



QUICKCLAMP 432 433

MAGNATECH

CABLE GUIDES

Control torch cable wrap up - prevent damage.

3-AXIS POSITION ADJUSTMENT FOR FILLER WIRE NOZZLE

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

TORCH OSCILLATION (WEAVE)

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 (ARC VOLTAGE CONTROL)

Electronically maintains programmed arc length.

INTEGRAL FILLER WIRE FEEDER

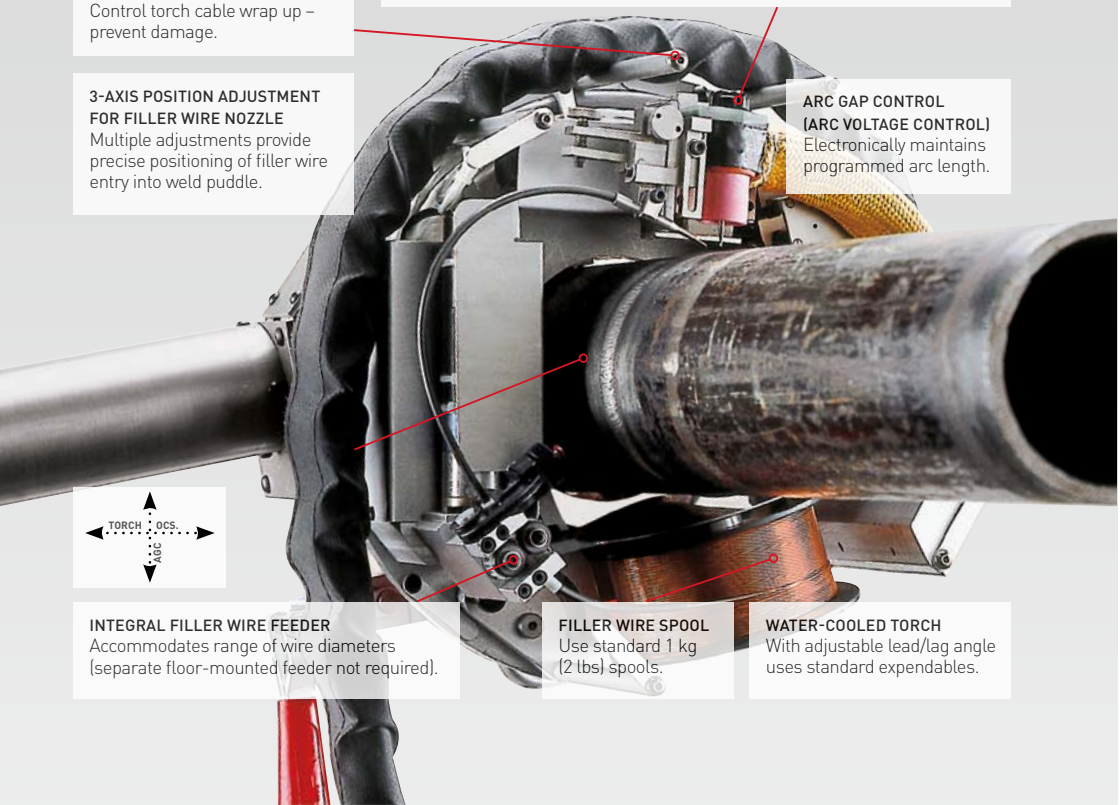
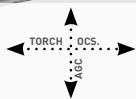
Accommodates range of wire diameters (separate floor-mounted feeder not required).

FILLER WIRE SPOOL

Use standard 1 kg (2 lbs) spools.

WATER-COOLED TORCH

With adjustable lead/lag angle uses standard expendables.



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ORBITAL WELD HEADS FOR MULTI-PASS GTAW PIPE WELDING

The Magnatech Quickclamp weld heads are designed to make pipe-to-pipe and pipe-to-fitting welds. They are “full function” – with the capability of reproducing all the precise motions of a skilled welder. A continuously adjustable clamp eliminates the need to interchange components when changing pipe sizes. Simply slip the head over the pipe and clamp with a toggle lever. The Quickclamp heads improve productivity by increasing duty cycle, reducing repair rates, and producing welds of consistent quality.



Features

- Multipass welding of tubes/pipes in all gravity positions
- Use economical standard 1 kg (2 lb.) wire spools
- Push button clutch for rapid cable unwind
- Heat tolerant steel bearings and chain drive
- Waterproof Carry Case/Tool Kit standard
- Socket Welding Kit and Tilt AVC option for angled torch applications
- Water-Cooled Torch uses standard expendables

Options

- Extension cables



TILT-AVC standard. Allows the torch to be pivoted for socket/fillet welding applications, maintaining the arc length correction motion along the tungsten electrode axis (tilt-torch bracket also provided standard).



HEAD mounts entirely on one side of the joint, allowing use for pipe-to-fitting welds.



PIVOTING SPOOL MOUNT
Unique design maintains tension on wire, prevents bending (not required on Model 433)



NARROW AXIAL PROFILE

QUICKCLAMP 432 433

Features

ENGRAVED SCALE allows precise clamp adjustment for pipe O.D. (metric or inch)

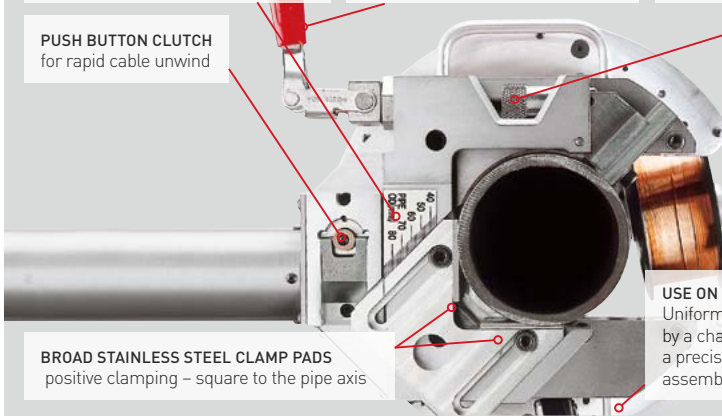
TOGGLE LEVER can be repositioned for right/left hand operation

MICROMETER FINE ADJUSTMENT on Clamp provides rapid adjustment for O.D. variation

PUSH BUTTON CLUTCH for rapid cable unwind

BROAD STAINLESS STEEL CLAMP PADS positive clamping – square to the pipe axis

USE ON PREHEATED PIPES
Uniform torch rotation is ensured by a chain and sprocket drive using a precision stainless steel bearing assembly that is immune to heat.



Applications

- Fossil Power Plant Construction/Maintenance
- Steam Generation Equipment Fabrication
- Nuclear Power Plant Construction/Maintenance
- Shipyard Construction
- Fabrication Shops
- Chemical/Petrochemical Facility Construction and Maintenance
- Process Piping



432 433 QUICKCLAMP

Specifications

| | QUICKCLAMP MODEL 432 | QUICKCLAMP MODEL 433 |
|------------------------------------|--|-------------------------------|
| Application | Multi-pass orbital GTAW pipe-to-pipe, pipe-to-fitting | |
| Pipe (tube) OD size range | 25 – 89 mm (1.0" – 3.5") | 60 – 168 mm (2.375" – 6.625") |
| Filler wire module | Wire size: 0.8, 0.9, 1.0 mm (.030, .035, .040") Max. speed capability: 2540 mm/min. (100 IPM) | |
| Oscillation module | Max. oscillation stroke amplitude: 16 mm (0.625") Max. oscillation speed: 1520 mm/min. (60 IPM) Oscillation dwell: 0 – 1 second Cross seam adjustment: ± 6.4 mm (± 0.25 ") | |
| Arc gap control module | 13 mm (0.5") stroke. Additional mechanical adjustment allows welding heavier wall pipe | |
| Torch propulsion module | 0.1 – 1.8 rpm | 0.05 – 0.9 rpm |
| Water-cooled torch | 200 A continuous | |
| Torch adjustment capability | Torch lead/lag adjustment: ± 15 degrees (manual) Torch tilt adjustment: ± 10 degrees (manual) | |
| Cable length | 7.6 m (25') standard. Extension cables available | |
| Power supply compatibility | Pipemaster 515, Pipemaster 516 | |

Dimensions/weights

| | QUICKCLAMP MODEL 432 | 433 |
|--|---|--|
| Weight | 5.9 kg (13.0 lb.) | 8.1 kg (17.8 lb.) |
| Axial Clearance (Torch Centerline to Rear Extremity) (A) | 158 mm (6.24") | 158 mm (6.24") |
| Axial Clearance (Torch Centerline to Front Extremity) (B) | 10 mm (0.41") | 10 mm (0.41") |
| Width (C) | 241 mm (9.50") | 321 mm (12.63") |
| Radial Clearance Requirement (D) | 241 mm (9.50") - Pipe OD $\div 2 =$ Radial Clearance | 321 mm (12.63") - Pipe OD $\div 2 =$ Radial Clearance |

