in the most demanding environments. Digital control ensures consistent motor velocity and responsiveness, even under intensive operational loads.

Designed for high-output environments, the Pipemaster 516 connects to an external power source and delivers up to 600A of stable welding current. It's the ideal solution for precise, high-integrity welds across a wide range of pipe, tube, and tubesheet configurations.

MAIN FEATURES

- **Controller-driven:** all programming and current pulsing are controlled by the Pipemaster 516, the external power supply is utilized for weld current delivery.
- **Up to 600A output:** meets industrial demands for large pipe welding once connected to a powerful external supply.
- **Multi-pass welding:** for pipes, tubes, and tubesheets.
- **Full weld head control:** includes torch rotation, filler wire feed, electronic arc gap, oscillation and cross-seam adjustment.

SMART AUTOMATION FEATURES

- **Auto program:** automatically generates optimal weld procedures.
- **Teach mode:** rapidly builds programs using real-time weld adjustments.
- **Programmable limits:** supervisory control with customizable override settings.
- **Auto rewind cable system:** unwraps cable at weld completion.

USER-FRIENDLY INTERFACE

- Color LCD display with intuitive prompts.
- Integrated help files for real-time guidance.
- Waterproof pendant with 25' (7.6 m) cable.
- Internal storage for up to 100 weld programs.
- Password protection for key functions.

DATA ACQUISITION & WELD MONITORING

- Transfer programs to PC using standard USB flash drive.
- Additional documentation and notes can be added to weld programs and QC records, providing traceability to individual drawings, projects, and customers.
- Store up to 100 additional weld programs on the flash drive for greater flexibility and traceability.

ROBUST DESIGN

- Sealed electronics module (IP-65 rated) with slide-out access.
- Detachable coolant recirculator with integral flow switch protection.
- Safety interlock prevents welding without torch gas flow
- 5 circuit breakers to prevent from overloading AGC, travel, wire, oscillation motors and water pump.



OPERATES ALL MODELS OF MAGNATECH WELDING HEADS (GTAW PROCESS) :
D-HEAD MODEL 420 & T-HEAD MODEL 419

POWER SOURCE CONTROLLER MODELS AND COOLING UNIT

PART NO.	DESCRIPTION	PICTURE
516EMJB000	Pipemaster Model 516E, 25 ft, Americas	
516ENJB000	Pipemaster Model 516E, 25 ft, International	
1005832	Water cooler assembly, Model 905E	

Americas = North, Central and South America

International = Europe, Africa, Middle East, Asia-Pacific

Note: External welding power supply required.

OPTIONAL ACCESSORIES

EXTENSIONS CABLES

Available extension cable in 25 ft / 7.6 m and 50 ft / 15.2 m. Maximum extension allowed is 100 ft / 30.4 m, including the 25 ft of standard weld head cable.

PART NO.	DESCRIPTION	PICTURE
1003157-25P	25 ft / 7.6 m extension cable kit for Pipemaster 515 and 516	
1003157-50P	50 ft / 15.2 m extension cable kit for Pipemaster 515 and 516	

REMOTE PENDANT

This handheld control is used to both program and remotely operate the controller.

Designed to withstand hard use, the pendant incorporates a completely sealed, waterproof silicone rubber panel keypad, impervious to grinding debris and weld spatter.

The remote pendant is supplied with the purchase of Pipemaster 516. However, it is still possible to purchase additional ones separately.

PART NO.	DESCRIPTION	PICTURE
1005328	Remote pendant for Pipemaster 515 and 516	

SPECIFICATIONS

OUTPUT POWER	0 - 600 amps (according to external power supplies range)
INPUT POWER REQUIREMENTS (RATED LOAD)	100/240 VAC, 1 Ø, 1 KVA, 50/60 Hz autoranging (no modifications necessary)
INTERNAL MEMORY CAPACITY	100 weld programs (per pendant)
UNITS OF MEASUREMENT	Metric and Inch (selectable)
PROGRAM TRANSFER	Solid state digital media (USB flash drive/memory key)
LANGUAGE SELECTION	English, Spanish, Czech (other languages available upon request)
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, user notes
ARC START TYPE	High frequency, touch-start
OPERATING/STORAGE TEMPERATURE	Operating: -18 to 50° C (0 to 120° F) Storage: -25 to 60° C (-20 to 140° F)
AIR HUMIDITY	To 98% RH (non-condensing)
STANDARDS	Meets applicable NEMA, CE, CSA standards

DIMENSIONS/WEIGHTS

	516 POWER SOURCE ONLY	COOLING UNIT MODEL 905E	TOTAL
DIMENSIONS	13.6" x 19.1" x 19.1" 346 x 485 x 485 mm	13.6" x 19.1" x 10.75" 346 x 485 x 273 mm	13.6" x 19.1" x 29.66" 346 x 485 x 754 mm
WEIGHT	77 lbs / 35 kg	33 lbs / 15 kg	110 lbs / 50 kg



PIPELINER PRO WELDING MACHINE

200/230/400/460 VAC, 3Ø 12.7 kVA,
50/60 Hz autoranging - 0-400 Amps



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The Magnatech Pipeliner Pro is a mechanized orbital GMAW/FCAW pipe welding system, engineered for high-performance applications. It integrates advanced Fronius technology through the TPS400i Digital Inverter Power Source, offering exceptional welding control and reliability.

System programming and parameter management are facilitated via the Magnatech Pipeliner Digital Programmer (PDP), which features a 10.4-inch color touchscreen interface and a wired remote pendant for precise, real-time adjustment during welding operations.

The complete Pipeliner Pro welding machine consists of:

- the Pipeliner Pro welding head model 616 (Part No: 6160HEB000)
- the digital inverter power source TPS400i (Part No.: TPS400i)
- the welding head controller Model 716 (Part No.: 7160GMB0M0)



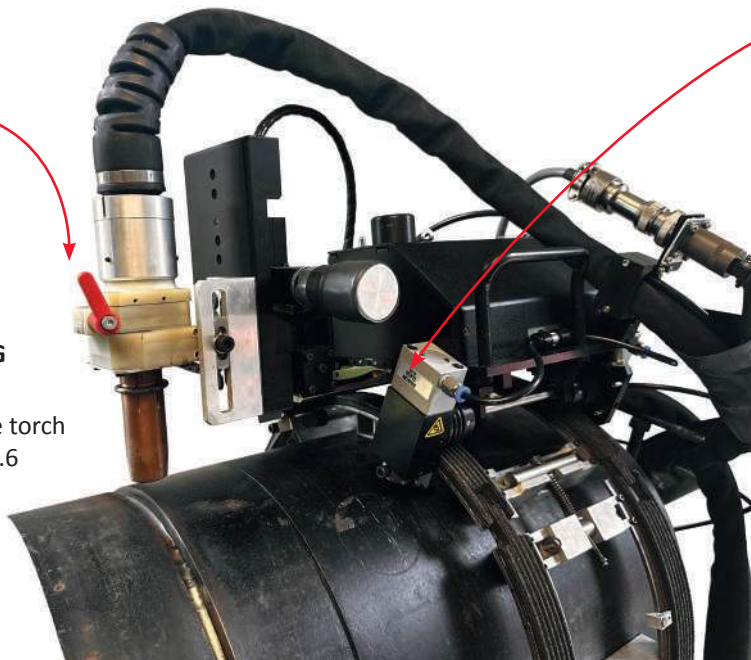
PIPELINER PRO WELDING HEAD 616

The Pipeliner Pro welding head 616 operates with a 400A water-cooled torch and is mounted on the field-proven, rugged tractor. Interchangeable guide rings provide mounting on the pipe, and allow the Pipeliner Pro to cover a broad size range. It can be used for FCAW uphill welding, GMAW high speed downhill welding with narrow groove bevel geometry, and also offers root pass welding capability. It incorporates pendular and straight-line torch oscillation.



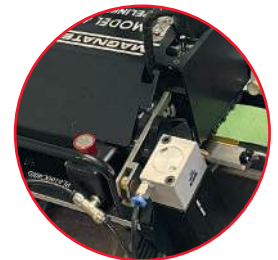
RAPID REPOSITIONNING SYSTEM

allows for quick and stable torch recentering. Up to 4" (101.6 mm) of motion.



WELDING HEAD MOUNTING/ROTATION

- Patented pneumatic clamping system delivers fast, secure, and tool-free installation.
- Powered by compressed gas, it ensures precise, repeatable clamping while reducing setup time and enhancing safety.
- Clutch system allows the head to be positioned on the pipe very quickly.



PART NO.	DESCRIPTION
6160HEB000	Pipeliner Pro welding head, model 616

The Pipeliner Pro welding head 616 comes with a starter kit of required consumables (gas nozzle, gas diffusor, tip holder, contact tip, isolation gasket) as well as a tool kit to operate the machine.

Everything is securely enclosed in a robust, heavy-duty storage case, ensuring optimal protection and easy portability.

DELIVERY AND STORAGE



REQUIRED ACCESSORIES

GUIDE RINGS

The guide rings serve to securely position the welding head around the pipe, enabling precise and stable rotation during operation. This rotation is achieved through a friction drive system composed of powered V-rollers that engage with two V-belts mounted on the surface of the guide ring.

Each guide ring is made up of two identical hinged half-sections, allowing for easy installation and removal. A total of 38 standard sizes are available to accommodate various pipe diameters.

For applications involving pipes smaller than the intended guide ring diameter, adaptor foot kits can be used to ensure proper fit and functionality (see section: Adaptor Foot Kits).



PART NO.	DESCRIPTION
103040-00663	Guide ring, 6.000" pipe, 6.625" / 168.30 mm
103040-00863	Guide ring, 8.000" pipe, 8.625" / 219.10 mm
103040-01075	Guide ring, 10.000" pipe, 10.750" / 273.00 mm
103040-01275	Guide ring, 12.000" pipe, 12.750" / 323.9 mm
103040-01400	Guide ring, 14.000" pipe, 14.000" / 355.60 mm
103040-01600	Guide ring, 16.000" pipe, 16.000" / 406.40 mm
103040-01800	Guide ring, 18.000" pipe, 18.000" / 457.00 mm
103040-02000	Guide ring, 20.000" pipe, 20.000" / 508.00 mm
103040-02200	Guide ring, 22.000" pipe, 22.000" / 559.00 mm
103040-02400	Guide ring, 24.000" pipe, 24.000" / 610.00 mm
103040-02600	Guide ring, 26.000" pipe, 26.000" / 660.00 mm
103040-02700	Guide ring, 27.000" pipe, 27.000" / 686.00 mm
103040-02800	Guide ring, 28.000" pipe, 28.000" / 711.00 mm
103040-03000	Guide ring, 30.000" pipe, 30.000" / 762.00 mm
103040-03200	Guide ring, 32.000" pipe, 32.000" / 813.00 mm
103040-03400	Guide ring, 34.000" pipe, 34.000" / 864.00 mm
103040-03600	Guide ring, 36.000" pipe, 36.000" / 914.00 mm
103040-03800	Guide ring, 38.000" pipe, 38.000" / 965.00 mm
103040-04000	Guide ring, 40.000" pipe, 40.000" / 1016.00 mm
103040-04200	Guide ring, 42.000" pipe, 42.000" / 1067.00 mm
103040-04400	Guide ring, 44.000" pipe, 44.000" / 1118.00 mm
103040-04600	Guide ring, 46.000" pipe, 46.000" / 1168.00 mm
103040-04800	Guide ring, 48.000" pipe, 48.000" / 1219.00 mm
103040-05000	Guide ring, 50.000" pipe, 50.000" / 1270.00 mm
103040-05200	Guide ring, 52.000" pipe, 52.000" / 1321.00 mm
103040-05300	Guide ring, 53.000" pipe, 53.000" / 1346.00 mm
103040-05400	Guide ring, 54.000" pipe, 54.000" / 1372.00 mm
103040-05600	Guide ring, 56.000" pipe, 56.000" / 1422.00mm
103040-05800	Guide ring, 58.000" pipe, 58.000" / 1473.00 mm
103040-06000	Guide ring, 60.000" pipe, 60.000" / 1524.00 mm
103040-06200	Guide ring, 62.000" pipe, 62.000" / 1575.00 mm
103040-06500	Guide ring, 65.000" pipe, 65.000" / 1651.00 mm
103040-06600	Guide ring, 66.000" pipe, 66.000" / 1676.00 mm
103040-06800	Guide ring, 68.000" pipe, 68.000" / 1727.00 mm
103040-07200	Guide ring, 72.000" pipe, 72.000" / 1829.00 mm
103040-07600	Guide ring, 76.000" pipe, 76.000" / 1930.00 mm
103040-07800	Guide ring, 78.000" pipe, 78.000" / 1981.00 mm
103040-08400	Guide ring, 84.000" pipe, 84.000" / 2134.00 mm

OPTIONAL ACCESSORIES

ADAPTATOR FOOT KITS

Adaptor foot kits may be used with larger guide rings on smaller pipe diameters when preheating is required, preventing overheating of the welding head. They are necessary to reach pipe diameters smaller than 6.625" / 168.30mm (down to 4.5" / 114.30mm).

Three types of adaptors can be screwed simply to the guide ring:

- 1" (25.4 mm) adaptor square tube
- 2" (50.8 mm) adaptor square tube
- .13 - .5" (3.3-12.7 mm) adaptor solid bar

(Magnatech can provide these in any dimension)

PART NO.	DESCRIPTION	PICTURE
103070-XXXX*	Adaptor foot set	

*The quantity of feet necessary for a complete set is defined by the guide ring size. Contact us for more information.

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 2.3 m (7.5') track sections. Multiple sections can be bolted together for longer lengths.
- Magnetic or vacuum attachments are available depending on the pipe material.

PART NO.	DESCRIPTION	PICTURE
SK2460-090	Flex-Track assembly, 90" / 2,286 mm	
SK2474-1	Magnet assembly large diameter, Flex-track	
104294-1	Vacuum cup kit 90" Flex Track	



Pipeliner mounted on Flx-Track in 3.3m (11 ft.) diameter duct



Pipeliner mounted on a stainless steel vessel using vacuum cup kit

CONSUMABLES

EXPENDABLES PART KIT

The expendables parts kit includes all consumables required to operate the Pipeliner Pro welding head 616: tip holder, gas diffuser, gas nozzle, contact tip, wire liner and feeder roller.

PART NO.	DESCRIPTION	PICTURE
EXPEND/616	Expendable parts kit, Model 616	

TECHNICAL SPECIFICATIONS

PIPE (TUBE) SIZE RANGE	4.5 - 84" / 114.30 - 2,134 mm	
CABLE LENGTH	25" / 7.6 m standard	
FILLER WIRE MODULE	Wire size	0.030", 0.035", 0.040", 0.045", 0.062" / 0.8, 0.9, 1.0, 1.2, 1.6 mm
	Max. speed capability	100 IPM / 2540 mm/min.
	Spool size	5 to 20 kg (10 to 44 lbs) (wire feeder supplied with the power source)
OSCILLATION MODULE	Max. oscillation stroke amplitude	2" / 50.8 mm
	Max. oscillation speed	100 IPM / 2540 mm/min.
	Oscillation dwell	0 – 1 second
	Cross seam adjustment	3" (76.20 mm) course adjustment
ARC GAP CONTROL MODULE	Max stroke amplitude	2.625" / 66 mm (motorized)
	Max speed	60 IPM / 1520 mm/min.
TORCH PROPULSION MODULE	Technology	Poly-Track® propulsion (patented)
	Speed	30 IPM / 0 - 762 mm/min. . Higher speed motors
TRAVEL DIRECTION	Switch selectable (on head)	
WATER-COOLED TORCH	300 A continuous. Uses standard torch components	
TORCH ADJUSTMENT CAPABILITY	Torch lead/lag adjustment	± 30 degrees (manual)
	Torch tilt adjustment	± 15 degrees (manual)

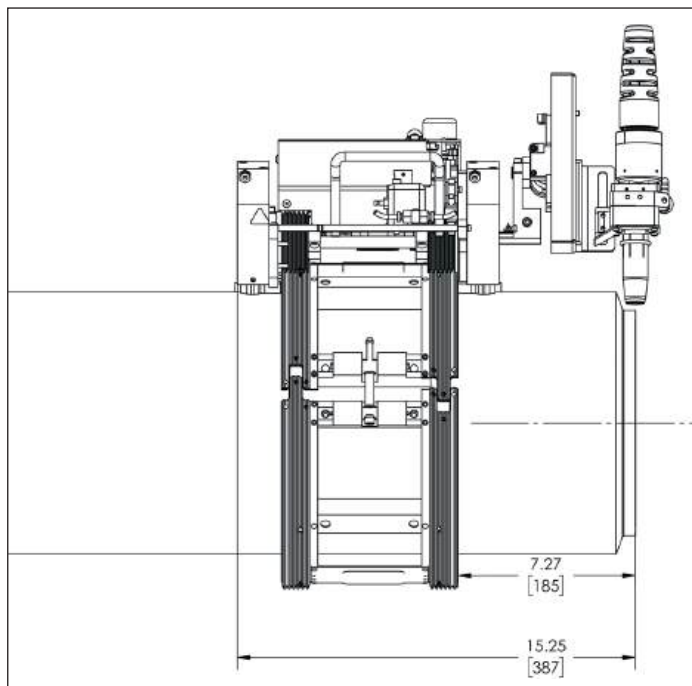
DIMENSIONS/WEIGHTS

AXIAL LENGTH ¹	15.25"	387 mm
MINIMUM RADIAL CLEARANCE ²	9.75"	248 mm
OVERALL WIDTH	12"	305 mm
WEIGHT	9.8 kg	21.5 lbs.

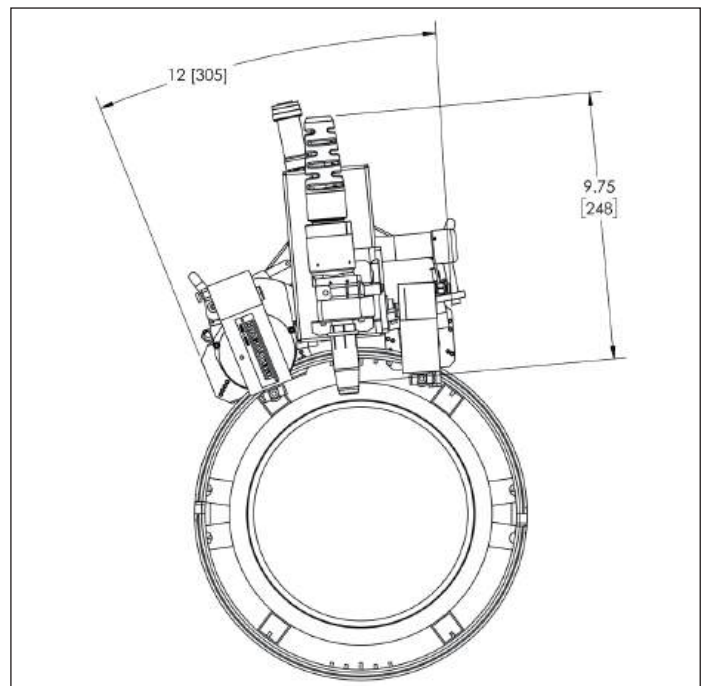
¹ Center of oscillation stroke

² Center of vertical stroke

AXIAL LENGTH



RADIAL CLEARANCE



DIGITAL INVERTER POWER SOURCE TPS400i

The **TPS400i** is a digital inverter power source for GMAW/FCAW process welding applications. The TPS400i 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

- LSC (Low Spatter Control) with advanced root programs
- Penetration and arc length stabilizer
- Root pass capability
- Pulsed/spray modes
- Multi-pass pipe welding
- Auto ranging power input
- Pre-set programs for standard materials
- Custom programs for special alloys

Also included:

- Wire feeder operating wire spool from 10 to 44 lbs (5 to 20 kg)
- Water cooler with flow sensor
- Cart with bottle rack

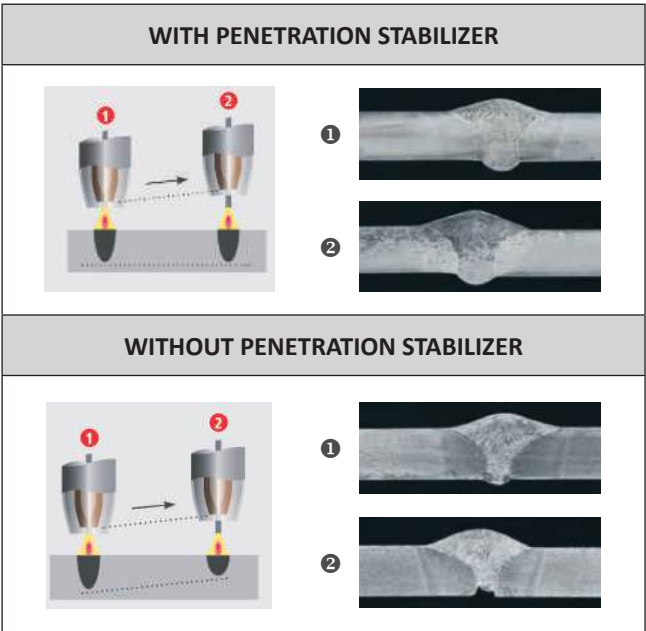


PART NO.	DESCRIPTION
TPS400i	Digital inverter power source



PENETRATION STABILIZER

Intelligent wire control maintains consistent current and penetration despite variations in stick-out. This ensures a significantly more stable arc and uniform penetration throughout the process.



ARC LENGTH STABILIZER

By reducing the arc length, the arc length stabilizer in the spray arc with LSC Universal enables stable and regular short circuit behaviour, with the arc always being maintained at the same short length. There is no need for the user to carry out manual readjustment in the event of external interference (e.g. caused by changing welding torch position, material misalignment, changing pipe thicknesses or uneven heat extraction).

LOW SPATTER CONTROL (LSC)

During critical phases of the process, such as short-circuiting or droplet detachment, the current is rapidly decreased to stabilize the arc and minimize spatter generation.

Highlights & benefits

- Minimal spattering
- Reduced heat input with increased deposition rate during root pass welding
- High welding speed
- Arc control stabilizers for consistent penetration and arc stability
- Enhanced arc performance and process reliability
- Consistent weld quality and arc stability, even with extended torch leads
- No need for external sensor integration compared to competitor systems

MODEL 716 CONTROLLER AND PIPELINER DIGITAL PROGRAMMER

The **Pipeliner Digital Programmer** (PDP) enables touchscreen programming of all weld head parameters for up to 9 weld passes. Designed for seamless integration with the TPS400i Power Source, it combines intuitive, icon-based operation with rugged hardware ideal for field use.

FEATURES



PIPELINER DIGITAL PROGRAMMER

- 10.4” HD color touchscreen, side-mounted on the power source
- Rapid and user-friendly weld parameter adjustment via icon-based interface.
- Test mode enables the operator to configure settings without initiating an arc
- Password protection for program security
- USB port for fast, easy software updates
- Steel enclosure with gasketed lockable cover

ADVANCED PROGRAMMING TOOLS

- Run pendant allows limited override for flexibility and safety
- Stored pre setted programs optimized for common materials
- Custom program development available



OPERATOR PENDANT: REMOTE CONTROL IN YOUR HANDS

- Handheld waterproof pendant
- Built with a silicone rubber keypad — glove-compatible and field-tested
- Immune to weld spatter and grinding dust
- Override On-the-Fly: enables welders to make real-time program adjustments without lifting their hood
- Durable cable resists weld spatter and abrasion



CONTROLLER CAPABILITIES

- Input power: 230 VAC, 1-phase
- Integrated compatibility: designed for direct integration with the Fronius TPS400i power source

PART NO.	DESCRIPTION
7160GMB0M0	Model 716 welding head controller

SPECIFICATIONS

PROCESS CAPABILITY	GMAW/ GMAW – pulsed (optional) / FCAW / LSC (low spatter control) + advanced root program
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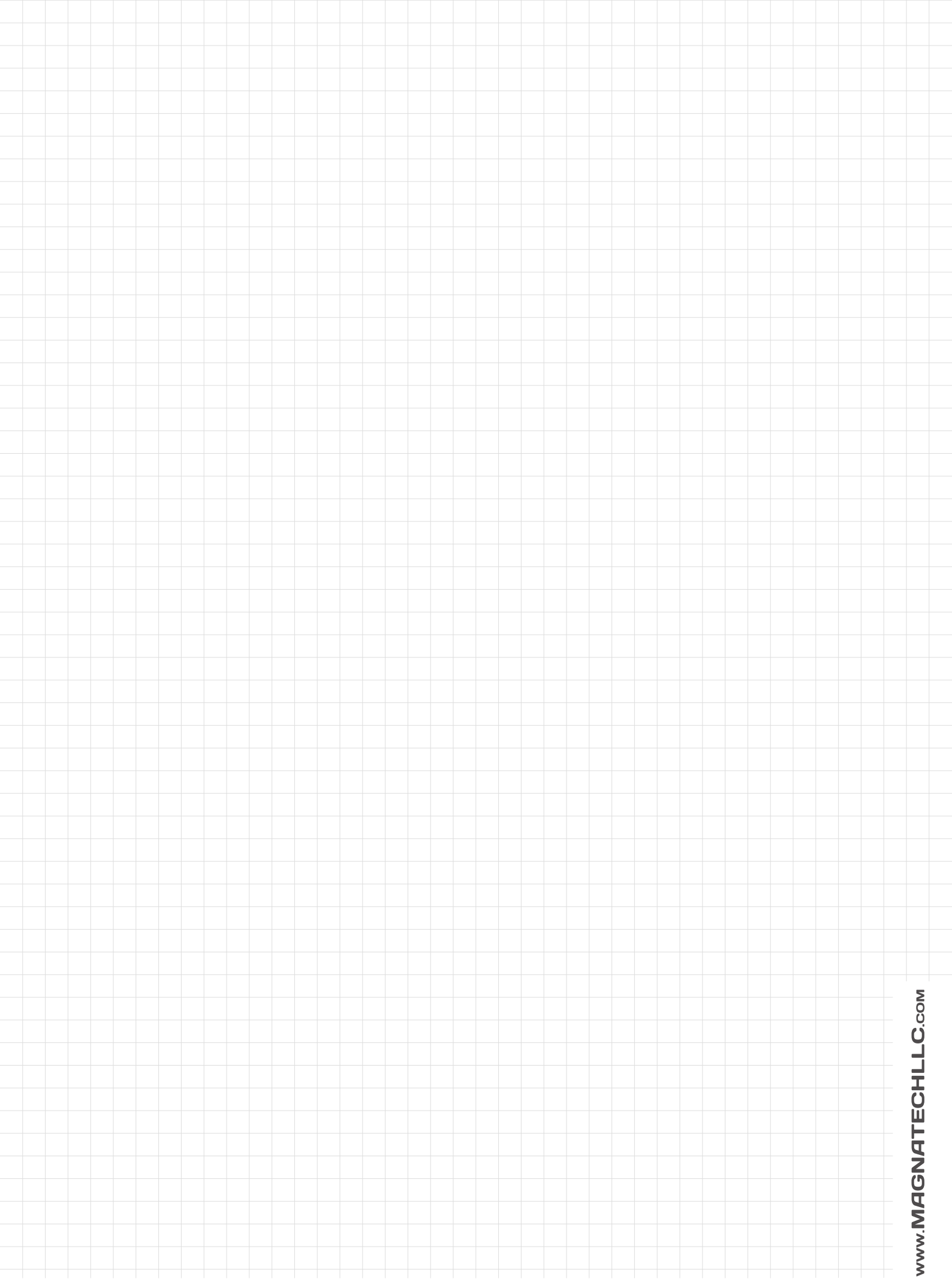
POWER SOURCE	DIGITAL INVERTER POWER SOURCE (PART NO. TPS400i)
OUTPUT RATING	400A @ 40% duty cycle, 320A @ 100% duty cycle
INPUT POWER	Volts 200/230/400/460 12.7 kVA frequency: 50/60 Hz
AUTORANGING POWER INPUT	230v / 480v tri-phase eliminates all internal modifications
MAXIMUM OUTPUT CIRCUIT VOLTAGE	75V
DEGREE OF PROTECTION	IP23
APPLICABLE ELECTRICAL STANDARDS	IEC 974-1 (IP-23S), CSA, EMC 89/336/EEC, EN 60 974-1
WATER CIRCULATOR	
PUMP	Centrifugal
COOLING CAPACITY	2000W (at 20°C/68F)
MAXIMUM DELIVERY CAPACITY/PRESSURE	3.5 liter/min at 4.2 bar
COOLANT VOLUME	5.54 liter
DEGREE OF PROTECTION	IP23
WIRE FEEDER	
DRIVE TYPE	4 rolls (various groove geometries available)
WIRE DIAMETER	0.03 – 0.062" (0.8 – 1.6 mm)
WIRE FEED SPEED	20 – 866 ipm (0.5 – 22 m/min)
DEGREE OF PROTECTION	IP23

CONTROLLER	MODEL 716 WELDING HEAD CONTROLLER (PART NO. 7160GMB0M0)
INPUT POWER	115/230 vac, 1 phase input
PENDANT CABLE LENGTH	7.6 m (25'). Extension cables available
DEGREE OF PROTECTION	IP23 (excluding remote pendant)

DIMENSIONS/WEIGHTS

POWER SOURCE		
DIMENSIONS (D x W x H)	24" x 43" x 64"	610 x 1092 x 1625 mm
WEIGHT	330 lbs	150 kg

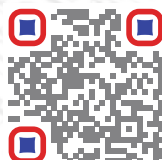






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