## WELDING OSCILLATOR & MINI-MANIPULATOR

### **Welding Oscillator**

#### **AUTOMATIC WEAVE WELDING**

Improve your circumferential welding processes with the Steelmax stand-alone **Welding Oscillator** and **Mini-Manipulator**. This lightweight, compact weld weaving oscillator provides you with full control of oscillation parameters, making it an ideal weave welding solution for many applications including: pipes, tubes, vessels, flanges, fittings, and much more. Combine this system with welding positioners, turning rolls, track-mounted welding carriages, trackless carriages, an existing welding system, such as a column and boom, or use it independently with the rugged freestanding **Mini-Manipulator**.

#### **FEATURES**

- Two working modes: automatic with existing weld fixtures and manual using the system independently with the Mini-Manipulator
- Simple adjustemnt of four weld parameters: oscillation width, oscillation speed, right and left dwell times
- · Lightweight and portable

#### **BENEFITS**

- Increased Productivity: Provides non-stop 360° welding when used with rotation devices such as welding positioners and turning rolls.
- Improved Weld Repeatability: Precise travel speed and torch angle reduces costly over-welding and rework, granting precise repeatability and consistent bead geometry.
- **Ergonomics and Safety**: Removes the operator from potentially hazardous heat and fumes created by prolonged open arc welding processes. Relieves the operator from repositioning reducing fatigue and stress.











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For ordering and customer service, or to request detailed product information or demonstration videos, contact:

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Oscillator Technical Specifications	
Voltage	115V or 230V (sold separately)
Torch type	MIG/MAG
Torch diameters	5/8"-7/8" (16-22 mm)
Oscillation type	Pendulum
Oscillation width	1/32"-1-3/16" (1-30 mm)
Oscillation speed	12–115 cycles/min
Oscillation dwell time range	0–3 s
Maximum torque	5.7 lb·ft (8 N·m)
Weight	4 lbs (2 kg)
Welding Oscillator part number	SM-OSC-0497-24-00-00-0
115V/230V power supply (sold seperatly) - Includes 10' power cord and 10' control cable	SM-ZSL-0497-16-00-01-0 (115V) SM-ZSL-0497-16-00-00-0 (230V)

# Freestanding Mini-Manipulator

The Freestanding **Mini-Manipulator** from Steelmax can be used with the **Welding Oscillator** or as an independent welding positioner. This lightweight column and boom provides full control of the oscillator or torch position during operation. Easily transport the Mini-Manipulator to wherever it's needed for quick and easy use.

Mini-Manipulator Technical Specifications	
Torch holder diameter	5/8-7/8" (16-22 mm)
Arm horizontal stroke	22" (560 mm)
Arm vertical stroke	25" (640 mm)
Weight	33 lbs. (15.3 kg)
Part Number	SM-STJ-0629-24-00-00-0



Mini-Manipulator with Oscillator







Mini-Manipulator as positioner

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