

# orbitalum



orbital | cutting + welding

## HIGH PURITY RENTALS

Ask About  
Training  
Options



## FACTORY RENTALS

[ehwachs.com](http://ehwachs.com)

### CUT. PREP. WELD. ONE SOURCE.

This edition of the Orbitalum Factory Rental brochure features the full array of Orbitalum rental machines, including our cutting, facing and orbital welding systems. Founded in 1960 as a subsidiary of Georg Fischer (GF) and renamed Orbitalum in 2006, we're the world's premier manufacturer of high purity tube cutting and preparation machines and orbital welding systems.

Orbitalum manufactures the industry standard GF and GFX tube saws and RPG tube squaring machines to produce the perfectly square, burr free preps required for defect free, orbital fusion welding applications. Orbitalum orbital welding system rental options include the Orbimat 165CA and 1805SW power supplies, Orbiweld weld heads, Orbitwin switching unit, and the ORBmax digital oxygen analyzer, plus AMI® adapter cables for operating AMI weld heads with Orbitalum power supplies.

Factory Orbitalum rentals, direct from the people who know them best, assures your rentals are fully checked, ready to weld, and available when and where you need them. Orbitalum factory product specialists are available to help you select the best equipment for the best results - call us to discuss your project details and reserve your equipment, we're here to help.

Available locally at our regional Sales, Service and Rental Centers, or shipped direct to your project site, ordering your Orbitalum factory rental equipment is as easy as 1-2-3.

**STEP 1** Identify Your Project. Simply identify what types of orbital cutting, facing and welding you want to do, when you want to do it, and if you know it, the project scope including clearances, diameters, materials and schedule of the tube and pipe you'll be working with.



**STEP 2** Select Your Equipment. A typical high purity project utilizes a GF saw to cut the tube, an RPG facer to square and deburr the tube, and a 165CA or 1805SW power supply with appropriately sized Orbiweld weld head for fusion welding.



**STEP 3** Select Your Collets and Consumables. Orbitalum offers many choices in OEM collets and consumables, including saw blades, facing bits and pre-ground tungstens all engineered and matched to keep your equipment running at peak performance.

**To learn more or request a quote  
call 800.323.8185 or visit [ehwachs.com](http://ehwachs.com)**



## GF SERIES TUBE & PIPE SAWS

Designed to complement orbital welding systems, the GF series of tube and pipe saws set the standard in high purity tube saws. They are designed to cut high-alloy steel, stainless steel, low-alloy and alloyed steel, plastics, casting materials and non-ferrous metals, easily and in seconds.

They produce precise, right-angle, burr-free cuts with a powerful, integrated stainless steel contact clamping system that secures the workpiece without marking or deformation. When specified with our long lasting Orbitalum OEM saw blades the GF saw delivers one of the lowest costs per cut available anywhere.

- Square, burr-free cutting
- Safely cuts stainless steel tube and pipe
- Deformation free stainless steel contact clamping system
- Orbital cutting process minimizes "cost per cut" with OEM Orbitalum saw blades
- Non-twisting swivel cord with quick disconnect for safety, security and simple replacement
- Integrated line laser pointer shows exact cut off location
- Locking mechanism helps prevent unauthorized usage or theft
- Multifunction hand tool for machine operation included
- Powerful motor with optimal speed range (40 – 215 rpm) for all materials
- Ergonomic twin motor handle for safe and comfortable operation
- Reversible clamping jaws maximize size range and rigidity
- Optimized blade guard protects operator while allowing cutting of short tangent fittings

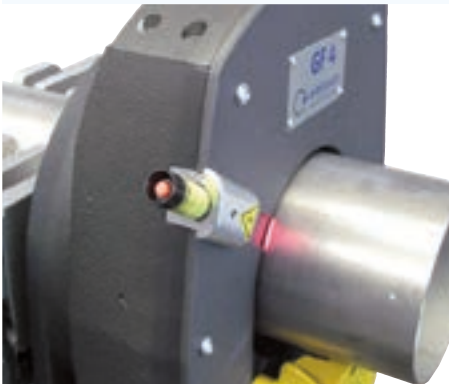
MODEL	PIPE SIZE (in)	PIPE SIZE (mm)	PART #
GF 4.0	0.472 - 4.724 in	12 - 120 mm	ROT790.142.002
GF 6.0	0.839 - 6.626 in	21.3 - 168.3 mm	ROT790.143.002



GF 4



GF 6



Integrated laser Indicates cut-off point



Deformation free stainless contact clamping jaws

## GFX 3.0 TUBE & PIPE SAW

The Orbitalum GFX 3.0 saw is a lightweight, easy to use compact tube saw ideal where portability is an important consideration and wall thicknesses do not exceed 7mm (.276in). Designed to cut tube and pipe diameters from 0.236 - 3.07in (6.0 - 78.0 mm), it's available in single-phase 120v electric power and runs on standard current.

When specified with our industry preferred Orbitalum OEM saw blades it delivers one of the lowest costs per cut available in high purity markets. Materials the GFX cuts include alloyed, low and high-alloy steels, stainless steels, non-ferrous metals, aluminum and titanium alloys, composites and plastics.

- Durable construction, designed for portability
- Inboard and outboard blade locations maximize cutting applications
- Safely cut stainless steel tube and pipe
- Square, burr-free cutting
- Deformation free stainless steel contact clamping system
- Orbital cutting process minimizes "cost per cut" with OEM Orbitalum saw blades
- Integrated line laser pointer shows exact cut off location
- Non-twist quick disconnect swivel cord for safety, security and simple replacement
- Simple manual cutter head rotation
- Powerful motor with optimal speed range (30 – 200 rpm)
- Ergonomic twin motor handle for safe and comfortable operation
- Optimized blade guard protects operator while allowing cutting of short tangent fittings

MODEL	TUBE SIZE (in)	TUBE SIZE (mm)	PART #
GFX 3.0	0.236 - 3.07in	6.0 - 78.0 mm	ROT790.144.002

### Pipe Saw Comparison

SAWS	GFX 3.0	GF 4	GF 6
Pipe Size	.236-3.07in (6-78mm)	.472-4.724in (12-120mm)	.839-6.626in (21.3-168.3mm)
Wall Thickness*	0.032 - 0.276in (.8mm-7mm)	0.039 - 0.354in (1-9mm)	0.059 - 0.591in (1.5-15mm)
Machine Weight	62.04lb (28.1kg)	121.3lb (55kg)	204.4lb (97kg)
Power	1.2kW	1.8kW	1.8kW
Nominal Speed Range	30-200rpm	65-215rpm	65-215rpm

\*Material Dependent

**Remember to order Orbitalum Saw Blades**



GFX 3.0



Integrated laser Indicates cut-off point



Deformation free stainless contact clamping jaws

## RPG SMALL DIAMETER TUBE FACING MACHINES

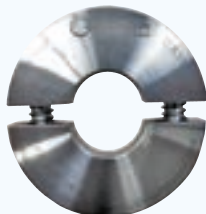
Orbitalum RPG facers are lightweight, handheld machine tools designed for burr-free squaring and beveling. Applications in the RPG range include squaring (I-seam) thin-walled stainless steel tubes and micro-fittings, as well as alloyed and low alloyed steels, aluminum and titanium. Users can select from a wide range of clamping shells based on diameter. RPG small diameter facers create high quality tube end preparations on tube and pipe from .118-1.5in (3.0 – 38.1mm).

- Squares tube ends with a high-quality finish
- Burr-free, square preparations for fusion orbital welding
- Quick clamping system for tools, clamping shells and tubes
- Preparation of thin-walled stainless steel tubes and micro fittings
- High-performance coated tool bits with dual cutting edges
- Micrometer feed for optimum results
- No additional tools required for operation
- Space saving, lightweight and portable for enhanced mobility
- Modular design, ensuring compatibility within the RPG series
- Highly compact designs

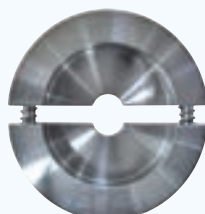
MODEL	PIPE SIZE	WALL THICKNESS	PART #
RPG One	0.118 - 1in (3.0 - 25.4mm)	0.118 (3mm)	ROT790.036.022
RPG One Cordless	0.118 - 1in (3.0 - 25.4mm)	0.118 (3mm)	ROT790.036.032
RPG 1.5	0.118 - 1.5in (3.0 - 38.1mm)	0.118 (3mm)	ROT790.037.012
RPG 1.5 Cordless	0.118 - 1.5in (3.0 - 38.1mm)	0.118 (3mm)	ROT790.037.012

### CLAMPING SHELLS

Available in a variety of sizes to accurately center work piece. Orbitalum clamping shells change without any tools required and insert smoothly to ensure parts are securely clamped to prevent misalignment.



Stainless steel clamping shells



Stainless steel clamping shell for micro fittings

**Remember to order Orbitalum Facer Tooling**



RPG One Cordless



RPG One



RPG 1.5 Cordless



RPG 1.5



Long lasting  
Orbitalum RPG  
Facer Tooling

## RPG LARGE DIAMETER TUBE FACING MACHINES

Orbitalum RPG 2.5, RPG 4.5 and RPG 8.6 tube squaring machines are designed to deliver quality pipe end machining for automated orbital welding. The RPG 2.5 prepares tubes from .25 to 2.5in (6.35-63.5mm), the RPG 4.5 from .5 to 4.5in (12.7-114.3mm), and the RPG 8.6 from 2 to 8.6in (50.8-218.4mm) outer diameters.

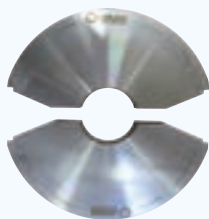
The RPG series provides a clean and secure working area with a clear view of the cutting head, and includes a rotating/removable bench stand. RPG users can select from a wide range of clamping shells, based on diameter. It's available in single phase 120v power with built in electronic speed regulation.

- Space saving, lightweight and portable
- Squares tube ends with a high-quality finish
- Burr-free and square weld preparations
- Quick clamping system for tools, clamping shells and tubes
- Preparation of thin-walled stainless steel tubes (V4A)
- High performance coated tool bit with dual cutting edges
- Built-in electronic speed regulation
- Micrometer feed for optimum results
- Special adaptor clamping shell allows the RPG 2.5 to use RPG 1.5 clamping shells

MODEL	PIPE SIZE (in)	PIPE SIZE (DN)	PART #
RPG 2.5	0.25 - 2.5in	6.35 - 63.5mm	ROT790.030.002
RPG 4.5	0.5-4.5in	12.7 - 114.3mm	ROT790.038.002
RPG 8.6	2 - 8.6in	50.8 - 218.4mm	ROT790.039.002

## CLAMPING SHELLS

Extremely durable. The two-piece-design with click mechanism ensures accurate centering and quick clamping shell change without any tools.



Stainless steel clamping shell for RPG 4.5



Aluminum clamping shells for RPG 8.6



## FACER TOOLING

Orbitalum OEM dual edge facing bits feature coating to reduce tool wear. Fits all RPG series models.



RPG 2.5



RPG 4.5  
Tube facer



RPG 8.6  
Tube facer



RPG 4.5 securely clamps to tube

## OM180 SmartWelder POWER SUPPLY

Designed as a durable, jobsite ready orbital welding system, the Orbitalum OM180 SmartWelder is a digitally-controlled power supply that moves the industry forward through advanced connectivity and communication technology. The OM180 includes Flow-Force, designed to minimize the gas pre-flow and post-flow times to increase productivity by shortening the welding process time.

- Rugged construction for fab or field applications
- High resolution touch screen or one touch control dial
- Digital purge gas flow control and monitoring
- Flow Force significantly shortens pre/post purge, increases weld quality
- Auto program allows for multiple weld schedule types with maximum ease
- Optional network connectivity via IoT/Industry 4.0 technology
- Wide input voltage tolerances, 90V to 260V, no dedicated power required
- Weld data printing function (onboard, external, and network)
- 100% data recording of all welding parameters, electronic or print
- High efficiency internal water cooling system
- Available ORBmax oxygen monitor and Orbitwin switching unit accessories
- Available AMI® adaptor cables to connect AMI heads to OM180 SW power supply

### RELIABILITY

#### Never Lost Data

##### Secure Internal Data Storage

- 100% Data Recovery via Internally Stored Weld Records
- Continuous Data Recording
- Eliminates Lost or Incomplete Weld Data
- QC Review at Unit or Remotely Via Connected PC

### PRODUCTIVITY

#### Flow Force

Reduces Total Cycle Time and Increases Arc On Time

- Delivers More Welds Per Shift
- Ensures Better Gas Coverage
- Increases Productivity
- Lowers Weld Head Temperatures
- Reduces Gas Consumption

### QUALITY

#### Digital Purge Control

##### Precise Weld Head Flow Regulation

- Cleaner Welds with Minimal Gas
- Fully Digitally Recordable
- Repeatable Results
- Improves Weld Quality
- Saves Money
- Saves Gas

### SAFETY

#### Motor Torque Control

Senses Rotation Obstruction Prevents Damage from Debris

- Helps Prevent Weld Head Damage
- Minimizes Risk of Operator Injury
- Reduces Downtime
- Increases Service Life of Weld Head



OM180

## SmartWelder



IP23 Rated housing with lifting handles



OM180 SmartWelder offers available network connectivity

SPECIFICATIONS	OM 180 SMARTWELDER
Input voltage	110 - 230 V, 50/60 Hz, single phase
Control range (Input voltage > 160 V)	5 - 180 A
Duty Cycle	60% at 180 A 100% at 160 A
Dimensions	23.6in x 15.7in x 12.2in (600 x 400 x 310 mm)
Machine Weight	57.32 lb (26 kg)
Shipping Weight	90.39 lb (41 kg)
Part #	ROT850.000.002

## OM 165CA WELDING POWER SUPPLY

Over the past decade the OM 165CA has established itself as the industry standard for a durable, jobsite ready orbital welding system for high purity and sanitary construction. Welding parameters can be quickly input and saved using tube diameter, wall thickness, material and welding gas. All OM 165C models include Flow Force to reduce the pre-purge gas times.

Other technical refinements of the OM 165CA includes softkeys for essential, high-level and quick-action commands. The integrated RTOS (Real Time Operating System) prevents even a direct, abrupt shutdown of the system leading to any problems, important in areas where power consistency is problematic.

- Rugged construction for fab or field applications
- WP approved for fab/clean room construction
- Large screen for easy operator viewing of weld progress
- Operate or program modes with key or electronic actuation
- Dual weld data printing function (onboard and external)
- 100% data recording of all welding parameters, electronic or print
- Built in purge gas flow meter and monitoring
- Flow Force shortens pre/post purge while increasing weld quality
- Auto program allows easy saving of multiple weld schedule types
- Wide input voltage tolerance, 90V to 260V, no dedicated power required
- High efficiency internal water-cooling system
- ORBmax oxygen monitor and Orbitwin switching unit integral accessories
- Available AMI® adaptor cables to connect AMI heads to OM 165CA power supply

SPECIFICATIONS	165CA ORBITAL WELDING POWER SUPPLY
Input voltage	Wide-Range 90 - 260 V, 50/60 Hz, single phase
Control range	2 - 165 A ( > 160V input) 2 - 110 A ( < 160V input)
Duty Cycle	30% at 165 A 100% at 120 A
Dimensions	510 x 360 x 220 mm 20.1 in x 14.2 in x 8.7 in
Storage	Compact Flash (CF)
Machine Weight	57.32 lb (26 kg)
Shipping Weight	90.39 lb (41 kg)
Part #	ROT871.000.001

**For a complete system specify a GF Saw, RPG Facer, and Orbitalum Consumables**



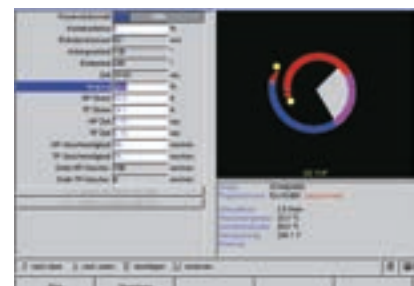
OM 165CA  
Power Supply



Highly compact design with  
integrated lifting holes



External Monitor and Printer Connections



Multi-language graphical user interface

## WELD HEADS

OW 12



OW 19



OW 38S



OW 76S



OW 115S



OW 170



## POWER SUPPLIES



OM180 SmartWelder  
Orbital Welding Power Supply



OM 165CA  
Orbital Welding Power Supply

## ACCESSORIES



Orbitwin SW



Orbitwin 165CA

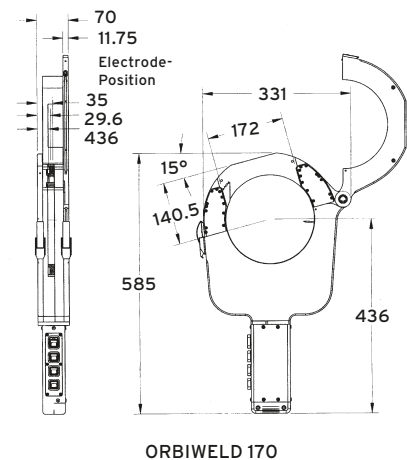
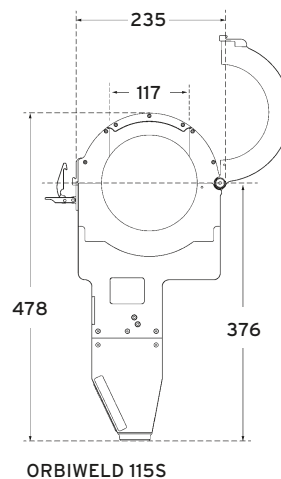
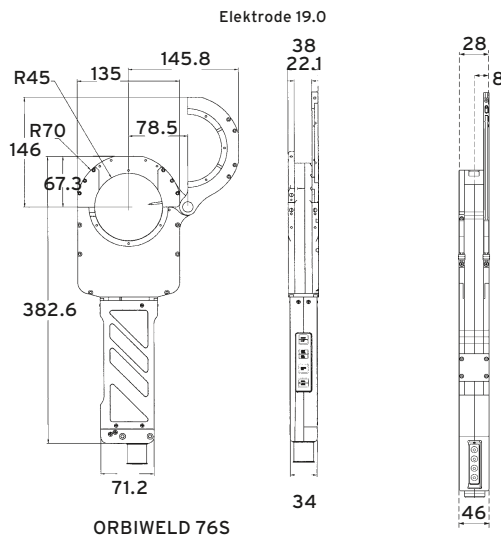
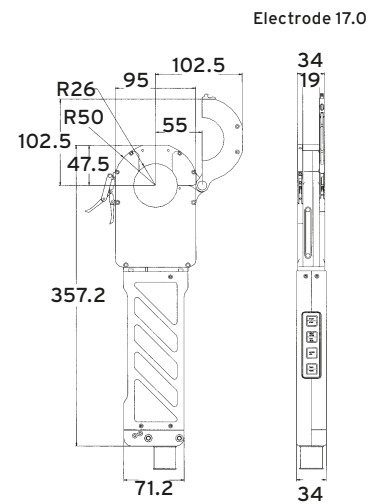
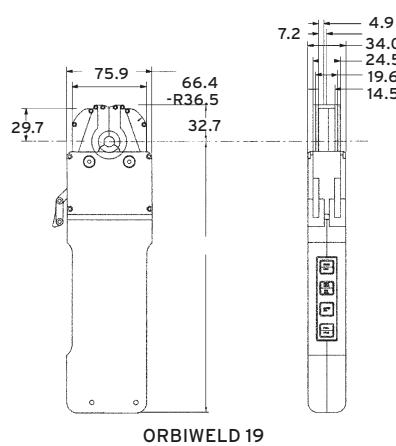
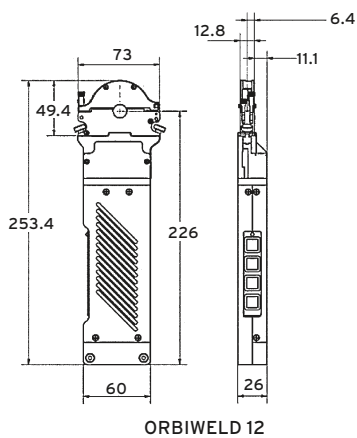
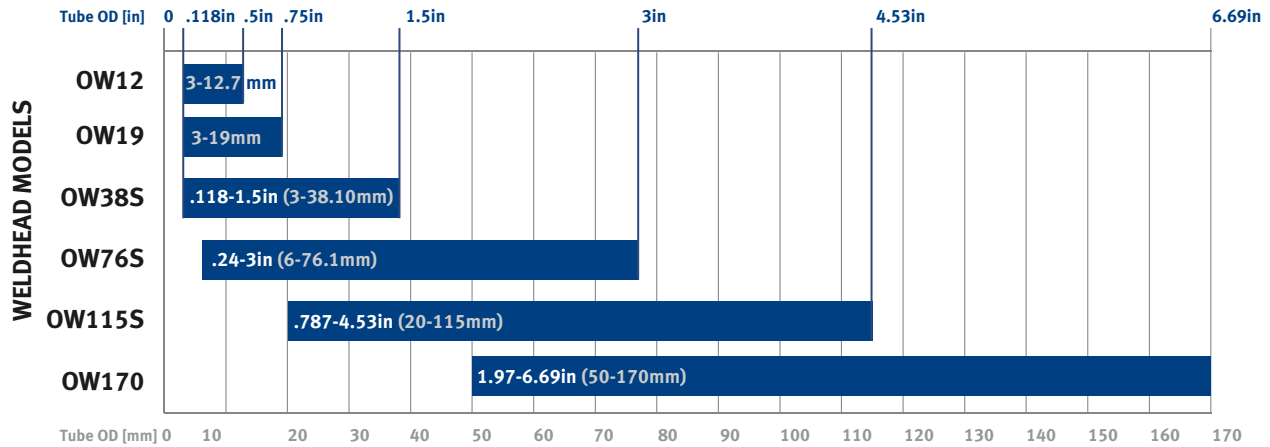


Orbitalum-to-AMI  
Conversion Cable Set  
Connects to customer-owned  
Arc Machines (AMI) Weld Head



ORBmax Digital Oxygen Analyzer

# Orbital Welding



## ENCLOSED WELD HEADS ORBIWELD / ORBIWELD S

MODEL	OW 12	OW 19	OW 38S	OW 76S	OW 115S	OW 170
Part #	ROT821.000.010	ROT822.000.010	ROT826.000.001	ROT827.000.001	ROT828.000.001	ROT825.000.001
Tube Ø	[mm]	3 - 12.7	3 - 19.05	3 - 39	6 - 76.1	20 - 115
	[inch]	.118 - .5	.118 - .75	.118 - 1.5	.236 - 3	.7875 - 4.53
Rotor Ø	[mm]	40	58	82	122	191
	[inch]	1.57	2.28	3.22	4.80	7.52

## ORBIWELD WELD HEADS 12, 19, & 170

The OrbiWeld 12 and 19 micro-heads compact design gives them the ability to fit into tight operating envelopes, and clamp and weld micro-fittings. Their quick change, narrow clamping shells make them ideal for applications in Aerospace, Pharma and Semicon. At the opposite end of the range the Orbiweld 170 is offered for its ability to weld larger 6in diameter tube (up to 6.69in or 170mm).

All heads feature coolant channels running through the entire weld head body, providing excellent heat dissipation to work continuously at high welding currents and intensive loads. They feature remote control on the handles that transmits commands to the power supply, eliminating the need for an extra-cost remote control solution.

- Quick change system for clamping shells that clip in and out without tools (OW 170 Only)
- Orbiweld heads feature advanced water cooling for extended duty cycles
- Wide selection of clamping shells for all tube dimensions assure secure clamping
- Major welding commands transmitted to the power supply via weld head handle control panel

### ORBIWELD MODELS

MODEL	TUBE SIZE (in)	TUBE SIZE (mm)	PART #
OW 12	0.118 - 0.5in	3 - 12.7mm	ROT821.000.001
OW 19	0.118 - 0.75in	3-19.05mm	ROT822.000.001
OW 170	2 - 6in	50 - 170mm	ROT825.000.001

### CLAMPING INSERT PAIRS

Clamping shell inserts are made of aluminum. 1 set of clamping inserts consists of 2 parts for 1 clamping side. 2 clamping inserts (4 parts) are required for each tube dimension. Inserts for the OW19 weld head consist of 3 parts for each clamping side.

For the ORBIWELD 170 you can choose between wide "W" and small "S" clamping inserts which can be combined with one another as desired.



OW 19 COLLETS



OW 170 COLLETS



OW 12 with narrow clamping cartridge (Type "A")

OW 12 with wide clamping cartridge (Type "B") and exchangeable clamping inserts



OW 19



OW 170

### ORBIWELD WELD HEADS 38S, 76S, & 115S

The Orbiweld 38S, 76S and 115S enclosed orbital weld heads feature an extremely narrow profile and are highly durable thanks to their advanced water-cooling system. The compact dimensions of the OrbiWeld S-weld head series make it ideal for applications where space is limited. Important weld commands can be transmitted to the power supply via a control panel built into the aluminum handle, eliminating the need for an additional remote control.

- Quick change system for clamping shells allows simple tool-free clip-in and pop-out interchange
- Completely water cooled for high duty cycles
- Narrow design of the OrbiWeld S series allows welding of short straight sections
- Durable clamping shells available for all tube dimensions for secure clamping and alignment
- Important weld commands can be transmitted to the power supply via a control panel built into the aluminum handle, so that no additional remote control is required

MODEL	TUBE SIZE (in)	TUBE SIZE (mm)	PART #
OW 38S	1/8 - 1.5in	3 - 38.10mm	ROT826.000.001
OW 76S	1/4 - 3in	6-77mm	ROT827.000.001
OW 115S	3/4 - 4.5in	20-115mm	ROT828.000.001

#### Remember Orbitalum Tungsten for Weld Heads



OrbiWeld heads are designed for limited clearance and include a control panel built into the handle



OW 38S



OW 76S



OW 115S

### ADAPTER CABLES FOR AMI WELD HEADS

Now you can use your existing AMI Weld Heads with your Orbitalum Power Supply. Simply connect one end to the weld head, connect the other to the power supply and you're ready to weld. With optional remote control the Orbitalum Power Supply can control the AMI Weld Head from a distance.



### ORBITWIN SWITCHING UNIT

The Orbitwin latches to the bottom of the OM power supply and allows alternate operation of two welding heads, allowing one to be setup while another is welding. The OM power supply automatically recognizes the active weld head.



### ORBMAX DIGITAL OXYGEN METER

Suitable for all high purity welding systems, the ORBmax is rugged, portable, has no consumable elements, and features full data recording and accuracy to 1 PPM.

**Ask Your Orbitalum Sales  
Representative for More Details**



### ORBIPURGE ID PURGE KIT

One of the most critical components of high quality stainless welding is ensuring a simple and repeatable ID purge. For orbital or hand welding applications, the OrbiPurge is a complete kit to give superior results when welding stainless tube.



### EXTENSION CABLES ASSEMBLY

Extension cable assembly suitable for all Orbitalum orbital weld heads. Available in 50ft (15.24m) and 75ft (22.86m) lengths.



### DUAL FLOW REGULATOR

With 2 adjustable flow displays and option to connect purge gas. Heavy duty construction with solid brass fittings.

## RENT ORBITALUM

### DIRECT FROM THE MANUFACTURER

- One Source for Orbital Cutting and Welding Equipment, Accessories and Consumables
- Newest Technology Equipment on the Market
- Factory Technicians Check and Calibrate Machines in Rental Fleet Before Shipment
- Competitive Weekly and Monthly Rates
- No Hidden Service Fees
- Large Inventory for Immediate Delivery
- Localized Equipment and Support at Our Regional Service Centers
- Factory Training Available at Your Location or Ours



PORTABLE TUBE & PIPE SAWS	RENTAL PART #
GF4 120v	ROT790.142.002
GF6 120v	ROT790.143.002
GFX 3.0 120v	ROT790.144.002

RPG TUBE FACING & SQUARING MACHINES	RENTAL PART #
RPG ONE 120v	ROT790.036.032
RPG ONE Cordless	ROT790.036.022
RPG ONE Collets / Clamping Shell Inserts	ROT790.036.XXX
RPG 1.5 Cordless	ROT790.037.012
RPG 1.5 120v	ROT790.037.002
RPG 1.5/2.5 Collets / Clamping Shell Inserts	ROT790.037.XXX
RPG 2.5 120v	ROT790.030.002
RPG 2.5 Collets / Clamping Shell Inserts	ROT790.030.XXX
RPG 4.5 120v	ROT790.038.002
RPG 4.5 Collets / Clamping Shell Inserts	ROT790.038.XXX
RPG 8.6 120v	ROT790.039.002
RPG 8.6 Collets / Clamping Shell Inserts	ROT790.038.XXX

OM WELDING POWER SUPPLIES	RENTAL PART #
OM 165CA Power Supply	ROT871.000.001
OM180 SmartWelder Power Supply	ROT850.000.002

ORBIWELD WELD HEADS	RENTAL PART #
OW 12 Weld Head	ROT821.000.001
OW 12 Cartridges and Clamping Shell Inserts	ROT821.050.XXX
OW 19 Weld Head	ROT822.000.001
OW 19 Collets / Clamping Shell Inserts	ROT822.002.XXX
OW 38S Weld Head	ROT826.000.001
OW 38S Collets / Clamping Shell Inserts	ROT826.002.XXX
OW 76S Weld Head	ROT827.000.001
OW 76S Collets / Clamping Shell Inserts	ROT827.002.XXX
OW 115S Weld Head	ROT828.000.001
OW 115S Collets / Clamping Shell Inserts	ROT824.002.XXX
OW 170 Weld Head	ROT825.000.001
OW 170 Collets / Clamping Shell Inserts	ROT825.002.XXX

ORBITAL WELDING ACCESSORIES	RENTAL PART #
Dual Flow Regulator	ROT888.000.001
Extension Cable (50 ft)	ROT871.050.013
OrbiPurge Purge Plug Set	ROT-881-000
OrbiTwin OM 165CA	ROT861.000.001
OrbiTwin OM180 SW	ROT853.000.001
ORBmax Oxygen Monitor	ROT882.000.002

OTHER WELDING ACCESSORIES	RENTAL PART #
AMI Adapter (Water-Cooled Heads)	ROT871.030.025
AMI Adapter (Air-Cooled Heads)	ROT871.030.026

# Orbital Welding Consumables

## ORBIWELD OW 12 TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
.125 in	3.175 mm	TC 04-0500-010
.250 in	6.35 mm	TC 04-0450-010
.375 in	9.525 mm	TC 04-0400-010
.500 in	12.7 mm	TC 04-0350-010

## ORBIWELD OW 19 TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
.125 in	3.175 mm	TC 06-0900-020
.250 in	6.35 mm	TC 06-0800-020
.375 in	9.525 mm	TC 06-0750-020
.500 in	12.7 mm	TC 06-0700-020
.625 in	15.875 mm	TC 06-0650-020
.750 in	19.05 mm	TC 06-0550-020

## ORBIWELD OW 38S TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
.125 in	3.175 mm	TC 06-1350-020
.250 in	6.35 mm	TC 06-1300-020
.375 in	9.525 mm	TC 06-1200-020
.500 in	12.7 mm	TC 06-1150-020
.625 in	15.875 mm	TC 06-1100-020
.750 in	19.05 mm	TC 06-1050-020
1.0 in	25.4 mm	TC 06-0900-020
1.5 in	38.1 mm	TC 06-0650-020

## ORBIWELD OW 76S TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
.250 in	6.35 mm	TC 06-2050-020
.375 in	9.525 mm	TC 06-2000-020
.500 in	12.7 mm	TC 06-1950-020
.625 in	15.875 mm	TC 06-1900-020
.750 in	19.05 mm	TC 06-1800-020
1.0 in	25.4 mm	TC 06-1700-020
1.5 in	38.1 mm	TC 06-1450-020
2.0 in	50.8 mm	TC 06-1200-020
2.5 in	63.5 mm	TC 06-0950-020
3.0 in	76.2 mm	TC 06-0700-020

## ORBIWELD OW 115S TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
1.0 in	25.4 mm	TC 06-3050-020
1.5 in	38.1 mm	TC 06-2800-020
2.0 in	50.8 mm	TC 06-2550-020
2.5 in	63.5 mm	TC 06-2300-020
3.0 in	76.2 mm	TC 06-2050-020
4.0 in	101.6 mm	TC 06-1550-020
4.5 in	114.3 mm	TC 06-1300-020

## ORBIWELD OW 170 TUNGSTEN

TUBE OD (IN)	TUBE OD (MM)	PART NUMBER
2.0 in	50.8 mm	TC 06-3750-020
2.5 in	63.5 mm	TC 06-3500-020
3.0 in	76.2 mm	TC 06-3250-020
4.0 in	101.6 mm	TC 06-2750-020
4.5 in	114.3 mm	TC 06-2500-020
6.0 in	152.4 mm	TC 06-1750-020
6.625 in	168.275 mm	TC 06-1450-020

### FORMULA:

$$\text{Electrode length} = \frac{\text{Rotor } \varnothing - \text{Tube } \varnothing}{2} - \text{Electrode interval (generally 1.5 mm)} - 3$$

Corporate Locations

Sales Locations

Contact your local ITW Orbital Cutting & Welding representative for additional information or to request a product demonstration.

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