



# T HEAD 419

## ORBITAL WELD HEAD FOR MULTI-PASS GTAW PIPE WELDING

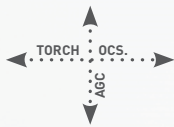
The Magnatech T model weld head is designed to make pipe-to-pipe and pipe-to-fitting welds. It is “full function” – with the capability of reproducing all the motions of a skilled manual welder. The T Head is used for larger diameter/heavy wall applications, requiring the precise weld process control of gas tungsten arc welding. Interchangeable guide rings provide mounting on the pipe, and allow the T Head to cover a broad size range. The T model weld head improves productivity by increasing duty cycle, reducing repair rates, and producing welds of consistent quality.

- Generates high quality welds
- Single or dual wire feeder option
- Rugged design
- State of the art technology

# T HEAD 419

## 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.



## 3-AXIS POSITION ADJUSTMENT FOR FILLER WIRE NOZZLE

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

## WATER-COOLED TORCH

## FILLER WIRE SPOOL

Use standard 1 kg (2 lbs) spools.

## HEAD-MOUNTED WIRE FEEDER

Accommodates range of wire diameters.

## WELD HEAD MOUNTING/ROTATION

Guide rings attach head to pipe.

## SPECIFICATIONS

\*Guide rings come with a one year warranty

|                               |  |  |
|-------------------------------|--|--|
| Application                   | Multi-pass orbital GTAW pipe-to-pipe, pipe-to-fitting                                  |  |
| Cable length                  | 7.6 m (25') standard. Extension cables available                                       |  |
| Pipe (tube) size range        | 168 - 1524 mm (6 - 60") and larger   |  |
| Filler wire module            | Wire size: 0.8, 0.9, 1.0, 1.2 mm (.030", .035", .040", .045")                          |  |
|                               | Max. speed capability:   | 2540 mm/min. (100 IPM)   |
|                               | Spool size:  | 1 kg (2 lbs) standard. 5 kg (10 lb) spool size optional              |
| Oscillation module            | Max. oscillation stroke amplitude:   | 16 mm (0.6725")  |
|                               | Max. oscillation speed:  | 1520 mm/min. (60 IPM)  |
|                               | Oscillation dwell:   | 0 - 1 second   |
|                               | Cross seam adjustment:   | ± 6.4 mm (0.25") fine adjustment<br>± 38 mm (1.5") course adjustment |
| Arc gap control module stroke | 66 mm (2.6") stroke. Additional mechanical adjustment allows welding heavier wall pipe |  |
| Torch propulsion module       | 250 mm/min. (10 IPM) maximum rotation speed  |  |
| Water-cooled torch            | 300 A continuous   |  |
| Torch adjustment capability   | Torch lead/lag adjustment:   | ± 15 degrees (manual)  |
|                               | Torch tilt adjustment:   | ± 10 degrees (manual)  |
| Power supply compatibility    | Pipemaster 515, Pipemaster 516   |  |



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