

# MAGNATECH



# ORBITAL WELD HEADS FOR FUSION WELDING OF TUBE

Magnatech introduces an innovate solution to orbital tube welding with its modular EZ Orbital welding systems. The model 517 is a tube welding controller that integrates the operation of a standard, commercial GTAW power source with the weld head. The new line of weld heads, the 1000 series, with digital control of rotation speed regulation, ensuring perfect repeatability.



#### Features

#### WELDING CONTROLLER

- Full color, touch screen operation
- Intuitive symbol-based operation
- Real time head temperature monitoring and over temperature alert
- Visual display of welding cycle
- Simple % adjustment of preset welding parameters
- Diagnostic fault detection system (gas purge, weld head jam, etc)
- Software updates and upgrades available by internet download via USB interface
- Compact and lightweight controller built into waterproof rugged case

#### WELD HEADS

- Digital rotation motor ensures 100% repeatable speed regulation
- Easy access collet clamp adjustment optimal grip without deformation
- Flip top viewing port accurate pre-weld fit up inspection
- Molded silicone switch panel on weld head handle – eliminates need for remote pendant
- Indestructible SS hinge provides rigidity for positive tube alignment
- Collets for all tube sizes/fitting geometries
- Internal water cooling standard simply connect to a commercial water recirculator for high duty cycle applications

#### **Accessories**

- Extension cables allow use up to 12 m (40') from power supply
- Pre-ground tungsten electrodes
- Waterproof carry case
- Bench mount bracket



Tungsten Electrodes

# OVER-CENTER CLAMPING USES SOLID COLLETS - NEVER NEEDS

**REPLACEMENT\*** 

\*Patent Applied For

- Flush collets for minimal axial clamping length
- Extended collets for maximum alignment capability





### Specifications 2

Length x width x height	330 x 420 x 170 mm (13 x 16.5 x 6.8")
Weight	6 kg (13 lbs)
Power supply capability	Consult factory for suitable models
Input power requirements	90/240 VAC, 1 Ø, 0.5 A fuse, 50/60 Hz
Unites of measurement	Metric and inch (selectable)
Operating temperature	-18 to 50° C (0 to 120° F)
Storage temperature	-25 to 60°C (-20 to 140° F)
Humidity	To 98% RH (non-condensing)
Power source	Conventional tig
Weldhead	1030
Pipe (tube) size	25 - 75 mm (1.0/3.0")

#### **HOW EASY IS EZ ORBITAL?**

The model 517 Controller has an intuitive symbol-based touch-screen user interface. Operation involves selecting a tube size and wall thickness and pressing the Start Weld switch on the Head. The operator can adjust amperage by a percentage override to accom-modate tube lot variation.

1 From Start Up Display



2 Select (Input) Tube O.D.



3 Select Wall Thickness

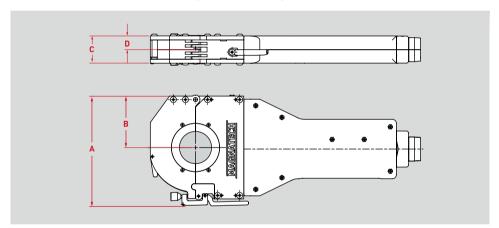


## Dimensions/weights

#### **HEAD MODEL 1030**

Tube Diameter Range	25 – 75 mm (1.0–3.0")
Weight	6.4 kgs (14 lbs.)
"A"	202 mm (7.96")
"B"	96 mm (3.79")
"C"	43 mm (1.70")
"D"	19.5 mm (.77")
Cable length	4.6 m (15') standard. Extension cables available

<sup>&</sup>lt;sup>1</sup> Distance from nearest flush collet face to tungsten centerline. (Tungsten offset from center)









5 ... For a perfect weld every time