



OTTO ARC SYSTEMS, INC.

SINCE 1988

2015 PRODUCT CATALOG



www.ottoarc.com

ORBITAL WELDING / BEVELING / FACING / ACCESSORIES

800-878-2487



OTTO ARC

INTRODUCTION

Otto Arc Systems, Inc., formerly Otto Tool, has been in business for over 27 yrs. We have provided Beveling and Facing Equipment since the day we opened our doors and have been expanding our product lines ever since. Over the last three years we have added numerous lines of products to help assist with your project requirements.

Our high performance line of Orbital Welding products include Mechanized and Robotic Systems that can also be customized per project if needed. We recently added our exclusive QC-4000 Tube and Pipe Saw and have also enhanced a few of our TSM Facing models.

This year our new catalogs will present to you how our company has grown over the years and the wide array of products we have to offer. Along with this current product catalog we have added two more catalogs showing our auxiliary welding product line and automated piping systems. At Otto Arc we are always making sure our clients are well taken care of - that is our first priority.

We are always attentive to new market trends and believe that feedback from our customers has placed our company on the map. We assist our clients by listening to their needs and then delivering to them the best options, service and products available for their business. Thank you for your time and consideration; please do not hesitate to contact us with any questions you may have.

Sincerely,

Alan Avis
President, Otto Arc Systems, Inc.

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CONTACT US!

For other power requirements, quotes or questions please contact us at 1-800-878-BITS (2487)

OW-ARC 180 (Power Unit)

The OW-ARC 180 welding power supply provides digital control of the weld current and electrode travel speed; producing consistent and repeatable weld results. The OW-ARC 180 features a touch-screen display for easy navigation and data input. To access menus and input weld data, the operator presses the touch screen over the selection. Weld programming is easily accomplished using the built in auto programming feature.

PERFORMANCE

- Windows CE operating system
- Up to 20 levels for each program for accurate welding control
- Internal memory can store 200 welding programs
- USB port for importing and exporting data
- Controls for welding current, travel/wire speed
- Remote pendant
- Fault detection and message display for easy maintenance
- Integrated printer / offline printing
- Welding heads available for a wide range of welding applications
- Large Cooling system
- Solid metal case for convenient transport
- Auto select 120/240 VAC
- Real time data collection with printout
- Auto print weld summary option
- Burn through protection prevents weld head damage
- Start, stop, downslope, home and set home from weld head



OW-ARC 180 Power Unit Includes: Power Source, Water Tank, Hoses, Manual, Case and Pendant

OW-ARC 180 Auto Shift 115V or 230V 50/60Hz Single Phase P/N: OW-ARC 180

OW-ARC Printer paper for OW-ARC Power Units (5 pack)

OW-ARC 180

MAIN VOLTAGE SUPPLY	230V	115V
Current	5 - 180A	5 - 150A
Voltage	10.2V-17.2V	10.2V-16V
Duty Cycle 20°C	180A/35%, 150A/60%, 120A/100%	150A/35%, 120A/60%, 100A/100%
Duty Cycle 40°C	180A/35%, 150A/60%, 120A/100%	150A/35%, 120A/60%, 100A/100%
Open Circuit Voltage	90V	
Input (wave)	1x230V (-20% to +15%) 1x240V (-20% to +10%)	1x115V (-15% to +15%) 1x110V (-15% to +20%)
Frequency	50Hz / 60Hz Single Phase	
Type	Inverter	
Max. Power	6.2kVA	
Recommended Power	8.5kVA	
Efficiency	0.99/89%	
Insulation / Protection Class	F / IP21S	
Working Temperature	-10°C to +40°C	
Cooling/Welding Head Cooling	Water	
Screen	10" touch screen	
Functions	Gas, rotation, current and wire feed control	
Program Storage	200	
Number of Levels (per program)	20	
Printing	Integrated printer	
Weight	33 kg / 73 lbs	
Dimensions mm (inches)	620mm x 400mm x 285mm (24" x 15.75" x 11")	
WATER TANK		
Input Voltage	115V/230V	
Frequency	50Hz / 60Hz Single Phase	
Cooling Power	800W	
Water Flow	8L/min 2gal/min	
Max. lift	40m	
Water Tank Capacity	6.8L / 1.8 GAL	
Insulation / Protection Class	F / IP21	
Dimensions mm (inches)	620mm x 400mm x 180mm (24" x 15.75" x 7")	
Weight with coolant	24 kg / 55 lbs	

OW-ARC 250 (Power Unit with AVC and OSC)

The OW-ARC 250 uses an intelligent PC based control system with digital signal processing and high resolution monitoring for every output and sampling signal. It also contains a windows CE embedded version operating system and simple operating interface for accurate welding. Also includes off-line programming and off-line printing function.

PERFORMANCE

- Up to 20 levels for each program for accurate welding control
- Internal memory can store 100 welding programs
- USB support for importing and exporting data
- Controls for welding current, travel/wire speed and gas
- Control pendant display for real-time weld monitoring
- Welding distance can be set according to time or degree
- Arc voltage tracking control for peak and/or base values or simultaneous values
- Oscillation edge lock function
- Memory function for welding parameter changes made during weld
- Fault detection and message display for easy maintenance
- Pulse rotation and pulse wire feeding function
- Wire feeding ON/OFF during the welding process
- Current, rotation/wire feed speed, oscillation width, speed, center position and arc voltage are adjustable during the welding process
- Data transfer between the same series power source by USB driver
- Option to choose offline programming and printing with USB support
- Welding heads available for autogenous (fusion) / wire feed applications
- Multi-axis function display
- Integrated water cooling system/Internal printer to print data
- Solid metal case for convenient transport



Cover flips up to view Control/Data Display



OW-ARC 250 Power Unit Includes: Machine, Hoses, Manual and Pendant

OW-ARC 250 Electric 220v P/N: OW-ARC 250

OW-ARC Printer paper for OW-ARC Power Units (5 pack)

OW-ARC 250

Type	Inverter
Current	5 - 250A
Duty Cycle	150/200A 100% / 250A 60%
Open Circuit Voltage	52V
Input Voltage	220V
Frequency	50Hz / 60Hz Single Phase
Torch Cooling	Built-in water circuit cooling
Power	8.5 KVA
Functions	Gas control, current control, rotation control, wire feeding, oscillation and arc voltage control
Program Storage	100
Number of Levels (per program)	20
Insulation / Protection Class	F / IP21
Max. Tank Capacity	15 L / 4 Gallons
Screen, CPU, Memory and Disk Size	6.5", 1.1G, 1G, 2G with Printer
Weight (ex. Coolant)	135kg / 297 lbs.
Dimensions mm (inches)	1110mm x 545mm x 1120mm (43.7" x 21.45" x 44")

OW-ARC 400 (Power Unit)

The OW-ARC 400 digital GTAW (TIG) welding power source consists of an inverter power supply, remote control pendant, integrated water cooling system and gas bottle rack on a portable chassis. The system utilizes a state-of-the-art PC controller and is designed for medium to thick wall pipe and tubing. It offers easy programming and versatility to tackle the most demanding piping applications for power generation, petrochemical, marine and aerospace industries.

PERFORMANCE

- Windows CE embedded version operating system
- Up to 20 levels of parameter control (sector/levels) per welding program
- Stores 100 welding programs in internal memory
- Parameter controls for welding current, travel speed, wire speed, shielding gas and AVC / OSC control
- Arc voltage tracking control for peak and or base value tracking or simultaneous tracking
- Welding heads available for autogenous (fusion) / wire feed applications
- Control pendant display for real-time weld monitoring
- Oscillation controls - width, speed and center position are adjustable during the welding process
- High frequency or touch start arc ignition
- Built in integrated water cooling system
- Comprehensive fault detection and message display for easy maintenance
- Option to choose offline programming with offline printing



Remote Pendant Control Unit



Control/Data Display



OW-ARC 400 Power Unit Includes: Machine, Hoses, Manual and Pendant

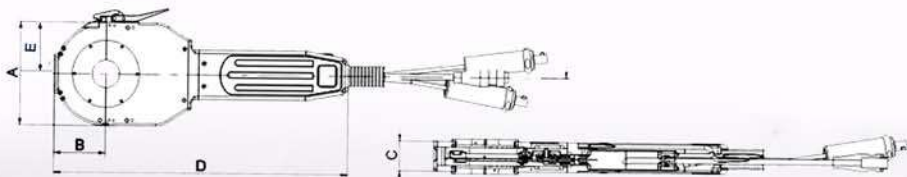
OW-ARC 400 (240V-480V 3 Phase)	P/N: OW-ARC 400
OW-ARC	Printer paper for OW-ARC Power Units (5 pack)

OW-ARC 400

Type	Inverter
Current	5- 400A
Duty Cycle (40C)	380A 100% / 400A 60%
Open Circuit Voltage	72V
Welding Voltage	10.2V-30V
Efficiency	50Hz
Input Voltage	3 380V (3x415V, 3x460V) (-15%--+15%)
Max. Power	35KVA
Insulation / Protection level	F/IP21S
Temp. Environment	-10°--+40°
Temp. of Transportation and Storage	-25°--+55°
Pump lift	30m/0.3Pa
Torch Cooling	Integrated water circuit
Display	Industrial PC
Program Storage	100
Number of Levels (per program)	20
Insulation / Protection Class	F/IP21
Water Tank Capacity	15L / 4 Gallons
Weight (ex. Coolant) kg /lbs	135kg / 297lbs
Dimension mm (inches)	1110mm x 545mm x 1120mm (43.7" x 21.45" x 44")
Functions	Gas control, current control, rotation control, wire feeding, oscillation and Arc voltage control

TPWH-C SERIES (Closed Weld Head for Tube and Pipe)

The TPWH-C series is designed to perform orbital TIG welds on tube and thin wall pipe without the need for wire feeding. The sealed cavity is filled with protective gas prior to and during the welding process. This weld head is very efficient and has a water cooled system. Various collet sizes are available, offering accurate positioning without tacking.



TPWH-C-5 Micro	
Diameter Range mm (inches)	6.35-12.7mm (.25"-0.5")
Welding Speed (rpm)	0.62-12.4
Standard Cable Length	10m (32')
Cooling	Air
Weight kg (lbs) excludes cable	0.85 (2 lbs.)
Dimensions (mm)	280 x 85 x 45
Dimensions (inches)	11.6" x 2.75" x 1.8"

Main Dimensions mm (inches)	
A	65mm (2.6")
B	35mm (1.4")
C	12.5mm (0.5")
D	280mm (11")
E	32.5mm (1.2")



Pictured:
TPWH-C-6 Closed Weld Head

Pictured:
TPWH-C-5 Micro
Closed Weld Head

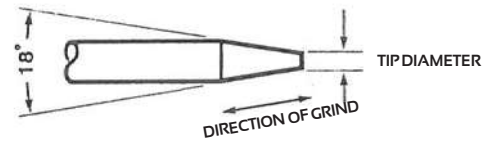
PERFORMANCE

- TIG autogenous (fusion) welding without filler material
- Precision design for accurate tube positioning
- Tube clamping collets manufactured from 17-4 SS for repeatability
- Closed chamber for better gas coverage and cleaner welds
- Compact design for small work areas
- Commonly used for stainless steel, nickel alloys and titanium
- Water cooled head for high production and larger wall thickness
- The tool of choice for medical, food, biological, electric, instrument and pipe installation industries
- **Recommended Power Unit = OW-ARC 180**

SEE FOLLOWING PAGE FOR WELD HEAD COLLETS

TPWH-C Series (Material Type: Stainless Steel and Titanium Alloy)						
	TPWH-C-5	TPWH-C-1	TPWH-C-1.5	TPWH-C-3	TPWH-C-4	TPWH-C-6
Diameter Range mm (inches)	3-12.7mm (.125"-0.5")	6-25.4mm (.25"-1")	6.35-38.1mm (.25" - 1.5")	19.05-76.2mm (.75" - 3")	38.1-101.6mm (1.5" - 4")	50.8-168mm (2" - 6.625")
Welding Speed (rpm)	2.3-46.13	0.61-12.2	0.3-6.08	0.2-4.08	0.09-1.9	0.06-1.19
Standard Cable Length	10m (32')	10m (32')	10m (32')	10m (32')	10m (32')	10m (32')
Cooling	Air	Water	Water	Water	Water	Water
Weight kg (lbs) excludes cable	0.85 (2 lbs.)	2.0 (4.4 lbs.)	2.0 (4.4 lbs.)	3 (6.6 lbs.)	6 (6.6 lbs.)	10.5 (23 lbs.)
Dimensions (mm)	280 x 85 x 45	340 x 80 x 100	360 x 120 x 41	412 x 165 x 43	497 x 230 x 57	360 x 330 x 61
Dimensions (inches)	11.6" x 2.75" x 1.8"	13.4" x 3.2" x 4"	14.2" x 4.8" x 1.6"	16.2" x 6.5" x 1.7"	19.5" x 9" x 2.25"	24.8" x 13" x 2.4"
Main Dimensions	mm (inches)	mm (inches)	mm (inches)	mm (inches)	mm (inches)	mm (inches)
A	65mm (2.6")	80mm (3.2")	98mm (3.9")	145mm (5.7")	195mm (7.7")	255mm (11.6")
B	35mm (1.4")	40mm (1.6")	47mm (1.9")	72mm (2.9")	97mm (3.9")	150mm (6")
C	12.5mm (0.5")	40mm (1.6")	41mm (1.6")	43mm (1.6")	57mm (2.5")	61mm (2.4")
D	280mm (11")	340mm (13.4")	360mm (14.2")	412mm (16.2")	497mm (19.5")	630mm (24.8")
E	32.5mm (1.2")	40mm (1.6")	49mm (1.95")	72.5mm (2.85")	97.5mm (3.85")	127.5mm (5.8")

TPWH-C SERIES - Closed Weld Head Inserts



WELD HEAD COLLETS (For TPWH-C SERIES)

TPWH-C-5-M (0.125" Closed Chamber) Micro	
C-5-M-125	.125" Collet for TPWH-C-5-M
C-5-M-25	.25" Collet for TPWH-C-5-M
C-5-M-375	.375" Collet for TPWH-C-5-M
C-5-M-5	.5" Collet for TPWH-C-5-M
TPWH-C-5 (0.125" Closed Chamber) Standard	
C-5-125	.125" Collet for TPWH-C-.5
C-5-25	.25" Collet for TPWH-C-.5
C-5-375	.375" Collet for TPWH-C-.5
C-5-5	.5" Collet for TPWH-C-.5
TPWH-C-1 (1" Closed Chamber)	
C-1-25	.25" Collet for TPWH-C-1
C-1-375	.375" Collet for TPWH-C-1
C-1-5	.5" Collet for TPWH-C-1
C-1-5P	.5P" Collet for TPWH-C-1
C-1-625	.625" Collet for TPWH-C-1
C-1-75	.75" Collet for TPWH-C-1
C-1-75P	.75P" Collet for TPWH-C-1
C-1-1	1" Collet for TPWH-C-1
TPWH-C-1.5 (1.5" Closed Chamber)	
C-1.5-25	.25" Collet for TPWH-C-1.5
C-1.5-375	.375" Collet for TPWH-C-1.5
C-1.5-5	.5" Collet for TPWH-C-1.5
C-1.5-5P	.5P" Collet for TPWH-C-1.5
C-1.5-625	.625" Collet for TPWH-C-1.5
C-1.5-75	.75" Collet for TPWH-C-1.5
C-1.5-75P	.75P" Collet for TPWH-C-1.5
C-1.5-1	1" Collet for TPWH-C-1.0
C-1.5-1P	1P" Collet for TPWH-C-1.5
C-1.5-1.5	1.5" Collet for TPWH-C-1.5
TPWH-C-3 (3" Closed Chamber)	
C-3-75	3/4" Collet for TPWH-C-3 Head.
C-3-75P	3/4P" Collet for TPWH-C-3 Head
C-3-1	1" Collet for TPWH-C-3 Head.
C-3-1P	1"P Collet for TPWH-C-3 Head.
C-3-1.5	1.5" Collet for TPWH-C-3 Head.
C-3-1.5P	3/4P" Collet for TPWH-C-3 Head
C-3-2	2" Collet for TPWH-C-3 Head.
C-3-2P	2P" Collet for TPWH-C-3 Head
C-3-2.5	2.5" Collet for TPWH-C-3 Head.
C-3-2.5P	2.5P Collet for TPWH-C-3 Head.
C-3-3	3" Collet for TPWH-C-3 Head.
TPWH-C-4 (4" Closed Chamber)	
C-4-1	1" Collet for TPWH-C-4
C-4-1.5	1.5" Collet for TPWH-C-4
C-4-1.5P	1.5P" Collet for TPWH-C-4
C-4-2	2" Collet for TPWH-C-4
C-4-2P	2P" Collet for TPWH-C-4
C-4-2.5	2.5" Collet for TPWH-C-4
C-4-2.5P	2.5P" Collet for TPWH-C-4
C-4-3	3" Collet for TPWH-C-4
C-4-3.5	3.5" Collet (3" Pipe) for TPWH-C-4
C-4-4	4P" Collet (3.5" Pipe) for TPWH-C-4
TPWH-C-6 (6" Closed Chamber)	
C-6-2	2" Collet for TPWH-C-6 Head
C-6-2P	2" Collet for TPWH-C-6 Head
C-6-2.5	2.5" Collet for TPWH-C-6 Head
C-6-2.5P	2.5P" Collet for TPWH-C-6 Head
C-6-3	3" Collet for TPWH-C-6 Head
C-6-3.5	3.5" Collet (3" Pipe) for TPWH-C-6 Head
C-6-4	4" Collet (3.5" Pipe) for TPWH-C-6 Head
C-6-4.5	4.5" Collet (4" Pipe) for TPWH-C-6 Head
C-6-6	6" Collet for TPWH-C-6 Head
C-6-6P	6P" Collet for TPWH-C-6 Head

TUNGSTEN TIPS (For TPWH-C SERIES) RECOMMENDED TUNGSTEN GEOMETRY

Item (Inches)		OD Size	Arc Gap	Rotor O.D.	Tungsten Length
TPWH-C-5 (Micro)					
TPWH-C-5	TC04-0833-01	0.125	0.030	1.890	0.833
TPWH-C-5	TC04-0770-01	0.250	0.030	1.890	0.770
TPWH-C-5	TC04-0708-01	0.375	0.030	1.890	0.708
TPWH-C-5	TC04-0645-01	0.500	0.030	1.890	0.645
TPWH-C-5 (Standard)					
TPWH-C-5	TC04-0738-01	0.125	0.030	1.700	0.738
TPWH-C-5	TC04-0675-01	0.250	0.030	1.700	0.675
TPWH-C-5	TC04-0613-01	0.375	0.030	1.700	0.613
TPWH-C-5	TC04-0550-01	0.500	0.030	1.700	0.550
TPWH-C-1					
TPWH-C-1	TC06-1088-02	0.125	0.030	2.400	1.088
TPWH-C-1	TC06-1025-02	0.250	0.030	2.400	1.025
TPWH-C-1	TC06-0963-02	0.375	0.030	2.400	0.963
TPWH-C-1	TC06-0900-02	0.500	0.030	2.400	0.900
TPWH-C-1	TC06-0818-02	0.625	0.050	2.400	0.818
TPWH-C-1	TC06-0755-02	0.750	0.050	2.400	0.755
TPWH-C-1	TC06-0630-02	1.000	0.050	2.400	0.630
TPWH-C-1.5					
TPWH-C-1.5	TC06-1265-02	0.250	0.030	2.880	1.265
TPWH-C-1.5	TC06-1203-02	0.375	0.030	2.880	1.203
TPWH-C-1.5	TC06-1120-02	0.500	0.050	2.880	1.120
TPWH-C-1.5	TC06-1058-02	0.625	0.050	2.880	1.058
TPWH-C-1.5	TC06-0995-02	0.750	0.050	2.880	0.995
TPWH-C-1.5	TC06-0870-02	1.000	0.050	2.880	0.870
TPWH-C-1.5	TC06-0620-02	1.500	0.050	2.880	0.620
TPWH-C-3					
TPWH-C-3.0	TC06-1985-02	0.750	0.050	4.860	1.985
TPWH-C-3.0	TC06-1860-02	1.000	0.050	4.860	1.860
TPWH-C-3.0	TC06-1610-02	1.500	0.050	4.860	1.610
TPWH-C-3.0	TC06-1360-02	2.000	0.050	4.860	1.360
TPWH-C-3.0	TC06-1110-02	2.500	0.050	4.860	1.110
TPWH-C-3.0	TC06-0860-02	3.000	0.050	4.860	0.860
TPWH-C-4					
TPWH-C-4	TC09-2548-03	1.315	0.070	6.590	2.548
TPWH-C-4	TC09-2475-03	1.500	0.050	6.590	2.475
TPWH-C-4	TC09-2255-03	1.900	0.070	6.590	2.255
TPWH-C-4	TC09-2255-03	2.000	0.050	6.590	2.225
TPWH-C-4	TC09-2018-03	2.375	0.070	6.590	2.018
TPWH-C-4	TC09-1975-03	2.500	0.050	6.590	1.975
TPWH-C-4	TC09-1725-03	3.000	0.050	6.590	1.725
TPWH-C-4	TC09-1455-03	3.500	0.070	6.590	1.455
TPWH-C-4	TC09-1203-03	4.000	0.070	6.590	1.205
TPWH-C-4	TC09-0955-03	4.500	0.070	6.590	0.955
TPWH-C-6					
TPWH-C-6	TC09-4000-03	2.000	0.050	10.140	4.000
TPWH-C-6	TC09-3793-03	2.375	0.070	10.140	3.793
TPWH-C-6	TC09-3750-03	2.500	0.050	10.140	3.750
TPWH-C-6	TC09-3500-03	3.000	0.050	10.140	3.500
TPWH-C-6	TC09-3230-03	3.500	0.070	10.140	3.230
TPWH-C-6	TC09-2980-03	4.000	0.070	10.140	2.980
TPWH-C-6	TC09-2730-03	4.500	0.070	10.140	2.730
TPWH-C-6	TC09-2480-03	5.000	0.070	10.140	2.480
TPWH-C-6	TC09-2199-03	5.563	0.070	10.140	2.199
TPWH-C-6	TC09-1980-03	6.000	0.070	10.140	1.980

TC-ARC (AMI) Closed Weld Head (1", 2" and 4")

Plugs directly into AMI Power Sources, no cable adapter needed. Optional adapter available for AMI collets, easy clamping system.

Note: This weld head is specifically designed for AMI equipment.



PERFORMANCE

- Plugs directly into AMI Power Unit
- No cable adapter needed
- Easy clamping system for adjusting and tightening collets
- Size range is 1/4" to 4"
- Various sized collets available
- Optional adapter available if using AMI collets (see page 42)
- Optional 1" head holder available
- Heavy duty, more robust design
- Water cooled

WELD HEAD COLLETS (For TC-ARC Series)

TC-ARC-1 (.25" to 1")	
C-1-25	.25" Collet for TPWH-C-1
C-1-375	.375" Collet for TPWH-C-1
C-1-5	.5" Collet for TPWH-C-1
C-1-5P	.5P" Collet for TPWH-C-1
C-1-625	.625" Collet for TPWH-C-1
C-1-75	.75" Collet for TPWH-C-1
C-1-75P	.75P" Collet for TPWH-C-1
C-1-1	1" Collet for TPWH-C-1
TC-ARC-2 (.5" to 2")	
C-2-5	.5" Collet for TC-ARC-2
C-2-5P	.5P" Collet for TC-ARC-2
C-2-625	.625" Collet for TC-ARC-2
C-2-75	.75" Collet for TC-ARC-2
C-2-75P	.75P" Collet for TC-ARC-2
C-2-1	1" Collet for TC-ARC-2
C-2-1P	1P" Collet for TC-ARC-2
C-2-1.5	1.5" Collet for TC-ARC-2
C-2-1.5P	1.5P" Collet for TC-ARC-2
C-2-2	2" Collet for TC-ARC-2
TC-ARC-4 (1" to 4")	
C-4-1	1" Collet for TPWH-C-4
C-4-1.5	1.5" Collet for TPWH-C-4
C-4-1.5P	1.5P" Collet for TPWH-C-4
C-4-2	2" Collet for TPWH-C-4
C-4-2P	2P" Collet for TPWH-C-4
C-4-2.5	2.5" Collet for TPWH-C-4
C-4-2.5P	2.5P" Collet for TPWH-C-4
C-4-3	3" Collet for TPWH-C-4
C-4-3.5	3.5" Collet (3" Pipe) for TPWH-C-4
C-4-4	4P" Collet (3.5" Pipe) for TPWH-C-4

NOTE: All AFTERMARKET collets and tool bits are manufactured by Otto Arc Systems, Inc. and are not genuine Tri Tool, George Fisher, Orbatech, ARC Machine or Swagelok products. Each is a trademark of its own.

TC-ARC-1	
Diameter Range mm (inches)	6-25.4mm (.25"-1")
Welding Speed (rpm)	0.61-12.2
Weight kg (lbs)	2.5kg (5.5lbs)
Standard Cable Length	10m (32')
Cooling	Water
Dimensions (mm)	337x96x50
Dimensions (inches)	13.25"x3.78"x1.97"

TC-ARC-4	
Diameter Range mm (inches)	38.1-101.6 (1.5"-4")
Welding Speed (rpm)	0.095-1.9
Weight kg (lbs)	6kg (13lbs) without cable
Standard Cable Length	10m (32')
Cooling	Water
Dimensions (mm)	498x195x56
Dimensions (inches)	19.5"x7.5"x2"

Note:
Contact us regarding details on our TC-ARC-2 Model.

TPWH-O SERIES (Open Weld Head for Tube and Pipe)

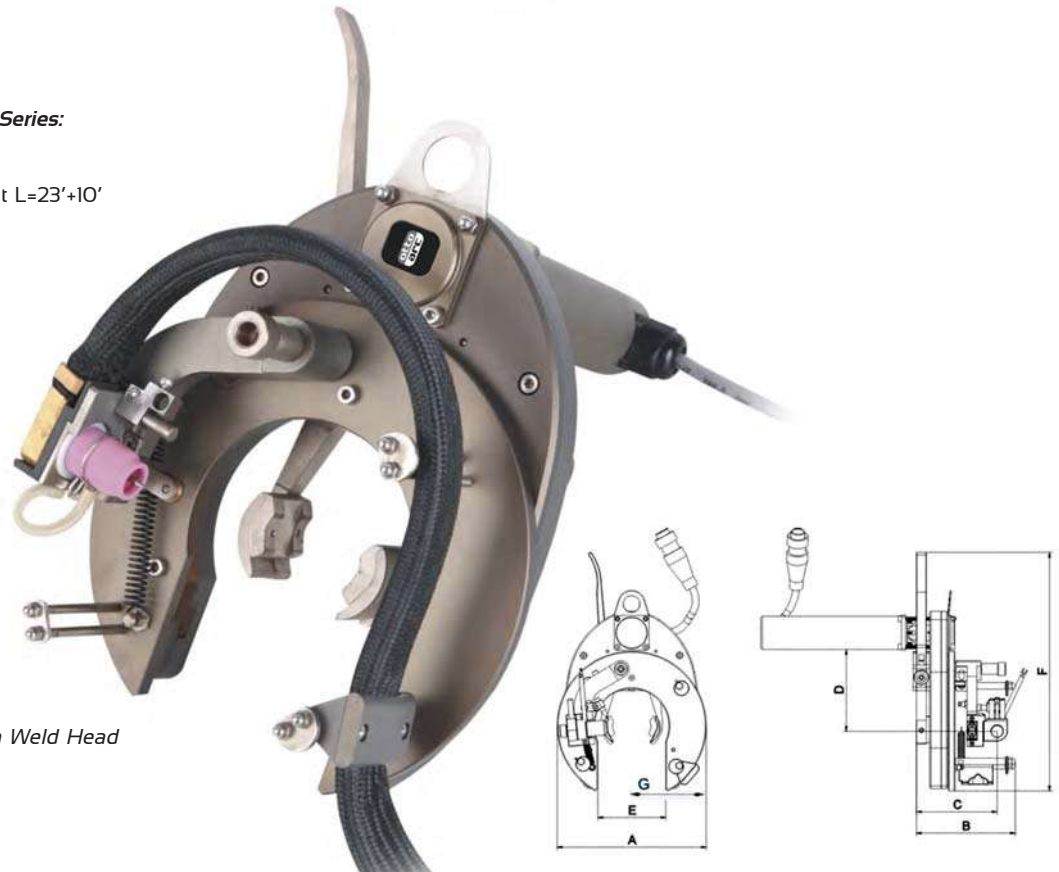
The TPWH-O Series is designed for TIG welding on tube to tube, pipe to pipe and pipe fittings and is suitable for carbon and stainless steel. The TPWH-O Series is used for applications that do not require AVC/OSC. Welds tubing and pipe for industries such as chemical, food, medicine, boilers, military and nuclear industries.

Cable Details for all O Series:

Rotation L=7m (23')

Water, electric assy

Meters L=7m+3m Feet L=23'+10'



*Pictured:
TPWH-O-5 Open Weld Head*

PERFORMANCE

- Suitable for thin wall stainless steel, carbon steel and other common alloys
- Capable of welding 4mm (.158") wall thickness
- Used for tube to tube, tube to flange, tube to elbow and tube to valve etc.
- Automatic all position TIG welding for tube to tube welding with or without wire feed
- Water cooled and highly durable torch design
- Mechanical tracking ensures consistent torch height control
- **Recommended Power Unit = OW-ARC 180**

Note main dimensions /size chart below.

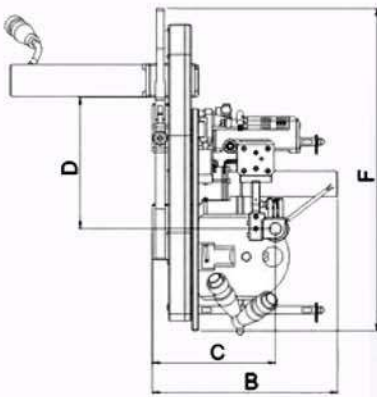
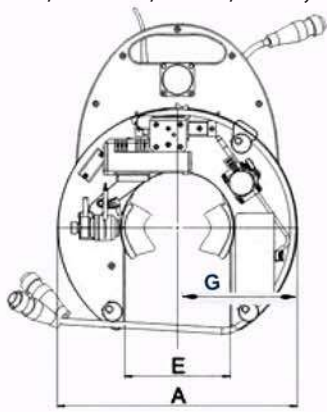
TPWH-O Series	TPWH-O-1	TPWH-O-3	TPWH-O-5
Tube OD	.625" - 1.625"	.75" - 3"	1.5" - 5"
Tungsten Diameter	2.4mm (3/32")	2.4mm (3/32")	2.4, 3.2mm (3/32", 1/8")
Rotation Speed (rpm)	0.37-7.45	0.19-3.8	0.11-2.2
Protective Gas	Ar / Mixed Gases	Ar / Mixed Gases	Ar / Mixed Gases
Cooling	Water	Water	Water
Cable Length	15m (49')	15m (49')	15m (49')
Cooling Flow (ml/mm)	≥600	≥600	≥600
Weight kg (lbs)	2.5kg (5.5lbs) excludes cable	4kg (9lbs) excludes cable	10.8kg (23lbs) excludes cable
Dimensions (mm)	305 x 128 x 230mm	310 x 180 x 290mm	435 x 300 x 400mm
Dimensions (inches)	12" x 5" x 9"	12" x 7" x 11"	17" x 12" x 15.5"
Main Dimensions	mm (inches)	mm (inches)	mm (inches)
A	128mm (5.04")	180mm (7.09")	300mm (11.8")
B	115mm (4.5")	120mm (4.75")	235mm (9.25")
C	85.5-92.5mm (3.37"-3.64")	95-101mm (3.75"-4")	132-172mm (5.2"-6.77")
D	165mm (6.5")	92mm (3.62")	165mm (6.5")
E	44mm (1.73")	82mm (3.23")	132mm (5.2")
F	231mm (9.09")	290mm (11")	400mm (15.5")
G	64mm (2.52")	60mm (3.545")	150mm (5.9")

TPWH-OA SERIES (Open Weld Head with AVC and OSC for Tube and Pipe)

The TPWH-OA Series is designed for TIG welding on tube to tube, pipe to pipe and pipe fittings and is suitable for carbon and stainless steel. The TPWH-OA Series is used for applications that require AVC/OSC. Welds tubing and pipe for industries such as chemical, food, medicine, boilers, military and nuclear industries.

Pictured:
TPWH-OA-7 Open Weld Head internal or external wire feeder accessory available for the TPWH-OA Series

Cable Details for all OA Series:
Rotation and AVC Cable L=7m (23')
Water, electric assay
Meters L=7m+3m Feet L=23'+10'



Example of Pipe Weld:
4" Carbon Steel, Sch 80



Note main dimensions /size chart below.

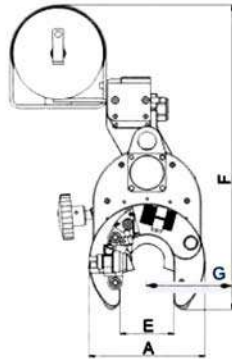
PERFORMANCE

- Commonly used for medium to thick wall stainless and carbon steel material and other pipe alloys
- Used for pipe to pipe, tube to tube, butt welds, flange welds, elbows, valves etc.
- Arc voltage control (AVC) and oscillation control (OSC) for multi-pass welding procedures
- Automatic all position TIG welding for tube and pipe welding with or without wire feed
- Compact design for limited radial and axial clearances / can perform up to 1" wall thickness
- Water cooled and highly durable torch design
- **Recommended Power Unit = OW-ARC 250 and 400**

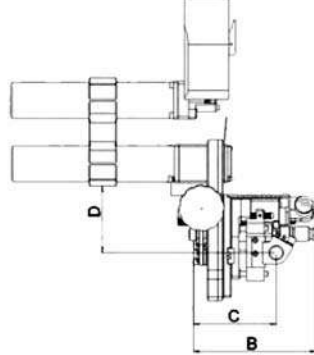
TPWH-OA Series	TPWH-OA-3	TPWH-OA-5	TPWH-OA-7	TPWH-OA-9	TPWH-OA-12
Tube OD	.75"- 3"	1.5"- 5"	2"- 7"	4.5"- 9"	6"- 12"
Tungsten Diameter	2.4, 3.2mm (3/32", 1/8")	2.4, 3.2mm (3/32", 1/8")	2.4, 3.2mm (3/32", 1/8")	2.4, 3.2mm (3/32", 1/8")	2.4, 3.2mm (3/32", 1/8")
Rotation Speed (rpm)	0.19 - 3.8	0.11-2.2	0.09-1.8	0.05-1.0	0.026-0.52mm
Protective Gas	Ar / Mixed Gases	Ar / Mixed Gases	Ar / Mixed Gases	Ar / Mixed Gases	Ar / Mixed Gases
Cooling	Water	Water	Water	Water	Water
Cable Length	9m (29')	7m (22')	7m (22')	7m (22')	7m (22')
Cooling Flow (ml/mm)	≥600	≥600	≥600	≥600	≥600
OSC Width	20mm (.75")	40mm (1.5")	40mm (1.5")	40mm (1.5")	40mm (1.5")
AVC Height	40mm (1.5")	40mm (1.5")	40mm (1.5")	40mm (1.5")	40mm (1.5")
Wire Diameter mm (inches)	0.8, 0.9, 1.0 (0.031", 0.035", 0.039")	0.8, 0.9, 1.0 (0.031", 0.035", 0.039")	0.8, 0.9, 1.0 (0.031", 0.035", 0.039")	0.8, 0.9, 1.0 (0.031", 0.035", 0.039")	0.8, 0.9, 1.0 (0.031", 0.035", 0.039")
Max Wire Feed Speed	1800mm/min (5.5in/min)	1800mm/min (5.5in/min)	1800mm/min (5.5in/min)	1800mm/min (5.5in/min)	1800mm/min (5.5in/min)
Weight kg (lbs)	5.5kg (12lbs) excludes cable	10.8kg (23lbs) excludes cable	19.5kg (43lbs) excludes cable	21.5kg (47lbs) excludes cable	36kg (79lbs) excludes cable
Dimensions (mm)	370 x 220 x 320mm	435 x 300 x 400mm	445 x 375 x 525mm	465 x 425 x 570mm	430 x 610 x 680mm
Dimensions (inches)	14.5" x 8.6" x 12.5"	17" x 12" x 15.5"	17.5" x 14.5" x 20"	18" x 16.5" x 22"	17" x 24" x 26.5"
Main Dimensions	mm (inches)	mm (inches)	mm (inches)	mm (inches)	mm (inches)
A	220mm (8.66")	300mm (11.8")	375mm (14.75")	425mm (16.73")	550mm (21.65")
B	180mm (6")	235mm (9.25")	260 (10.25")	300 (11.5")	312mm (12.3")
C	112-132mm (4.41"-5.2")	132-172mm (5.2"-6.77")	184-224mm (7.24"-8.82")	194.5-234.5mm (7.65"-9.23")	228.5-268.5mm (8.9"-10.57")
D	92mm (3.6")	165mm (6.5")	225mm (8.85")	249mm (9.8")	297mm (11.7")
E	82mm (3.23")	132mm (5.2")	184mm (7.24")	230mm (9.06")	328mm (12.9")
F	320mm (14.5")	400mm (15.5")	525mm (20")	570mm (22")	680mm (26.5")
G	110mm (4.33")	150mm (5.9")	187.5mm (7.375")	212.50mm (8.365")	275mm (10.825")

TPWH-NS-2 (Narrow Space Weld head for Tube and Pipe)

The TPWH-NS-2 is designed for tube to "U" shape (return bends) TIG welding suitable for carbon and stainless steel tube to tube connections and is used mainly for applications that require wire feeds or autogenous welding. This product also includes an integrated wire feeder with AVC & OSC controls.



*Pictured:
TPWH-NS-2 Narrow Space
Weld Head*



Note main dimensions /size chart below.



PERFORMANCE

- Orbital welding head with integrated wire feed
- Unique no twist cable / hose design
- Motorized AVC and OSC control for narrow spaced applications
- Quick clamping and accurate centering ensure repeatability
- Special design for return bends, "S" bends and other reduced clearance applications
- **Recommended Power Unit = OW-ARC 250 or 400**

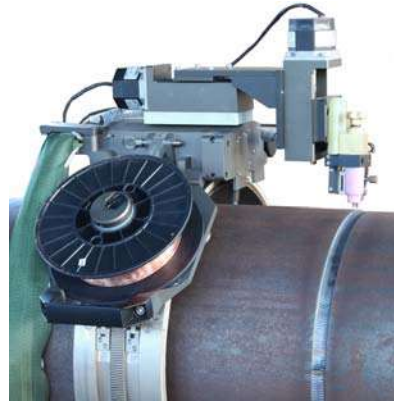
TPWH-NS-2

Diameter Range mm	32-51mm (1.26"-2")
Tungsten Diameter	2.4, 3.2mm (3/32", 1/8")
Wire Diameter	0.8, 0.9, 1.0 (0.030", 0.035",
Standard Cable Length	L=15m (49')
Rotation Speed (rpm)	0.25 - 5.02
Weight kg (lbs)	7.5kg (15.5lbs)
Cooling	Water

Main Dimensions mm (inches)

A	128mm (5.04")
B	138mm (5.43")
C	85-97mm (3.25"-4")
D	75mm (2.95")
E	59mm (2.32")
F	360mm (14")
G	64mm (2.52")

PWH-LD TIG (Large Diameter for Medium/Heavy Wall Pipe)



PERFORMANCE

- TIG orbital welding system for medium and heavy wall pipe
- Track mounted welding head with single/dual wire feed
- Optional with hot wire TIG welding power source and hot wire TIG wire feeder for greater performance
- Welds large diameter and thick wall stainless steel pipe welding with standard J or compound preps
- Standard "V" prep on carbon steel only
- **Recommended Power Unit = OW-ARC 250 or 400**

PWH-LD SERIES (TIG)

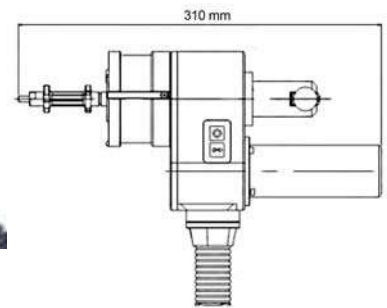
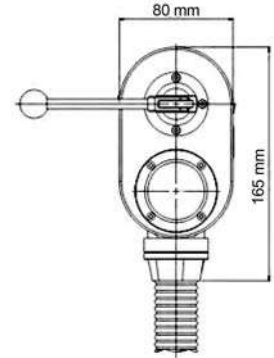
	PWH-LD
Diameter Range mm (inches)	203.2 -1219.2mm (8" to 48")
OSC Width mm (inches)	50mm (2")
OSC Speed mm/min (inches/min)	30mm (1.18")
AVC Speed mm/min (inches/min)	20-1000mm (.79"-39.4")
Arc Length Height mm (inches)	10 - 500mm (.39"-19.7")
Standard Cable Length	L=15m (50')
Torch Angle	-45° - +45°
Tungsten Diameter (mm)	2.4, 3.2, 4.0mm (3/32", 1/8", 5/32")
Welding Speed mm/min (inches/min)	20-400mm/min (.79"-15.7"/min)
Wire Feeding Speed (mm/min)	Cold 95-1500mm Hot 360-7800mm
Wire Feeding Speed (inches/min)	Cold 3.7-59" Hot 14.2" - 307"
Wire Diameter (mm/inches)	0.8, 0.9, 1.0, 1.2 (0.030", 0.035", 0.040",
Carriage Weight kg (lbs) <i>exc. wire and cables</i>	9kg (20lbs)

Guide Track Size	Diameter Range mm (inches)	Guide Track Size	Diameter Range mm (inches)
P/N PWH-10 (8" PIPE TO 10" PIPE)	203.2-254mm (8" to 10")	P/N PWH-30 (28" PIPE TO 30" PIPE)	711.2 - 762mm (28" to 30")
P/N PWH-12 (10" PIPE TO 12" PIPE)	254-304.8mm (10" to 12")	P/N PWH-32 (30" PIPE TO 32" PIPE)	762 - 812.8mm (30" - 32")
P/N PWH-14 (12" PIPE TO 14" PIPE)	304.8-355.6mm (12" to 14")	P/N PWH-34 (32" PIPE TO 34" PIPE)	812.8 - 863.60mm (32" to 34')
P/N PWH-16 (14" PIPE TO 16" PIPE)	355.6 - 406.4mm (14" - 16")		
P/N PWH-18 (16" PIPE TO 18" PIPE)	406.4 - 457.2mm (16" - 18")		
P/N PWH-20 (18" PIPE TO 20" PIPE)	457.2 - 508mm (18" - 20")		
P/N PWH-22 (20" PIPE TO 22" PIPE)	508 - 558.8mm (20" - 22")		
P/N PWH-24 (22" PIPE TO 24" PIPE)	558.8 - 609.6mm (22" - 24")		
P/N PWH-26 (24" PIPE TO 26" PIPE)	609.6 - 660.4mm (24" - 26")		
P/N PWH-28 (26" PIPE TO 28" PIPE)	609.6 - 711.2mm (24" - 26")		

Larger sizes available upon request.

TSWH-1.5 (Tube to Tube Sheet Weld Head)

Designed for TIG welds for tube to tube sheet carbon and stainless steel. Mainly used for flush tube connections that require no wire feed.



PERFORMANCE

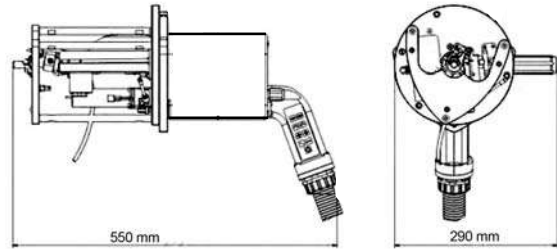
- Tube to tube sheet welding without filler wire
- Commonly used for stainless steel, titanium and nickel alloy tube to tube sheet welding
- Small, light and simple operation
- Uses localized guide for self-centering with optional spring balancer
- Expandable centering mandrel designed for precise positioning
- Enhanced water cooling system and high duty cycle for durability
- Recommended power unit = OW-ARC 180, 250 or 400

TSWH-1.5

Diameter Range mm (inches)	16-38mm (.63"-1.5")
Rotation Speed (rpm)	0.6 - 12rpm
Weight kg (lbs)	3.5kg (8lbs)
Cooling	Water
Protective Gas	Ar / Mixed Gases
Standard Cable Length	L=12m (40')
Joint Type	Flush
Tungsten Diameter	2.4mm (3/32")
Welding Degree	0°- 7°
Duty Cycle	100A at 70%
Dimensions (mm)	310 x 80 x 165mm (12" x 3.15" x 6.5")

TSWH-1.25 (Tube to Tube Sheet Weld Head)

The TSWH-1.25 tube to tube sheet weld head is designed for TIG welding small tube to tube sheet, suitable for carbon and stainless steel. It can also be used for recessed, projected and flush tubing, with or without wire feed. **Can do .375" OD tube to 1.25" ID.**



Note: This model weld head requires the use of the Manipulator.



TPF-M

For more information on the TPF-M manipulator see page 19.

PERFORMANCE

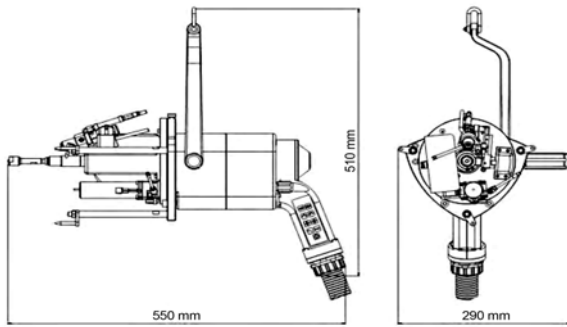
- High precision with fast and accurate performance, suitable for small heat exchanger
- Auto AVC control with on and off function for manual adjustments
- Water cooled TIG weld head, easy to change or adjust Tungsten
- No twist wire and special wire feeding design for accurate/repeatable single and multi pass welds
- Integrated wire feed for recessed, projected or flush tube ends
- Uses localized guide for self-centering of welds 1"OD and under using TPF-M manipulator
- Expandable mandrels to be used with optional spring balancer for welds 1"OD or larger
- Buttons on handle for easy operation.
- **Recommended power unit = OW-ARC 250 or 400**

TSWH-1.25

Diameter Range mm (inches)	8-32mm (.375"-1.25")
Rotation Speed (rpm)	0.37 - 7.39rpm
Arc Adjusting Distance	18mm (0.71")
Weight	11kg (24 lbs) without cable
Standard Cable Length	L=12m (40')
Tungsten Diameter	2.4mm (3/32")
Max wire feeding speed	1800mm (5.8')
Wire Diameter	0.8, 0.9, 1.0 (0.030", 0.035", 0.040")
Cooling	Water
Cooling flow (ml/min)	≥600 / ≥1.26 gal
Protective Gas	Ar / Mixed Gases
Duty Cycle	300A at 60%
Dimensions (mm)	550 x 290 x 510mm (21" x 11" x 20")

TSWH-3 (Tube to Tube Sheet Weld Head)

The TSWH-3 tube to tube sheet weld head is designed for TIG welding tube to tube sheet, suitable for carbon and stainless steel. It can also be used for recessed, projected and flush tubing with or without wire feed. We recommend for pipe with an OD of less than 1.25" with manipulator/balancer. For pipe with OD more than 1.25" the self centering mandrel is used with our optional spring balancer.



Welding Titanium? See our optional protective cap accessory on page 14.



Localizer Guide



Expandable Spring Collet



PERFORMANCE

- With/without wire feeding TIG DC/pulse welding
- Continuous rotation weld head with no cable twist
- Suitable for Tungsten electrodes 1/16 up to 1/8
- Expandable pneumatic mandrel for easy positioning
- Easily connects to the balancer
- Suitable for tube to tube sheet welding (boiler industry)
- Compatible with manipulator - useful within the heat exchange industry
- Material types - carbon and stainless steel, and other alloys
- For flush tube, recessed (1 mm max.) and projected (not over 5mm) tube end
- Arc voltage control (AVC) for consistent arc length
- **Recommended power unit = OW-ARC 250 or 400**

Recommended Accessories Manipulator and or Spring Balancer



TPF-M



SB-1

TSWH-3

Diameter Range mm (inches)	16-60mm expandable to 80mm (.630"-2.36" expandable to 3.15")
Rotation Speed (rpm)	0.37 - 7.39rpm
Arc Voltage Adjustment mm (inches)	20mm (.79")
Welding Torch Angle	0° - 30°
Standard Cable Length	L=5m (16')
Welding Current/Duty Cycle	300A at 70%
Protective Gas	Ar / Mixed Gases
Wire Feeding Speed mm/min (inches/min)	2200mm/min (86.6"/min)
Wire Diameter mm (inches)	0.8, 0.9, 1.0 (0.030", 0.035", 0.040")
Cooling	Water
Joint Type	Flush, projected or recessed
Weight kg (lbs)	13kg (28lbs)
Dimensions	550 x 290 x 510 (22" x 11.4" x 20")

TSWH-i-75 (Tube to Tube Sheet Weld Head)

The TSWH-i-75 tube to tube sheet weld head is designed for inner tube to tube sheet TIG welding and is suitable for carbon and stainless steel without wire feed.

AUTOGENOUS / FUSION



PERFORMANCE

- Commonly used on heat exchangers, inner tube to tube sheet welding
- Minimum inner tube diameter of 19mm (.75 inches)
- Precise positioning and accurate/repeatability welding
- Suitable for carbon and stainless steel
- Can customize according to specific requirements
- **Recommended power unit = OW-ARC 250 or 400**



TSWH-i-75

Tube OD	±19mm (.75")	Weight (excludes cable)	11kg (24lbs)
Depth for Inner Tube	20-120mm (.75"-4.75')	Cooling Flow	≥600ml
Tube Thickness	1-2.5mm (0.040"-0.1")	Cooling	Water
Connection	Tube insert, flush tube	Standard Cable Length	L=5m (16')
Rotation Speed (rpm)	0.37 - 7.39 rpm		
Tungsten Diameter	2.4mm (0.095")		
Arc Adjusting Distance	15mm (0.59')		
Protective Gas	Ar / Mixed Gases		

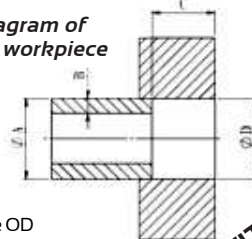
TSWH-i-1 (Tube to Tube Sheet Weld Head)

This welding head is also designed for inner tube to tube sheet TIG welding with integrated wire feeder.

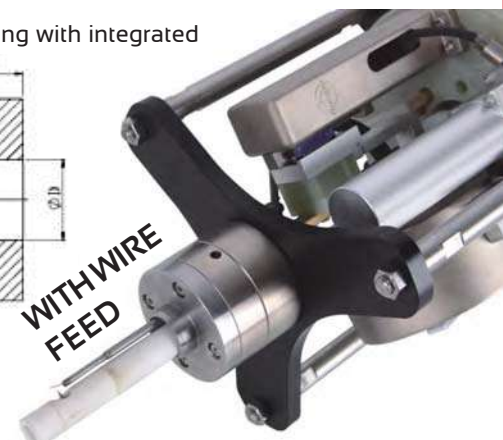
PERFORMANCE

- Inner-hole with integrated wire feed
- No wire twisting with special wire feed design
- Minimum inner tube diameter of 25mm (1 inch)
- Achieves complex single and multi layer welds
- Can customize according to specific requirements
- Special water cooling feature (cools to the end of torch, near the Tungsten)
- **Recommended power unit = OW-ARC 250 or 400**

Sample diagram of inner tube workpiece



- A. Tube OD
- B. Tube thickness
- C. The distance between tube sheet and welding position
- D. Tube-sheet hole diameter



TSWH-i-1

Tube OD	≥25mm (1")	Weight (excludes cable)	12kg (26lbs)
Depth for Inner Tube	20-80mm (.75"-3')	Cooling Flow	≥600ml
Connection	Tube insert, flush tube	Cooling	Water
Tungsten Diameter	2.4mm (3/32")	Standard Cable Length	L=5m (16')
Rotation Speed (rpm)	0.37 - 7.39 rpm		
Arc Adjusting Distance	15mm (0.59')		
Max Wire Feed Speed	1800mm/min (5.83"/min)		
Protective Gas	Ar / Mixed Gases		

TSWH-HB-625 (Headerbox Tube to Tube Sheet Weld Head)

This weld head is designed for deep hole tube to tube sheet TIG welding. It is suitable for carbon steel, stainless steel and most TIG type materials.



PERFORMANCE

- Commonly used for special heat exchanger needs within the chemical industry (for example: air-cooled hydrogenation)
- Perfect for wire feed welds in hard to reach areas
- Narrow space welds reaching 4.75" to 8.5" (4.75" to 8.5" is the min. and max. distance between the two tube plates)
- Can customize according to specific requirements
- Torch angle negative 3 degrees
- Optional external or integrated wire feed available see page 22
- **Recommended power unit = OW-ARC 250 or 400**

TSWH-HB-625

Tube OD	25 or 32mm (1"-1.25)	Weight (excludes cable)	13kg (28lbs) no cable
Depth for Inner Tube	230mm (9") including plate thickness	Cooling Flow	≥600ml
Connection	Flush tube	Cooling	Water
Rotation Speed (rpm)	0.37 - 7.39 rpm	Duty Cycle	200A 60%
Tungsten Diameter	2.4mm (0.095")	Standard Cable Length	L=5m (16')
Torch Angle	-3°		
Arc Adjusting Distance	18mm (0.70')		
Protective Gas	Ar / Mixed Gases		

HCW TIG NARROW GROOVE (IG/5G Hot or Cold Wire Welding System)

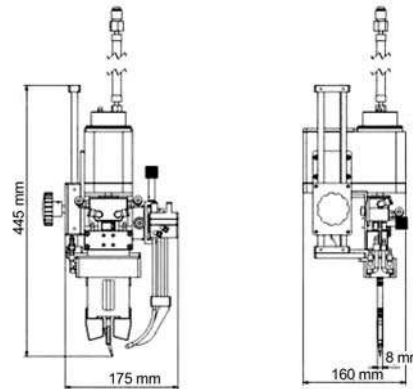
CUSTOM MANUFACTURED PRODUCT - CALL US WITH YOUR REQUIREMENT

This system contains a swinging angle torch, protective gas hood, wire feeding frame, and optional camera monitoring system and electronic sliding function. The torch is made of high temperature resistant material and integrated water cooling system and protective gas channels. The inner protective gas hood is made of stainless steel. The torch design protects the external surface while performing the groove weld.



PERFORMANCE

- Suitable for narrow bevel widths greater than 9mm (.375") and wall thickness greater than 30mm (1.25")
- Deposits heat efficiently, low heat input
- Various welding methods: horizontal, vertical and orbital welding
- Five water cooling channels, high duty cycle
- Double gas protection ensures greater weld quality
- Suitable for carbon/stainless steel, nickel base alloys and titanium
- Recommended power unit = OW-ARC 400, 401 and 600



Can be configured per customer requirement.

HCW TIG NARROW GROOVE

Bevel Type	U, J type
Pipe Thickness	30-200mm (1.25"-7.75")
Bevel Width	9-20mm (.35"-.75")
Max Current (A)	350
Max Wire Feeding Speed (mm/min)	5500mm (18')
Wire Diameter	1.0, 1.2mm (0.040", 0.045")
Protective Gas	Ar / Mixed Gases
Weight	7kg / 15.43 lbs.
Cooling	Water
Dimensions mm (inches)	175 x 160 x 445 (6.88" x 6.29" x 17.5")

TPH-WH-S (Horizontal/Vertical Weld Station)

CUSTOM MANUFACTURED PRODUCT - CALL US WITH YOUR REQUIREMENT

This system is specially designed for tube to flange TIG welding. It can perform a spot, seam and orbital weld with or without wire feed. It can handle vertical or horizontal placement. Suitable for all industries.

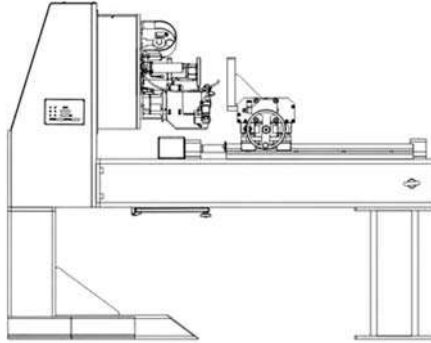


Diagram showing optional stand.



PERFORMANCE

- Pneumatic clamp design, ensures precise positioning
- Keeps workpiece stable
- Quick and convenient positioning
- Eliminates wire wrapping - reducing preparation time
- Option to choose with or without wire feed
- Water circuit cooling torch for increased working time
- **Recommended power unit = OW-ARC 250 or 400**

TPH-WH-S

Tube OD	17-76mm (.67"-3")
Tungsten Diameter	2.4mm, 3.2 mm (3/32", 1/8")
Rotation Speed (rpm)	0.1-3.29rpm
Torch Angle	0° - 45°
Protective Gas	Ar / Mixed
Cooling	Water
Cooling Flow (ml/mm)	≥600
OSC Width	40mm (1.5")
AVC Height	40mm (1.5")
Standard Cable Length	L=5m (16')
Wire Diameter	08, 0.9, 1.0mm (0.030", 0.035", 0.040")
Max Wire Feeding Speed	1800mm/min (5.83')
Weight kg (lbs)	290kg (639 lbs)

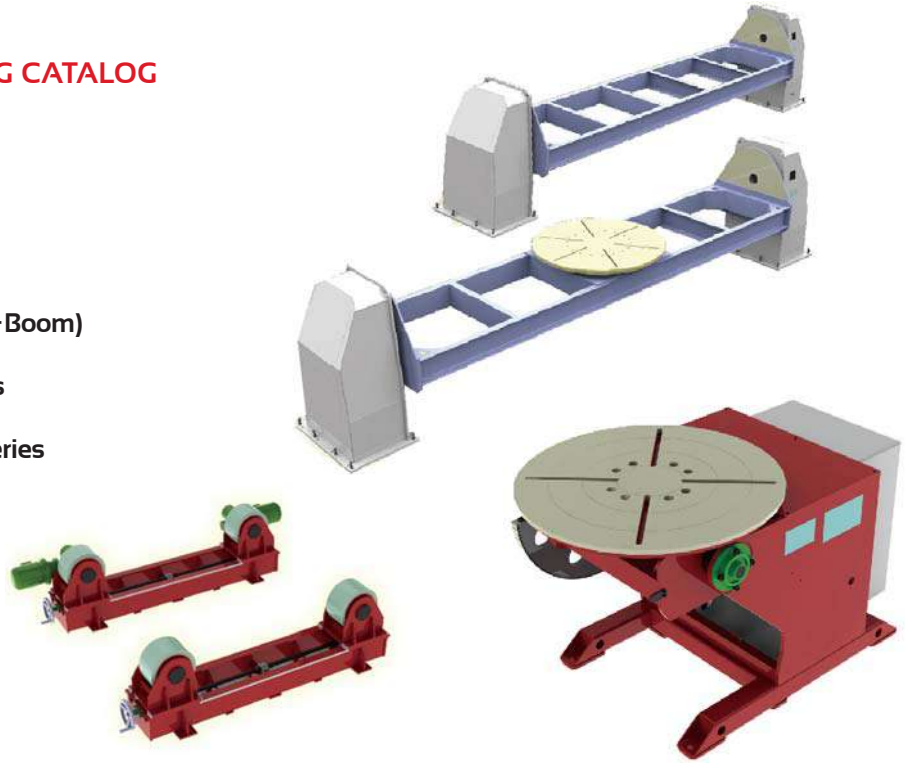


CHECK OUT OUR OTHER LINE OF PRODUCTS!

We also offer a full line of products ranging from Auxiliary Welding Products to Automated Systems. Contact our corporate office or one of our sales representatives / distributors to view all our product catalogs.

AUXILIARY WELDING CATALOG

- Screw Adjust Rotator
- Bolt Adjust Rotator
- Self-Adaptive Rotator
- Manipulator (Column & Boom)
- Tilting Positioner Series
- Hydraulic Positioner Series
- Headstock and Tail
- L Positioner



AUTOMATED WELDING PIPE SYSTEMS CATALOG

- Open Headstock System
- Press Roller System
- Pipe Fittings System
- Pipe Rotating Fixtures
- Custom Systems



ACCESSORIES (For Otto Arc Systems Orbital Welding Products)



SPRING BALANCER

The spring balancer is specially designed for tube to tube weld heads. It helps assist with controlling the weld head based on positioning by balance. This accessory helps make the process of locating the center of the tube quick and easy as well as keeping the weld head stable.

PERFORMANCE

- Convenient for moving
- Adjustable weight loading range
- For tube to tube sheet weld heads

SPRING BALANCER (SB-1)

Loading (kg/lbs)	9-15kg (19-33lbs.)
Traverse (mm/inches)	2000mm (78".7)
Weight (kg/lbs)	3.8kg (8lbs.)

MANIPULATOR

The manipulator is also designed for tube to tube sheet welding. The manipulator allows the operation to be easy and convenient by controlling the position of the weld head by 3 moving axes and by using pneumatic locking. It also assists with locating the center of the tube and creates stability during the welding process.

PERFORMANCE

- Durable and stable steel construction
- Linear track for each axis for smooth and reliable operation
- Three-axes pneumatic locking system
- Two fixed and flexible wheels, easy to move
- For tube to tube sheet weld heads
- Patented design

MANIPULATOR (TPF-M)

	Milimeters	Inches
Height Between Tube and Ground	500mm	19.7"
X axis Traverse	1500mm	59"
Y-axis Traverse	1500mm	59"
Z-axis Traverse	450mm	17.7"
Weight	230kg	507 lbs
Dimensions	2063 x 2325 x 1269mm	81" x 91.5" x 50"



EXTERNAL / INTEGRATED WIRE FEEDER

PERFORMANCE

- Simple design
- Light weight, easy to carry
- Branded Servo motor driving system
- Loop control
- Stable wire feeding speed
- Compatible with all TPWH-O and TPWH-OA Series weld heads



WIRE FEEDERS	EXTERNAL WIRE FEEDER (WFE-1)	INTEGRATED WIRE FEEDER (WFi-1)
Wire Feeding Speed (mm/inches)	100-1800 mm/min (4"-70.9")	100-1800 mm/min (4"-70.9")
Wire Diameter (mm/inches)	1.0mm (0.039")	0.8mm, 0.9mm, 1.0mm
Weight (kg/lbs)	7.34kg (16lbs)	1.5kg (3lbs.)

*Cable Length 4mm (12')

AFTERMARKET WELD HEADS / PRINTER PAPER / OTHER

Otto Arc aftermarket orbital welding collets for Arc Machine weld heads are made to the highest quality standards. All our collets are made from stainless steel to give you better wear versus aluminum type collets. Our new spring designed collet will hold oversized and undersized tubing. Our new spring collets have more flexibility to hold all types of tubing or pipe. Our 500 heads now offer gate screws with springs to hold the latch up to make closing the upper gate easier. Our one-piece construction on the lower head will give you better alignment on both sides of your tubing.

500 HEAD

P/N for 500 Head	Size
500-125	.125" Tube
500-25	.25" Tube
500-375	.375" Tube
500-5	.5" Tube

750 HEAD

P/N for 750 Head	Size
753-125	.125" Tube
753-25	.25" Tube
753-375	.375" Tube
753-5	.5" Tube
753-625	.625" Tube
753-75	.75" Tube

1500 HEAD

P/N for 1500 Head	Size	1500 Head	Size
1503-25	.25" Tube	1503-1.25	1.25" Tube
1503-375	.375" Tube	1503-1.5	1.5" Tube
1503-5	.5" Tube	1503-5P	.5" Pipe
1503-625	.625" Tube	1503-75P	.75" Pipe
1503-75	.75" Tube	1503-1P	1" Pipe
1503-1	1" Tube		

2000 HEAD

P/N for 2000 Head	Size	2000 Head	Size
2003-5	.5" Tube	2003-5P	.5" Pipe
2003-625	.625" Tube	2003-625P	.625" Pipe
2003-75	.75" Tube	2003-375P	.375" Pipe
2003-1	1" Tube	2003-75P	.75" Pipe
2003-1.5	1.5" Tube	2003-1P	1" Pipe
2003-2	2" Tube	2003-1.5P	1.5" Pipe

2500 HEAD

P/N for 2500 Head	Size	2500 Head	Size
2503-75	.75" Tube	2503-75P	.75" Pipe
2503-1	1" Tube	2503-1P	1" Pipe
2503-1.5	1.5" Tube	2503-1.5P	1.5" Pipe
2503-2	2" Tube	2503-2P	2" Pipe
2503-2.5	2.5" Tube		

3500 HEAD

P/N for 3500 Head	Size	3500 Head	Size
3503-1	1" Tube	3503-1.5P	1.5" Pipe
3503-1.5	1.5" Tube	3503-2P	2" Pipe
3503-2	2" Tube	3503-2.5P	2.5" Pipe
3503-2.5	2.5" Tube	3503-3.5	3.5" Tube (3" Pipe)
3503-3	3" Tube		

4000 HEAD

P/N for 4000 Head	Size	4000 Head	Size
4003-1	1" Tube	4003-3.5	3.5" Tube (3" Pipe)
4003-1.5	1.5" Tube	4003-4	4" Tube (3.5" Pipe)
4003-2	2" Tube	4003-4.5	4.5" Tube (4" Pipe)
4003-2.5	2.5" Tube	4003-2P	2" Pipe
4003-3	3" Tube	4003-2.5P	2.5" Pipe

4500 HEAD

P/N for 4500 Head	Size	4500 Head	Size
4503-1	1" Tube	4503-3.5	3.5" Tube (3" pipe)
4503-1.5	1.5" Tube	4503-4	4" Tube (3.5" Pipe)
4503-2	2" Tube	4503-4.5	4.5" Tube (4" Pipe)
4503-2.5	2.5" Tube	4503-2P	2" Pipe
4503-3	3" Tube	4503-2.5P	2.5" Pipe

7500 HEAD

P/N for 7500 Head	Size
7503-3.5	3.5" Tube (3" Pipe)
7503-4	4" Tube (3.5" Pipe)
7503-4.5	4.5" Tube (4" Pipe)
7503-6	6" Tube
7503-6P	6" Pipe



500 Cassette Head



3503 Head



750 Head



4003 Head



1503 Head



4503 Head



2003 Head



2503 Head



7503 Head

Printer Paper for OW-ARC & AMI Power Units

REPLACEMENT PRINTER PAPER	
OW-1000	Printer paper for #207 machine
OW-ARC (pack of 5)	Printer paper for OW-ARC Power Units



Replacement Window Screws

- 500-WI
- 750-WI
- 1500-WI
- 2500-WI
- 3500-WI
- 4500-WI
- 7500-WI



Head Holders

- 500-HOLDER
- 750-HOLDER



Replacement Windows

- 500-WINDOW
- 750-WINDOW
- 1500-WINDOW
- 2500-WINDOW
- 3500-WINDOW
- 4500-WINDOW
- 7500-WINDOW



Replacement Thumbscrews

- 500-SCREW
- 750-SCREW



NOTE: All AFTERMARKET collets and tool bits are manufactured by Otto Arc Systems, Inc. and are not genuine Tri Tool, George Fisher, Orbatech, ARC Machine or Swagelok products. Each is a trademark of its own.

PBM-2500 • 1" to 2.5" PIPE (ID Mount / Air or Electric) WITH OPTIONAL SIZE RANGE OF 0.5" TO 2.5"

The PBM-2500 beveling and facing machine is light weight, just 13 lbs. and is designed to bevel boiler tubes. Our heavy duty tool bits are held in by our wedge lock system.

The torque accepting mandrel with lock in blades (no springs) easily stops any pieces from dropping down into the boiler tube. Our gear drive unit has spiral bevel gears for better torque (more teeth engagement, compared to standard straight gears that other competitors use).



PBM-2500 Air Motor



PBM-2500 Electric Motor

PBM-2500 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-2500 Kit with Electric 110v Motor	P/N: PBM-2500-10-E
PBM-2500 Kit with Electric 230v Motor	P/N: PBM-2500-10-E-230
PBM-2500 Kit with Air Motor	P/N: PBM-2500-10

PERFORMANCE

- Size range for Pipe 1" to 2.5" (12.7 mm - 63.5 mm)
- Max wall thickness to 0.50"
- Air Power requirements: 40 cfm at 90 psi.
- Lock in mandrel blades (no springs to lose)
Adjustable keyway on machine and mandrel
(eliminates backlash and chatter)
- .75 hp pneumatic motor
- 13 lbs. approximate working weight
Hardened mandrel 55 Rc.
(less chance of gouging with metal chips)
- Tool bit is held in by our wedge lock system
(keeps the tool bit locked in the cutter head to ensure chatter free bevels)
- Single mandrel with mandrel blades to cover size ranges

TOOL BITS FOR PBM-2500

TB-1122	37.5 degree heavy duty bevel bit (upper range)
TB-6964	37.5 degree bevel bit (lower range, extended)
* TB-1123	.950 Facing bit
* TB-1124	37.5 degree bevel bit (extended)
TB-1125	30 degree heavy duty bevel bit
TB-1127	30 degree standard bevel bit
TB-1128	25 degree "J" bevel bit (upper range)
TB-1128L	25 degree "J" bevel bit (lower range)
TB-6963	Facing bit (1" extended reach)
TB-6965	30 degree bevel bit (lower range, extended)

* **Tool bits included in kit**

PBM-2500 ACCESSORIES

Optional Mandrel 0.5" to 1.25" OD	P/N: PBM-2590
Air Caddy - Includes air regulator, filter and oil mister	P/N: PBM-AF

All beveling machines come packaged in our heavy duty case with tooling, tool bits(2), manual and required ramps.



PBM-4500 • 1.25" to 4.5" (ID Mount / Air or Electric)

WITH OPTIONAL SIZE RANGE OF .625" TO 6" FEATURES - BUILT WITH A WORM GEAR DRIVE UNIT FOR EXTRA TORQUE!

The PBM-4500 beveling and facing machine comes with a torque accepting mandrel, built with a worm gear drive unit for extra torque to handle extra thick pipe walls. This machine can bevel, face, and counter-bore.



PBM-4500 Air Motor



TB-0333



TB-0257



Various Mandrel Options

PBM-4500 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-4500 Kit with Electric 110v Motor	P/N: PBM-4500-10-E
PBM-4500 Kit with Electric 230v Motor	P/N: PBM-4500-10-E-230
PBM-4500 Kit with Air Motor	P/N: PBM-4500-10

PERFORMANCE

- Size range 1.25" to 4.5" Pipe (31.74 mm -101.6 mm)
- Max wall thickness to 1"
- Air Power requirements: 76 cfm at 90 psi.
- Lock in mandrel blades (no springs to lose)
- Adjustable keyway on machine and mandrel (eliminates backlash and chatter)
- 1.5 HP pneumatic motor
- 31 lbs. approximate working weight
- Hardened mandrel 55 Rc. (less chance of gouging with metal chips)
- Three slots to do beveling, facing, deburring or counter-boring
- Single mandrel with mandrel blades to cover various size ranges

Many tool bit sizes available, contact us for further details.

TOOL BITS FOR PBM-4500

TB-0167	37.5 degree bevel bit (lower range)
TB-0168	4 degree chamfer/deburr bit
TB-0169	Facing bit (.75" Height)
* TB-0257	Facing bit (.875" Height)
TB-0258	Facing bit (1" Height)
* TB-0333	37.5 degree bevel bit 2" to 3.5" pipe
TB-0333-1	37.5 degree heavy bevel bit 2" to 3.5" pipe
TB-0944	37.5 degree bevel bit (upper range)
TB-1273	45 degree bevel bit (lower range)
TB-1274	45 degree bevel bit (upper range)
TB-2566	25 degree "J" bevel bit (lower range)
TB-2567	25 degree "J" bevel bit (upper range)
TB-2568	20 degree "J" bevel bit (lower range)
TB-2569	20 degree "J" bevel bit (upper range)
TB-3030	30 degree bevel bit (lower range)
TB-3035	30 degree bevel bit (upper range)
TB-412-01	10 degree counterbore bit (lower range)
TB-412-02	10 degree counterbore bit (upper range)
* Tool bits included in kit	

PBM-4500 ACCESSORIES

MANDREL OPTIONS FOR PBM-4500

.625" to 1.25" Mandrel	P/N: PBM-4590
1.25" to 4" Standard Mandrel	P/N: PBM-0490
2" to 6" Mandrel	P/N: PBM-0491
2" to 6" Extension Mandrel Kit	P/N: PBM-4500-EXT

ELBOW MANDREL FOR PBM-4500

Range 2"- 2.5"	P/N: EB-4500-2
Range 2.5"- 3"	P/N: EB-4500-2.5
Range 3"- 4"	P/N: EB-4500-3
Range 4"- 5"	P/N: EB-4500-4
Range 5"- 6"	P/N: EB-4500-5
Range 6"- 7"	P/N: EB-4500-6



AIR CADDY	PART NUMBER
Recommended for air motors	P/N: PBM-AF

PBM-6000 • 2" to 6" PIPE (ID Mount / Air or Electric)

WITH OPTIONAL SIZE RANGE OF 2" TO 8"

BUILT WITH A WORM GEAR DRIVE UNIT FOR EXTRA TORQUE!

The PBM-6000 beveling and facing machine comes with a torque accepting mandrel, built with a worm gear drive unit for extra torque to handle extra thick pipe walls. This machine can bevel, face, and counter-bore up to 1.25" wall thickness - worry free from damaging the gears.



PBM-6000 Air Motor



TB-2902



TB-2906

PBM-6000 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-6000 Kit with Electric 110v Motor	P/N: PBM-6000-10-E
PBM-6000 Kit with Electric 230v Motor	P/N: PBM-6000-10-E-230
PBM-6000 Kit with Air Motor	P/N: PBM-6000-10

PERFORMANCE

- Size range 2" to 6" Pipe (50.8 mm - 152.4 mm)
- Max wall thickness to 1.25"
- Air Power requirements: 76 cfm at 90 psi.
- Lock in mandrel blades (no springs to lose)
- Adjustable keyway on machine and mandrel (eliminates backlash and chatter)
- 2 hp pneumatic motor
- 52 lbs. approximate working weight
- Hardened mandrel 45 Rc. (less chance of gouging with metal chips)
- Three slots to do beveling, facing, deburring or counter-boring
- Single mandrel with mandrel blades to cover size ranges

Many tool bit sizes available, contact us for further details.

TOOL BITS FOR PBM-6000

* TB-2902	Facing Bit (1" Height)
TB-2903	Facing Bit (.875" Height)
TB-2904	Facing Bit (.75" Height)
TB-2905	37.5 degree bevel bit (lower range)
* TB-2906	37.5 degree bevel bit (upper range)
TB-2907	C-Bore 14.5 degree (lower range)
TB-2908	C-Bore 14.5 degree (middle range)
TB-2909	C-Bore 14.5 degree (upper range)
TB-2910	C-Bore 10 degree (lower range)
TB-2911	C-Bore 10 degree (middle range)
TB-2912	C-Bore 10 degree (upper range)
TB-2913	45 degree bevel bit (lower range)
TB-2914	45 degree bevel bit (upper range)
TB-8997	20 degree "J" bevel bit (lower range)
TB-8998	20 degree "J" bevel bit (upper range)
TB-2915	25 degree "J" bevel bit (lower range)
TB-2916	25 degree "J" bevel bit (upper range)
TB-2930	30 degree bevel bit (lower range)
TB-2931	30 degree bevel bit (upper range)

* *Tool bits included in kit*

PBM-6000 ACCESSORIES

2" to 6" Standard Mandrel	P/N: PBM-8920
3" to 8" Extension Mandrel Kit	P/N: PBM-8925
3" to 8" Mandrel	P/N: PBM-8912
Air Caddy - Includes air regulator, filter and oil mister	P/N: PBM-AF

PBM-8000 • 3" to 8" PIPE (ID Mount / Air or Electric)

WITH OPTIONAL SIZE RANGE OF 2" TO 10"

BUILT WITH A WORM GEAR DRIVE UNIT FOR EXTRA TORQUE!

The PBM-8000 beveling and facing machine comes with a torque accepting mandrel, built with a worm gear drive unit for extra torque to handle extra thick pipe walls. This machine can bevel, face, and counter-bore up to 1.25" wall thickness - worry free from damaging the gears.



PBM-8000 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-8000 Kit with Electric 110v Motor	P/N: PBM-8000-10-E
PBM-8000 Kit with Electric 230v Motor	P/N: PBM-8000-10-E-230
PBM-8000 Kit with Air Motor	P/N: PBM-8000-10

PERFORMANCE

- Size range 3" to 8" Pipe (76.2 mm - 203.2mm)
- Max wall thickness to 1.25"
- Air Power requirements: 76 cfm at 90 psi.
- Additional 10" extension kit
- Lock in mandrel blades (no springs to lose)
- Adjustable keyway on machine and mandrel (eliminates backlash and chatter)
- 2.5 HP pneumatic motor
- 66 lbs. approximate working weight
- Hardened mandrel 45 Rc. (less chance of gouging with metal chips)
- Three slots to do beveling, facing, deburring or counter-boring
- Single mandrel with mandrel blades to cover size ranges

Many tool bit sizes available, contact us for further details.

TOOL BITS FOR PBM-8000

- * TB-2902 Facing Bit (1" Height)
- TB-2903 Facing Bit (.875" Height)
- TB-2904 Facing Bit (.75" Height)
- TB-2905 37.5 degree bevel bit (lower range)
- * TB-2906 37.5 degree bevel bit (upper range)
- TB-2907 C-Bore 14.5 degree (lower range)
- TB-2908 C-Bore 14.5 degree (middle range)
- TB-2909 C-Bore 14.5 degree (upper range)
- TB-2910 C-Bore 10 degree (lower range)
- TB-2911 C-Bore 10 degree (middle range)
- TB-2912 C-Bore 10 degree (upper range)
- TB-2913 45 degree bevel bit (lower range)
- TB-2914 45 degree bevel bit (upper range)
- TB-8997 20 degree "J" bevel bit (lower range)
- TB-8998 20 degree "J" bevel bit (upper range)
- TB-2915 25 degree "J" bevel bit (lower range)
- TB-2916 25 degree "J" bevel bit (upper range)
- TB-2930 30 degree bevel bit (lower range)
- TB-2931 30 degree bevel bit (upper range)

* *Tool bits included in kit*

PBM-8000 ACCESSORIES

2" to 6" Mandrel	P/N: PBM-8920
3" to 8" Standard Mandrel	P/N: PBM-8912
6" to 10" Mandrel	P/N: PBM-1202
10" Extension Mandrel Kit	P/N: PBM-8000-EXT
Air Caddy - Includes air regulator, filter and oil mister	P/N: PBM-AF

PBM-614 • 6" to 14" PIPE (ID Mount / Air or Electric)

FEATURES - BUILT WITH A WORM GEAR DRIVE UNIT FOR EXTRA TORQUE!

The PBM-614 beveling and facing machine comes with a torque accepting mandrel, built with a worm gear drive unit for extra torque to handle extra thick pipe walls. This machine can bevel, face, and counter-bore up to 1.25" wall thickness.



PBM-614 Air Motor



TB-2902



TB-2906

PBM-614 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-614 Kit with Electric 110v Motor	P/N: PBM-14-10-E
PBM-614 Kit with Electric 230v Motor	P/N: PBM-14-10-E-230
PBM-614 Kit with Air Motor	P/N: PBM-14-10

PERFORMANCE

- Size range 6" to 14" Pipe (152.4 mm - 355.6mm)
- Max wall thickness to 1.25"
- Air Power requirements: 76 cfm at 90psi
- Lock in mandrel blades (no springs to lose)
- Adjustable keyway on machine and mandrel (eliminates backlash and chatter)
- 3hp pneumatic motor
- 190 lbs. approximate working weight
- Hardened mandrel 55 Rc. (less chance of gouging with metal chips)
- Three slots to do beveling, facing, deburring or counter-boring
- Single mandrel with mandrel blades to cover size ranges
- One cutter slot for heavy duty tool bits

Many tool bit sizes available, contact us for further details.

PBM-614 ACCESSORIES

PBM-AF
Air Caddy - Includes air regulator, filter and oil mister

** Optional hydraulic power unit for heavier wall recommended.*

TOOL BITS FOR PBM-12000

* TB-2902	Facing Bit (1" Height)
TB-2903	Facing Bit (.875" Height)
TB-2904	Facing bit (.750" Height)
TB-2905	37.5 degree bevel bit (lower range)
* TB-2906	37.5 degree bevel bit (upper range)
TB-2907	C-Bore 14.5 degree (lower range)
TB-2908	C-Bore 14.5 degree (middle range)
TB-2909	C-Bore 14.5 degree (upper range)
TB-2910	C-Bore 10 degree (lower range)
TB-2911	C-Bore 10 degree (middle range)
TB-2912	C-Bore 10 degree (upper range)
TB-2913	45 degree bevel bit (lower range)
TB-2914	45 degree bevel bit (upper range)
TB-8997	20 degree "J" bevel bit (lower range)
TB-8998	20 degree "J" bevel bit (upper range)
TB-2915	25 degree "J" bevel bit (lower range)
TB-2916	25 degree "J" bevel bit (upper range)
TB-2930	30 degree bevel bit (lower range)
TB-2931	30 degree bevel bit (upper range)

Heavy Duty Tool Bits (For wall thickness 5/8" and over)

TB-2924	37.5 degree bevel bit
TB-2925	37.5 / 10 degree compound bevel bit
TB-2926	30 degree bevel bit
TB-2927	20 degree J-Bevel
TB-2928	25 degree J-Bevel

* Tool bits included in kit

PBM-1224 • 12" to 24" PIPE (ID Mount / Air or Electric)

FEATURES - BUILT WITH A WORM GEAR DRIVE UNIT FOR EXTRA TORQUE!

The PBM-1224 beveling and facing machine comes with a torque accepting mandrel, built with a worm gear drive unit for extra torque to handle extra thick pipe walls. This machine can bevel, face, and counter-bore up to 1.25" wall thickness.



PBM-1224 Air Motor

TB-2902

TB-2906

PBM-1224 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

PBM-1224 Kit with Electric 110v Motor	P/N: PBM-24-10-E
PBM-1224 Kit with Electric 230v Motor	P/N: PBM-24-10-E-230
PBM-1224 Kit with Air Motor	P/N: PBM-24-10

PERFORMANCE

- Size range 12" to 24" Pipe (152.4 mm - 609.6mm)
- Max wall thickness to 1.25"
- Air Power requirements: 76 cfm at 90psi
- Lock in mandrel blades (no springs to lose)
- Adjustable keyway on machine and mandrel (eliminates backlash and chatter)
- 3hp pneumatic motor
- 260 lbs. approximate working weight
- Hardened mandrel 55 Rc. (less chance of gouging with metal chips)
- Three slots to do beveling, facing, deburring or counter-boring
- Single mandrel with mandrel blades to cover size ranges
- One cutter slot for heavy duty tool bits

Many tool bit sizes available, contact us for further details.

PBM-1224 ACCESSORIES PBM-AF

Air Caddy - Includes air regulator, filter and oil mister

** Optional hydraulic power unit for heavier wall recommended.*

TOOL BITS FOR PBM-1224

* TB-2902	Facing Bit (1" Height)
TB-2903	Facing Bit (.875" Height)
TB-2904	Facing bit (.750" Height)
TB-2905	37.5 degree bevel bit (lower range)
* TB-2906	37.5 degree bevel bit (upper range)
TB-2907	C-Bore 14.5 degree (lower range)
TB-2908	C-Bore 14.5 degree (middle range)
TB-2909	C-Bore 14.5 degree (upper range)
TB-2910	C-Bore 10 degree (lower range)
TB-2911	C-Bore 10 degree (middle range)
TB-2912	C-Bore 10 degree (upper range)
TB-2913	45 degree bevel bit (lower range)
TB-2914	45 degree bevel bit (upper range)
TB-8997	20 degree "J" bevel bit (lower range)
TB-8998	20 degree "J" bevel bit (upper range)
TB-2915	25 degree "J" bevel bit (lower range)
TB-2916	25 degree "J" bevel bit (upper range)
TB-2930	30 degree bevel bit (lower range)
TB-2931	30 degree bevel bit (upper range)

Heavy Duty Tool Bits (For wall thickness 5/8" and over)

TB-2924	37.5 degree bevel bit
TB-2925	37.5 / 10 degree compound bevel bit
TB-2926	30 degree bevel bit
TB-2927	20 degree J-Bevel
TB-2928	25 degree J-Bevel

* Tool bits included in kit

QUICK CUT SAW (.75" to 4.5" OD)

QUICK, EASY AND CONSISTENT! GREAT SOLUTION TO CUTTING TUBE & PIPE!

Designed to perform true and burr free cuts with our specially designed vice that creates a self-centering hold for the finest cuts. Ideal for high-purity applications!



Our Otto Arc "Quick Cut Saw" is designed for fabrication facilities and for projects that require beveling or squaring for pre-prep welding of pipes and tubes.

PERFORMANCE

- Will cut tubing from .75" to 4.5"
- Will cut piping from .5" to 4"
- Will cut square to .005"
- Steady rest for accurate cutting
- Enclosed gear box (does not require expensive oil)
- Enclosed bearings for smooth operation
- Designed to keep out chips during operation
- Simple to adjust sizes and depth
- Performs bevels and squaring
- Ideal for high-purity applications
- Can also cut plastic, aluminum and a variety of other alloys
- Electric motor: variable speed control 110v or 220v



QC-4000 Side View

QUICK CUT SAW	MOTOR SPECS	WEIGHT
PN: QC-4000-E (electric)	110V/60Hz or 220V/50Hz	60kg (132lbs.)

ADJUSTABLE SAW GUIDE - AN OTTO ARC EXCLUSIVE!

The Otto Arc Saw Guides are designed with multiple sizes in one and include 17-4 hardened steel guides that will assist in keeping the saw blade straight for square cuts plus less chance of accidentally sawing into the guide itself.



SG-1500

SG-3000

SG-6000

SAW GUIDES	PART NUMBER
.5" - 1.5" Pipe or Tube	P/N: SG-1500
1.5" - 3" Pipe or Tube	P/N: SG-3000
2" - 6" Pipe or Tube	P/N: SG-6000

Note: The SG-1500 & SG-3000 can be used with a hack saw or portaband saw. Our SG-6000 must be used with a Sawzall.



Pictured: example using Saw Guide to cut pipe/tube

SAW BLADES FOR CUTTING STAINLESS TUBING FOR QC-4000 SAW

(ALSO FITS GF STYLE MACHINES)

SAW BLADES	TEETH	PART NUMBER
.25" - .5" Tube	150	P/N: QC-150
.5" - 1" Tube	100	P/N: QC-100
1" - 3" Tube	70	P/N: QC-70
2" - 4" Pipe (.120 Wall Max.)	44	P/N: QC-44
2" - 4" Pipe (.375 Wall Max.)	32	P/N: QC-32



*QC-44 Saw Blade
(Blades can be requested with Laser Coating)*

TSM-1000 • 1/8" to 1" TUBE (OD Mount / Battery Powered)

FEATURES - PORTABLE!

TSM-1000 is one of the smallest designed facing tools on the market today. The machine is powered by an air cooled 18V-Li Metabo battery motor and the total working weight of the machine is 6 lbs. The design of this machine makes it easy to use on job sites, making hard-to-reach areas easily accessible due to its small size.

It has a battery powered motor, which will last for 2+ hours, with a 15 min. recharge. Collets are made from Stainless Steel material and are self-locking into the cutter to hold the collets in place.



Standard TSM-1000 Collets

TSM-1000 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-1000 Kit with Variable Battery Powered Motor

P/N: TSM-1000-10-BP

TSM-1500 Kit with Variable Battery Powered Motor (230v)

P/N: TSM-1000-10-BP-230

PERFORMANCE

- Size range 1/8" to 1" Tube (3.175 mm - 25.4 mm)
- 18V Metabo air cooled Li powered battery motor
- Easy replacement of collets and size ranges
- Uses Stainless Steel collet set (upper / lower)
- 6 lbs. (2.6 kg) approximate working weight
- Faces most metals and plastics, including high nickel materials
- Battery charger: 110V;60Hz US Style / 220V;50Hz CE Compliant
- Tool bits are designed to work on the following materials: stainless steel, inconel, hastelloy, carbon steels, aluminum and other alloys
- Options: additional batteries can be purchased

TOOL BIT FOR TSM-1000 Standard tool bit for SS Material

TB-1009-TIN	Med Range
TB-1010-TIN	Low Range
TB-1011-TIN	High Range



TB-1009 TB-1010 TB-1011

STANDARD COLLETS

INCHES			
TSM-1001	1/8" TUBE	TSM-1005	5/8" TUBE
TSM-1002	1/4" TUBE	TSM-1006	3/4" TUBE
TSM-1003	3/8" TUBE	TSM-1007	7/8" TUBE
TSM-1004	1/2" TUBE	TSM-1008	1" TUBE / 25.4mm

METRIC			
TSM-1009	6mm TUBE	TSM-1014	13mm TUBE
TSM-1010	8mm TUBE	TSM-1015	14mm TUBE
TSM-1011	10mm TUBE	TSM-1016	18mm TUBE
TSM-1012	11mm TUBE	TSM-1017	22mm TUBE
TSM-1013	12mm TUBE	TSM-1018	25mm TUBE

Note: Please call regarding stock for metric size collets.

TSM-1500 • 1/8" to 1.5" TUBE (OD Mount / Electric)

This is our first machine and the tool that started a revolution in the field of facing tools. Our machines offer increment feed control so you can cut and debur tubing at precision lengths.

All TSM-1500 Collets are made of hard anodized aluminum for maximum hold and minimal weight. Their three-piece design ensures accurate centering while affording the most surface area contact for the greatest holding power.



Standard TSM-1500 Collets

TB-1506 Tool Bit

TSM-1500 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-1500 Kit with Variable 110v Motor	P/N: TSM-1500-10
TSM-1500 Kit with Variable 230v Motor	P/N: TSM-1500-10-230
TSM-1500 Kit with Variable Battery Powered Motor (110V)	P/N: TSM-1500-10-BP
TSM-1500 Kit with Variable Battery Powered Motor (230v)	P/N: TSM-1500-10-BP-230
TSM 1500 with 230volt motor, VTC	TSM-1500-10-230-VTC (variable speed motor)
<i>Note: Bench Mount Option Available</i>	<i>P/N: TSM-253</i>

PERFORMANCE

- Size range 1/8" to 1.5" Tube (3.175 mm - 38.1 mm)
- Standard 110/220V variable speed motor
- Portable or mountable for high volume production
- Easy replacement of collets and size ranges
- 10 lbs. approximate working weight
- Adjustable measure indicator for accurate facing
- Large view port for easy bit replacement
- Tool bit designed to keep chips out of polished ID
- Faces most metals and plastics, including high nickel and carbon steel materials
- Options: bench mount kit or battery powered motor

TOOL BITS FOR TSM-1500

- ** TB-0169 Facing Bit (.75" Tall)
- TB-0167 37.5 degree bevel
- TB-0202 Extended reach standard facing style (1" Tall)
- TB-0202-TIN Extended reach laser coated (1" Tall)
- TB-0204 Heavy duty for larger wall thickness (.75" Tall)
- * TB-1506 For use on 316 or 304 stainless steel (.75" Tall)
- * TB-1506-TIN Laser coated for abrasion resistance
- TB-1510 Double sided tool insert (carbide)
- ** TB-4000 Facing Bit (.625" Tall)
- TB-5000 For soft and gummy SS tubing (.75" Tall)
- TSM-AD-1500 Tool bit adapter/holder for inserts
- * *Tool bits included in kit*
- ** *Not recommended for electropolished tube*

STANDARD COLLETS



INCHES			
TSM-000	1/8" TUBE	TSM-007	1" TUBE / 25.4mm
TSM-001	1/4" TUBE	TSM-010	1-1/2" TUBE
TSM-002	3/8" TUBE	TSM-011	1/4" PIPE
TSM-003	1/2" TUBE	TSM-012	1/2" PIPE
TSM-004	5/8" TUBE	TSM-013	3/4" PIPE
TSM-005	3/4" TUBE	TSM-014	1" PIPE
TSM-006	7/8" TUBE		

METRIC	
TSM-019	8mm TUBE
TSM-020	10mm TUBE
TSM-021	12mm TUBE
TSM-017	6mm TUBE
TSM-023	14mm TUBE
TSM-024	15mm TUBE
TSM-025	18mm TUBE
TSM-026	22mm TUBE
TSM-027	23mm TUBE
TSM-028	28mm TUBE
TSM-029	35mm TUBE

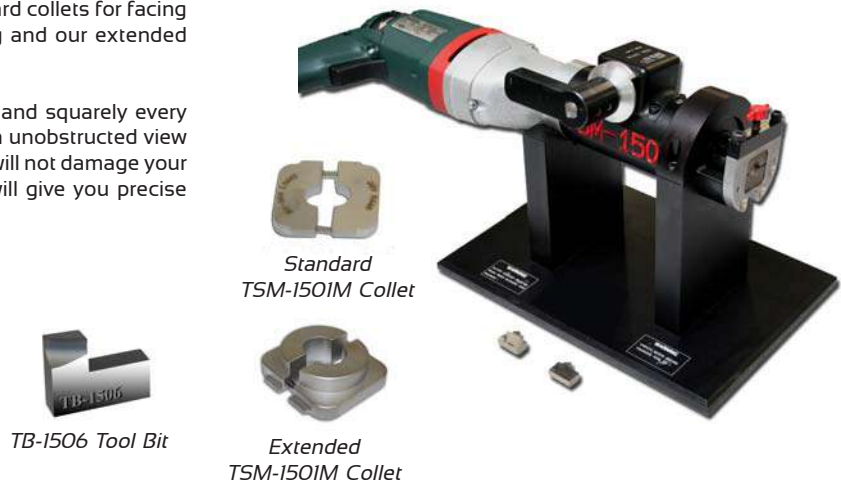
All facing machines come packaged in our heavy duty case with tooling, tool bits(2) and manual. Collets sold separately.

Note: Please call regarding stock for metric size collets.

TSM-150IM • 1/8" to 1" TUBE (OD Mount / Electric)

Our new micro facing machine was designed to face 1/8" to 1" tubing. We also offer two collets: our standard collets for facing micro fitting or short tubing from .20" long and our extended collets for 1" and above.

This new machine will let you face quickly and squarely every time. You will also find this machine has an unobstructed view of the tool bit and tubing. Stainless collets will not damage your electro-polish tubing. Our feed indicator will give you precise lengths every time.



TSM-150IM Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-150IM Kit with Variable 110v Motor	P/N: TSM-150IM-10
TSM-150IM Kit with Variable 230v Motor	P/N: TSM-150IM-10-230
TSM-150IM Kit with Variable Battery Powered Motor (110V)	P/N: TSM-150IM-10-BP
TSM-150IM Kit with Variable Battery Powered Motor (230v)	P/N: TSM-150IM-10-BP-230
TSM 150IM with 230volt motor, VTC	TSM-150IM-10-230-VTC (variable speed motor)
<i>Note: Bench Mount Option Available</i>	<i>P/N: TSM-253</i>

PERFORMANCE

- Size range 1/8" to 1" Tube (3.175mm- 25.4 mm)
- Standard 110/220V variable speed motor
- Easy replacement of collets
- 9 lbs. approximate working weight
- Adjustable measurement indicator
- Large view port for easy bit replacement
- Faces most metals and plastics, including high nickel and carbon steel materials
- Options: bench mount kit or battery powered motor

TOOL BITS FOR TSM-150IM

- ** TB-0169 Facing Bit (.75" Tall)
- TB-0167 37.5 degree bevel
- TB-0202 Extended reach standard facing style (1" Tall)
- TB-0202-TIN Extended reach laser coated (1" Tall)
- TB-0204 Heavy duty for larger wall thickness (.75" Tall)
- * TB-1506 For use on 316 or 304 stainless steel (.75" Tall)
- * TB-1506-TIN Laser coated for abrasion resistance
- TB-1510 Double sided tool insert (carbide)
- ** TB-4000 Facing Bit (.625" Tall)
- TB-5000 For soft and gummy SS tubing (.75" Tall)
- TSM-AD-1500 Tool bit adapter/holder for inserts
- * *Tool bits included in kit*
- ** *Not recommended for electropolished tube*

STANDARD COLLETS

INCHES			
M1-001	1/8" TUBE	M1-005	5/8" TUBE
M1-002	1/4" TUBE	M1-006	3/4" TUBE
M1-003	3/8" TUBE	M1-008	7/8" TUBE
M1-004	1/2" TUBE	M1-007	1" TUBE /25.4mm

METRIC			
M1-011	6mm TUBE	M1-017	14mm TUBE
M1-013	8mm TUBE	M1-018	15mm TUBE
M1-014	10mm TUBE	M1-019	18mm TUBE
M1-015	12mm TUBE	M1-020	22mm TUBE

EXTENDED COLLETS

INCHES			
M2-030	1/8" TUBE	M2-034	5/8" TUBE
M2-031	1/4" TUBE	M2-035	3/4" TUBE
M2-032	3/8" TUBE	M2-038	7/8" TUBE
M2-033	1/2" TUBE	M2-036	1" TUBE /25.4mm

METRIC			
M2-039	6mm TUBE	M2-043	14mm TUBE
M2-040	8mm TUBE	M2-044	15mm TUBE
M2-041	10mm TUBE	M2-045	18mm TUBE
M2-042	12mm TUBE	M2-046	22mm TUBE

Note: Please call regarding stock for metric size collets.

TSM-2500M • 1/2" to 2.5" TUBE (OD Mount / Electric)

FEATURES - HOLDS 3 TOOL BITS! FACES, BEVELS AND COUNTERBORES!

This new facing tool will face tubing from 1/2" to 2.5" and is designed like our TSM-450IM, but lighter in weight, approximately 19 lbs. This tool was designed with our Pharmaceutical contractors in mind.

Our feed knob will give you the control you need to ensure precise lengths. This machine comes with a Metabo motor with speed control that will keep the RPM constant under load. This speed control will help extend the life of your tool bits.

As with all our "M" style machines, we offer three types of collets. Use "Standard" to face short tube fittings and use extended collet's for tubing 4" or longer. It comes with a standard variable speed motor, allowing you to set a constant operating speed.



TB-0206 Tool Bit



Various Collets for TSM-2500M

TSM-2500M Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-2500M Kit with Variable Speed Control 110v Motor	P/N: TSM-2500M-10
TSM-2500M Kit with Variable 230v Motor	P/N: TSM-2500M-10-230

PERFORMANCE

- Size range .5" to 2.5" Tube (12.7 mm - 63.5mm)
- Less than 20" in length and 8" in overall height
- Easy replacement of collets, various sizes
- Adjustable measurement indicator for accurate facing
- 19 lbs. approximate working weight
- Large view port for easy tool bit replacement
- Spring loaded collets
- Worm gear drive

TOOL BITS FOR TSM-2500M

TB-0167	37.5 degree bevel
TB-0168	Counterbore bit
** TB-0169	Facing Bit (.75" Tall)
TB-0202	Extended reach standard style
TB-0202-TIN	Extended reach laser coated
* TB-0206	Heavy duty for larger wall thickness
TB-1506	For use on 316 or 304 stainless
* TB-1506-TIN	Laser coated for abrasion resistance
TB-1510	Double sided tool insert (carbide)
** TB-4000	Facing Bit (.625" Tall)
TB-5000	For soft and gummy SS tubing (.75" Tall)
TSM-AD-3000	Tool bit adapter/holder for inserts
* <i>Tool bits included in kit</i>	
** <i>Not recommended for electropolished tube</i>	

STANDARD COLLETS

INCHES			
TSM-2501	1/2" TUBE	TSM-2510	2-1/2" TUBE
TSM-2502	5/8" TUBE	TSM-2511	1/2" PIPE
TSM-2503	3/4" TUBE	TSM-2512	3/4" PIPE
TSM-2504	7/8" TUBE	TSM-2513	1" PIPE
TSM-2505	1" TUBE	TSM-2514	1-1/2" PIPE
TSM-2506	1-1/8" TUBE	TSM-2515	2" PIPE
TSM-2507	1-1/4" TUBE		
TSM-2508	1-1/2" TUBE		
TSM-2509	2" TUBE		

METRIC			
TSM-2516	12mm TUBE	TSM-2523	35mm TUBE
TSM-2517	13.5mm TUBE	TSM-2524	52mm TUBE
TSM-2518	14mm TUBE	TSM-2525	57.15mm TUBE
TSM-2519	15mm TUBE	TSM-2526	60.5mm TUBE
TSM-2520	17.2mm TUBE		
TSM-2521	22mm TUBE		
TSM-2522	28mm TUBE		

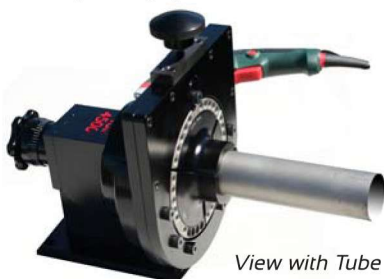
Note: Please call regarding stock for metric size collets.

TSM-450IM • 1" to 4.5" TUBE (OD Mount / Electric)

FEATURES - HOLDS 3 TOOL BITS. FACES, BEVELS AND COUNTERBORES!

This lightweight 25lb. facing machine has a wide working range of 1" to 4-1/2" OD. Our facing tool offers floating collets that let you grip oversize or out-of-round tubing.

As with all our "M" style machines, we offer three types of collets. Use "Standard" to face short tube fittings and use extended collet's for tubing 4" or longer. It comes with a standard variable speed motor, allowing you to set a constant operating speed.



View with Tube



TB-1506 Tool Bit



Standard Collet for TSM-450IM



Extended Collet for TSM-450IM

TSM-450IM Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-450IM Kit with Variable with Speed Control 110v Motor

P/N: TSM-450IM-10

TSM-450IM Kit with Variable 230v Motor

P/N: TSM-450IM-10-230

PERFORMANCE

- Size range for pipe 1" OD to 4.5" OD (25.4 mm - 114.3 mm)
- Rugged two speed design to fit more applications
- Comes with bench stand
- Easy replacement of collets and size ranges
- Adjustable measurement indicator for accurate facing
- Large view port for easy bit replacement
- Faces high nickel and carbon steel materials
- Spring loaded collets help align out-of-round tubing
- Worm gear drive
- Floating collet design
- Specially designed collets for efficient loading

TOOL BITS FOR TSM-450IM

- | | |
|--|--|
| TB-0167 | 37.5 degree bevel |
| TB-0168 | Counterbore bit |
| ** TB-0169 | Facing Bit (.75" Tall) |
| TB-0202 | Extended reach standard style |
| TB-0202-TIN | Extended reach laser coated |
| * TB-0206 | Heavy duty for larger wall thickness |
| TB-1506 | For use on 316 or 304 stainless |
| * TB-1506-TIN | Laser coated for abrasion resistance |
| TB-1510 | Double sided tool insert (carbide) |
| ** TB-4000 | Facing Bit (.625" Tall) |
| TB-5000 | For soft and gummy SS tubing (.75" Tall) |
| TSM-AD-3000 | Tool bit adapter/holder for inserts |
| * <i>Tool bits included in kit</i> | |
| ** <i>Not recommended for electropolished tube</i> | |

STANDARD COLLETS

INCHES			
TSM-7101	1" TUBE / 25.4mm	TSM-7109	4-1/2" TUBE (4" PIPE)
TSM-7103	1-1/2" TUBE / 38.1mm	TSM-7110	3/4" PIPE
TSM-7104	2" TUBE / 50.8 mm	TSM-7111	1" PIPE
TSM-7105	2-1/2" TUBE / 63.5mm	TSM-7112	1.5" PIPE
TSM-7106	3" TUBE / 76.2mm	TSM-7113	2" PIPE
TSM-7107	3-1/2" TUBE (3" PIPE)	TSM-7114	2.5" PIPE
TSM-7108	4" TUBE (3.5" PIPE)		

METRIC			
TSM-7119	52mm TUBE	TSM-7124	88.9mm TUBE
TSM-7120	57.15mm TUBE	TSM-7125	95.25mm TUBE
TSM-7121	60.5mm TUBE	TSM-7126	101.6mm TUBE
TSM-7122	69.85mm TUBE	TSM-7127	107.95mm TUBE
TSM-7123	82.55mm TUBE		

EXTENDED COLLETS

INCHES			
TSM-7201	1" TUBE / 25.4mm	TSM-7209	4-1/2" TUBE (4" PIPE)
TSM-7203	1-1/2" TUBE / 38.1mm	TSM-7210	3/4" PIPE
TSM-7204	2" TUBE / 50.8 mm	TSM-7211	1" PIPE
TSM-7205	2-1/2" TUBE / 63.5mm	TSM-7212	1.5" PIPE
TSM-7206	3" TUBE / 76.2mm	TSM-7213	2" PIPE
TSM-7207	3-1/2" TUBE (3" PIPE)	TSM-7214	2.5" PIPE
TSM-7208	4" TUBE (3.5" PIPE)		

METRIC			
TSM-7215	52mm TUBE	TSM-7222	101.6mm TUBE
TSM-7216	57.15mm TUBE	TSM-7223	107.95mm TUBE
TSM-7217	60.5mm TUBE		
TSM-7218	69.85mm TUBE		
TSM-7219	82.55mm TUBE		
TSM-7220	88.9mm TUBE		
TSM-7221	95.25mm TUBE		

Note: Please call regarding stock for metric size collets.

TSM-6001 • 1" to 6" TUBE (OD Mount / Electric)

FEATURES - HOLDS 3 TOOL BITS. FACES, BEVELS AND COUNTERBORES!

This lightweight 42 lb. facing machine has a wide working range of 1" to 6.625" OD.



Front View



TB-0206 Tool Bit



TSM-6001 Collet

TSM-6001 Machine Kit Includes: Machine, Tool Bits (2), Tooling, Manual and Case

TSM-6001 Kit with Variable Speed Control 110v Motor

P/N: TSM-6001-10

TSM-6001 Kit with Variable 230v Motor

P/N: TSM-6001-10-230

PERFORMANCE

- Size range for pipe 1.315" OD to 6.625" OD
- Size range for tube 1" to 6"
- Rugged two speed design to fit more applications
- Comes with bench stand
- Adjustable measurement indicator for accurate facing
- Large view port for easy bit replacement
- Worm gear drive
- Floating collet design
- Specially designed collets for efficient loading
- Faces most metals and plastics, including high nickel and carbon steel materials

TOOL BITS FOR TSM-6001

- | | |
|---------------|--|
| TB-0167 | 37.5 degree bevel |
| TB-0168 | Counterbore bit |
| ** TB-0169 | Facing Bit (.75" Tall) |
| TB-0202 | Extended reach standard style |
| TB-0202-TIN | Extended reach laser coated |
| * TB-0206 | Heavy duty for larger wall thickness |
| TB-1506 | For use on 316 or 304 stainless |
| * TB-1506-TIN | Laser coated for abrasion resistance |
| TB-1510 | Double sided tool insert (carbide) |
| ** TB-4000 | Facing Bit (.625" Tall) |
| TB-5000 | For soft and gummy SS tubing (.75" Tall) |
| TSM-AD-3000 | Tool bit adapter/holder for inserts |
- * *Tool bits included in kit*
 ** *Not recommended for electropolished tube*

STANDARD COLLETS

INCHES			
TSM-61001	1" TUBE / 25.4mm	TSM-61009	3" TUBE / 76.2mm
TSM-61002	1" PIPE	TSM-61010	3-1/2" TUBE (3" PIPE) / 88.9mm
TSM-61003	1-1/2" TUBE / 38.1mm	TSM-61011	4" TUBE (3.5" PIPE) / 101.6mm
TSM-61004	1-1/2" PIPE	TSM-61012	4-1/4" TUBE / 107.95mm
TSM-61005	2" TUBE / 50.8 mm	TSM-61013	4-1/2" TUBE (4" PIPE) / 114.3mm
TSM-61006	2" PIPE	TSM-61014	5" TUBE / 127mm
TSM-61007	2-1/2" TUBE / 63.5mm	TSM-61015	6" TUBE / 152.4mm
TSM-61008	2-1/2" PIPE	TSM-61016	6" PIPE

METRIC	
TSM-61017	28mm TUBE
TSM-61018	35mm TUBE
TSM-61019	52mm TUBE
TSM-61020	57.15mm TUBE
TSM-61021	60.5mm TUBE
TSM-61022	69.85mm TUBE
TSM-61023	76.2mm TUBE
TSM-61024	82.55mm TUBE
TSM-61025	95.25mm TUBE

Note: Please call regarding stock for metric size collets.

OPTIONAL AFTERMARKET FACING TOOL BITS / COLLETS

TRI TOOL 301 FACING COLLETS

TRI TOOL P/N:	OTTO ARC P/N:	SIZE:
30-0065	301-E-0065	.25" Collet
30-0066	301-E-0066	0.375" Collet
30-0067	301-E-0067	.5" Collet
30-0068	301-E-0068	0.625" Collet
30-0069	301-E-0069	0.75" Collet
30-0070	301-E-0070	1" Collet



301-E-0067 Collet

TRI TOOL 301 SADDLE COLLETS

EXTENDED	SIZE:	SHORT PERCH	SIZE:
30ISS-125	0.125"	30ISP-125	0.125"
30ISS-25	0.25"	30ISP-25	0.25"
30ISS-375	0.375"	30ISP-375	0.375"
30ISS-5	0.5"	30ISP-5	0.5"
30ISS-625	0.625"	30ISP-625	0.625"
30ISS-75	0.75"	30ISP-75	0.75"
30ISS-1	1"	30ISP-1	1"
30ISS-5P	.5" Pipe	30ISP-5P	.5" Pipe
30ISS-75P	.75" Pipe	30ISP-75P	.75" Pipe



30ISS-375 Extended Collet



30ISP-5 Short Perch Collet

TRI TOOL FACING TOOL BITS

TRI TOOL P/N:	OTTO ARC P/N:	DESCRIPTION:
Durabit-1	TB-1506-LC	Laser Coated Facing Bit
99-1046	TB-1046	Heavy Duty Facing Bit
99-1506	TB-1506	Facing Bit
99-1506-LC	TB-1506LC	Laser Coated Facing Bit
99-1445C	TB-1445C	Carbide Facing Bit
99-5000	TB-5000	Extended Reach Facing Bit
99-5176	TB-5176	Extended Reach Facing Bit



TB-5000

TRI TOOL SEVER / CUT OFF BITS

TRI TOOL P/N:	OTTO ARC P/N:	DESCRIPTION:
99-2959	TB-2959	For 572 Facing Tool
99-3143	TB-3143	For 574 Facing Tool
99-3347	TB-3347	For 574 Facing Tool
99-5472	TB-5472	For 576 Facing Tool



TB-2959

TOOL BIT FOR GEORGE FISHER/ORBITALUM FACING MACHINE

TB-1510	Double Sided Tool Bit for RPG Series
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TOOL BIT FOR SWAGelok FACING MACHINE

TB-SL-01	Facing Bit
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TOOL BIT FOR T&C FACING MACHINE

TB-1111	Double Sided Tool Bit
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TB-5472 Sever Bit

NOTE: All AFTERMARKET collets and tool bits are manufactured by Otto Arc Systems, Inc. and are not genuine Tri Tool, George Fisher, Orbatech, ARC Machine or Swagelok products. Each is a trademark of its own.

PRODUCT NOTES:

WELDING

BEVELING

FACING

OTHER

SUMMER 2015



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