



# REDHEAD WELD HEADS 427A / 428A 429A

**MAGNATECH**

## ARC LENGTH ADJUSTMENT CONTROL

Maintains set arc length. Allows adjustment during welding.

## WATER-COOLED TORCH

With adjustable lead/lag angle.

## PUSH BUTTON CLUTCH

For rapid cable unwind.

## TOGGLE LEVER

Actuates clamps – can be positioned for right or left hand operation.

**3-AXIS POSITION ADJUSTMENT FOR FILLER WIRE NOZZLE**  
(Vertical, horizontal, angular)

## TORCH CROSS-SEAM ADJUSTMENT

Allows lateral torch adjustment during welding.

## BROAD STAINLESS STEEL CLAMP PADS

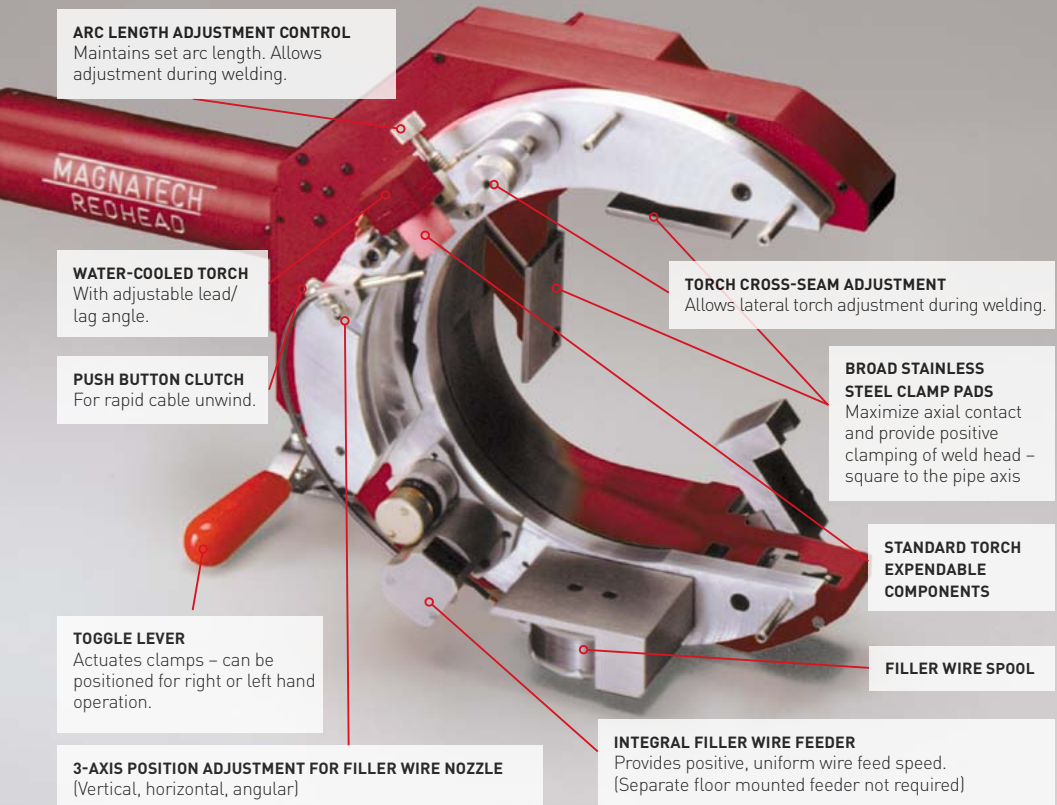
Maximize axial contact and provide positive clamping of weld head – square to the pipe axis

## STANDARD TORCH EXPENDABLE COMPONENTS

## FILLER WIRE SPOOL

## INTEGRAL FILLER WIRE FEEDER

Provides positive, uniform wire feed speed.  
(Separate floor mounted feeder not required)



# 427A 428A 429A REDHEAD

## ORBITAL WELD HEADS FOR FUSION AND WIRE FEED WELDING OF PIPE

Magnatech Redheads are designed to make pipe-to-pipe and pipe-to-fitting welds with precision and repeatability. Redheads can be used for fusion welding, or with filler wire addition – an integral headmounted feeder is standard on all models. Three models cover the size range of 12.7 to 168 mm (0.5 to 6.625") OD. Digital technology forever eliminates the need for periodic calibration – rotation and wire speed remain accurate regardless of wear, and heads can be interchanged without time-consuming recalibration.



## MOUNTING

The Weld Head mounts entirely on one side of the joint, allowing use on pipe-to-pipe and pipe-to-fitting welds.

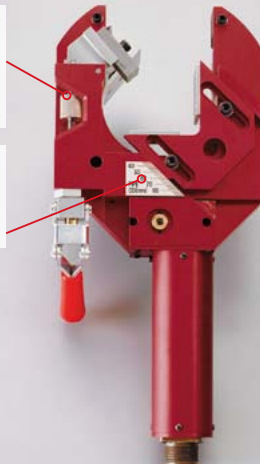


## CLAMPING

### MICROMETER FINE ADJUSTMENT ON CLAMP

Provides rapid Adjustment for Pipe O.D. Variation

### ENGRAVED SCALE CLAMP ADJUSTMENT FOR PIPE O.D. (METRIC OR INCH)



## TORCH ROTATION

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



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## Options

- Extension Cables
- Fillet/Socket Weld Kit
- Extended Clamping Range Kit
  - R-2 allows welding down to 21mm (0.84 inch) OD
- Extended Clamping Range Kit
  - R-3 allows welding down to 50 mm (2 inch) OD

## Applications

- Pharmaceutical
- Sanitary (Hygienic) Process Piping
- Food Processing/Dairy
- Brewery Tubing
- Power Generation
- Chemical



## Specifications

R-1 (MODEL 427A) R-2 R-2 (MODEL 428A) R-3 (MODEL 429A)

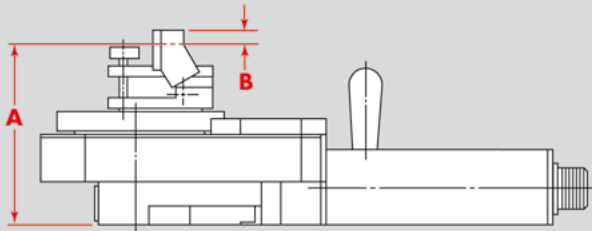
<b>Application</b>	Orbital GTAW welding of pipe-to-pipe, pipe-to-fittings		
<b>Pipe (tube) OD size range</b>	13 – 38 mm (0.5 – 1.5")	33 – 90 mm (1.315 – 3.5")	90 – 168 mm (3.5 – 6.625")
<b>Filler wire module</b>	Wire size: 0.8 mm (0.03")		
<b>CE standards adopted</b>	Max. speed capability: 1900 mm/min. (75 IPM) Spool size: 0.16 kg (0.35 lbs)		
<b>Arc gap control module</b>	Mechanical, adjustable		
<b>Torch propulsion module</b>	0 – 4.0 rpm	0–1.5 rpm	0–0.6 rpm
<b>Water-cooled torch</b>	200 A continuous		
<b>Torch adjustment capability</b>	Torch lead/lag adjustment: ± 15 degrees (manual) Torch tilt adjustment: Requires optional socket weld kit		
<b>Cable length</b>	7.6 m (25') standard. Extension cables available.		
<b>Power supply compatibility</b>	Tubemaster 514, Pipemaster 515, Pipemaster 516		

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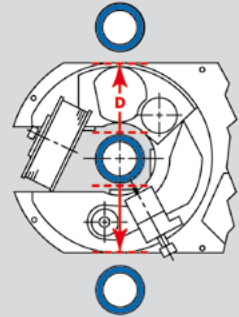
## Dimensions/weights

	R-1 (MODEL 427A) R-2	R-2 (MODEL 428A)	R-3 (MODEL 429A)
<b>Weight</b>	3.9 kg (8.5 lbs.)	5.4 kg (12 lbs.)	9.0 kg (20 lbs.)
<b>Axial Clearance (Torch C/L to Rear Extremity) (A)</b>	127mm (5.0")	127mm (5.0")	127mm (5.0")
<b>Axial Clearance (Torch C/L to Front Extremity) (B)</b>	10mm (0.41")	10mm (0.41")	10mm (0.41")
<b>Width (C)</b>	140mm (5.5")	191mm (7.5")	280mm (11.0")
<b>Radial Clearance Requirement (D)</b>	[140mm (5.5") – Pipe O.D.] ÷ 2 = Radial Clearance	[191mm (7.5") – Pipe O.D.] ÷ 2 = Radial Clearance	[280mm (11") – Pipe O.D.] ÷ 2 = Radial Clearance

TOP VIEW



RADIAL CLEARANCE



SIDE VIEW

