

THE FUTURE OF ORBITAL WELDING

Innovation is our DNA.



CompactOne – the royal class

FIELDS OF APPLICATION



Semiconductors



Pharmaceutical Industry

CompactOne is the lightest and most compact welding system in the world.

Simple smartphone-style operation, touch panel and various help functions make it a leader in innovation in its sector.

- Intuitive operation thanks to touch panel & revolutionary software
- Connection options for residual oxygen analyzer via Bluetooth
- Various documentation management possibilities



Tools and accessories

Forming gas chamber
Page 19



CWH Closed welding heads, Page 7



PRO2 Stick
Page 14



CompactDual – Economy with class

FIELDS OF APPLICATION



Piping



Food industry



Water treatment

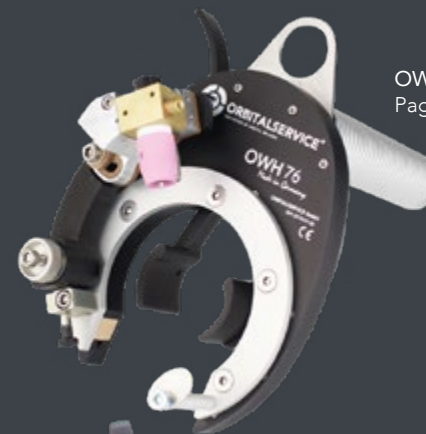
CompactDual is the most cost-effective manual and orbital TIG welding equipment in the world.

Its multi-voltage power supply allows worldwide operation.

- High quality manual/orbital welding equipment with 220A DC output
- Simple operator guidance
- 250 manual welding programs can be saved
- 99 orbital welding programs with synergic function



Tools and accessories



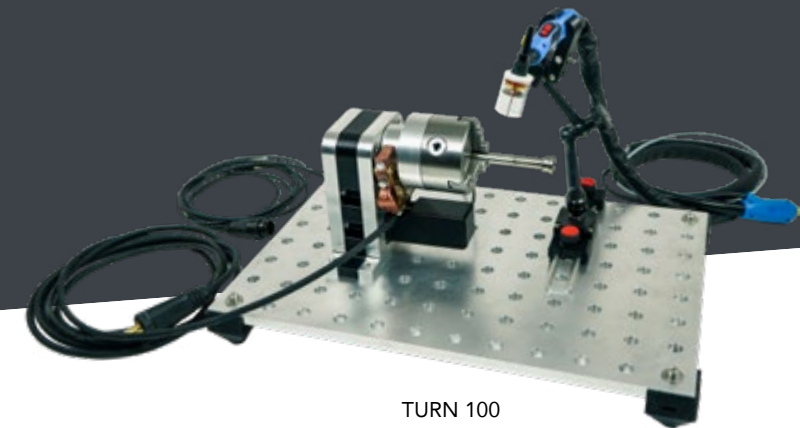
OWH Open welding heads
Page 6



TR-1000 Rolling system
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CWF-1 Cold wire feeder
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TURN 100
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Manual welding with
the CompactDual

OWH – Open Weld Heads

UPGRADEABLE
WITH AVC/OSC



WIDE RANGE OF PRODUCTS FOR ANY APPLICATION

With our open orbital welding heads, we cover a range of orbital welding from OD 8 mm up to OD 273 mm

Exclusive is the possibility of conversion with the wire kit AVC-OSC. This allows the operator to weld pipes with very thick walls, without the need to purchase new machines and welding heads. Every orbital welding system includes all of the additional motor control cards for cold wire, AVC and OSC

- **OWH 40** OD: 8 - 40 mm
- **OWH 76** OD: 12 - 76 mm
- **OWH 114** OD: 15 - 115 mm
- **OWH 168** OD: 35 - 168,3 mm
- **OWH 273** OD: 88,9 - 273,3 mm



Open Weld Head

CWH – Closed Weld Heads

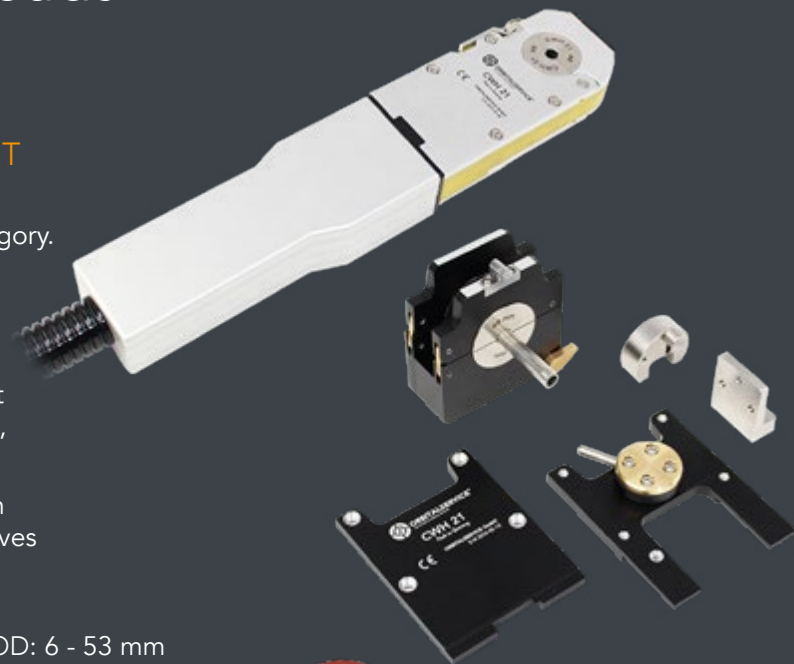
NARROWEST WELD HEADS OF ITS RANGE EXISTING ON THE MARKET

We supply a range of closed weld heads, which are the narrowest on the market within its category.

The microfitting weld head as well as the replacement and wear parts are fully compatible with the AMI 9-500 weld head. This weld head is the most used in the semiconductor industry around the world, having proved it for almost 4 decades.

A new geometry of the clamping jaws allows our own „just in time“ production. This saves costs and improves delivery times.

- | | |
|---------------------------------|-----------------------------------|
| • CWH 13 OD: 3 - 12,7 mm | • CWH 53 OD: 6 - 53 mm |
| • CWH 21 OD: 3 - 21,3 mm | • CWH 76 OD: 6 - 76,2 mm |
| • CWH 38 OD: 3 - 38,1 mm | • CWH 115 OD: 6 - 114,3 mm |



Differential pressure gauge for
measuring internal pressure

TTS – Tube-to-Tube Sheet Weld Heads

SUITABLE WELD HEADS FOR EVERY PROJECT

TTS 40

Our fusion only tube-to-tube sheet weld head is small, practical & easy to use and is suitable for stainless steels, titanium and nickel-based alloys.

- Eroded clamping mandrels, also compatible with the TTS 90 model
- Suitable for titanium applications
- Change to pneumatic clamping system possible

TTS 90

The tube-to-tube sheet weld head with cold wire (co-rotating) features a pneumatic clamping system. It even works in overhead positions, thanks to the eroded metal mandrels and its powerful pneumatic clamping system.

- Maximum diameter range up to 120 mm
- Rotating cold wire feeder
- Pneumatic clamping mandrel included



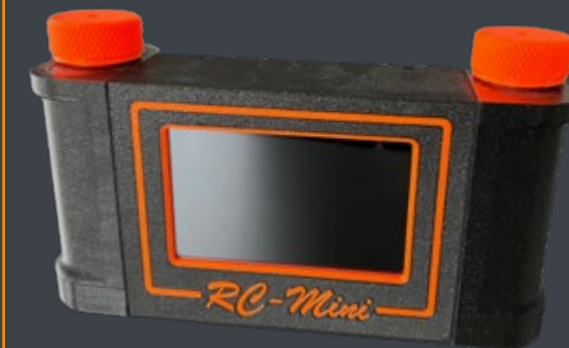
UPGRADEABLE
WITH AVC



RC Mini – Remote Control

The 5" capacitive touch display allows a convenient smartphone-style operation.

- Intuitive operation, thanks to its touch screen and revolutionary software
- Range of up to 100 meters via Bluetooth class 1
- A4 documentation in PDF possible
- Possibility of connecting a "Point-of-Sale" Bluetooth printer or residual oxygen analyzer



RC plus+ – Remote Control

Easy-to-use cable remote control allows the operator to change parameters during the welding process, such as currents, wire speed, arc voltage and also oscillation. In OFF mode, you can test gas and water flows, engine and wire movements, AVC and OSC.

MORE POTENTIAL THANKS TO INCREASED MOBILITY



TR 1000 – Rolling Systems



UPGRADEABLE
WITH AVC/OSC

PERFECT COMMUNICATION BETWEEN ORBITAL POWER SUPPLY AND WELD HEAD

The rolling system is a tool which allows the welding of small tubes, as well as large containers.

Furthermore, cold wire, AVC and OSC can be connected, which greatly expands the field of applications.

It often serves as a base for special welds (e. g. simultaneous welding with 2 systems at both ends of the tube). For this purpose, we have built additional pneumatic sets for displacement, clamping and centering, angular adjustment, supports, etc.

- Range from OD 20 mm to OD 323 mm
- Other sizes (up to approx. OD 1000 mm) on request
- Can be modularly expanded with profile kits



Welding with our
Rolling System

Turn – Turntables

VERSATILE USE FOR WELDING OF ASSEMBLIES

With our TURN 100 and TURN 250 turntables, we offer two high quality tools to complete the range of the best-known orbital welding tools (open weld heads, closed weld heads, tube-tube sheet weld heads).

- All devices with hollow shafts
- Adaptations of the cross support, linear welding device, swing arm and angle adjustment possible



Turn 100
Orbitalservice's Turntable



TURN 100



TURN 250

CWF – Cold Wire Feeder



STABILITY AND ROBUSTNESS IN THE FOCUS

These robust cold wire feeders are characterized by its compact dimensions. The suitcase can be closed and protects the mechanical components from dirt, oil, etc. These devices can be used with open weld heads type OWH, as well as with TURN turntables.

These devices can also be connected to open weld heads, rolling systems, turntables and linear units

Available in two versions:

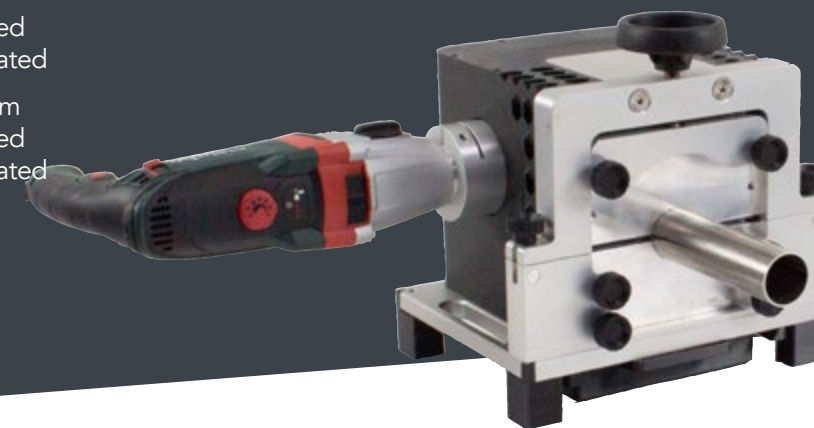
- **CWF 1** 1 kg- wire coil
0.6 mm and 0.8 mm wire diameters
- **CWF 5** 5 kg- wire coil
0.8 mm and 1.0 mm wire diameters

TF – Pipe Facing Machines

OPTIMAL PREPARATION FOR PERFECT RESULTS

Tube beveling machines (facers) are required to achieve unions without burrs and perpendicular. The best solution for a correct preparation of tube ends are the high-quality TF 1.5 and TF 4.5 facers.

- **TF 1.5** Range: 3 mm to 38.1 mm
This equipment can be used with battery or cable operated
- **TF 4.5** Range: 10 mm to 114.3 mm
This equipment can be used with battery or cable operated



Plastic clamps (also according to customer's own designs) are also available for this device. Not only do they protect the outside of the pipe, they can also be quickly manufactured by ourselves.

PRO2 Stick – Oxygen Analyzer

MODERN SOLUTIONS WITH AN UNIQUE DESIGN

One of the few measuring instruments for O₂ measurements of gases with H₂ content.

The innovative and modern solution among oxygen analyzers. The PRO2 stick starts quickly by shaking the device and can be easily controlled via Bluetooth by our CompactOne power supply.

Ready to measure in 5 seconds!

- Measuring range: 1000 ppm to 1 ppm
- Non sensitive to H₂, humidity or ozone
- Shake to measure mode
- Battery life: 11 hours

- Automatically turns off after 10 minutes if no measurements below 1000 ppm
- Display with 180° rotation
- Documentation via PC software possible
- Bluetooth 100 m, class 1



An introduction
to the PRO2 Stick

PRO2 EXPERT – Oxygen Analyzer

INNOVATIVE DESIGN ADVANCED TECHNOLOGY

Intelligent charging management and high-quality integrated components turn this device into the market leader in its sector. Equipped with a wear-proof zirconium sensor. Ready to measure in 60 seconds! Innovative color concept – Visual and acoustics information on operating statuses

- Innovative color concept – optical and acoustic information about operating statuses
- Optical color warning of discharged battery
- Operation and charging via power bank and USB-C connection possible
- Battery life: > 4 hours
- Diffusion-tight FPM special gas tube



OrbiBug



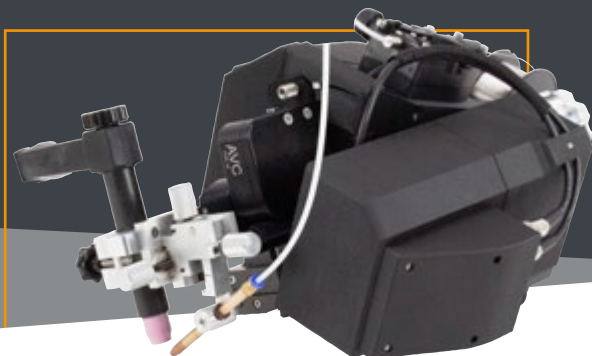
Range of Application:
OD 200 mm - OD 1,000 mm

Holder for 1 kg Sigmat Wire Coils and 5kg
standard coils.

Different wire diameters possible.

(0.6 mm, 0.8 mm, 1.0 mm e 1.2 mm)

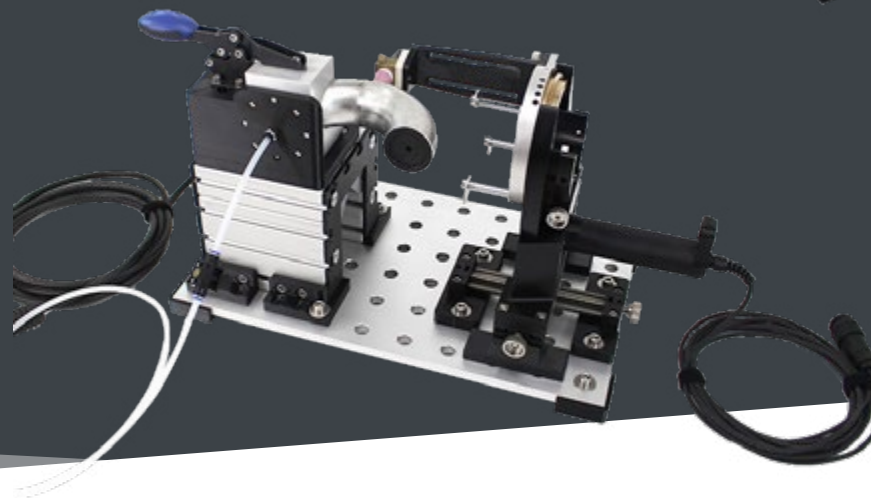
The OrbiBug is attached to a guide ring. Gears
engage into the laser cutouts in order to avoid
slipping.



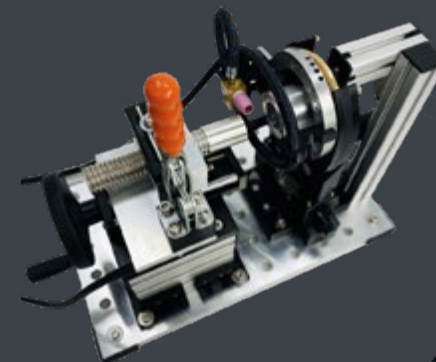
Special Applications? No problem!

INDIVIDUAL SOLUTIONS TAILORED TO YOUR REQUIREMENTS

We develop solutions, design and
manufacture orbital and special welding
systems. We customize our exclusive products
according to the individual needs and
requirements from our customers.



EET-50 DOUBLE ELBOW EQUIPMENT



EQUIPMENT FOR
CORRUGATED PIPE

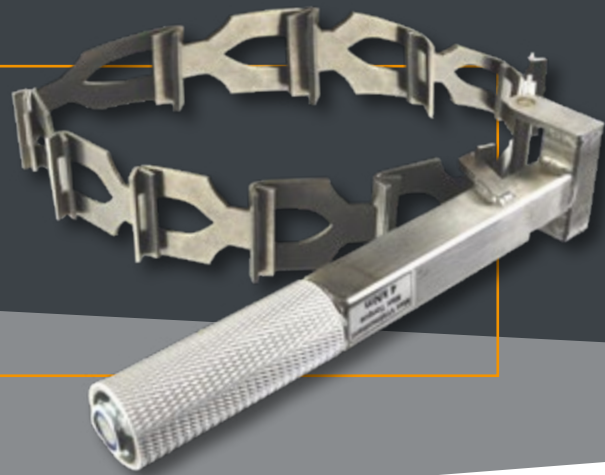


EQUIPMENT FOR
CONTAINER COVERS

Pipe tensioners

OPTIMAL SOLUTIONS PATENTED

With our innovative and patented stainless-steel pipe tensioners for TIG manual tack welding, pipes and bends can be tack welded together manually. This tensioning system is very light and practical and requires no instructions.



- Allows tack welding pipes between 60 and 600 mm.
- For tube-to-tube joints, fittings, elbows and more.
- Additional tightening connections for adjusting ovalities/tubes of different diameters (TC-611).
- Practical carrying case.



Forming gas stopper set and caps



PLUG SET WITH SWIRL NOZZLES

Plugs and swirl nozzles in a compact case with transparent cover.

- Dimensions from 1 to 115 mm

CAPS

- OD 6 mm to OD 323 mm
- For use in high purity applications
- Middle hose connection, either with clamp wedge ring fitting (Swagelok) or plug-in coupling (Festo-SMC) can be used

WORLD'S FIRST!



**VERSATILE ACCESSORIES
FOR DIFFERENT NEEDS**



OVER 33 YEARS OF EXPERIENCE

We have 3 production sites (approx. 2,500 m²), in which we design, manufacture and assemble.

We have state-of-the-art technologies such as 3D printing and scanning, as well as the latest CNC and measuring technology available.



orbitalservice-group.com



www.heronitec-solutions.de



2
COMPANIES



>10
EMPLOYEES



3
PATENTS



>25
INTERNATIONAL
SALES PARTNERS



>100
INNOVATIVE
PROJECTS

ALWAYS A STEP AHEAD

We invest a lot of passion in new ideas in order to develop and manufacture innovative products. High affinity for new technologies and new designs in the industry set us apart.

Thanks to our vast experience, we are always one step ahead in the market with our products and we think future-oriented. Motivated by a constant exchange with our customers and technological partners we meet market needs and new potential opportunities opening up in the industry.

We develop, design and manufacture for our customers as a certified company according to international ISO 9001:2015 quality standards, thus ensuring the quality of our products and services.



Corporate video
Orbitalservice

Robotic Solutions

FOR THE FIRST TIME AT SCHWEISSEN & SCHNEIDEN 2023 WE INTRODUCE OUR FIRST OWN GANTRY ROBOT SYSTEM

With this system, welding jobs that cannot be welded using orbital technology can be carried out.

For this purpose, our robot has up to 10 axes. The system is scalable up to approximately 6,000 mm across axes.

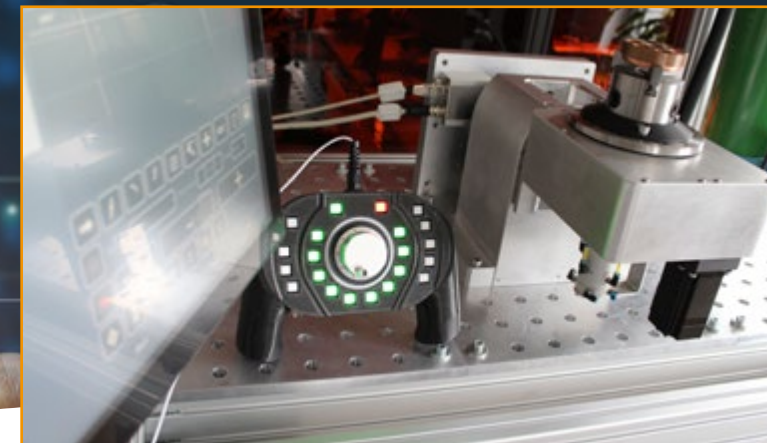
Unique is the very quick calculation of the welding path (not just cartesian) if there is a CAD model. This is calculated by powerful processors. If no CAD model is available, you can create a 3D model using various optical sensors and use it as well. We have created software and hardware with AI specifically for this purpose.

The declared objective of the Orbitalservice Group is to allow every user in the market for standard industrial robots or Cobot to learn the basics of this technology in less than 30 minutes.



For this purpose, we have entered into a partnership with Heronitec Solutions. This company is also part of our small industrial innovation park.

Daily communication with designers and professionals allows not only quick reaction times, but also to uncover practical solutions, not yet available on the global market.



COMPETENCE CONCENTRATED IN ONE LOCATION

