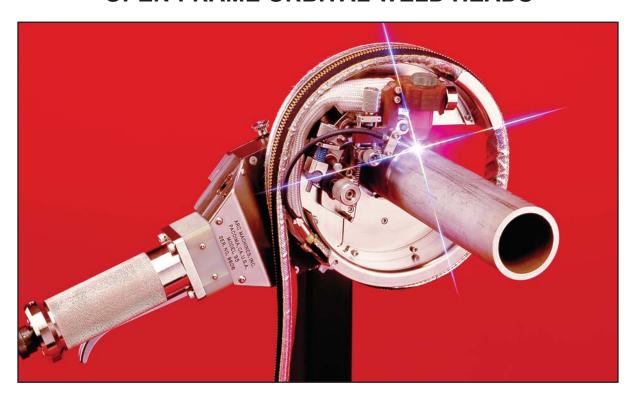


# MODEL 95 SERIES (WITH WIRE FEED) OPEN-FRAME ORBITAL WELD HEADS



AMI's Model 95 (M95) Series is a family of economical, easy to use, sturdy welding heads featuring precise but rugged mechanics. They are designed for precision orbital welding with or without filler wire of tube, pipe, return-bends, fittings, and flanges and are intended for small-diameter pipe and fitting welds that have limited axial or radial clearance. Precision-machined clamping jaws always hold the weld head concentric to the pipe, with  $\pm 0.010$ ".

- Series of orbital, GTAW (TIG) wire feed pipe weld heads for field or fab shop
- Accommodates tube, pipe, flanges, sockets or fittings from 0.625" to 6.625" O.D. with wall thicknesses up to 0.44"
- Welds standard weld preps, square butt preps and socket welds
- Rapid mount and dismount capability
- Centers the weld head to the pipe automatically
- Low radial / axial clearance provides high visibility torch with easy access to wire manipulator controls
- Compatible with AMI Model 227, Model 307, Model 415 power supplies or the Model 207 (fusion-only using optional adapter)

#### ARC MACHINES, INC.

AMI is an ISO Certified Company

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#### **MODEL 95 SERIES OPEN-FRAME ORBITAL WELD HEADS**

The Model 95 (M95) series of weld heads is a low-cost, easy set-up, rapid mount and rapid dismount type of weld head that features precise but rugged mechanics. It is mainly intended for small diameter pipe and fitting welds that have limited axial and/or radial clearance or require a high productivity (quick set-up) type of welding head. The arc length and torch cross-seam positions are manually controlled. The M95 weld heads use an off-board wire feeder and the same adjustable mounting system as the M79 weld heads. They can be used as fusion weld heads or with the wire feeder. Several torch options are available for a variety of welding applications.

The M95 series weld heads are versatile and compatible with a variety of joint designs, such as "J" prep, socket and square butt. They will weld materials ranging from stainless steels or carbon steels to exotic alloys like Hastelloy™, Inconel™ and Monel™ as well as all other TIG weldable materials. Root passes may be done fusion-only, with filler wire, or with the use of insert rings. Autogenous welds (without filler metal) with 100% penetration may be done on wall thicknesses up to 0.154" (3,9mm) depending on alloy.



## **MODEL 95-1250 WELD HEAD (Special Torch)**

Tube / Pipe O.D. Range: 0.75" – 1.00" (19 – 25mm) (Smaller sizes are possible using optional clamp inserts)

Torch: Water-cooled, 200 amp
Rotation speed: 0.05 – 10.0 RPM
Wall thicknesses: Welds up to 0.3"

Torch adjustments: Lead / lag  $\pm$  5°, cross-seam  $\pm$  0.25"

Weight (less cables): 5 lbs.



# MODEL 95-1500 WELD HEAD (B and C Torches)

Tube / Pipe O.D. Range: 0.625" – 1.50" (16 – 40mm) (Smaller sizes are possible using optional clamp inserts)

Torch: Water-cooled, 200 amp

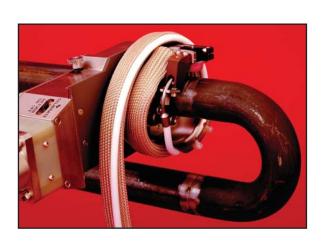
continuous duty 0.05 – 10.0 RPM

Rotation speed: 0.05 – 10.0 RPM Wall thicknesses: Welds up to 0.3"

Torch adjustments: Lead / lag  $\pm$  10°, tilt in / out  $\pm$  15°,

Cross-seam "B"  $\pm$  0.50", Cross-seam "C"  $\pm$  0.25"

Weight (less cables): 5.5 lbs.



#### **MODEL 95-2375 WELD HEAD**

Tube / Pipe O.D. Range: 0.750" – 2.375" (19 – 61mm)

(Smaller sizes are possible using optional clamp inserts)

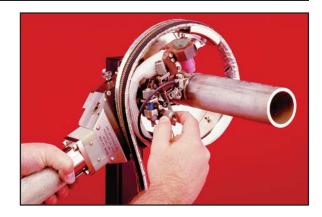
Torch: Water-cooled, 200 amp continuous duty

Rotation speed: 0.1 – 5.0 RPM Wall thicknesses: Welds up to 0.4"

Torch adjustments: Lead / lag  $\pm 5^{\circ}$ , cross-seam  $\pm 0.50$ ,"

tilt in / out ± 10°

Weight (less cables): 8 lbs.



## **MODEL 95-3500 WELD HEAD**

Tube / Pipe O.D. Range: 1.00" – 3.50" (25 – 90mm) (Smaller sizes are possible using optional clamp inserts)

Torch: Water-cooled, 200 amp continuous duty

Rotation speed: 0.05 – 2.0 RPM Wall thicknesses: Welds up to 0.4"

Torch adjustments: Lead / lag  $\pm$  10°, cross-seam  $\pm$  0.50,"

tilt in / out ± 15°

Weight (less cables): 13 lbs.



## **MODEL 95-6625 WELD HEAD**

Tube / Pipe O.D. Range: 2.00" – 6.625" (50 – 170mm) (Smaller sizes are possible using optional clamp inserts)

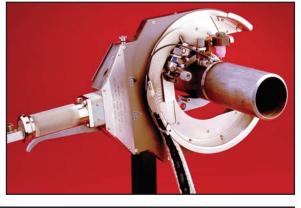
Torch: Water-cooled, 200 amp continuous duty

Rotation speed: 0.05 – 2.0 RPM Wall thicknesses: Welds up to 0.4"

Torch adjustments: Lead / lag  $\pm$  10°, cross-seam  $\pm$  0.50,"

tilt in / out ± 15°

Weight (less cables): 16 lbs.



# **MODEL 95 - 45 DEGREE TILT WELD HEADS**

AMI's M95 - 45 degree tilt weld heads have been successfully designed for socket and flange fillet-welding applications. The M95 - 45 degree tilt heads feature the same mounting, cross-seam adjustment, arc length and wire feed mechanics as the standard M95 pipe-to-pipe series weld heads. The M95 - 45 degree tilt torch featured on the M95-2375, M95-3500 and M95-6625 can be rotated into a 90° position allowing standard pipe-to-pipe welding with a small increase in radial clearance over the standard weld head versions.



## **MODEL 95-WF REMOTE PUSHER WIRE FEED**



The Model 95-WF wire feeder is a compact, portable unit designed specifically for use with all M95 series weld heads. It features precise and reliable wire feed speed control when used with AMI's Model 227, 215 or 415 power supplies.

Wire feed speed: 5.0 to 100 IPM

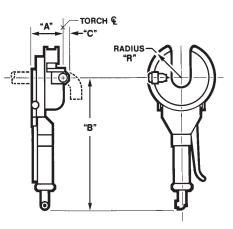
Wire spool size: 2 lb. (4" spool) standard 10 lb. (8" spool) optional

Filler wire size: 0.030" or 0.035" Dimensions: 11" x 21" x 15"

Weight: 16 lbs.

## **Technical Data**

Weld Head Model No.	Tube / Pipe O. D. Range	Dimensions			
		Α	В	С	R
95-1250	0.75" - 1.00"	3.00"	8.56"	0.74"	1.81"
Special Torch	19 - 25mm	76mm	217mm	19mm	46mm
95-1500	0.625" - 1.50"	3.60"	15.95"	0.46"	2.17"
"C" Torch	16 - 40mm	92mm	405mm	12mm	56mm
95-1500	0.625" - 1.50"	3.81"	15.95"	0.63"	3.38"
"B" Torch	16 - 40mm	97mm	405mm	16mm	86mm
95-1500	0.625" - 1.50"	4.91"	15.95"		2.17"
45° Tilt	16 - 40mm	125mm	405mm		55mm
95-2375	0.75" - 2.375"	3.75"	16.26"	0.62"	3.95"
	19 - 61mm	95mm	412mm	16mm	100mm
95-2375	0.750" - 2.375"	4.98"	16.26"		3.94"
45° Tilt	19 - 61mm	126mm	412mm		100mm
95-3500	1.00" - 3.50"	3.83"	19.3"	0.62"	4.25"
	25 - 90mm	97mm	490mm	16mm	108mm
95-3500	1.00" - 3.50"	5.05"	19.3"		4.25"
45° Tilt	25 - 90mm	128mm	490mm		108mm
95-6625	2.00" - 6.625"	3.75"	19.25"	0.63"	6.31"
	50 - 170mm	95mm	489mm	16mm	160.3mm
95-6625	2.00" - 6.625"	5.12"	19.25"		6.31"
45° Tilt	50 - 170mm	130mm	489mm		160.3mm



Special application torch designs are available. Consult factory for more information.

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