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Каталог продукции ORBITALUM



orbital

cutting.
beveling.
welding.

› complete solutions.
one source.

Catalogue
EN



New products.

RPG 4.5 S | Tube Squaring Machine with vice

Designed for burr-free squaring of thin-walled stainless steel tubes. The clean and high-value solution for specific welding preparations!

Advantages:

- Integrated clamping jaws made from coated cast aluminum for different tube diameters
- Cost-effective as no dimension-specific clamping shells required
- Multi-point clamping of the tube
- Burr-free and square

...more on page 45

GF 4 and GF 6 (AVM/MVM) | Pipe Cutting and Beveling Machines

The new GF series sets new standards in orbital pipe machining! Numerous innovative functions combined with an ergonomic design create significant advantages for you in the industrial prefabrication of pipeline systems.

Advantages:

- Anthracite-colored coated components for improved sliding properties and protection against corrosion
- Reduced operator impact by optional feed module AVM or MVM for an automated or manual cutting process

...more on page 5

RPG XS Cordless | Tube Squaring Machine

Designed for burr-free squaring and beveling of thin-walled stainless steel tubes and micro fittings. For the required, high quality tube end preparation for orbital welding!

Advantages:

- Squaring tube ends with a high-quality finish
- Burr-free and square
- Beveling possible with a special tool holder
- Preparation of thin-walled stainless steel tubes (V4A) and micro fittings
- Space saving, light weight and portable machine for a mobile and secure application

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orbital | cutting + beveling + welding.

Pipe Cutting and Beveling Technology

Pipe Cutting and Beveling Machines

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Complete solutions. One source.

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The GF series sets new standards in orbital tube and pipe machining!



Also available with automatic or manual feed modules AVM/MVM



Multifunctional wrench.
1 tool = 6 functions:
Vice handle, fastening clamping jaws, saw blades/bevel cutters, and quick mounting plate; anti-theft protection as well as blade adjustment with the star handle



2 position clamping jaws to enable the machining of thin-walled tubes



Integrated line laser to determine the cut off point

Pipe Cutting and Beveling Machines GF

GF Pipe Cutting and Beveling Machines

- Square, burr-free and cold machining process
- Deformation-free clamping system for tubes and pipes
- Optimum preparation for the automated welding process
- Sturdy design with powerful drive
- Unique and automated orbital cutting process
- Simultaneous or separate cutting and beveling
- Cost-effective, increasing productivity
- Even longer tool life



GF 4



GF 4 AVM



GF 4 MVM

GF 4, GF 6 (AVM/MVM)

The new GF series sets new standards in orbital pipe machining.

Numerous innovative functions combined with an ergonomic design create significant advantages for you in the industrial prefabrication of pipeline systems. Cutting and beveling high-alloy steel (stainless steel), low- and unalloyed steel, plastics, casting materials and non-ferrous metals in just seconds, using the “Planetary Cutting” method.

- Anthracite-colored coated components for improved sliding properties and protection against corrosion
- Stainless steel clamping attachments (Code 790 142 241) for protection against contact corrosion included
- Reduced operator impact by optional feed module AVM or MVM for an automated or manual cutting process
- Locking mechanism prevents unauthorized usage and theft
- A new ergonomically-designed motor handle for a safe and comfortable operating position, which also enables easy cutting of elbows
- Integrated line laser to determine the cut off point
- 2 position clamping jaws to reduce chatter and enable smaller length of pipe to be machined
- 1 multifunctional tool for all adjustments on the machine
- Extended speed range (65 - 215 rpm), ideal for the cutting of high-performance materials (Hastelloy®, P91, etc.)
- Swivel cable with a quick-disconnect coupler for easy and quick replacement of power cables
- The new chip guard protects against flying chips and comes with a measuring port (for GF 4 only)

Feed versions:

GF AVM*

Pipe Cutting and Beveling Machine with automatic feed module AVM. This intelligent solution continuously controls the cutting speed depending on the torque and the parameter settings. The AVM improves the handling of the GF and RA machine and stops automatically after the cutting process. The restart inhibit does not allow an unintended start-up.

GF MVM*

Pipe Cutting and Beveling Machines with manual feed module MVM. This manually operated feed module facilitates the cutting and beveling of pipes. With the help of a hand wheel, the machine head rotates easily and with little effort around the pipe with a constant speed.

Machine comes with:

- 1 Pipe Cutting and Beveling Machine GF 4 or GF 6 (AVM/MVM)*
- 1 Transportation case
- 1 Saw blade (GF 4: Code 790 042 064, GF 6: Code 790 043 018)
- 1 Set of stainless steel clamping attachments

- 1 Mounting plate
- 1 Tool set
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Bottle of special gear oil (Code 790 041 030)
- 1 Set of operating instructions and spare parts list

* The automatic/manual feed module AVM/MVM is already fitted to the pipe cutter upon delivery

All saws are fitted with the quick disconnect swivel cable.



GF 6



GF 6 AVM



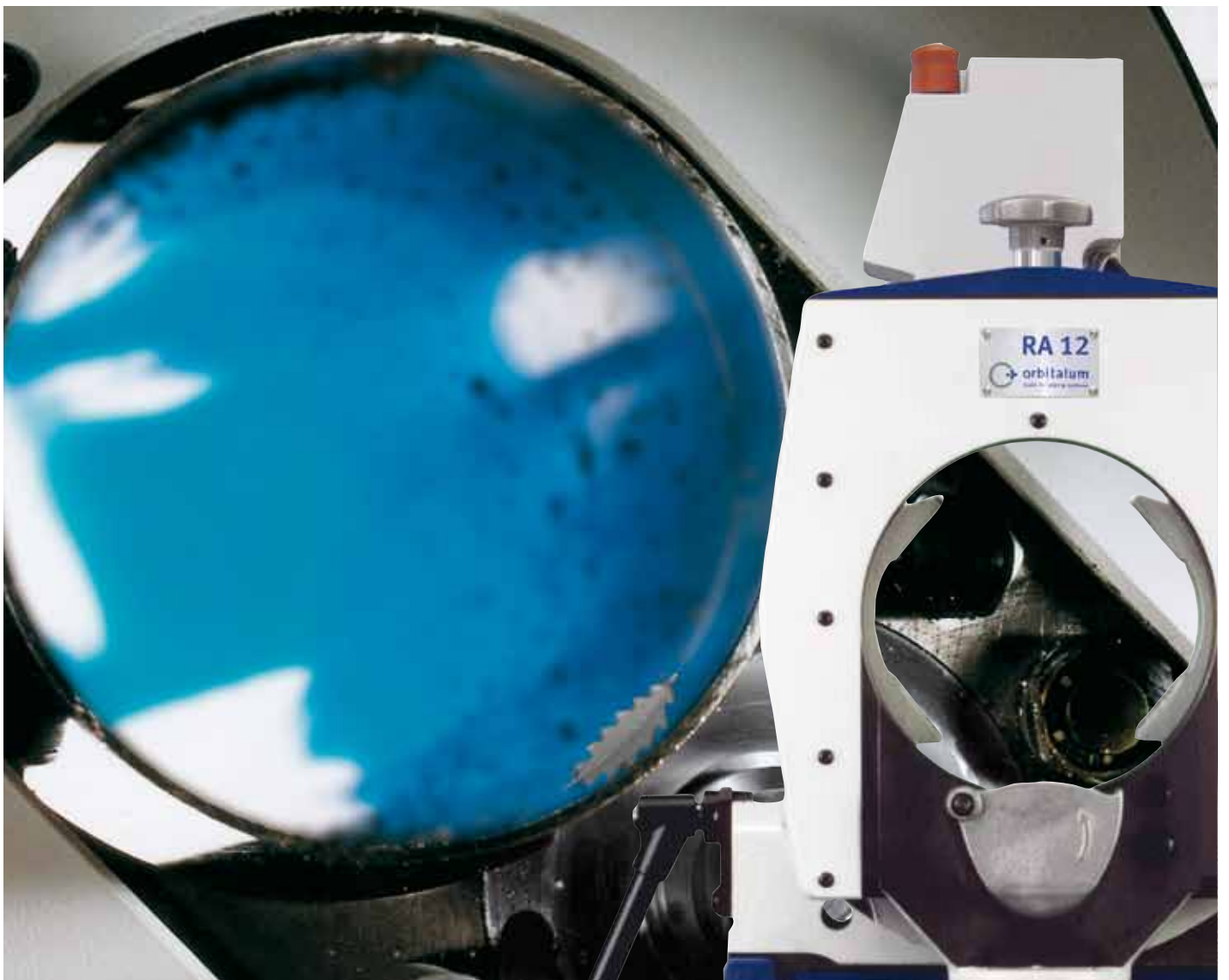
GF 6 MVM

Application range	GF 4 (AVM/MVM)	GF 6 (AVM/MVM)
Pipe OD	12 - 120 mm 0.472 - 4.724 inch	21.3 - 168.3 mm 0.839 - 6.626 inch
Wall thickness (depends on material)*	1 - 9 mm 0.039 - 0.354 inch	1.5 - 15 mm 0.059 - 0.591 inch
Pipe ID min. (saw blade Ø 63 mm/Ø 2.480 inch)	21 mm 0.827 inch	30 mm 1.181 inch
Pipe ID min. (saw blade Ø 68 mm/2.677 inch)	16 mm 0.630 inch	25 mm 0.984 inch
Pipe ID min. (saw blade Ø 80 mm/3.150 inch)	4 mm 0.157 inch	13 mm 0.512 inch
Pipe ID min. (saw blade Ø 100 mm/3.937 inch)	-	0 mm 0 inch
Technical data	Drive with single-phase AC motor	
Power	1.8 kW without AVM / 1.9 kW with AVM	
Built-in electronic variable cutting speed with restart inhibitor	65 - 215 rpm	65 - 215 rpm
Protection class	Double-insulated according to class II, DIN EN 60745-1 Double-insulated according to class I, DIN EN 60204-1 (GF AVM)	
Noise level at the workplace approx.	79 dB (A)	79 dB (A)
Vibration level	< 2.5 m/s ² in accordance with DIN EN 28662, part 1	

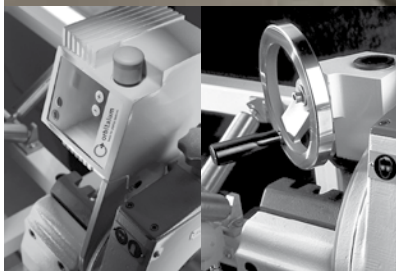
* Increased wall thickness possible with manual feed or by adding an additional cut (depending on the saw blade diameter).

Article	Version	Code	Weight of machine kg	Dispatch weight kg
GF 4	230 V, 50/60 Hz EU	790 142 001	61.300	88.000
GF 4	120 V, 50/60 Hz EU/US	790 142 002	61.300	88.000
GF 4 AVM	230 V, 50/60 Hz EU	790 142 011	70.500	98.000
GF 4 AVM	120 V, 50/60 Hz EU/US	790 142 012	70.500	98.000
GF 4 MVM	230 V, 50/60 Hz EU	790 142 021	66.600	98.000
GF 4 MVM	120 V, 50/60 Hz EU/US	790 142 022	66.600	98.000
GF 6	230 V, 50/60 Hz EU	790 143 001	92.700	140.000
GF 6	120 V, 50/60 Hz EU/US	790 143 002	92.700	140.000
GF 6 AVM	230 V, 50/60 Hz EU	790 143 011	101.700	153.000
GF 6 AVM	120 V, 50/60 Hz EU/US	790 143 012	101.700	153.000
GF 6 MVM	230 V, 50/60 Hz EU	790 143 021	97.800	147.000
GF 6 MVM	120 V, 50/60 Hz EU/US	790 143 022	97.800	147.000





Perform economical cutting and beveling with technology made by Orbitalum Tools!



Also available with automatic or manual feed module AVM/MVM



New motor with extended speed range



Planetary Cutting Technology

RA Pipe Cutting and Beveling Machines

- Square, burr-free and cold machining process
- Deformation-free clamping system for tubes and pipes
- Optimum preparation for the automated welding process
- Sturdy design with powerful drive
- Unique and automated orbital cutting process

RA 2, RA 8 and RA 12

Cutting and beveling high-alloy steel (stainless steel), low- and unalloyed steel, plastics, casting materials and non-ferrous metals in just seconds, using the “Planetary Cutting” method.

- Reduced operator impact by optional feed module AVM or MVM for an automated or manual cutting process
- Multiple point clamping
- Fast adjustment of dimensions
- Regulated cutting speed
- Optimal tool contact
- Working direction from the inside towards the outside
- Fast tool replacement
- Optimal speed range of 65 - 215 rpm, ideal for the cutting of high-performance materials (Hastelloy®, P91, etc.)
- An ergonomically-designed motor handle for a safe and comfortable operating position
- Square, burr-free and deformation-free pipe end
- Cold machining process
- Cutting in seconds
- Simultaneous or separate cutting and beveling
- Increased productivity
- Improved cutting quality
- Increased service life of tools

Pipe Cutting and Beveling Machines **with special aluminum attachments**. Supplied as standard with RA 8 and RA 12.

The above-mentioned RA machines are also available in the following **feed versions**:

RA 8 AVM and RA 12 AVM

Pipe Cutting and Beveling Machines **with integrated crown wheel and automatic feed module AVMAVM**. This intelligent solution continuously controls the cutting speed depending on the torque and the parameter settings. The AVM improves the handling of the GF and RA machine and stops automatically after the cutting process. The restart inhibit does not allow an unintended start-up.

RA 8 MVM and RA 12 MVM

Pipe Cutting and Beveling Machines **with manual feed module MVM**. This manually operated feed module facilitates the cutting and beveling of pipes. With the help of a hand wheel, the machine head rotates easily and with little effort around the pipe with a constant speed.

Machine comes with:

- 1 Pipe Cutting and Beveling Machine RA (AVM/MVM)*
- 1 Transportation case
- 1 Saw blade (RA 2: Code 790 041 035, RA 8: Code 790 043 018, RA 12: Code 790 043 018)
- 1 Mounting plate
- 1 Tool set



RA 2



RA 8, RA 8 AVM, RA 8 MVM



RA 12, RA 12 AVM, RA 12 MVM



- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Bottle of special gear oil (Code 790 041 030)
- 1 Set of operating instructions and spare parts list

All RA's are fitted with the swivel cable with a quick-disconnect coupler.

Application range		RA 2	RA 8 (AVM/MVM)	RA 12 (AVM/MVM)
Pipe OD	[mm]	12 - 63	114 - 230	154 - 325
	[inch]	0.472 - 2.480	4.488 - 9.055	6.063 - 12.795
Wall thickness depends on material**	[mm]	1.5 - 5.5	2 - 10	2 - 10
	[inch]	0.059 - 0.217	0.079 - 0.394	0.079 - 0.394
Pipe ID min. (saw blade-Ø 63 mm/2.480 inch)	[mm]	7	137	190
	[inch]	0.276	5.394	7.480
Pipe ID min. (saw blade-Ø 68 mm/2.677 inch)	[mm]	2	132	185
	[inch]	0.079	5.197	7.283
Pipe ID min. (saw blade-Ø 80 mm/3.150 inch)	[mm]	–	120	173
	[inch]	–	4.724	6.811
Pipe ID min. (saw blade-Ø 100 mm/3.937 inch)	[mm]	–	100	153
	[inch]	–	3.937	6.024
Technical data		Drive with single-phase AC motor		
Dimensions (lxwxh) RA	[mm]	620 x 350 x 420	778 x 485 x 430	940 x 592 x 374
	[inch]	24.4 x 13.8 x 16.5	30.6 x 19.1 x 16.9	37.0 x 23.3 x 14.7
Dimensions (lxwxh) RA AVM	[mm]	–	918 x 485 x 430	1.070 x 592 x 374
	[inch]	–	36.1 x 19.1 x 16.9	42.1 x 23.3 x 14.7
Dimensions (lxwxh) RA MVM	[mm]	–	788 x 485 x 430	1.090 x 592 x 374
	[inch]	–	31.0 x 19.1 x 16.9	42.9 x 23.3 x 14.7
Power RA / RA AVM / RA MVM	[kW]	1.8 / – / –	1.8 / 1.9 / 1.8	1.8 / 1.9 / 1.8
Power AVM	[kW]	–	0.10	0.10
Protection class	[class]	Double-insulated according to class II, DIN EN 60745-1 (RA AVM: according to class I, EN 60204-1)		
Built-in electronic speed regulation with speed stabilisation	[rpm]	65 - 215	65 - 215	65 - 215
Vibration level in accordance with 28662, part 1	[m/s ²]	< 2.5	< 2.5	< 2.5
Noise level at the workplace approx.	[dB (A)]	79	79	79

Article	Version	Code		Weight of machine kg	Dispatch weight kg
RA 2	230 V, 50/60 Hz EU	790 041 095		41.000	60.000
RA 2	120 V, 50/60 Hz EU/US	790 041 096		41.000	60.000
RA 2 INOX	230 V, 50/60 Hz EU	790 041 057		41.000	62.000
RA 2 INOX	120 V, 50/60 Hz EU/US	790 041 090		41.000	62.000
RA 8	230 V, 50/60 Hz EU	790 045 095		102.000	149.000
RA 8	120 V, 50/60 Hz EU/US	790 045 096		102.000	149.000
RA 8 AVM	230 V, 50/60 Hz EU	790 045 001		114.000	165.000
RA 8 AVM	120 V, 50/60 Hz EU/US	790 045 007		114.000	165.000
RA 8 MVM	230 V, 50/60 Hz EU	790 045 069		103.000	153.000
RA 8 MVM	120 V, 50/60 Hz EU/US	790 045 082		103.000	153.000
RA 12	230 V, 50/60 Hz EU	790 047 095		135.000	177.000
RA 12	120 V, 50/60 Hz EU/US	790 047 096		135.000	177.000
RA 12 AVM	230 V, 50/60 Hz EU	790 047 001		146.000	205.000
RA 12 AVM	120 V, 50/60 Hz EU/US	790 047 007		146.000	205.000
RA 12 MVM	230 V, 50/60 Hz EU	790 047 069		139.000	200.000
RA 12 MVM	120 V, 50/60 Hz EU/US	790 047 082		139.000	200.000

* The automatic/manual feed module AVM/MVM is already fitted to the pipe cutter upon delivery

** Increased wall thickness possible with manual feed or by adding an additional cut (depending on the saw blade diameter).
When processing thin-walled tubes, special clamping shells may be needed, see page 21.



A strong machine for demanding applications!



Unique automatic process by the AVM feed module thus ensuring constant cutting



Including a height-adjustable and robust lifting bench with a container for swarf collection



An even higher operating life of the tools is guaranteed by the continual cooling system (available as special accessory)

Pipe Cutting and Beveling Machine GF 20 AVM



GF Pipe Cutting and Beveling Machine

- Square, burr-free and cold machining process
- Optimum preparation for the automated welding process
- Sturdy design with powerful drive
- Unique and automated orbital cutting process
- Height-adjustable lifting bench

GF 20 AVM

Pipe Cutting and Beveling Machine **with automatic feed module AVM***. This intelligent solution continuously controls the cutting speed depending on the torque and the parameter settings. The AVM improves the handling of the GF and RA machine and stops automatically after the cutting process. The restart inhibit does not allow an unintended start-up. Cutting and beveling high-alloy steel (stainless steel), low- and unalloyed steel, plastics, casting materials and non-ferrous metals in just seconds, using the “Planetary Cutting” method.

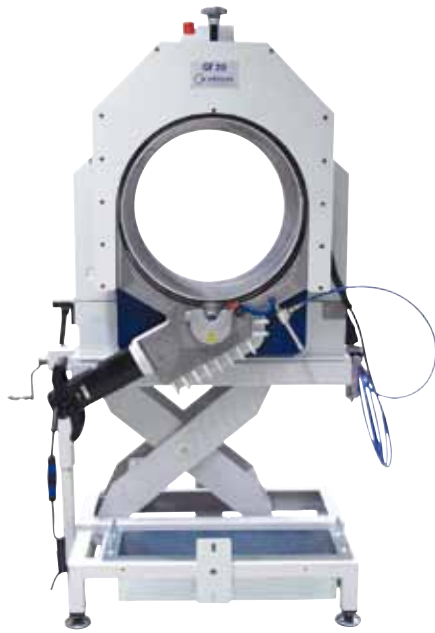
- Reduced operator impact by optional feed module AVM or MVM for an automated or manual cutting process
- A new ergonomically-designed motor handle for a safe and comfortable operating position, which also enables easy cutting of elbows
- 1 multifunctional tool for all adjustments on the machine
- High rotational moment for optimal cutting and beveling processes
- Optimal speed range of 50 - 163 rpm, ideal for cutting high-performance materials (Hastelloy®, P91, etc.)
- Plug connection with quick-action coupling: for easy and comfortable replacement of the power cable
- Optimized saw blade guard protects the user against flying chips

Machine comes with:

- 1 Pipe Cutting and Beveling Machine GF 20 AVM*
- 1 Transportation case
- 1 Lifting bench (Code 790 050 051)
- 1 Saw blade (Code 790 047 026)
- 1 Tool set
- 1 KSS-TOP lubricant spray pump (Code 790 060 226)
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Bottle of special gear oil (Code 790 041 030)
- 1 Set of operating instructions and spare parts list

* The automatic feed module AVM is already fitted to the pipe cutter upon delivery.

The saw is fitted with the swivel cable with a quick-disconnect coupler.



GF 20 AVM with lifting bench

Application range	GF 20 AVM
Pipe OD	283 - 508 mm / 11.14 - 20 inch
Pipe ID min. (saw blade Ø 80 mm/3.150 inch)	295 mm / 11.6 inch
Pipe ID min. (saw blade Ø 100 mm/3.937 inch)	275 mm / 10.8 inch
Wall thickness max.	15 mm / 0.59 inch
Pipe materials	Steel, stainless steel, copper, cast, iron, aluminum, synthetic
Technical data	Drive with single-phase AC motor
Dimensions of GF 20 incl. lifting bench (hxwx) approx.	145 - 171 x 94 x 63 cm / 57.1 - 67.3 x 37 x 24.8 inch
Dimensions of lifting bench (hxwx) approx.	44.5 - 70.5 x 94 x 63 cm / 17.5 - 27.8 x 37 x 24.8 inch
Load capacity of lifting bench max.	1.200 kg / 2,645.5 lbs
Power	1.9 kW (AVM: 50 W)
Built-in electronic variable cutting speed with restart inhibitor	50 - 163 rpm

Application range	GF 20 AVM
Protection class	Protection isolated class I, DIN VDE 0740
Vibration level in accordance with 28662, part 1	2.5 m/s ²
Noise level at the workplace	approx. 79 dB (A)

Article	Version	Code	Weight of machine* kg	Dispatch weight kg
GF 20 AVM	230 V, 50/60 Hz EU	790 050 001	475.000	554.000
GF 20 AVM	120 V, 50/60 Hz EU/US	790 050 002	475.000	554.000

* Weight including lifting bench

Lifting bench

For GF 20 AVM (supplied as standard) and RA 12. Easy mounting of the saw directly on to the plate. On the RA 12, fastening with quick-mounting plate only. Mechanical height adjustment using a handwheel. Very sturdy and robust design with steel construction. Swarf collector included.

Technical data	Lifting bench for GF 20 AVM and RA 12
Dimensions of lifting bench (h x w x d) approx.	44.5 - 70.5 x 94 x 63 cm / 17.5 - 27.8 x 37 x 24.8 inch
Load max.	1,200 kg / 2,645.52 lbs

Article	Code	kg
Lifting bench for GF 20 AVM and RA 12	790 050 051	170.000



Lifting bench

Extension unit

For GF 20 AVM. Available as an accessory. The extension unit accurately feeds long and heavy pipes into the pipe cutter. Very robust and sturdy design with 2 V supports and stainless steel bearings. Modular construction. Application with 2 extension units is recommended.

Application range	Extension unit
Pipe OD max.	508 mm / 20 inch
Dimensions approx.	110 x 50 x 95 cm / approx. 43.3 x 19.7 x 37.4 inch
Load capacity max.	400 kg / 881.8 lbs

Article	Code	kg
Extension unit for GF 20 AVM	790 050 061	67.000



Extension unit





Continuous cooling system

Continuous cooling system

For GF 20 AVM. For GF 4, GF 6, RA 8 and RA 12 on request.

To increase the service life of the saw blade and for improved surface finish to the pipe. The system is cooled with compressed air fed through a vortex tube. The cooling air rate can be configured to the optimum level for your application. Also suitable for cutting plastic pipes. Cooling without coolants. The saw blade is constantly cooled during the cutting process with cold air (to -37 °C).

Article	Version	Code	kg
Continuous cooling system	Compressed air (5.5 - 8.0 bar required)	790 050 773	0.600



Aluminum clamping shells

Aluminum clamping shells

For GF 20 AVM. Ideal for clamping thin-walled pipes. When ordering, please indicate the outside diameter of the tube to be worked on.

Comes with:

- 4 Clamping shells
- 8 Cylinder head screws
- 8 Cylinder head pins

Article	Code	kg
Aluminum clamping shells for GF 20 AVM	on request	3.700



The perfect preparation for orbital welding!



Square, burr-free and deformation-free pipe end – ideal for pressfitting applications



Second saw blade position to cut off elbows



Powerful drive with electronic overload protection and ergonomically designed motor handle



Cast iron clamping jaws – stainless steel caps optional available



Integrated line laser to mark the cut off point

Pipe Cutting and Beveling Machine GFX 3.0



GFX Pipe Cutting and Beveling Machines

- Square, burr-free and cold machining process
- Deformation-free clamping system especially applicable for thin-walled tubes
- Easy handling through light weight
- Simultaneous or separate cutting and beveling
- Increased productivity
- Low-maintenance and service friendly
- Environmentally friendly and long product life
- Second saw blade position to cut off elbows
- Ideal for pressfitting applications

GFX 3.0

New, innovative saw from Orbitalum Tools for cutting and beveling of tubes and elbows in just seconds. The perfect preparation for orbital welding! Easy to use, powerful and compact saw with low weight – our new GFX 3.0 provides even more outstanding features:

- Optimized chip flow due to a new vice design
- Cast iron clamping jaws
- Integrated line laser to mark the cut off point
- Ergonomically designed motor handle
- Powerful drive with 1.2 kW and adjustable speed control for cutting several materials and extended tool life
- Electronic overload protection with integrated temperature monitor and electronic speed regulation
- Increased durability of tools due to the new drive GF10
- Ergonomically positioned speed control adjusting wheel
- Swivel cable with a quick-disconnect coupler for easy and quick replacement of power cables
- Directly mountable to the work bench

Machine comes with:

- 1 Pipe Cutting and Beveling Machine GFX 3.0
- 1 Transportation case
- 1 Saw blade (Code 790 041 035)
- 1 Tool set
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Set of operating instructions and spare parts list



GFX 3.0



GFX 3.0

Application range	with tubes	with bars
Tube OD min.-max. (saw blade Ø 63 mm/2.480 inch)	6.0 - 78.0 mm 0.236 - 3.071 inch	6.0 - 16.0 mm 0.236 - 0.630 inch
Tube OD min.-max. (saw blade Ø 68 mm/2.677 inch)	6.0 - 73.0 mm 0.236 - 2.874 inch	6.0 - 21.0 mm 0.236 - 0.827 inch
Wall thickness min.-max. (saw blade Ø 63 mm/2.480 inch)	0.8 - 5.5 mm 0.032 - 0.217 inch	-
Wall thickness min.-max. (saw blade Ø 68 mm/2.677 inch)	0.8 - 7.0 mm 0.032 - 0.276 inch	-
Tube materials	Unalloyed, low-alloy and high-alloy steel, stainless steel, non-ferrous metal, aluminum alloy, titanium alloy, composite material and plastic	
Technical data	Electric drive with single-phase AC motor	
Dimensions (lxhxb)	570 x 280 x 330 mm / 22.441 x 11.024 x 12.993 inch	
Protection class	Class II	
Power	1200 W	
Built-in electronic speed regulation with speed stabilisation	30 - 200 rpm	
Vibration level in accordance with 50144	< 2.5 m/s ²	

Article	Version	Code	Weight of machine kg	Dispatch weight kg
GFX 3.0	230 V, 50/60 Hz EU	790 144 001	28.500	44.000
GFX 3.0	120 V, 50/60 Hz US	790 144 002	28.500	44.000

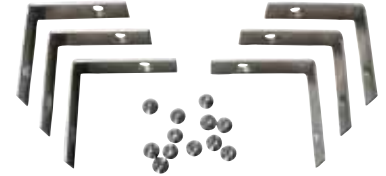
Accessories for GFX 3.0

Set of stainless steel caps

Ideal for preparing stainless steel tubes. Prevents contact corrosion between tube and clamping parts. Clamping shells for thin-walled tubes are available on request.

Set comes with:

- 6 Stainless steel caps
- 12 Countersunk screws
- 1 Allen key



Set of stainless steel caps

Article	Code	kg
Set of stainless steel caps for GFX 3.0	790 144 200	0.150

Quick-mounting base plates

With and without integrated screw clamps for quick mounting of the machine on work benches, see page 23.

Durable storage and shipping case

High-quality padded blue shipping case.

Article	Code	kg
Durable storage and shipping case for GFX 3.0	790 144 019	12.500



Durable storage and shipping case





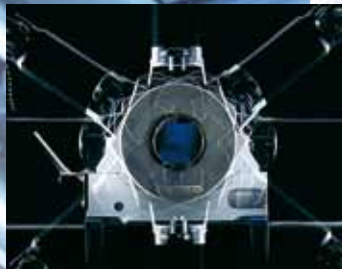
One machine to cut tubes and elbows!



Application



New motor with
extended speed range



Planetary Cutting
Technology

18 Pipe Cutting and Beveling Machines RA 41 Plus

RA Pipe Cutting and Beveling Machines

- Square, burr-free and cold machining process
- Deformation-free clamping system, especially applicable for thin-walled tubes
- Fast dimension adjustment
- Sturdy design with powerful drive
- Optimum preparation for the automated welding process
- Dimension related clamping shells made of aluminum for thin-walled tubes
- Clamping jaws made of aluminum

RA 41 Plus

Cutting and beveling pipes and elbows in high-alloy steel (stainless steel), low- and unalloyed steel, plastics, casting materials and non-ferrous metals in just seconds, using the “Planetary Cutting” method.

- Optimal speed range of 65 - 215 rpm, ideal for the cutting of high-performance materials (Hastelloy®, P91, etc.)
- An ergonomically-designed motor handle for a safe and comfortable operating position
- One machine to cut tubes and elbows
- Effective and environmental friendly
- Increased service life of tools
- No contact corrosion while preparing stainless steel tubes
- Perfect for INOX applications

Machine comes with:

- 1 Pipe Cutting and Beveling Machine RA 41 Plus
- 1 Transportation case
- 1 Saw blade (Code 790 042 064)
- 1 Set of aluminum clamping jaws (Code 790 046 250)
- 1 Mounting plate
- 1 Tool set
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Bottle of special gear oil (Code 790 041 030)
- 1 Set of operating instructions and spare parts list



RA 41 Plus

Application range	RA 41 Plus
Pipe OD (tubes)	10 - 120 mm / 0.394 - 4.724 inch
Pipe OD (elbows)	30 - 120 mm / 1.181 - 4.724 inch
Wall thickness (depends on material)	0.6 - 7 mm / 0.024 - 0.276 inch
Tube ID min. (saw blade Ø 63 mm/2.480 inch)	21 mm / 0.827 inch
Tube ID min. (saw blade Ø 68 mm/2.677 inch)	16 mm / 0.630 inch
Tube ID min. (saw blade Ø 80 mm/3.150 inch)	4 mm / 0.157 inch
Tube materials	Unalloyed and low-alloyed steel, high-alloyed steel, copper, brass, annealed cast-iron pipe (nodular graphite iron), aluminum.
Technical data	Electric drive with single-phase AC motor
Dimensions	700 x 490 x 460 mm / 27.6 x 19.3 x 18.1 inch
Power	1.8 kW
Protection class	Double-insulated according to class II, DIN VDE 0740
Built-in electronic variable cutting speed with restart inhibitor	65 - 215 rpm
Vibration level	< 2.5 m/s ² (EN 28662, part 1)
Noise level at the workplace approx.	At idle: 76 dB (A), under load: 85 dB (A)

Article	Version	Code	Weight of machine kg	Dispatch weight kg
RA 41 Plus	230 V, 50/60 Hz EU	790 046 011	70.000	109.000
RA 41 Plus	120 V, 50/60 Hz EU	790 046 014	70.000	109.000
RA 41 Plus	120 V, 50/60 Hz US	790 046 012	70.000	109.000





For more efficiency and easy handling in the workplace!



Our high-performance lubricants for cutting and beveling to increase the tool life of saw blades (page 22)



Clamping shells or jaws for deformation- or corrosion-free clamping of tubes (page 21)



Quick-mounting base plates – ideal for frequent changes of location (page 23)



Pipe feeder for accurately feeding long and heavy pipes into GF and RA machines (page 24)

Our Mobile Workstation for the mobile site and/or workshop (page 25):



Lockable tool box with 4 drawers



Lifting table with height adjustment



Swarf collection tray



Roller pipe support

20 Accessories for GF and RA machines



Accessories for GF and RA machines

Aluminum clamping shells

For RA 6, RA 8 and RA 12. Customized aluminum clamping shells for deformation-free clamping of thin-walled tubes.

When ordering, please indicate the outside diameter and/or inside diameter and the wall thickness of the tube to be worked on.

Comes with:

- 4 Cylinder head screws
- 1 Set of clamping shells

When ordering clamping shells for RA 8 you will also receive:

- 1 Drilling jig for the assembly of the clamping shells
- 2 Cylinder head screws for the drilling jig

Other dimensions are available.

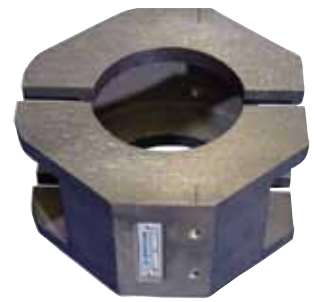
Article	Version	Pipe OD [mm]	Pipe OD [inch]	Code	kg
Aluminum clamping shells	for RA 6	76.1	3.000	790 043 216	4.500
Aluminum clamping shells	for RA 6	122.5	4.823	790 043 220	3.800
Aluminum clamping shells	for RA 6	125.0	4.921	790 043 219	–
Aluminum clamping shells	for RA 6	148.5	5.846	790 043 221	3.300
Aluminum clamping shells	for RA 6	154.0	6.063	790 043 218	3.130
Aluminum clamping shells	for RA 6	177.5	6.988	790 043 222	2.600
Aluminum clamping shells	for RA 8	129.0	5.079	790 045 216	4.300
Aluminum clamping shells	for RA 8	139.1	5.476	790 045 219	4.700
Aluminum clamping shells	for RA 8	167.0	6.575	790 045 218	4.000
Aluminum clamping shells	for RA 8	168.3	6.626	790 045 220	3.600
Aluminum clamping shells	for RA 8	210.0	8.268	790 045 217	2.900
Aluminum clamping shells	for RA 12	204.0	8.030	790 047 222	–
Aluminum clamping shells	for RA 12	209.0	8.230	790 047 221	11.500
Aluminum clamping shells	for RA 12	219.0	8.620	790 047 220	11.200
Aluminum clamping shells	for RA 12	254.0	10.000	790 047 216	9.200
Aluminum clamping shells	for RA 12	273.0	10.750	790 047 219	8.400
Aluminum clamping shells	for RA 12	300.0	11.810	790 047 224	9.100
Aluminum clamping shells	for RA 12	324.0	12.760	790 047 218	6.100
Aluminum clamping shells	for RA 12	306.0	12.047	790 047 225	5.800

Aluminum clamping shells for GF 4 and RA 41 Plus

For deformation-free clamping of thin-walled tubes.

Further clamping shells are available for various outer diameters.

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Aluminum clamping shells	25.40	1.000	790 046 316	3.025
Aluminum clamping shells	38.10	1.500	790 046 331	2.950
Aluminum clamping shells	50.80	2.000	790 046 345	2.850
Aluminum clamping shells	76.10	2.996	790 046 358	2.800
Aluminum clamping shells	88.90	3.500	790 046 363	2.500
Aluminum clamping shells	108.00	4.252	790 046 367	1.640
Aluminum clamping shells	114.30	4.500	790 046 368	1.640



Aluminum clamping shells

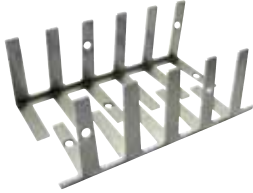


Aluminum clamping shells for GF 4 and RA 41 Plus





Special stainless steel clamping jaws



Set of stainless steel clamping attachments



GF TOP



GF LUB



Special gear oil

Special stainless steel clamping jaws for RA 2, RA 21 S, GF 4, RA 4 and RA 41 Plus

In pairs. Retrofit. While stock last.

Article	Code	kg
Special stainless steel clamping jaws for RA 2 and RA 21 S	790 041 323	1.035
Special stainless steel clamping jaws for GF 4, RA 4 and RA 41 Plus	790 042 201	2.350

Set of stainless steel clamping attachments

For GF 4 and GF 6 (AVM/MVM). For protection against contact erosion. Standard part of the GF 4 and the GF 6 (AVM/MVM).

Article	Version	Code	kg
Set of stainless steel clamping attachments for GF 4	right + left	790 142 241	0.510
Set of stainless steel clamping attachments for GF 6	right + left	790 143 200	0.510

Continuous cooling system

On request for GF 4, GF 6, RA 8 and RA 12 available. For details, see page 14.

Saw blade lubricant GF TOP

Synthetic high-performance lubricant for cutting and beveling machines. Increases the tool life of the saw blade. Compliant with the food approval NSF H2. The screwable brush guarantees an easy and uniform application of lubricant on the saw blade.

Article	Version	Code	kg
Saw blade lubricant GF TOP	Tube, 180 g	790 060 228	0.205

Saw blade lubricant GF LUB

The NEW chlorine-free high-performance lubricant for cutting and beveling. Increases the tool life of the saw blade. This ecologically cutting compound is the environmentally friendly replacement for ROCOL: just with a new name and improved quality. GF LUB meets the latest environmental directives and ecological standards.

Article	Version	Code	kg
Saw blade lubricant GF LUB	Tube, 160 ml	790 041 016	0.144

Special gear oil

For all GF and RA machines.

Article	Version	Code	kg
Special gear oil	Bottle, 250 ml	790 041 030	0.235

Intermediate gearbox retrofit kit

To convert a standard pipe cutting and beveling RA machine (RA) to RA H (with intermediate gear) with the former FE 680 Motor (150 - 270 rpm). The intermediate gearbox reduces the cutting speed of the RA machine to 40 - 70 rpm and increases torque. For cutting high-performance materials e.g. Hastelloy® and Inconel. Fits all RA 2, RA 4, RA 41, RA 41 Plus, RA 6, RA 8 and RA 12 machines. The kit includes all parts necessary for retrofitting as well as additional gear oil.



Intermediate gearbox retrofit kit

Article	Code	kg
Intermediate gearbox retrofit kit	790 041 063	2.000

Swivel cable

To prevent twisting of the cable. For all GF, RA and PS machines with protection class II (double insulated).



Swivel cable

Article	Version	Cable length [m/ft]	Code	kg
Swivel cable complete	230 V, 50/60 Hz EU	4/13.1	790 142 081	0.560
Swivel cable complete	120 V, 50/60 Hz US/CA	4/13.1	790 142 082	0.560
Swivel cable complete	230 V, 50/60 Hz CH	4/13.1	790 142 083	0.560
Swivel cable complete	230 V, 50/60 Hz AU	4/13.1	790 142 084	0.560
Swivel cable complete	120 V, 50/60 Hz GB	4/13.1	790 142 087	0.560
Swivel cable	230 V, 50/60 Hz EU	4/13.1	790 142 076	0.560
Swivel cable	120 V, 50/60 Hz US/CA	4/13.1	790 142 077	0.560
Swivel cable	230 V, 50/60 Hz CH	4/13.1	790 142 078	0.560
Swivel cable	120 V, 50/60 Hz GB	4/13.1	790 142 079	0.560
Swivel cable	230 V, 50/60 Hz AU	4/13.1	790 142 080	0.560



Swivel cable complete

Quick-mounting base plate without screw clamps

Complete with screws and nuts to mount the GFX 3.0 on a work bench.

Article	Code	kg
Quick-mounting base plate complete for GFX 3.0, RA 2 (H), RA 21 S	790 041 026	2.380



Quick-mounting base plate without screw clamps

Quick-mounting base plates with integrated screw clamps

For quick mounting of the machine on work benches. Ideal for frequent changes of location.

Article	Code	kg
Quick-mounting base plate for GFX 3.0, RA 2 (H), RA 21 S	790 041 027	4.230
Quick-mounting base plate for GF 4, RA 4 (H), RA 6 (H), RA 8 (H), RA 41 Plus (H)	790 042 027	6.165
Quick-mounting base plate for PS 4.5 and PS 6.6	790 048 334	2.600



Quick-mounting base plates with integrated screw clamps



Pipe feeder base unit and extension unit

The pipe feeder accurately feeds long and heavy pipes into GF and RA machines. Very sturdy and stable design with powder-coated frames and stainless steel rollers.

Advantages:

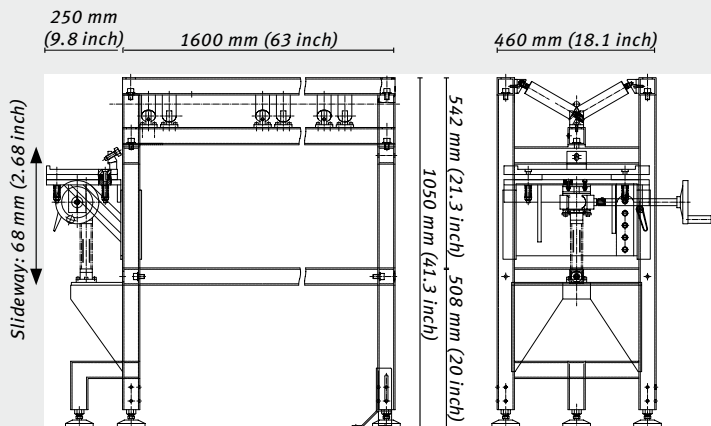
- Extremely stable and sturdy
- Fast adjustment of dimensions
- Centerline of tubes and pipes adjust easily in seconds
- Steel frame coated for maintenancefree finish
- Rollers made of stainless steel
- Extension of the Pipe Feeder possible with Extension Unit
- Saves time and money
- No contamination
- Perfect for all kinds of steel

Base unit:

Fits all pipe cutting and beveling machines in the GF and RA series from Orbitalum Tools (except the RA 21 S and GF 20 AVM. RA 2, GFX 3.0, PS 4.5 and PS 6.6 on request). The machines can be directly mounted onto the base plate of the pipe feeder base unit, without further parts. The machines can be easily adjusted to the required cutting dimension using the handwheel-operated mechanical height adjustment. The machine is securely fastened to the base plate.



Pipe feeder base unit

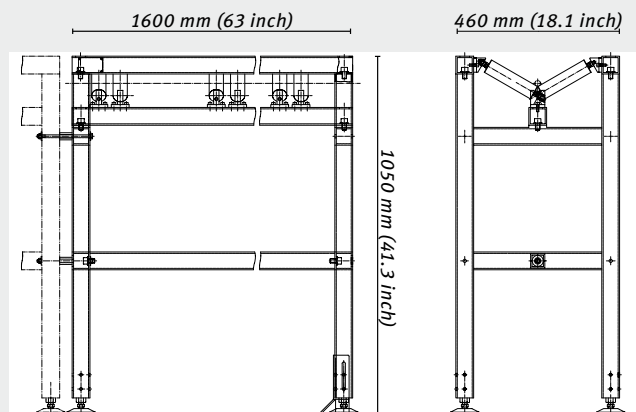


Extension unit:

To extend the the base unit, can be used singularly or in multiples, easily bolted together.



Pipe feeder extension unit



Floor bracket accessory:

To fasten the base unit or the extension unit to the floor.
The assembly consists of 4 brackets and 8 bolts with washers.

Application range/ Technical data	Pipe feeder base unit	Pipe feeder extension unit
Pipe OD	16 - 325 mm 0.63 - 12.8 inch	16 - 325 mm 0.63 - 12.8 inch
Dimensions approx.	185 x 105 x 50 cm 72.8 x 41.3 x 19.7 inch	approx. 160 x 105 x 50 62.9 x 41.3 x 19.7 inch
Load capacity max.	400 kg 881.8 lbs	400 kg 881.8 lbs
Height-adjustable mounting plate (adjusting range)	68 mm 2.68 inch	- -

Article	Code	kg
Pipe feeder base unit	790 068 051	116.000
Pipe feeder extension unit	790 068 061	72.000
Floor bracket accessory	790 068 053	1.900

Mobile Workstation

For the mobile site and/or workshop. The ideal addition for all Orbitalum pipe cutters (with exception of GF 20 AVM. RA 2, GFX 3.0, PS 4.5 and PS 6.6 on request).

- Safe and easy transportation of machines and equipment on site
- Flexible operation at each working station
- Elimination of material handling and setting up of the machines e.g. no requirement to mount the machines to benches
- Height-adjustable pipe support with stainless steel roller
- The tool box comes with 4 drawers for tools and equipment and is lockable
- Lifting table with height adjustment of the GF- and RA-machines to the required pipe dimension
- Accurate and clean work by swarf collection tray

Technical data	Mobile Workstation
Dimensions (hxlxw)	91 x 115 x 43 cm 35.8 x 45.3 x 16.9 inch
Load capacity max.	675 kg 1488.1 lbs

Article	Code	kg
Mobile Workstation	790 068 071	137.000



Mobile Workstation





For highest requirements and longest service life!



Burr-free and deformation-free



Square



Cutting and beveling

» Innovative manufacturing methods and special cutting geometry ensure a precise, square and burr-free cut «

Saw blades and bevel cutters for GF and RA machines

These saw blades and bevel cutters are especially designed for our pipe cutters for highest requirements and longest service life. 4 different ranges of saw blades are available:

- **Economy Range** for low and non-alloy steels and cast iron pipes
- **Performance Range** for high-alloy steels (stainless steel)
- **High Performance Range** for high-performance materials and high-alloy steels
- **Premium Range** especially made for stainless steel applications with extra long durability

Workable pipe materials	Al	Mild steel, Cu, CuNi, CuZn, CuSn	INOX, V2A, V4A, 304, 316 (L)	Ti, Duplex, Inconel
Economy	*	*		
Performance		*	*	
High-Performance		*	*	*
Premium			*	

Saw blades

Minimum purchase: 5 blades

Version	Pipe wall thickness		Saw blade Ø		Code	kg
	[mm]	[inch]	[mm]	[inch]		
Economy	1.2 - 2.5	.047 - .098	63	2.480	790 041 135	0.035
Economy*	1.5 - 6.0	.059 - .236	68	2.677	790 042 063	0.036
Economy	2.0 - 5.5	.079 - .217	63	2.480	790 041 020	0.032
Economy	2.5 - 7.0	.098 - .276	68	2.677	790 042 020	0.045
Economy*	5.0 - 12.0	.197 - .472	80	2.953	790 043 030	0.053
Economy*	6.0 - 15.0	.236 - .591	100	3.937	790 047 030	0.117
Performance	0.6 - 1.2	.024 - .047	63	2.480	790 041 036	0.027
Performance	1.0 - 1.6	.039 - .063	68	2.677	790 042 049	0.040
Performance	1.0 - 3.0	.039 - .118	63	2.480	790 048 072	0.025
Performance	1.2 - 2.5	.047 - .098	63	2.480	790 041 035	0.045
Performance	1.2 - 2.5	.047 - .098	68	2.677	790 042 064	0.050
Performance**	1.2 - 2.5	.047 - .098	100	3.937	790 043 036	0.104
Performance	1.2 - 3.0	.047 - .118	83	3.268	790 043 024	0.060
Performance	1.5 - 2.5	.059 - .098	80	3.150	790 046 022	0.085
Performance	2.5 - 5.5	.098 - .217	63	2.480	790 041 048	0.035
Performance**	2.5 - 5.5	.098 - .217	100	3.937	790 043 038	0.104
Performance	2.5 - 7.0	.098 - .276	68	2.677	790 042 048	0.045
Performance	2.5 - 7.0	.098 - .276	80	3.150	790 043 018	0.060
Performance	6.0 - 10.0	.236 - .394	80	2.953	790 043 022	0.055
Performance**	6.0 - 15.0	.236 - .591	100	3.937	790 047 026	0.105
High-Performance	1.2 - 2.5	.047 - .098	80	3.150	790 046 021	0.064
High-Performance	1.2 - 2.5	.047 - .098	63	2.480	790 041 034	0.031
High-Performance	2.5 - 7.0	.098 - .267	68	2.677	790 042 058	0.045
Premium	1.2 - 2.5	.047 - .098	63	2.480	790 041 049	0.033

* applicable only for aluminum pipes

** only for RA 6, RA 8, RA 12 and GF 20 AVM



Saw blade Economy



Saw blade Performance



Saw blade High-Performance



Saw blade Premium





Saw blade with additional borehole

Saw blades

Saw blades with additional borehole. Minimum purchase: 5 blades

Version	Pipe wall thickness		Saw blade Ø		Code		kg
	[mm]	[inch]	[mm]	[inch]			
Performance	1.2 - 2.5	.047 - .098	63	2.480	790 041 435		0.030
Performance	1.2 - 2.5	.047 - .098	68	2.677	790 042 464		0.037
Performance	1.5 - 2.5	.059 - .098	80	3.150	790 046 422		0.080
Performance	2.5 - 7.0	.098 - .276	68	2.677	790 042 448		0.036

Saw blade/bevel cutter combinations

Simultaneous cutting and beveling of pipes in just seconds.

Weld-prep saw blade/bevel cutter combinations (V-prep)*

Version	Pipe wall thickness		Beveling angle	Height of bevel max.		Saw blade Ø		Code		kg
	[mm]	[inch]		[mm]	[inch]	[mm]	[inch]			
Performance	1.2 - 3.0	.047 - .118	30	3	.118	63	2.480	790 044 050		0.090
Performance	2.5 - 7.0	.098 - .276	30	7	.276	68	2.677	790 042 161		0.108
High-Performance	2.5 - 5.0	.098 - .197	35	5	.197	68	2.677	790 042 015		0.120
High-Performance	2.5 - 6.0	.098 - .236	45	4	.157	68	2.677	790 042 023		0.135
High-Performance	2.5 - 7.0	.098 - .276	30	7	.276	68	2.677	790 042 013		0.108



Weld-prep saw blade/bevel cutter combinations (V-prep)

Replacement parts for weld-prep saw blade/bevel cutter combinations (V-prep)*

Article	Version	Code	kg
Saw blade for 790 044 050	Performance	790 044 040	0.027
Bevel cutter 30° for 790 044 050	Performance	790 044 049	0.065
Saw blade for 790 042 155, 790 042 157 and 790 042 161	Performance	790 042 153	0.040
Bevel cutter 30° for 790 042 161	Performance	790 042 160	0.060
Saw blade for 790 042 018, 790 042 015, 790 042 023, 790 042 013	High-Performance	790 042 016	0.040
Bevel cutter 30° for 790 042 013	High-Performance	790 042 021	0.077

Support disc for saw blade/bevel cutter combinations

We recommend the use of 1 support disc for the saw blade/bevel cutter combination.

Article	Code	kg
Support disc	790 046 188	0.068



Press fitting saw blade/bevel cutter combination

Press fitting saw blade/bevel cutter combinations**

Version	Pipe wall thickness		Beveling angle	Height of bevel max.		Saw blade Ø		Code		kg
	[mm]	[inch]		[mm]	[inch]	[mm]	[inch]			
Performance	1.0 - 2.0	.039 - .079	45 / 70	0.4/1.0	.016/.039	63	2.480	790 044 046		0.090
High-Performance	1.0 - 2.0	.039 - .079	45 / 70	0.4/1.0	.016/.039	63	2.480	790 044 047		0.090

Replacement parts for press fitting saw blade/bevel cutter combinations

Article	Version	Code	kg
Saw blade for 790 044 046	Performance	790 044 040	0.027
Saw blade for 790 044 047	High-Performance	790 044 041	0.030

* Consisting of one saw blade and one bevel cutter. It is possible to order the individual parts separately.

** Consisting of one saw blade and one bevel cutter. Especially for stainless steel press fitting systems. It is possible to order the individual parts separately.

Bevel cutters

For V-prep profiles on pipe ends.

The bevel cutter is mounted on the RA pipe cutter instead of a saw blade. Reproducible weld seam preparation in just seconds.

Bevel cutters V-prep

Version	Beveling angle	Height of bevel max.		Bevel cutter Ø		Code	kg
	[°]	[mm]	[inch]	[mm]	[inch]		
Economy	30.0	9.5	.374	72	2.835	790 042 045	0.135
Economy	35.0	8.9	.350	70	2.756	790 042 037	0.170
Economy	37.5	8.4	.331	70	2.756	790 042 036	0.162
Economy	45.0	7.5	.295	70	2.756	790 042 038	0.162
Performance	30.0	9.5	.374	72	2.835	790 042 071	0.153
Performance	30.0	13.0	.512	76	2.992	790 043 023	0.187
Performance	30.0	20.0*	.787*	100	3.937	790 043 027	0.250
Performance	37.5	8.4	.331	70	2.756	790 042 070	0.163
High-Performance	30.0	9.5	.374	72	2.835	790 042 073	0.157
High-Performance	37.5	8.4	.331	70	2.756	790 042 072	0.163

* Height of bevel max. 20 mm (0.787 inch) only with aluminum pipes. Other pipe materials: max. 13 mm (0.512 inch).



Bevel cutter V-prep

Saw blade lubricant GF TOP

Synthetic high-performance lubricant for cutting and beveling machines.

Increases the tool life of the saw blade. Compliant with the food approval NSF H2.

The screwable brush guarantees an easy and uniform application of lubricant on the saw blade.

Article	Version	Code	kg
Saw blade lubricant GF TOP	Tube, 180 g	790 060 228	0.205



GF TOP

Saw blade lubricant GF LUB

The NEW chlorine-free high-performance lubricant for cutting and beveling.

Increases the tool life of the saw blade. This ecologically cutting compound is the environmentally friendly replacement for ROCOL: just with a new name and improved quality. GF LUB meets the latest environmental directives and ecological standards.

Article	Version	Code	kg
Saw blade lubricant GF LUB	Tube, 160 ml	790 041 016	0.144



GF LUB

Saw blades for SCORP machines



Saw blade TCT

Saw blade TCT

Article	For pipe materials	Saw blade Ø [mm/inch]	rpm max.	Code	kg
Saw blade TCT	Steel, copper, aluminum, all kinds of plastic	140/5.512	4,200	790 014 055	0.154

Application range SCORP 360 with TCT saw blade

Plastic pipe OD		Saw blade Ø 140 mm/5.512 inch max. wall thickness	
[mm]	[inch]	[mm]	[inch]
75	2.953	15.1	0.594
90	3.543	11.4	0.449
100	3.937	10.1	0.398
110	4.331	9.3	0.366
115	4.528	9.1	0.358
125	4.921	8.8	0.346
140	5.512	8.7	0.343
160	6.299	9.1	0.358
165	6.496	9.3	0.366
180	7.087	9.9	0.390
190	7.480	10.4	0.409
200	7.874	10.9	0.429
215	8.465	11.8	0.465
225	8.858	12.4	0.488
240	9.449	13.4	0.528
250	9.843	14.0	0.551
270	10.630	15.4	0.606
280	11.024	16.0	0.630
315	12.402	18.3	0.720
320	12.598	18.6	0.732
355	13.976	20.4	0.803



Cutting blade Diamond

Cutting blade Diamond

Article	For pipe materials	Cutting blade Ø [mm/inch]	rpm max.	Code	kg
Cutting blade Diamond	Cast iron	140/5.512	4,200	790 014 057	0.173
Cutting blade Diamond*	Cast iron	155/6.102	4,200	790 014 059	0.200

* only for SCORP 360

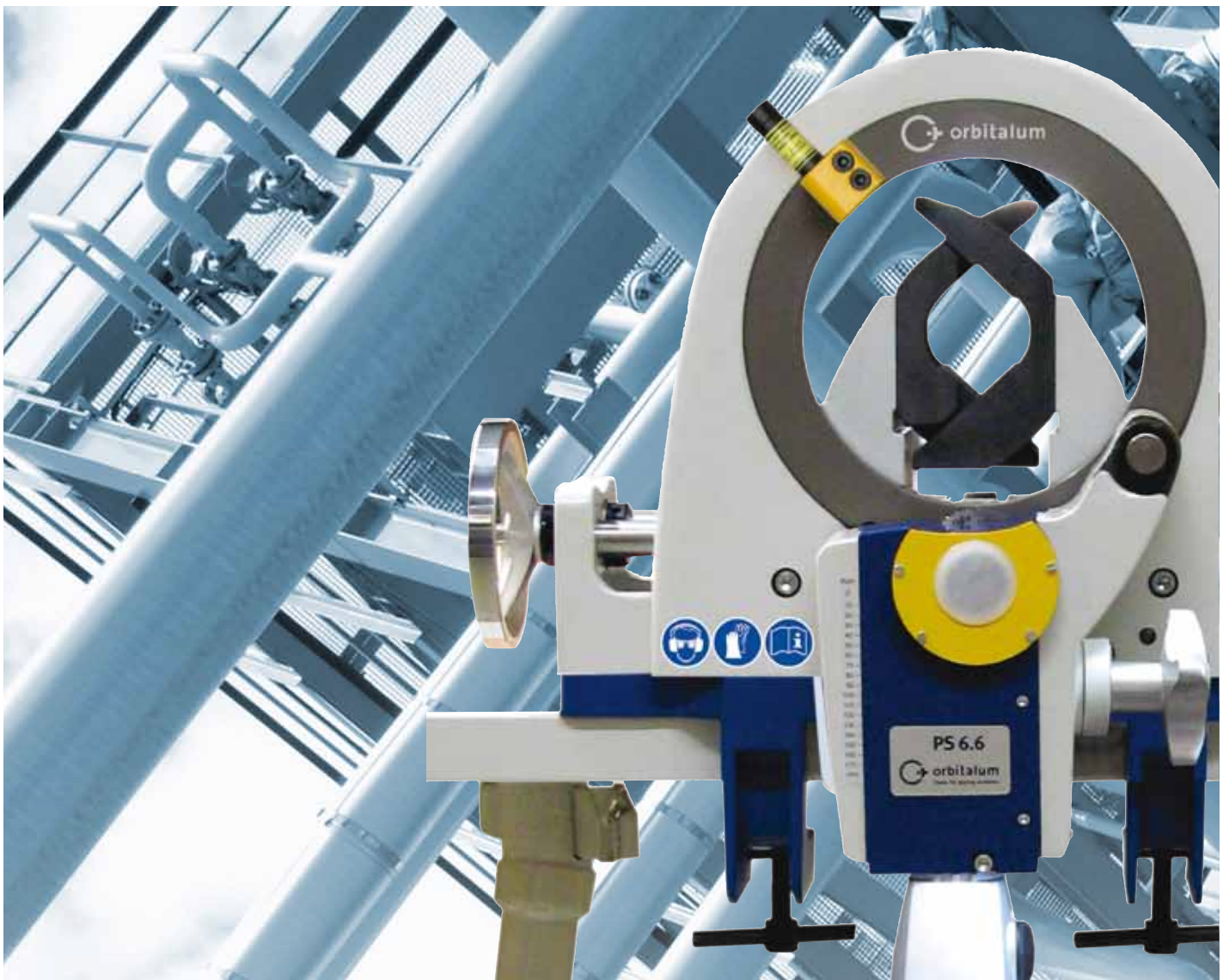


Saw blade Cermet

Saw blade Cermet

Article	For pipe materials	Saw blade Ø [mm/inch]	rpm max.	Code	kg
Saw blade Cermet	Stainless steel	140/5.512	4,200	790 014 056	0.153





Tube cutting made easy!



Integrated line laser



Deformation-free clamping of thin-walled tubes



Cutting thin-walled stainless-steel tubes and elbows



Portable Tube Saws

- Lightweight and easily transportable machine (only 23 kg (PS 4.5) or 26 kg (PS 6.6)), to provide flexibility for on-site applications
- Deformation-free clamping of thin-walled tubes
- For cutting of thin-walled tubes and elbows
- No rework necessary because of a burr-free and square cut
- Cold cutting process prevents corrosion
- Integrated line laser to identify the cut-off point
- Orbital cutting process saves time
- Multi-point clamping of the tube
- Fast adjustment of tube dimensions
- Long saw blade service life
- Press fitting saw blade combinations can be used*

PS 4.5, PS 6.6

Tube cutting made easy! Cutting thin-walled stainless-steel tubes and elbows using the superior “Planetary Cutting Technology”. Deformation-free clamping system by integrated clamping jaws made from coated cast aluminum for different tube diameters.

Machine comes with:

- 1 Portable Tube Saw PS 4.5 or PS 6.6
- 1 Set of cast aluminum clamping jaws
- 1 Durable storage and shipping case
- 1 Saw blade, already mounted on the PS-machine (Code 790 048 072)
- 1 Tool bag equipped with tools
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Set of operating instructions and spare parts list



PS 4.5



PS 6.6

Application range	PS 4.5	PS 6.6
Tube OD	6 - 120 mm 0.236 - 4.724 inch	50** - 170 mm 1.969** - 6.693 inch
Elbow OD	30 - 120 mm 1.181 - 4.724 inch	50** - 170 mm 1.969** - 6.693 inch
Wall thickness max.	< 3 mm < 0.118 inch	< 3 mm < 0.118 inch
Technical data	Electric drive (single-phase AC motor)	
Dimensions	480 x 230 x 600 mm 20.9 x 9.1 x 23.6 inch	480 x 230 x 660 mm 20.9 x 9.1 x 26 inch
Power	1100 W 1.5 hp	1100 W 1.5 hp
Protection class	Protection isolated class II, DIN VDE 0740	
Speed	30 - 165 rpm	30 - 165 rpm
Vibration level (EN 28662, part 1)	< 2.5 m/s ²	< 2.5 m/s ²
Noise level at the workplace	approx. 78 dB (A)	approx. 78 dB (A)

* Only with saw blade/bevel cutter combinations of Orbitalum Tools: Code 790 044 046 or 790 044 047. Especially for stainless steel press fitting systems. Consisting of one saw blade and one bevel cutter. It is possible to order the individual parts separately. Workable wall thickness: 1 - 2 mm (0.039 - 0.079 inch), beveling angle: 45°/70°, height of bevel: max. 0.4/1 mm (0.016/0.039 inch).

** It is possible to cut tubes with a outer diameter min. 30 mm (1.181 inch) with the PS 6.6 by using additional clamping jaws (accessory, Code 790 048 380). These clamping jaws are delivered as a standard with the PS 4.5.

Article	Version	Code	Weight of machine kg	Dispatch weight kg
PS 4.5	230 V, 50/60 Hz EU	790 048 001	23.600	37.000
PS 4.5	110 V, 50/60 Hz EU	790 048 002	23.600	37.000
PS 4.5	120 V, 50/60 Hz US	790 048 003	23.600	37.000
PS 6.6	230 V, 50/60 Hz EU	790 049 001	26.300	41.000
PS 6.6	110 V, 50/60 Hz EU	790 049 002	26.300	41.000
PS 6.6	120 V, 50/60 Hz US	790 049 003	26.300	41.000

Accessories for PS machines

Quick-mounting plate with screw clamps

Quick and easy mounting of the machine to the bench with no drilling.
Including 4 socket head screws to fix the PS to the quick-mounting base plate.



Quick-mounting plate with screw clamps

Article	Code	kg
Quick-mounting plate with screw clamps	790 048 334	2.600

Saw blades

Performance range for high-alloy steels (stainless steel).
Recommended saw blades for the Portable Tube Saws PS 4.5 and PS 6.6.



Saw blade Performance

Version	Tube wall thickness [mm]	Tube wall thickness [inch]	Saw blade Ø [mm]	Saw blade Ø [inch]	Code	kg
Performance	1.0 - 3.0	0.039 - 0.118	63	2.480	790 048 072	0.035
Performance	0.6 - 1.2	0.024 - 0.047	63	2.480	790 041 036	0.027

Tripod

Made of stainless steel.
For easy mounting of PS machines directly on the tripod with no base plate.
Space saving – fast application – easy handling.



Tripod

Article	Code	kg
Tripod	790 048 335	10.600

Clamping jaws replacement set

Made from coated cast aluminum. Extends the dimension range of the PS 6.6 to OD min. 30 mm (1.181 inch).



Clamping jaws replacement set

Article	Code	kg
Clamping jaws replacement set for PS 4.5 and extension jaws for PS 6.6	790 048 380	2.030

Laser retrofitting kit

Line laser to identify the cutting point on the tube.
Easy mounting on the swivel on the PS machines. Kit contains 1 line laser, 1 laser holder with 2 fixing screws, replacement batteries, 1 set of assembly instructions.



Laser retrofitting kit

Article	Code	kg
Laser retrofitting kit for PS 4.5 and PS 6.6	790 048 060	0.150

Solutions for Orbital Welding



ORBIMAT CA | Orbital welding power supplies

The ORBIMAT CA *Advanced* series of orbital welding power supplies are equipped with a new and unique operating concept. In addition to the reliable automatic programming which generates welding parameters by entering the tube diameter, wall thickness, material, and welding gas all ORBIMAT CA models also have the exclusive new development FLOW FORCE to reduce the pre-flow gas time when the weld heads are closed in the standard model and BUP control function with controllable, position-dependent tube internal pressure control as an optional extra.

- Simple and convenient operation thanks to multifunctional rotary actuator
- DC welding
- Control option for cold wire feed
- Optimal visibility and operating conditions thanks to clearly laid-out 10.5" swivel monitor



ORBIWELD TP | Rohr-an-Rohr-Schweißzangen

The ORBIWELD TP series has a unique design and functionality. An extremely compact design has been achieved thanks to the drive motor that is fully integrated into the housing. The completely new drive concept has made the well-known large and costly drives associated with conventional weld heads unnecessary.

- Can be used with and without cold wire attachment, as the cold wire feed nozzle can be adjusted exactly in both a vertical and horizontal direction via an adjustment unit
- Open arc system
- The arc length is kept at a constant gap mechanically
- Infinitely variable clamping mechanism
- The water-cooled TIG Torch head can be swiveled in any direction and allows fillet welds or short hollowed out tubes to be welded
- Models with oscillation OSC and arc voltage control AVC available



P16/P20 | Tube-to-tube-sheet orbital weld heads

With this TIG weld head, it is easy to weld tubes to tubesheets with the highest of accuracy and consistent quality.

- Completely water-cooled weld head housing
- Water coolant that extends into the TIG Torch head
- Simple handling with maximum functionality
- Burner head up to 30° stepless inclination (reduced diameter range)



Manual cutting of metal tubes in any position!



Guiding of the multi-roller cutting chain and the MRA through the clamping shells

Diameter-specific clamping shells

Durable storage and shipping case

Multi-roller cutting chains: The cutting wheels are made from hardened steel

Metal Tube Cutter MRA



Metal Tube Cutter

The clever solution for cutting metal tubes manually. This Metal Tube Cutter is especially designed for cramped working places and for chipless cutting processes.

- Deformation-free and square cut
- No electricity required
- Requires little space, for use in limited access areas

MRA

For manual cutting of metal tubes in any position.

Easy to use – first-rate cutting technology.

The patented cutting technique used in designing the MRA is based on the diameter-specific clamping shells and the flexible multi-roller cutting chain. Both these components are made of hardened, wear resistant steel and provide the following advantages:

- Long service life of the components
- The cutting chain is at a right-angle around the tube
- The MRA runs on track rollers on the clamping shells
- Minimum hand movements
- Tubes made of stainless steel can be cut

For tube materials:

- High-alloy steel (stainless steel material e.g. no. 1.40... to 1.45... or 304/316 materials)
- Low-alloy and unalloyed steel
- Cast materials
- Non-ferrous metals

Comes with:

- 1 Metal Tube Cutter MRA*
- 1 Durable storage and shipping case
- 1 Socket head key
- 1 Connection clamp
- 1 Pair of working gloves
- 1 Set of operating instructions and spare parts list

* without multi-roller cutting chains and without clamping shells (see accessories)

Application range	MRA
Tube OD	33.7 - 254.0 mm 1.327 - 10.000 inch
Wall thickness (depends on material)*	0.8 - 3.0 mm 0.031 - 0.118 inch

Technical data	
Dimensions	450 x 105 mm 17.7 x 4.1 inch

* for high-alloy steels, the max. wall thickness which can be processed is 2.0 - 2.5 mm (0.08 - 0.09 inch).

Article	Code	Weight of machine kg	Dispatch weight kg
Metal Tube Cutter MRA	790 008 001	3.100	8.000



MRA

Accessories for MRA

Multi-roller cutting chains

Cutting wheels made from hardened steel.

Article	Tube OD [mm]	Tube OD [inch]	Number of cutting wheels [pieces]	Code	kg
Multi-roller cutting chain for MRA	33.7 - 114.3	1.330 - 4.500	15	790 008 018	0.500
Multi-roller cutting chain for MRA	114.3 - 254.0	4.500 - 10.000	16	790 008 041	0.900



Multi-roller cutting chain

Clamping shells

Set of two pieces, made from hardened steel. One pair of clamping shells needed for each tube size. Further dimensions of clamping shells are available on request.

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Clamping shells for MRA	25.0	0.984	790 008 102	0.750
Clamping shells for MRA	25.4	1.000	790 008 104	0.795
Clamping shells for MRA	29.0	1.142	790 008 103	0.835
Clamping shells for MRA	33.7	1.330	790 008 105	0.885
Clamping shells for MRA	38.1	1.500	790 008 130	0.955
Clamping shells for MRA	40.0	1.575	790 008 135	0.955
Clamping shells for MRA	42.4	1.670	790 008 140	1.005
Clamping shells for MRA	44.5	1.752	790 008 150	1.052
Clamping shells for MRA	48.3	1.900	790 008 155	1.100
Clamping shells for MRA	50.0	1.970	790 008 160	1.130
Clamping shells for MRA	50.8	2.000	790 008 165	1.140
Clamping shells for MRA	52.0	2.050	790 008 175	1.190
Clamping shells for MRA	53.0	2.087	790 008 180	1.150
Clamping shells for MRA	54.0	2.125	790 008 185	1.100
Clamping shells for MRA	57.0	2.244	790 008 190	1.200
Clamping shells for MRA	60.3	2.375	790 008 195	1.315
Clamping shells for MRA	63.5	2.500	790 008 200	1.375
Clamping shells for MRA	65.0	2.559	790 008 203	1.375
Clamping shells for MRA	70.0	2.755	790 008 215	1.445
Clamping shells for MRA	73.0	2.874	790 008 220	1.480
Clamping shells for MRA	75.0	2.950	790 008 225	1.600
Clamping shells for MRA	76.1	2.996	790 008 230	1.560
Clamping shells for MRA	80.0	3.150	790 008 233	1.375
Clamping shells for MRA	84.0	3.300	790 008 240	1.690
Clamping shells for MRA	85.0	3.350	790 008 245	1.750
Clamping shells for MRA	88.9	3.500	790 008 250	1.780
Clamping shells for MRA	100.0	3.937	790 008 255	1.970
Clamping shells for MRA	101.6	4.000	790 008 260	2.025
Clamping shells for MRA	104.0	4.095	790 008 270	1.925
Clamping shells for MRA	108.0	4.252	790 008 280	2.100
Clamping shells for MRA	110.0	4.330	790 008 285	2.150
Clamping shells for MRA	114.3	4.500	790 008 290	2.295
Clamping shells for MRA	129.0	5.080	790 008 315	3.000
Clamping shells for MRA	139.7	5.500	790 008 325	3.365
Clamping shells for MRA	150.0	5.906	790 008 333	3.375
Clamping shells for MRA	152.4	6.000	790 008 335	3.232
Clamping shells for MRA	154.0	6.060	790 008 340	3.365
Clamping shells for MRA	160.0	6.300	790 008 355	3.520
Clamping shells for MRA	165.0	6.496	790 008 360	4.125
Clamping shells for MRA	168.3	6.625	790 008 365	3.600
Clamping shells for MRA	204.0	8.030	790 008 380	4.375
Clamping shells for MRA	219.1	8.625	790 008 385	4.680
Clamping shells for MRA	228.6	9.000	790 008 387	4.890
Clamping shells for MRA	254.0	10.000	790 008 390	5.420



Clamping shells



The required, high-quality tube end preparation for orbital welding!



Burr-free and square



Exact results due to micrometer/inch feed



Speed regulated electric motor



Environmentally friendly cordless versions thanks to lithium-ion technology and AIR-COOLED technology for short charging times and long service life

Tube Squaring Machines

- Squaring tube ends with a high-quality finish
- Burr-free and square
- Beveling possible with a special tool holder
- Quick clamping system for tools, clamping shells and tubes
- Preparation of thin-walled stainless steel tubes (V4A) and micro fittings
- High-performance coated tool bit with two cutting edges
- Micrometer feed for optimum results
- No additional tools required for operation
- Space saving, light weight and portable machine for a mobile and secure application
- Modular design, ensuring compatibility within the RPG series
- The special adaptor clamping shell allows the RPG 2.5 to be used with the clamping shells for the RPG 1.5 machines
- Very short design (cordless versions)

Improved features in the electric versions:

- Machine with rotating/removable drive
- Built-in electronic speed regulation with speed stabilization: Vario-Tachometer-Constamatic (VTC) full wave electronics
- Restart protection to prevent the machine from starting in an uncontrolled way after it has been re-connected to the electric mains or after the voltage supply has been re-established after a power failure
- RPM regulator
- Sturdy marathon motor
- Overload protection
- Shut-off carbon brushes
- Carbon wear indicator

Improved features in the cordless versions thanks to lithium-ion technology:

- Motor with high performance and small size
- No memory effect
- Single cell monitoring in the cordless pack
- Electronic overload protection with integrated temperature monitor
- Robust cordless packs with capacity display
- Minimal self-discharge
- Environmentally friendly
- AIR-COOLED technology for short charging times and a long service life

RPG XS, RPG ONE, RPG 1.5, RPG 2.5

Designed for burr-free squaring and beveling of thin-walled stainless steel tubes and micro fittings. For the required, high quality tube end preparation for orbital welding!

Machine comes with:

- 1 Tube Squaring Machine RPG XS, RPG ONE, RPG 1.5 or RPG 2.5 (cordless)
- 1 Durable storage and shipping case
- 2 Rechargeable batteries, 1 battery charger (for cordless versions only)
- 1 Overload protection (Square nut, not for RPG XS and RPG ONE)
- 1 Tool holder (Code 790 037 152. RPG XS: Code 790 033 150)
- 1 Multifunctional tool (Code 790 038 314)
- 1 Adapter clamping shell (Code 790 030 094, only for RPG 2.5)
- 1 Tool set
- 1 Set of operating instructions and spare parts list

Bench stand for cordless machines optional available (Code 790 037 169).

NEW



RPG XS Cordless

NEW



RPG XS Cordless angle drive



RPG ONE



RPG ONE Cordless



RPG 1.5



RPG 1.5 Cordless





RPG 2.5



RPG 2.5 Cordless

Application range	RPG XS Cordless	RPG ONE	RPG ONE Cordless	RPG 1.5	RPG 1.5 Cordless	RPG 2.5	RPG 2.5 Cordless	
Tube OD min.-max. [mm]	3.0 - 19.05	3.0 - 25.4	3.0 - 25.4	3.0 - 38.1	3.0 - 38.1	6.35* - 63.5	6.35* - 63.5	
[inch]	0.118 - 0.75	0.118 - 1.0	0.118 - 1.0	0.118 - 1.5	0.118 - 1.5	0.25* - 2.5		
Wall thickness max. [mm]	2.0	3.0	3.0	3.0	3.0	3.0	3.0	
[inch]	0.079	0.118	0.118	0.118	0.118	0.118	0.118	
Tube materials	High-alloy steels (stainless steel material no. 1.40... to 1.45... as per DIN 17455 and DIN 17456), unalloyed and low-alloy steels, aluminum.							
Technical data								
Dimensions (lxhxd) [mm]	217x187x53	390x200x70	261x255x80	400x350x160	275x255x90	500x300x170	260x300x320	
[inch]	8.5x7.4x2.1	15.4x7.9x2.8	10.3x10x3.2	15.8x13.8x6.3	10.8x10x3.5	19.7x11.8x6.7	10.2x11.8x12.6	
Built-in electronic variable cutting speed	[rpm]	0 - 350	145 - 380	0 - 400	145 - 380	0 - 400	1. speed: 9 - 2 2. speed: 27 - 153	1. speed: 0 - 24 2. speed: 0 - 83
Power [W]	-	1100	-	1100	-	1100	-	
Voltage of rechargeable battery [V]	10.8	-	18	-	18	-	18	
Capacity [Ah]	1.5	-	2.6	-	2.6	-	2.6	
Sound pressure level (EN 23741) [dB (A)]	approx.78	approx.78	approx.78	approx.78	approx.78	approx.78.2	approx.78.2	
Vibration level (EN 50144) [m/s ²]	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	

* only with special adapter clamping shell (supplied as standard with RPG 2.5)

Article	Version	Code	Weight of machine kg	Dispatch weight kg
RPG XS Cordless (10.8 V)	230 V, 50/60 Hz EU	790 033 001	1.320	
RPG XS Cordless (10.8 V)	115 V, 60 Hz US	790 033 002	1.320	
RPG XS Cordless angle drive (10.8 V)	230 V, 50/60 Hz EU	790 033 011	1.520	
RPG XS Cordless angle drive (10.8 V)	115 V, 60 Hz US	790 033 012	1.520	
RPG ONE	230 V, 50/60 Hz EU	790 036 031	4.140	9.600
RPG ONE	120 V, 50/60 Hz US	790 036 032	4.140	9.600
RPG ONE	110 V, 50/60 Hz EU	790 036 033	4.140	9.600
RPG ONE Cordless (18 V)	230 V, 50/60 Hz EU	790 036 021	2.880	8.200
RPG ONE Cordless (18 V)	115 V, 60 Hz US	790 036 022	2.880	8.200
RPG 1.5	230 V, 50/60 Hz EU	790 037 001	3.880	9.500
RPG 1.5	120 V, 50/60 Hz US	790 037 002	3.880	9.500
RPG 1.5	110 V, 50/60 Hz EU	790 037 003	3.880	9.500
RPG 1.5 Cordless (18 V)	230 V, 50/60 Hz EU	790 037 011	3.440	10.100
RPG 1.5 Cordless (18 V)	115 V, 60 Hz US	790 037 012	3.440	10.100
RPG 2.5	230 V, 50/60 Hz EU	790 030 001	6.600	12.500
RPG 2.5	120 V, 50/60 Hz US	790 030 002	6.600	12.500
RPG 2.5	110 V, 50/60 Hz EU	790 030 003	6.600	12.500
RPG 2.5 Cordless (18 V)	230 V, 50/60 Hz EU	790 030 011	5.340	11.320
RPG 2.5 Cordless (18 V)	110 V, 60 Hz US	790 030 012	5.340	11.320

Angle drive RPG ONE (cordless) and RPG 1.5 (cordless)

The angle drive is optionally available and may be retrofitted to the RPG ONE and RPG 1.5 (cordless). The squaring machine reduces the design length to 200 mm (7.874 inch). Technical characteristics remain unchanged.



Angle drive

Article	Code	kg
Angle drive for RPG ONE and RPG 1.5 (cordless)	790 037 400	0.475



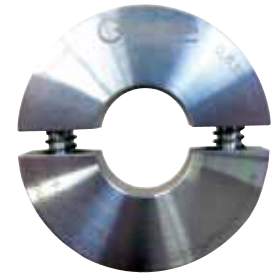
Accessories for RPG XS, RPG ONE, RPG 1.5, RPG 2.5

Please check the outer diameter of the tubes before ordering the clamping shells.

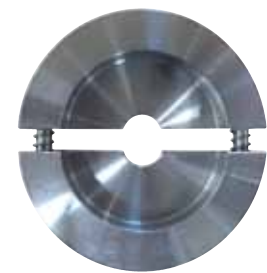
One-piece stainless steel clamping shells

Extremely durable. Assures accurate centering and quick clamping shell change without any tools with its unique design and positive clamping shell mechanism. Further dimensions of clamping shells are available.

Applicable with	Applicable for	Tube OD		Tube clamping length		Code	kg
		[mm]	[inch]	[mm]	[inch]		
RPG XS	Tubes	6.35	0.250	10.00	0.394	790 033 202	0.108
RPG XS	Tubes	8.00	0.315	10.00	0.394	790 033 203	0.106
RPG XS	Tubes	9.53	0.375	10.00	0.394	790 033 204	0.105
RPG XS	Tubes	10.00	0.394	10.00	0.394	790 033 205	0.105
RPG XS	Tubes	12.70	0.500	10.00	0.394	790 033 206	0.101
RPG XS	Tubes	13.50	0.531	10.00	0.394	790 033 207	0.100
RPG XS	Tubes	19.05	0.750	10.00	0.394	790 033 209	0.090
RPG XS	Micro fittings	6.35	0.250	10.00	0.394	790 033 301	0.056
RPG ONE	Tubes	3.00	0.118	10.00	0.394	790 036 232	0.118
RPG ONE	Tubes	3.18	0.125	10.00	0.394	790 036 201	0.119
RPG ONE	Tubes	6.00	0.236	10.00	0.394	790 036 213	0.117
RPG ONE	Tubes	6.35	0.250	10.00	0.394	790 036 202	0.118
RPG ONE	Tubes	7.00	0.276	10.00	0.394	790 036 214	0.118
RPG ONE	Tubes	8.00	0.315	10.00	0.394	790 036 215	0.116
RPG ONE	Tubes	9.53	0.375	10.00	0.394	790 036 203	0.115
RPG ONE	Tubes	10.00	0.394	10.00	0.394	790 036 204	0.115
RPG ONE	Tubes	10.10	0.398	10.00	0.394	790 036 222	0.114
RPG ONE	Tubes	11.00	0.433	10.00	0.394	790 036 226	0.112
RPG ONE	Tubes	12.00	0.472	10.00	0.394	790 036 205	0.112
RPG ONE	Tubes	12.10	0.476	10.00	0.394	790 036 223	0.111
RPG ONE	Tubes	12.70	0.500	10.00	0.394	790 036 206	0.111
RPG ONE	Tubes	13.50	0.531	10.00	0.394	790 036 227	0.110
RPG ONE	Tubes	14.00	0.551	10.00	0.394	790 036 228	0.108
RPG ONE	Tubes	14.10	0.555	10.00	0.394	790 036 224	0.107
RPG ONE	Tubes	15.00	0.590	10.00	0.394	790 036 216	0.107
RPG ONE	Tubes	15.60	0.614	10.00	0.394	790 036 225	0.105
RPG ONE	Tubes	15.88	0.625	10.00	0.394	790 036 211	0.105
RPG ONE	Tubes	16.00	0.630	10.00	0.394	790 036 212	0.104
RPG ONE	Tubes	17.00	0.670	10.00	0.394	790 036 221	0.103
RPG ONE	Tubes	17.20	0.677	10.00	0.394	790 036 207	0.104
RPG ONE	Tubes	18.00	0.709	10.00	0.394	790 036 217	0.102
RPG ONE	Tubes	19.05	0.750	10.00	0.394	790 036 208	0.100
RPG ONE	Tubes	20.00	0.787	10.00	0.394	790 036 230	0.096
RPG ONE	Tubes	21.30	0.839	10.00	0.394	790 036 209	0.094
RPG ONE	Tubes	21.70	0.854	10.00	0.394	790 036 220	0.093
RPG ONE	Tubes	22.00	0.866	10.00	0.394	790 036 218	0.093
RPG ONE	Tubes	23.00	0.906	10.00	0.394	790 036 219	0.085
RPG ONE	Tubes	25.00	0.984	10.00	0.394	790 036 231	0.081
RPG ONE	Tubes	25.40	1.000	10.00	0.394	790 036 210	0.083
RPG ONE	Micro fittings	6.00	0.236	4.00	0.157	790 036 304	0.066
RPG ONE	Micro fittings	6.35	0.250	4.00	0.157	790 036 301	0.066
RPG ONE	Micro fittings	8.00	0.315	4.00	0.157	790 036 307	0.065
RPG ONE	Micro fittings	9.53	0.375	4.00	0.157	790 036 302	0.064
RPG ONE	Micro fittings	10.00	0.394	4.00	0.157	790 036 305	0.065
RPG ONE	Micro fittings	12.00	0.472	4.00	0.157	790 036 306	0.064
RPG ONE	Micro fittings	12.70	0.500	4.00	0.157	790 036 303	0.062
RPG 1.5	Tubes	3.00	0.118	15.00	0.591	790 037 220	0.300
RPG 1.5	Tubes	3.18	0.125	15.00	0.591	790 037 221	0.308
RPG 1.5	Tubes	4.00	0.157	15.00	0.591	790 037 222	0.308
RPG 1.5	Tubes	4.78	0.188	15.00	0.591	790 037 223	0.308
RPG 1.5	Tubes	5.00	0.197	15.00	0.591	790 037 224	0.290
RPG 1.5	Tubes	6.00	0.236	15.00	0.591	790 037 225	0.310
RPG 1.5, RPG 2.5	Tubes	6.35	0.250	15.00	0.591	790 037 226	0.306
RPG 1.5, RPG 2.5	Tubes	7.00	0.276	15.00	0.591	790 037 257	0.306
RPG 1.5, RPG 2.5	Tubes	8.00	0.314	15.00	0.591	790 037 227	0.299
RPG 1.5, RPG 2.5	Tubes	9.00	0.354	15.00	0.591	790 037 254	0.280



One-piece stainless steel clamping shell



One-piece stainless steel clamping shell for micro fittings



Applicable with	Applicable for	Tube OD		Tube clamping length		Code	kg
		[mm]	[inch]	[mm]	[inch]		
RPG 1.5, RPG 2.5	Tubes	9.53	0.375	15.00	0.591	790 037 228	0.297
RPG 1.5, RPG 2.5	Tubes	10.00	0.394	15.00	0.591	790 037 229	0.298
RPG 1.5, RPG 2.5	Tubes	11.00	0.433	15.00	0.591	790 037 293	0.252
RPG 1.5, RPG 2.5	Tubes	11.11	0.437	15.00	0.591	790 037 255	0.295
RPG 1.5, RPG 2.5	Tubes	12.00	0.472	15.00	0.591	790 037 230	0.293
RPG 1.5, RPG 2.5	Tubes	12.70	0.500	15.00	0.591	790 037 231	0.292
RPG 1.5, RPG 2.5	Tubes	13.00	0.512	15.00	0.591	790 037 232	0.291
RPG 1.5, RPG 2.5	Tubes	13.20	0.520	15.00	0.591	790 037 263	0.290
RPG 1.5, RPG 2.5	Tubes	13.50	0.531	15.00	0.591	790 037 233	0.290
RPG 1.5, RPG 2.5	Tubes	14.00	0.551	15.00	0.591	790 037 234	0.288
RPG 1.5, RPG 2.5	Tubes	14.30	0.563	15.00	0.591	790 037 253	0.289
RPG 1.5, RPG 2.5	Tubes	14.70	0.579	15.00	0.591	790 037 290	0.287
RPG 1.5, RPG 2.5	Tubes	15.00	0.591	15.00	0.591	790 037 235	0.286
RPG 1.5, RPG 2.5	Tubes	15.30	0.602	15.00	0.591	790 037 259	0.287
RPG 1.5, RPG 2.5	Tubes	15.70	0.618	15.00	0.591	790 037 291	0.284
RPG 1.5, RPG 2.5	Tubes	15.88	0.625	15.00	0.591	790 037 236	0.285
RPG 1.5, RPG 2.5	Tubes	16.00	0.630	15.00	0.591	790 037 237	0.282
RPG 1.5, RPG 2.5	Tubes	17.00	0.669	15.00	0.591	790 037 256	0.280
RPG 1.5, RPG 2.5	Tubes	17.08	0.672	15.00	0.591	790 037 260	0.281
RPG 1.5, RPG 2.5	Tubes	17.20	0.677	15.00	0.591	790 037 238	0.300
RPG 1.5, RPG 2.5	Tubes	18.00	0.709	15.00	0.591	790 037 239	0.280
RPG 1.5, RPG 2.5	Tubes	19.00	0.748	15.00	0.591	790 037 240	0.277
RPG 1.5, RPG 2.5	Tubes	19.05	0.750	15.00	0.591	790 037 241	0.274
RPG 1.5, RPG 2.5	Tubes	20.00	0.787	15.00	0.591	790 037 242	0.272
RPG 1.5, RPG 2.5	Tubes	21.00	0.827	15.00	0.591	790 037 294	0.270
RPG 1.5, RPG 2.5	Tubes	21.30	0.839	15.00	0.591	790 037 243	0.270
RPG 1.5, RPG 2.5	Tubes	21.70	0.854	15.00	0.591	790 037 261	0.270
RPG 1.5, RPG 2.5	Tubes	22.00	0.866	15.00	0.591	790 037 244	0.264
RPG 1.5, RPG 2.5	Tubes	22.22	0.875	15.00	0.591	790 037 292	0.270
RPG 1.5, RPG 2.5	Tubes	23.00	0.906	15.00	0.591	790 037 245	0.261
RPG 1.5, RPG 2.5	Tubes	24.00	0.945	15.00	0.591	790 037 246	0.256
RPG 1.5, RPG 2.5	Tubes	25.00	0.984	15.00	0.591	790 037 247	0.252
RPG 1.5, RPG 2.5	Tubes	25.40	1.000	15.00	0.591	790 037 248	0.240
RPG 1.5, RPG 2.5	Tubes	26.90	1.059	15.00	0.591	790 037 249	0.260
RPG 1.5, RPG 2.5	Tubes	27.00	1.063	15.00	0.591	790 037 264	0.260
RPG 1.5, RPG 2.5	Tubes	27.20	1.071	15.00	0.591	790 037 262	0.260
RPG 1.5, RPG 2.5	Tubes	28.00	1.102	15.00	0.591	790 037 250	0.238
RPG 1.5, RPG 2.5	Tubes	29.00	1.142	15.00	0.591	790 037 251	0.235
RPG 1.5, RPG 2.5	Tubes	30.00	1.181	15.00	0.591	790 037 252	0.232
RPG 1.5, RPG 2.5	Tubes	31.80	1.250	15.00	0.591	790 037 280	0.230
RPG 1.5, RPG 2.5	Tubes	32.00	1.260	15.00	0.591	790 037 258	0.226
RPG 1.5, RPG 2.5	Tubes	33.40	1.315	15.00	0.591	790 037 281	0.220
RPG 1.5, RPG 2.5	Tubes	33.70	1.327	15.00	0.591	790 037 282	0.218
RPG 1.5, RPG 2.5	Tubes	34.00	1.339	15.00	0.591	790 037 283	0.210
RPG 1.5, RPG 2.5	Tubes	35.00	1.377	15.00	0.591	790 037 284	0.210
RPG 1.5, RPG 2.5	Tubes	36.00	1.417	15.00	0.591	790 037 285	0.204
RPG 1.5, RPG 2.5	Tubes	38.00	1.496	15.00	0.591	790 037 286	0.199
RPG 1.5, RPG 2.5	Tubes	38.10	1.500	15.00	0.591	790 037 287	0.194
RPG 2.5	Tubes	40.00	1.575	15.00	0.591	790 030 234	0.565
RPG 2.5	Tubes	41.00	1.614	15.00	0.591	790 030 230	0.560
RPG 2.5	Tubes	42.00	1.654	15.00	0.591	790 030 117	0.500
RPG 2.5	Tubes	42.40	1.669	15.00	0.591	790 030 227	0.483
RPG 2.5	Tubes	42.70	1.681	15.00	0.591	790 030 224	0.483
RPG 2.5	Tubes	43.00	1.693	15.00	0.591	790 030 231	0.544
RPG 2.5	Tubes	44.50	1.752	15.00	0.591	790 030 228	0.483
RPG 2.5	Tubes	48.30	1.902	15.00	0.591	790 030 226	4.990
RPG 2.5	Tubes	50.80	2.000	15.00	0.591	790 030 220	0.483
RPG 2.5	Tubes	51.00	2.008	15.00	0.591	790 030 233	0.482
RPG 2.5	Tubes	52.00	2.047	15.00	0.591	790 030 225	0.483
RPG 2.5	Tubes	53.00	2.087	15.00	0.591	790 030 232	0.457
RPG 2.5	Tubes	54.00	2.126	15.00	0.591	790 030 221	0.452
RPG 2.5	Tubes	55.00	2.165	15.00	0.591	790 030 235	0.440
RPG 2.5	Tubes	57.00	2.244	15.00	0.591	790 030 229	0.419
RPG 2.5	Tubes	60.30	2.374	15.00	0.591	790 030 222	0.386
RPG 2.5	Tubes	63.50	2.500	15.00	0.591	790 030 223	0.350
RPG 2.5	Tubes	65.00	2.559	15.00	0.591	790 030 236	0.330
RPG 1.5	Micro fittings	3.00	0.118	4.00	0.157	790 037 300	0.241
RPG 1.5	Micro fittings	3.18	0.125	4.00	0.157	790 037 301	0.227
RPG 1.5	Micro fittings	4.00	0.157	4.00	0.157	790 037 302	0.237
RPG 1.5	Micro fittings	4.78	0.188	4.00	0.157	790 037 303	0.234

Applicable with	Applicable for	Tube OD		Tube clamping length		Code	kg
		[mm]	[inch]	[mm]	[inch]		
RPG 1.5	Micro fittings	5.00	0.197	4.00	0.157	790 037 304	0.228
RPG 1.5	Micro fittings	6.00	0.236	4.00	0.157	790 037 305	0.220
RPG 1.5, RPG 2.5	Micro fittings	6.35	0.250	4.00	0.157	790 037 306	0.460
RPG 1.5, RPG 2.5	Micro fittings	8.00	0.314	4.00	0.157	790 037 307	0.223
RPG 1.5, RPG 2.5	Micro fittings	9.53	0.375	4.00	0.157	790 037 308	0.300
RPG 1.5, RPG 2.5	Micro fittings	10.00	0.394	4.00	0.157	790 037 309	0.222
RPG 1.5, RPG 2.5	Micro fittings	12.00	0.472	4.00	0.157	790 037 310	0.220
RPG 1.5, RPG 2.5	Micro fittings	12.50	0.492	4.00	0.157	790 037 317	0.220
RPG 1.5, RPG 2.5	Micro fittings	12.70	0.500	4.00	0.157	790 037 311	0.220
RPG 1.5, RPG 2.5	Micro fittings	17.20	0.678	4.00	0.157	790 037 312	0.220
RPG 1.5, RPG 2.5	Micro fittings	19.00	0.748	4.00	0.157	790 037 314	0.216
RPG 1.5, RPG 2.5	Micro fittings	19.05	0.750	4.00	0.157	790 037 315	0.215
RPG 1.5, RPG 2.5	Micro fittings	21.20	0.835	4.00	0.157	790 037 313	0.213
RPG 1.5, RPG 2.5	Micro fittings	21.30	0.839	4.00	0.157	790 037 318	0.212

Tool holder WH

Fits multifunctional tool **790 038 314**. incl. Torx fixing screw.
For max. wall thickness 3 mm (0.118 inch).



Tool holder WH

Application range of tool holders	Possible application		Beveling angle [°]	Recommended application range	Tube OD			
	Squaring	Beveling			RPG XS cordless	RPG ONE (cordless)	RPG 1.5 (cordless)	RPG 2.5 (cordless)
WH12-I/Standard* Code 790 037 152	x	-	-	[mm] 6.0 - 12.7 [inch] 0.236 - 0.5	-	6.0 - 25.4 0.236 - 1.0	6.0 - 38.1 0.236 - 1.5	6.0 - 63.5 0.236 - 2.5
WH12-I Code 790 037 154	x	-	-	[mm] [inch]	-	12.7 - 25.4 0.5 - 1.0	12.7 - 38.1 0.5 - 1.5	12.7 - 63.5 0.5 - 2.5
WH12-I/micro fittings** Code 790 037 156	x	-	-	[mm] [inch]	-	-	3.0 - 21.2 0.118 - 0.84	6.35 - 21.2 0.25 - 0.84
WH3-V-30 Code 790 037 158	-	x	30°	[mm] [inch]	-	max. 25.4 max. 1.0	max. 35.0 max. 1.378	max. 60.3 max. 2.374
WH3-V-35 Code 790 037 159	-	x	35°	[mm] [inch]	-	max. 25.4 max. 1.0	max. 33.7 max. 1.327	max. 59.3 max. 2.335
WH3-V-45*** Code 790 037 157	-	x	45°	[mm] [inch]	-	-	max. 33.7 max. 1.327	max. 59.0 max. 2.3
WH-I Code 790 033 150	x	-	-	[mm] 3.0 - 12.0 [inch] 0.118 - 0.472	3.0 - 19.05 0.118 - 0.75	-	-	-
WH-I Code 790 033 151	x	-	-	[mm] 12.0 - 19.05 [inch] 0.472 - 0.75	12.0 - 19.05 0.472 - 0.75	-	-	-

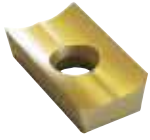
Article	Code	kg
Standard tool holder WH12-I*	790 037 152	0.040
Optional tool holder WH12-I	790 037 154	0.050
Optional tool holder for micro fittings WH12-I**	790 037 156	0.100
Tool holder WH3-V-30	790 037 158	0.024
Tool holder WH3-V-35	790 037 159	0.024
Tool holder WH3-V-45***	790 037 157	0.022
Tool holder WH-I	790 033 150	
Tool holder WH-I	790 033 151	

* Supplied as standard with the RPG ONE, RPG 1.5, RPG 2.5.

** Only to be used with stainless steel clamping shells for micro fittings.

*** Not applicable with the RPG XS and the RPG ONE.





Multifunctional tool MFW

Multifunctional tool MFW

Two-sided tool bit with high-performance Balinit® Futura protective coating against tool wear. Usable for all machines of the RPG series.

Article	Quantity	Code	kg
Multifunctional tool MFW-P-2	1	790 038 314	0.003
Multifunctional tool MFW-P-2	10	790 038 315	0.045
Torx screw (RPG ONE, RPG 1.5, RPG 2.5)	1	790 086 220	0.002
Torx screw (RPG XS)	1	790 086 217	0.002



The clean and high-value solution for specific welding preparations!



QTC® Quick-Tool-Change:
Quick clamping system for
tools, clamping shells and
tubes



A wide range of stainless steel
clamping shells (for RPG 8.6
also made from aluminum)



Including durable storage
and shipping case:
High-quality blue transportation
case with insert
Very sturdy design.



Including tool holder WH
and high-performance coated
tool bit MFW with two
cutting edges

Tube Squaring Machines RPG 4.5, RPG 4.5 S, RPG 8.6



Tube Squaring Machines

- Squaring tube ends with a high-quality finish
- Burr-free and square
- Beveling possible with a special tool holder (only with the RPG 4.5 and RPG 8.6)
- Quick clamping system for tools, clamping shells and tubes
- Preparation of thin-walled stainless steel tubes (V4A)
- High-performance coated tool bit with two cutting edges
- Built-in electronic speed regulation
- Micrometer feed for optimum results
- No additional tools required for operation
- Space saving, light weight and portable machine for a mobile and secure application

Additional advantages with the RPG 4.5 S:

- Integrated clamping jaws made from coated cast aluminum for different tube diameters
- Cost-effective as no dimension-specific clamping shells required
- Multi-point clamping of the tube

RPG 4.5, RPG 4.5 S, RPG 8.6

Designed for burr-free squaring of thin-walled stainless steel tubes.

Clean and secure working area with a clear view of the cutting head.

Machine with rotating/removable bench stand.

Machine comes with:

- 1 Tube Squaring Machine RPG 4.5, RPG 4.5 S or RPG 8.6
- 1 Durable storage and shipping case
- 1 Tool holder (Code 790 038 320) with multifunctional tool (Code 790 038 314)
- 1 Tool set
- 1 Set of operating instructions and spare parts list

Application range		RPG 4.5	RPG 4.5 (S)	RPG 8.6
Tube OD	[mm]	12.7 - 114.3	12.7 - 114.3	50.8 - 219.1
	[inch]	0.5 - 4.5	0.5 - 4.5	2 - 8.6
Wall thickness max.	[mm]	3.0	3.0	3.6
	[inch]	0.118	0.118	0.142
Tube materials		High-alloy steels, unalloyed and low-alloy steels and aluminum. Others on request.		
Technical data		Electric drive with single-phase AC motor		
Dimensions (including motor)	[mm]	460 x 260 x 230	610 x 380 x 270	500 x 350 x 350
	[inch]	18.1 x 10.2 x 9.1	24 x 15 x 10.6	19.7 x 13.8 x 13.8
Power	[W]	1100	1100	1100
Protection class	[class]	II	II	II
Built-in electronic variable cutting speed	[min ⁻¹]	8 - 52	8 - 52	7 - 18
Vibration level according to EN 60745	[m/s ²]	< 2.5	< 2.5	< 2.5
Noise level at the workplace (EN 23741)	[dB (A)]	Idle running	Idle running	Idle running
		approx. 83	approx. 83	approx. 83

Article	Version	Code		Weight of machine kg	Dispatch weight kg
RPG 4.5	230 V, 50/60 Hz EU	790 038 001		10.500	19.400
RPG 4.5	110 V, 50/60 Hz EU	790 038 003		10.500	19.400
RPG 4.5	120 V, 50/60 Hz US	790 038 002		10.500	19.400
RPG 4.5 S	230 V, 50/60 Hz EU	790 038 011		23.000	34.000
RPG 4.5 S	120 V, 50/60 Hz US	790 038 012		23.000	34.000
RPG 8.6	230 V, 50/60 Hz EU	790 039 001		20.500	32.000
RPG 8.6	110 V, 50/60 Hz EU	790 039 003		20.500	32.000
RPG 8.6	120 V, 50/60 Hz US	790 039 002		20.500	32.000



RPG 4.5

NEW



RPG 4.5 S



RPG 8.6

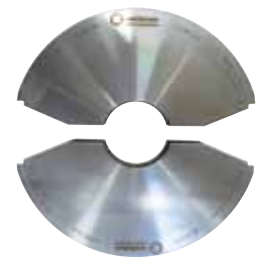
Accessories for RPG 4.5, RPG 8.6

Please check the outer diameter of the tubes before ordering the clamping shells.

Clamping shells

Extremely durable. The two-piece-design with click mechanism ensures accurate centering and quick clamping shell change without any tools. Further dimensions of clamping shells are available.

Applicable with	Version	Tube OD [mm]	Tube OD [inch]	Code	kg
RPG 4.5	Stainless steel	12.00	0.472	790 038 454	2.170
RPG 4.5	Stainless steel	12.70	0.500	790 038 438	2.177
RPG 4.5	Stainless steel	13.00	0.512	790 038 439	2.176
RPG 4.5	Stainless steel	13.50	0.531	790 038 440	2.175
RPG 4.5	Stainless steel	14.00	0.551	790 038 441	2.174
RPG 4.5	Stainless steel	16.00	0.630	790 038 442	2.168
RPG 4.5	Stainless steel	17.20	0.677	790 038 443	2.164
RPG 4.5	Stainless steel	18.00	0.709	790 038 444	2.161
RPG 4.5	Stainless steel	19.00	0.748	790 038 445	2.150
RPG 4.5	Stainless steel	19.05	0.750	790 038 446	2.157
RPG 4.5	Stainless steel	20.00	0.787	790 038 447	2.153
RPG 4.5	Stainless steel	21.30	0.839	790 038 448	2.100
RPG 4.5	Stainless steel	22.00	0.866	790 038 449	2.144
RPG 4.5	Stainless steel	22.22	0.875	790 038 050	2.195
RPG 4.5	Stainless steel	23.00	0.906	790 038 450	2.140
RPG 4.5	Stainless steel	24.00	0.945	790 038 451	2.133
RPG 4.5	Stainless steel	25.00	0.984	790 038 452	2.127
RPG 4.5	Stainless steel	25.25	0.994	790 038 049	2.180
RPG 4.5	Stainless steel	25.40	1.000	790 038 051	2.100
RPG 4.5	Stainless steel	26.90	1.059	790 038 400	2.090
RPG 4.5	Stainless steel	27.20	1.071	790 038 468	2.165
RPG 4.5	Stainless steel	28.00	1.102	790 038 401	2.110
RPG 4.5	Stainless steel	29.00	1.142	790 038 402	2.105
RPG 4.5	Stainless steel	30.00	1.181	790 038 403	2.095
RPG 4.5	Stainless steel	31.75	1.250	790 038 052	2.090
RPG 4.5	Stainless steel	31.80	1.252	790 038 404	2.080
RPG 4.5	Stainless steel	32.00	1.260	790 038 455	2.080
RPG 4.5	Stainless steel	33.00	1.299	790 038 465	2.120
RPG 4.5	Stainless steel	33.40	1.315	790 038 405	2.040
RPG 4.5	Stainless steel	33.70	1.327	790 038 406	2.060
RPG 4.5	Stainless steel	34.00	1.339	790 038 407	2.040
RPG 4.5	Stainless steel	35.00	1.378	790 038 408	2.050
RPG 4.5	Stainless steel	36.00	1.417	790 038 409	2.044
RPG 4.5	Stainless steel	38.00	1.496	790 038 410	2.025
RPG 4.5	Stainless steel	38.10	1.500	790 038 053	2.020
RPG 4.5	Stainless steel	40.00	1.575	790 038 411	2.000
RPG 4.5	Stainless steel	41.00	1.614	790 038 412	1.990
RPG 4.5	Stainless steel	42.00	1.654	790 038 413	1.976
RPG 4.5	Stainless steel	42.16	1.660	790 038 414	1.950
RPG 4.5	Stainless steel	42.40	1.669	790 038 415	1.965
RPG 4.5	Stainless steel	42.70	1.681	790 038 416	1.950
RPG 4.5	Stainless steel	44.45	1.750	790 038 417	1.955
RPG 4.5	Stainless steel	44.50	1.752	790 038 418	1.955
RPG 4.5	Stainless steel	45.00	1.772	790 038 419	1.948
RPG 4.5	Stainless steel	48.00	1.890	790 038 464	1.960
RPG 4.5	Stainless steel	48.26	1.900	790 038 420	1.880
RPG 4.5	Stainless steel	48.30	1.902	790 038 421	1.905
RPG 4.5	Stainless steel	48.60	1.913	790 038 422	1.875
RPG 4.5	Stainless steel	50.00	1.969	790 038 456	1.880
RPG 4.5	Stainless steel	50.80	2.000	790 038 054	1.895
RPG 4.5	Stainless steel	51.00	2.008	790 038 423	1.870
RPG 4.5	Stainless steel	52.00	2.047	790 038 424	1.850
RPG 4.5	Stainless steel	53.00	2.087	790 038 425	1.835
RPG 4.5	Stainless steel	54.00	2.126	790 038 426	1.827
RPG 4.5	Stainless steel	57.00	2.244	790 038 457	1.780



Clamping shells for RPG 4.5



Aluminum clamping shells for RPG 8.6



Applicable with	Version	Tube OD [mm]	Tube OD [inch]	Code	kg
RPG 4.5	Stainless steel	60.00	2.362	790 038 469	1.780
RPG 4.5	Stainless steel	60.30	2.375	790 038 427	1.700
RPG 4.5	Stainless steel	60.45	2.380	790 038 428	1.726
RPG 4.5	Stainless steel	60.50	2.382	790 038 429	1.695
RPG 4.5	Stainless steel	63.00	2.480	790 038 461	1.688
RPG 4.5	Stainless steel	63.50	2.500	790 038 055	1.670
RPG 4.5	Stainless steel	65.00	2.559	790 038 463	1.700
RPG 4.5	Stainless steel	70.00	2.756	790 038 430	1.545
RPG 4.5	Stainless steel	73.03	2.875	790 038 453	1.485
RPG 4.5	Stainless steel	73.15	2.880	790 038 431	1.482
RPG 4.5	Stainless steel	75.00	2.953	790 038 462	1.443
RPG 4.5	Stainless steel	76.10	2.996	790 038 432	1.420
RPG 4.5	Stainless steel	76.20	3.000	790 038 056	1.390
RPG 4.5	Stainless steel	76.30	3.004	790 038 433	1.390
RPG 4.5	Stainless steel	80.00	3.150	790 038 466	1.390
RPG 4.5	Stainless steel	85.00	3.346	790 038 434	1.220
RPG 4.5	Stainless steel	85.90	3.382	790 038 435	1.200
RPG 4.5	Stainless steel	88.90	3.500	790 038 057	1.130
RPG 4.5	Stainless steel	89.10	3.508	790 038 436	1.100
RPG 4.5	Stainless steel	90.00	3.543	790 038 467	1.150
RPG 4.5	Stainless steel	101.60	4.000	790 038 058	0.800
RPG 4.5	Stainless steel	104.00	4.094	790 038 437	0.740
RPG 4.5	Stainless steel	108.00	4.252	790 038 458	0.620
RPG 4.5	Stainless steel	114.30	4.500	790 038 059	0.435
RPG 8.6	Aluminum	50.80	2.000	790 039 260	3.800
RPG 8.6	Aluminum	57.00	2.244	790 039 265	4.000
RPG 8.6	Aluminum	76.20	3.000	790 039 261	4.200
RPG 8.6	Aluminum	88.90	3.500	790 039 264	4.000
RPG 8.6	Aluminum	101.60	4.000	790 039 252	3.800
RPG 8.6	Aluminum	108.00	4.252	790 039 266	4.850
RPG 8.6	Aluminum	114.30	4.500	790 039 256	3.500
RPG 8.6	Aluminum	127.05	5.002	790 039 262	3.420
RPG 8.6	Aluminum	133.00	5.236	790 039 267	4.600
RPG 8.6	Aluminum	139.70	5.500	790 039 259	3.100
RPG 8.6	Aluminum	141.30	5.563	790 039 257	2.900
RPG 8.6	Aluminum	152.40	6.000	790 039 253	2.700
RPG 8.6	Aluminum	159.00	6.260	790 039 268	4.200
RPG 8.6	Aluminum	168.30	6.625	790 039 254	2.300
RPG 8.6	Aluminum	193.70	7.626	790 039 269	3.500
RPG 8.6	Aluminum	197.00	7.756	790 039 263	1.530
RPG 8.6	Aluminum	203.20	8.000	790 039 258	3.500
RPG 8.6	Aluminum	219.10	8.625	790 039 255	0.600
RPG 8.6	Stainless steel	101.60	4.000	790 039 287	5.000
RPG 8.6	Stainless steel	114.30	4.500	790 039 280	4.700
RPG 8.6	Stainless steel	141.30	5.563	790 039 281	4.500
RPG 8.6	Stainless steel	152.40	6.000	790 039 283	4.400
RPG 8.6	Stainless steel	168.30	6.625	790 039 284	4.000
RPG 8.6	Stainless steel	203.20	8.000	790 039 286	3.240
RPG 8.6	Stainless steel	219.10	8.625	790 039 285	1.500



Tool holder WH

Fits multifunctional tool 790 038 314. Incl. Torx fixing screw.
Beveling with the RPG 4.5 S is not recommended.

Application range	Possible application		Beveling angle [°]
	Squaring	Beveling	
Tool holder WH15-I	x	–	–
Tool holder WH12-V-45°	–	x	45
Tool holder WH12-V-35°	–	x	35
Tool holder WH12-U-20°	–	x	20

Article	Code	kg
Tool holder WH15-I	790 038 320	0.025
Tool holder WH12-V-45°	790 038 280	0.044
Tool holder WH12-V-35°	790 038 282	0.054
Tool holder WH12-U-20°	790 038 326	0.031



Tool holder WH

Multifunctional tool MFW

Two-sided tool bit with high-performance Balinit® Futura protective coating against tool wear. Usable for all machines of the RPG series.

Article	Quantity	Code	kg
Multifunctional tool MFW-P-2	1	790 038 314	0.003
Multifunctional tool MFW-P-2	10	790 038 315	0.045



Multifunctional tool MFW





Powerful and robust boiler pipe preparation machine!



BRB Pneumatic/Auto with pneumatic clamping, ideal for series processing



The "NC" clamping system never loses grip thanks to clamping wedges firmly anchored in the mandrel



Optimized electric motor – the BRB 2 will also soon be available as an electric model



Holder for balancer allows work to be carried out quickly and effortlessly



Optimum performance with the low weight

Boiler Pipe Preparation Machines BRB

- Handy and compact design
- Precise and reproducible weld preparation
- Fast application with the BRB Pneumatic/Auto by means of pneumatic clamping, ideal for continuous production e.g. boiler and heat exchanger applications
- High performance and lightweight
- High-performance coated tool bits with up to 4 cutting edges
- Quick clamping system for tools with easy adjustment
- Adjustable air outlet
- Easy to change tools
- Tools adaptable on all BRB machines
- Possibility to retrofit to previous BRB models to BRB Pneumatic/Auto and to the new clamping system "NC"
- Up to 3 tools can be used at the same time

Powerful and robust Boiler Prep Machine. Counterboring and axial turning of pipes made from high-alloy steel (stainless steel), low-alloy and carbon steel with the unique tool system QTC®. Designed for pipe end preparations and boiler pipe applications.

The BRB machines are available in the following **drive versions**:

- **Electric:** 230 V, 50/60 Hz EU or 120 V, 50/60 Hz EU/US
Electric drive with single-phase AC motor, protection class II (double insulated), Built-in electronic variable cutting speed
- **Pneumatic:** Pneumatic power drive. Manufacturer's warranty can only be given when using a mobile air unit. We recommend the mobile air unit from Orbitalum Tools, Code 790 093 060 (see page 65).
- **Pneumatic/Auto:** Pneumatic multi-disc motor with additional pneumatic clamping system. Time is of the essence when installing or repairing boiler pipes, the new pneumatic clamping system greatly reduces the time to both clamp and release the machine, improving efficiency. The machine centers itself on the inside diameter of the pipe and then clamps automatically by using the toggle switch, likewise the toggle switch releases the clamping after the machining operation. This is why the BRB with automatic pneumatic clamping is ideal for continuous production e.g. boiler and heat exchanger applications.

Technical data	BRB 2 Electric	BRB 2 Pneumatic	BRB 2 Pneu/Auto	BRB 4 Electric	BRB 4 Pneumatic	BRB 4 Pneu/Auto
Power	0.5 kW	0.38 kW	0.38 kW	1.5 kW	1.0 kW	1.0 kW
Speed	18 - 118 rpm	0 - 120 rpm	0 - 120 rpm	12 - 37 rpm	0 - 110 rpm	0 - 110 rpm
Air supply requirement (at 6 bar)	–	0.7 m ³ /min	0.7 m ³ /min	–	1.0 m ³ /min	1.0 m ³ /min
Noise level LAeq 1 m (EN 23741), approx.	76 dB (A)	82 dB (A)	82 dB (A)	82 dB (A)	84 dB (A)	84 dB (A)
Vibration level (EN 28662, part 1)	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²	2.5 m/s ²

Please choose before ordering the above mentioned BRB drive version one of the following **clamping systems**:

- Standard clamping system (see page 52)
- NC clamping system (see page 54)

All BRB machines come with:

- 1 Boiler Pipe Preparation Machine BRB 2 or BRB 4
- 1 Durable storage and shipping case
- Tool retainer, clamping sets, mandrels, application kits (tables see page 52 and page 54).
- 1 KSS-TOP lubricant spray pump (Code 790 060 226)
- 1 Tool set
- 1 Set of operating instructions and spare parts list



BRB with clamping system “Standard”

BRB 4 with clamping system “NC” see page 54.

A detailed description of the machine, technical specifications and scope of delivery see on page 50. Please specify the required clamping system (“Standard” or “NC”), the application kit (Kit 1 to Kit 5) as well as the drive version (Electric, Pneumatic or Pneumatic/Auto) with your purchase order.

Application range	BRB 2		BRB 4					
	Kit 1	Kit 2	Kit 1	Kit 2	Kit 3	Kit 4	Kit 5	
Pipe ID (Ø)	[mm]	12.75 - 25.5	19.1 - 46.0	19.1 - 33.8	32.0 - 61.7	32.0 - 110.8	19.1 - 61.7	19.1 - 110.8
clamping range)	[inch]	0.502 - 1.004	0.752 - 1.811	0.752 - 1.330	1.260 - 2.429	1.260 - 4.370	0.752 - 2.429	0.752 - 4.362
Tool retainer Ø	[mm]	50.0 / 12.75	50.0 / 16.0	68.0 / 19.0	68.0 / 27.0	120.0 / 27.0	68.0 / 19.0 68.0 / 27.0	68.0 / 19.0 68.0 / 27.0 120.0 / 27.0
	[inch]	1.969 / 0.502	1.969 / 0.630	2.677 / 0.748	2.677 / 1.063	4.724 / 1.063	2.677 / 0.748 2.677 / 1.063	2.677 / 0.748 2.677 / 1.063 4.724 / 1.063
Clamping wedges	[Sets]	6	8	4	3	6	7	10
Mandrel Ø	[mm]	12.75	19.05	19.05	31.5	31.5	19.05 31.5	19.05 31.5
	[inch]	0.502	0.750	0.750	1.240	1.240	0.750 1.240	0.750 1.240
Pipe OD	[mm]	16.75 - 41.5	23.0 - 62.0	64.0	73.0	114.3	73.0	114.3
	[inch]	0.659 - 1.634	0.906 - 2.441	2.51	2.87	4.50	2.87	4.50
Wall thickness*	[mm]	2 - 8	2 - 8	2 - 15	2 - 15	2 - 15	2 - 15	2 - 15
min. - max.	[inch]	0.079 - 0.315	0.079 - 0.315	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590

* depending on pipe material and dimension

Article	Version	Clamping system	Code	Weight of machine kg	Dispatch weight kg
BRB 2 EL, Kit 1	230 V, 50/60 Hz EU	Standard	790 085 011		12.200
BRB 2 EL, Kit 2	230 V, 50/60 Hz EU	Standard	790 085 012		12.000
BRB 2 EL, Kit 1	120 V, 50/60 Hz EU/US	Standard	790 085 021		
BRB 2 EL, Kit 2	120 V, 50/60 Hz EU/US	Standard	790 085 022		
BRB 2 Pneumatic, Kit 1	Pneumatic	Standard	790 085 007		11.900
BRB 2 Pneumatic, Kit 2	Pneumatic	Standard	790 085 008		12.300
BRB 2 Pneu/Auto, Kit 1	Pneumatic/Auto	Standard	790 085 041		13.300
BRB 2 Pneu/Auto, Kit 2	Pneumatic/Auto	Standard	790 085 042		13.500
BRB 4 EL, Kit 1	230 V, 50/60 Hz EU	Standard	790 086 011		15.000
BRB 4 EL, Kit 2	230 V, 50/60 Hz EU	Standard	790 086 012		16.000
BRB 4 EL, Kit 3	230 V, 50/60 Hz EU	Standard	790 086 013		22.800
BRB 4 EL, Kit 4	230 V, 50/60 Hz EU	Standard	790 086 014		18.000
BRB 4 EL, Kit 5	230 V, 50/60 Hz EU	Standard	790 086 015		19.000
BRB 4 EL, Kit 1	120 V, 50/60 Hz EU/US	Standard	790 086 021		15.000
BRB 4 EL, Kit 2	120 V, 50/60 Hz EU/US	Standard	790 086 022		16.000
BRB 4 EL, Kit 3	120 V, 50/60 Hz EU/US	Standard	790 086 023		18.500
BRB 4 EL, Kit 4	120 V, 50/60 Hz EU/US	Standard	790 086 024		18.000
BRB 4 EL, Kit 5	120 V, 50/60 Hz EU/US	Standard	790 086 025		19.000
BRB 4 Pneumatic, Kit 1	Pneumatic	Standard	790 086 001		14.000
BRB 4 Pneumatic, Kit 2	Pneumatic	Standard	790 086 002		15.000
BRB 4 Pneumatic, Kit 3	Pneumatic	Standard	790 086 003		17.000
BRB 4 Pneumatic, Kit 4	Pneumatic	Standard	790 086 004		16.600
BRB 4 Pneumatic, Kit 5	Pneumatic	Standard	790 086 005		23.700
BRB 4 Pneu/Auto, Kit 1	Pneumatic/Auto	Standard	790 086 031		
BRB 4 Pneu/Auto, Kit 2	Pneumatic/Auto	Standard	790 086 032		
BRB 4 Pneu/Auto, Kit 3	Pneumatic/Auto	Standard	790 086 033		
BRB 4 Pneu/Auto, Kit 4	Pneumatic/Auto	Standard	790 086 034		
BRB 4 Pneu/Auto, Kit 5	Pneumatic/Auto	Standard	790 086 035		24.500



BRB 2 and BRB 4 Electric with clamping system “Standard”



BRB 2 and BRB 4 Pneumatic with clamping system “Standard”



BRB 2 and BRB 4 Pneumatic/Auto with clamping system “Standard”

Retrofit kits BRB Standard “Dimension”

To extend the diameter dimension range of BRB machines.

Retrofit kits “Dimension” for BRB machines with clamping system “NC” see page 55.

Retrofit kits “Dimension” for BRB 4 with drive version Pneumatic/Auto on request.



Retrofit kit BRB Standard “Dimension”

No.	for	Version	Code-No.	For retrofitting	Mandrel Ø		Tool retainer Ø		Extension of dimension to			
					Pipe ID		Pipe OD		Pipe ID		Pipe OD	
					[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
01	BRB 2	Auto	790 085 016	Kit 2 to Kit 1	12.75	0.500	50.00	1.968	12.75 - 25.5	0.500 - 1.004	16.75 - 41.5	0.659 - 1.634
02	BRB 2	Pneu/EL	790 085 017	Kit 2 to Kit 1	12.75	0.500	50.00	1.968	12.75 - 25.5	0.500 - 1.004	16.75 - 41.5	0.659 - 1.634
03	BRB 2	Pneu/EL	790 085 018	Kit 1 to Kit 2	19.10	0.750	50.00	1.968	19.10 - 46.0	0.750 - 1.811	23.00 - 50.0	0.910 - 1.960
01	BRB 4	Pneu/EL	790 086 051	Kit 1 to Kit 4 / Kit 1 to Kit 2	31.50	1.240	68.0	2.677	19.1 - 61.7	0.752 - 2.429	68.0	2.677
02	BRB 4	Pneu/EL	790 086 052	Kit 1 to Kit 3	31.50	1.240	120.0	4.724	19.1 - 110.8	0.752 - 4.362	114.3	4.500
03	BRB 4	Pneu/EL	790 086 053	Kit 2 to Kit 1 / Kit 3 to Kit 1	19.05	0.750	68.0	2.677	19.1 - 61.7	0.752 - 2.429	68.0	2.677
04	BRB 4	Pneu/EL	790 086 054	Kit 2 to Kit 3 / Kit 4 to Kit 5	-	-	120.0	4.724	32.0 - 110.8	1.260 - 4.362	114.3	4.500
05	BRB 4	Pneu/EL	790 086 055	Kit 1 to Kit 5	31.50	1.240	68.0	2.677	19.1 - 110.8	0.752 - 4.362	114.3	4.500
06	BRB 4	Pneu/EL	790 086 056	Kit 3 to Kit 2	-	-	68.0	2.677	32.0 - 110.8	1.260 - 4.362	114.3	4.500

Article	Version	Code	kg
Retrofit kit BRB 2 Standard/01 "Dimension"	Kit 2 to Kit 1 (Auto)	790 085 016	1.235
Retrofit kit BRB 2 Standard/02 "Dimension"	Kit 2 to Kit 1	790 085 017	0.800
Retrofit kit BRB 2 Standard/03 "Dimension"	Kit 1 to Kit 2	790 085 018	1.235
Retrofit kit BRB 4 Standard/01 "Dimension"	Kit 1 to Kit 4 / Kit 1 to Kit 2	790 086 051	2.600
Retrofit kit BRB 4 Standard/02 "Dimension"	Kit 1 to Kit 3	790 086 052	3.700
Retrofit kit BRB 4 Standard/03 "Dimension"	Kit 2 to Kit 1 / Kit 3 to Kit 1	790 086 053	1.900
Retrofit kit BRB 4 Standard/04 "Dimension"	Kit 2 to Kit 3 / Kit 4 to Kit 5	790 086 054	1.900
Retrofit kit BRB 4 Standard/05 "Dimension"	Kit 1 to Kit 5	790 086 055	4.200
Retrofit kit BRB 4 Standard/06 "Dimension"	Kit 3 to Kit 2	790 086 056	0.700

Retrofit kits BRB Standard “Pneumatic to Auto”

Retrofitting to pneumatic clamping, ideal for continuous production e.g. boiler and heat exchanger applications. Only for pneumatic machine versions. Easy and fast to mount.

The retrofit kit comes with: clamping cylinder complete, spindle complete and feed handle.

BRB retrofit kits for machines with clamping system “NC” see page 55.

Article	Kit	Code	kg
Retrofit kit BRB 2 Standard/01 "Pneumatic to Auto"	Kit 1	790 085 081	-
Retrofit kit BRB 2 Standard/02 "Pneumatic to Auto"	Kit 2	790 085 082	-
Retrofit kit BRB 4 Standard/01 "Pneumatic to Auto"	Kit 1	790 086 081	-
Retrofit kit BRB 4 Standard/02 "Pneumatic to Auto"	Kit 2	790 086 082	-
Retrofit kit BRB 4 Standard/03 "Pneumatic to Auto"	Kit 3	790 086 083	-
Retrofit kit BRB 4 Standard/04 "Pneumatic to Auto"	Kit 4	790 086 084	-
Retrofit kit BRB 4 Standard/05 "Pneumatic to Auto"	Kit 5	790 086 085	-



Retrofit kits BRB “Standard to NC”

Retrofit kits BRB “Standard to NC” for BRB with drive version Pneumatic/Auto on request.

Article	Clamping range Ø		Code		kg
	[mm]	[inch]			
Retrofit kit BRB 2/01 "Standard to NC"	19.1 - 38.0	0.752 - 1.490	790 185 083		–
Retrofit kit BRB 4/01 "Standard to NC"	19.1 - 38.0	0.752 - 1.490	790 186 071		–
Retrofit kit BRB 4/02 "Standard to NC"	35.0 - 64.0	1.378 - 2.520	790 186 072		–
Retrofit kit BRB 4/03 "Standard to NC"	35.0 - 108.0	1.378 - 4.252	790 186 073		–
Retrofit kit BRB 4/04 "Standard to NC"	19.1 - 64.0	0.752 - 2.520	790 186 074		–
Retrofit kit BRB 4/05 "Standard to NC"	19.1 - 108.0	0.752 - 4.252	790 186 075		–

BRB 4 with clamping system “NC”

BRB with clamping system “Standard” see page 52.

The wedges of the new clamping system “NC” are fixed to the mandrel – the ideal solution for applications where foreign particles should not access into the pipe or boiler pipe. Especially when working vertically the “NC” clamping system ensures additional safety.

A detailed description of the machine, technical specifications and scope of delivery see on page 51. Please specify the required clamping system (“Standard” or “NC”), the application kit (Kit 1 to Kit 5) as well as the drive version (Electric, Pneumatic or Pneumatic/Auto) with your purchase order.



BRB 2 and BRB 4 Electric with clamping system “NC”



BRB 2 and BRB 4 Pneumatic with clamping system “NC”



BRB 2 and BRB 4 Pneumatic/Auto with clamping system “NC”

Application rangee		BRB 2		BRB 4				
		Kit 2	Kit 1	Kit 2	Kit 3	Kit 4	Kit 5	
Pipe ID (Ø)	[mm]	19.1 - 38.0	19.1 - 38.0	35.0 - 64.0	35.0 - 108.0	19.1 - 64.0	19.1 - 108.0	
clamping range)	[inch]	0.752 - 1.490	0.752 - 1.490	1.378 - 2.520	1.378 - 4.252	0.752 - 2.520	0.752 - 4.252	
Tool retainer Ø	[mm]	50.0 / 16.0	68.0 / 19.0	68.0 / 27.0	120.0 / 27.0	68.0 / 19.0	68.0 / 19.0	
	[inch]	1.969 - 0.630	2.677 / 0.748	2.677 / 1.063	4.724 / 1.063	2.677 / 0.748	2.677 / 0.748	
Clamping wedges	[Sets]	6	6	7	18 (8+10)	13	24 (14+10)	
	Mandrel Ø	[mm]	19.05	19.05	34.5	34.5	19.05	19.05
Pipe OD	[mm]	23.0 - 62.0	64.0	73.0	114.3	73.0	114.3	
	[inch]	0.906 - 2.441	2.51	2.87	4.50	2.87	4.50	
Wall thickness*	[mm]	2 - 8	2 - 15	2 - 15	2 - 15	2 - 15	2 - 15	
	[inch]	0.079 - 0.315	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590	0.079 - 0.590	

* depending on pipe material and dimension

Article	Version	Clamping system	Code	Weight of machine kg	Dispatch weight kg
BRB 2 EL, Kit 2	230 V, 50/60 Hz EU	NC	790 185 012		13.000
BRB 2 EL, Kit 2	120 V, 50/60 Hz EU/US	NC	790 185 022		13.000
BRB 2 Pneumatic, Kit 2	Pneumatic	NC	790 185 002		12.500
BRB 2 Pneu/Auto, Kit 2	Pneumatic/Auto	NC	790 185 042		13.800
BRB 4 EL, Kit 1	230 V, 50/60 Hz EU	NC	790 186 011		
BRB 4 EL, Kit 2	230 V, 50/60 Hz EU	NC	790 186 012		
BRB 4 EL, Kit 3	230 V, 50/60 Hz EU	NC	790 186 013		23.300
BRB 4 EL, Kit 4	230 V, 50/60 Hz EU	NC	790 186 014		25.200
BRB 4 EL, Kit 5	230 V, 50/60 Hz EU	NC	790 186 015		26.400
BRB 4 EL, Kit 1	120 V, 50/60 Hz EU/US	NC	790 186 021		
BRB 4 EL, Kit 2	120 V, 50/60 Hz EU/US	NC	790 186 022		
BRB 4 EL, Kit 3	120 V, 50/60 Hz EU/US	NC	790 186 023		
BRB 4 EL, Kit 4	120 V, 50/60 Hz EU/US	NC	790 186 024		
BRB 4 EL, Kit 5	120 V, 50/60 Hz EU/US	NC	790 186 025		26.000
BRB 4 Pneumatic, Kit 1	Pneumatic	NC	790 186 001		19.500
BRB 4 Pneumatic, Kit 2	Pneumatic	NC	790 186 002		
BRB 4 Pneumatic, Kit 3	Pneumatic	NC	790 186 003		22.200
BRB 4 Pneumatic, Kit 4	Pneumatic	NC	790 186 004		
BRB 4 Pneumatic, Kit 5	Pneumatic	NC	790 186 005		25.500
BRB 4 Pneu/Auto, Kit 1	Pneumatic/Auto	NC	790 186 031		
BRB 4 Pneu/Auto, Kit 2	Pneumatic/Auto	NC	790 186 032		
BRB 4 Pneu/Auto, Kit 3	Pneumatic/Auto	NC	790 186 033		23.400
BRB 4 Pneu/Auto, Kit 4	Pneumatic/Auto	NC	790 186 034		
BRB 4 Pneu/Auto, Kit 5	Pneumatic/Auto	NC	790 186 035		26.000



Retrofit kits BRB 4 NC “Dimension”

To extend the diameter dimension range of BRB 4 machines.

Retrofit kits “Dimension” for BRB 4 machines with clamping system “Standard” see page 53. Retrofit kits “Dimension” for BRB with drive version Pneumatic/Auto on request.

No.	Code-No.	For retrofitting	Mandrel Ø		Tool retainer Ø		Extension of dimension to			
							Pipe ID		Pipe OD	
			[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
10	790 186 051	Kit 1 to Kit 4 / Kit 1 to Kit 2	34.50	1.358	68.0	2.677	19.1 - 64.0	0.752 - 2.520	68.0	2.677
11	790 186 052	Kit 1 to Kit 3	34.50	1.358	120.0	4.724	19.1 - 108.0	0.752 - 4.252	114.3	4.500
12	790 186 053	Kit 2 to Kit 1 / Kit 3 to Kit 1	19.05	0.750	68.0	2.677	19.1 - 64.0	0.752 - 2.520	68.0	2.677
13	790 186 054	Kit 2 to Kit 3 / Kit 4 to Kit 5	-	-	120.0	4.724	35.0 - 108.0	1.378 - 4.252	114.3	4.500
14	790 186 055	Kit 1 to Kit 5	34.50	1.358	68.0	2.677 120.0 4.724	19.1 - 108.0	0.752 - 4.252	114.3	4.500
15	790 186 056	Kit 3 to Kit 2	-	-	68.0	2.677	35.0 - 108.0	1.378 - 4.252	114.3	4.500

Article	Version	Code	kg
Retrofit kit BRB 4 NC/10 "Dimension"	Kit 1 to Kit 4 / Kit 1 to Kit 2	790 186 051	-
Retrofit kit BRB 4 NC/11 "Dimension"	Kit 1 to Kit 3	790 186 052	-
Retrofit kit BRB 4 NC/12 "Dimension"	Kit 2 to Kit 1 / Kit 3 to Kit 1	790 186 053	-
Retrofit kit BRB 4 NC/13 "Dimension"	Kit 2 to Kit 3 / Kit 4 to Kit 5	790 186 054	-
Retrofit kit BRB 4 NC/14 "Dimension"	Kit 1 to Kit 5	790 186 055	-
Retrofit kit BRB 4 NC/15 "Dimension"	Kit 3 to Kit 2	790 186 056	-

Retrofit kits BRB NC “Pneumatic to Auto”

Retrofitting to pneumatic clamping, ideal for continuous production e.g. boiler and heat exchanger applications. Only for pneumatic machine versions. Easy and fast to mount.

The retrofit kit comes with: clamping cylinder complete, spindle complete and feed handle. BRB retrofit kits for machines with clamping system “Standard” see page 53.

Article	Kit	Code	kg
Retrofit kit BRB 2 NC/03 "Pneumatic to Auto"	Kit 2	790 185 082	-
Retrofit kit BRB 4 NC/10 "Pneumatic to Auto"	Kit 1	790 186 081	-
Retrofit kit BRB 4 NC/11 "Pneumatic to Auto"	Kit 2	790 186 082	-
Retrofit kit BRB 4 NC/12 "Pneumatic to Auto"	Kit 3	790 186 083	-
Retrofit kit BRB 4 NC/13 "Pneumatic to Auto"	Kit 4	790 186 084	-
Retrofit kit BRB 4 NC/14 "Pneumatic to Auto"	Kit 5	790 186 085	-

Brush attachments

For BRB 4 machines. These new brush attachments made from brass prevent swarf and any other foreign materials entering the pipe, especially when using the machine vertically. The brushes can be mounted quickly and easily to the threaded spindle of the new BRB 4 models. The new threaded spindle can be retrofitted to machines manufactured up to October 2009. The brushes are applicable for both clamping systems (Standard/NC).

1 packaging unit = 5 brushes. Price per packaging unit. Weight per brush attachment.

Further dimensions on request.

Article	Brush adapter			Pipe ID min.-max.		Code	kg
	10	25	33	[mm]	[inch]		
Brush M8/25*	-	-	-	19.1 - 24.3	0.752 - 0.957	790 086 520	-
Brush M8/28*	-	-	-	22.1 - 27.3	0.870 - 1.075	790 086 521	-
Brush M8/31*	-	-	-	25.5 - 30.8	1.004 - 1.213	790 086 522	-
Brush M8/34*	-	-	-	28.5 - 33.8	1.122 - 1.331	790 086 523	-
Brush adapter 10	x	-	-	-	-	790 086 497	-
Brush 10/43	x	-	-	32.0 - 42.1	1.260 - 1.657	790 086 524	-
Brush 10/53	x	-	-	40.9 - 52.0	1.610 - 2.047	790 086 525	-
Brush adapter 25	-	x	-	-	-	790 086 498	-
Brush 25/62,5	-	x	-	50.7 - 61.7	1.996 - 2.429	790 086 526	-
Brush 25/71	-	x	-	59.4 - 70.4	2.339 - 2.772	790 086 527	-
Brush 25/81	-	x	-	69.2 - 80.2	2.724 - 3.157	790 086 528	-
Brush adapter 33	-	-	x	-	-	790 086 499	-
Brush 33/91	-	-	x	79.6 - 90.5	3.134 - 3.563	790 086 529	-
Brush 33/101	-	-	x	89.4 - 100.4	3.520 - 3.953	790 086 530	-
Brush 33/112	-	-	x	99.6 - 110.8	3.921 - 4.362	790 086 531	-

* Comes with the suitable adapter.

** When ordering, please indicate the inside diameter of the pipe to be worked on. The brush comes with a suitable adapter.



Brush attachment

Initial equipment kit of brushes for BRB 4

Including all above listed adapters and brushes (1 brush of each dimension).

Article	Brush adapter			Pipe ID min.-max.		Code	kg
	10	25	33	[mm]	[inch]		
Initial equipment kit of brushes for BRB 4	x	x	x	19.1 - 110.8	0.752 - 4.362	790 086 535	-

Machines manufactured up to October 2009 can be used with brushes by upgrading with one of the following threaded spindles:

Article	Code	kg
Threaded spindle for mandrel 19.05 / BRB 4	790 086 190	0.136
Threaded spindle for mandrel 31.50 / BRB 4	790 086 160	0.100



Hoist bracket

Hoist bracket

Designed for use with a hoist.

BRB machines which have been manufactured up to October 2009 can be retrofitted with this hoist bracket; all new models are already equipped with the hoist bracket.

Article	Code	kg
Hoist bracket for BRB 4	790 086 310	0.270
Hoist bracket for BRB 2	790 085 310	0.185



Bevel cutter head for BRB 2

Bevel cutter head for BRB 2 (V-/Y-prep)

Optimized work, smoother and steadier cutting. Including adjustable tool holder.

The bevel cutter heads can be replaced like a tool mounting plate. They are available for several prep angles. The bevel cutter heads can be adapted to all machines (even older models).

Comes with:

- 3 multifunctional tools (MFW-12-V/I-2, Code 790 086 060)
- 1 multifunctional tool (MFW5-U/I-2, Code 790 085 030)
- 4 Torx screws
- 3 fastening screws M5x16

Article	Application range				Code	kg
	Kit 1 (ID min. – OD max.)		Kit 2 (ID min. – OD max.)			
	[mm]	[inch]	[mm]	[inch]		
Bevel cutter head 30°	14.5 - 48.0	0.570 - 1.890	–	–	790 085 380	–
Bevel cutter head 37.5°	14.5 - 48.0	0.570 - 1.890	–	–	790 085 381	–
Bevel cutter head 45°	14.5 - 48.0	0.570 - 1.890	–	–	790 085 382	–



Bevel cutter head for BRB 4

Bevel cutter head for BRB 4 (V-prep)

The bevel cutter heads with 3 cutting edges provide considerable advantages for heavy chip removal, e.g. for welded material. The bevel cutter heads can be replaced like a tool mounting plate. They are available for various prep angles and can be adapted to all machines (even older models).

Comes with:

- 3 multifunctional tools: MFW-12-V/I-2, Code 790 086 060
MFW-P-2, Code 790 038 314 on request
- 3 Torx screws
- 3 fastening screws M6x16

Article	Application range	Pipe wall thickness max.		Code	kg
		[mm]	[inch]		
		Bevel cutter head 30°	ID 36 mm to OD 78 mm (1.417 - 3.071 inch) in 3 steps of 5 mm (0.197 inch) distance		
Bevel cutter head 45°	ID 45 mm to OD 73 mm (1.772 - 2.874 inch) in 2 steps of 5 mm (0.197 inch) distance	10	0.394	790 086 459	0.515

Adjustable spacer

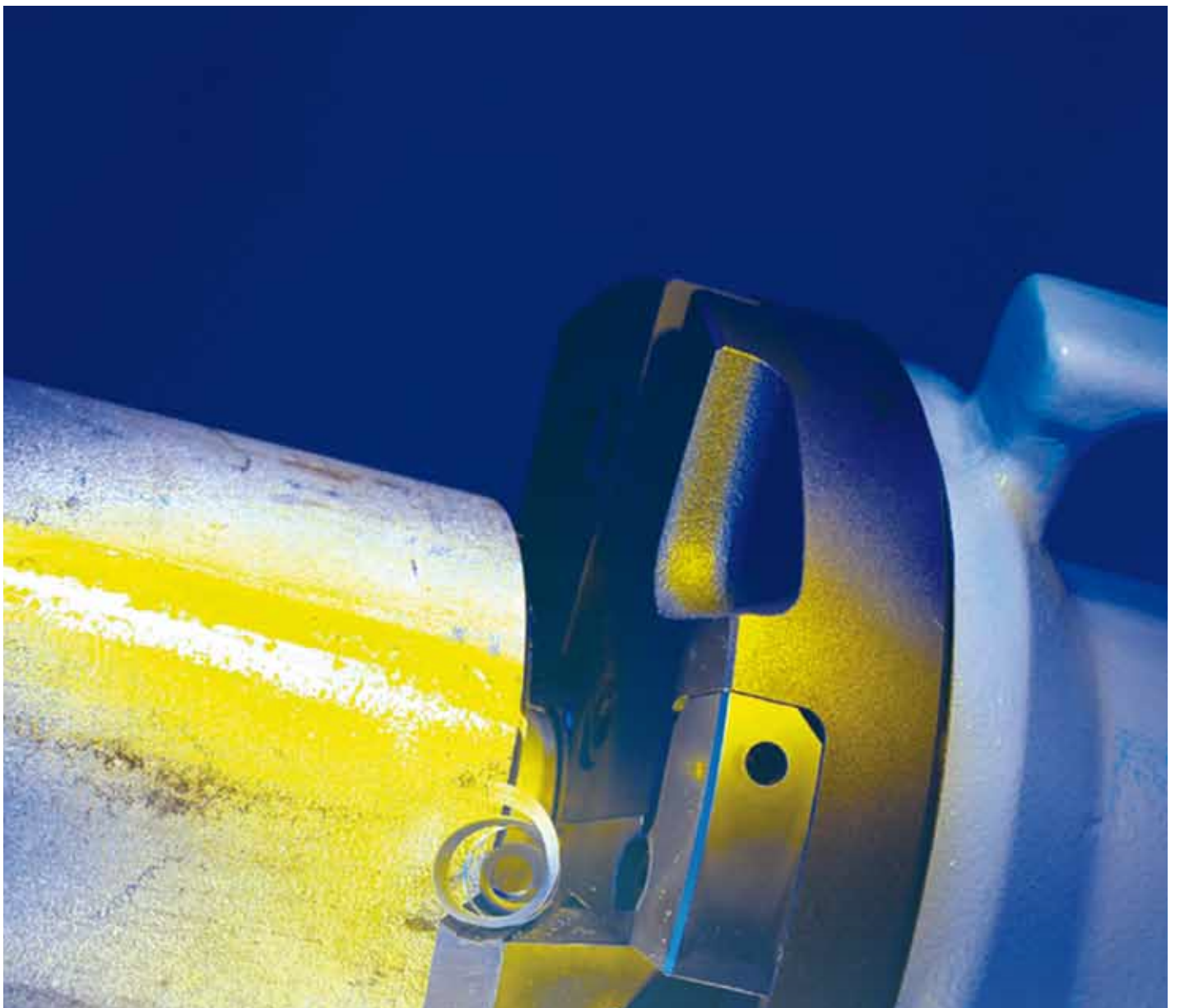
For BRB machines. The adjustable spacer ensures a constant and repeatable depth machining of boiler pipes, etc.

Article	Code		kg
Adjustable spacer for BRB 4	790 086 045		1.285
Adjustable spacer for BRB 2	790 085 055		-



Adjustable spacer





The powerful pipe end preparation solution!



Quick-Tool-Change QTC®



Fast adjustment of the pipe dimension



Portable with an integral carrying handle



Sturdy construction



Compact design for precise and reproducible weld prep profiles

Pipe End Preparation Machines

- Compact design for precise and reproducible weld prep profiles
- Quick-Tool-Change QTC®
- Square and burr-free
- High-performance coated tool bit with two or four cutting edges
- Sturdy construction
- Tools adaptable on all REB machines
- Optimized performance and ergonomic drive system
- Portable with an integral carrying handle

REB 6, REB 14, REB 20

The powerful pipe end preparation solution. Counterboring and axial turning of pipes made from high-alloy steel (stainless steel), low-alloy and carbon steel with the unique tool system QTC®. Up to 4 tools can be used at the same time.

Machine comes with:

- 1 Pipe End Preparation Machine REB 6, REB 14 or REB 20
- 1 Transportation case
- 1 Clamping chuck (REB 6 and REB 14) or 2 clamping chucks (REB 20)
- 5 Clamping sets, each with 3 clamping wedges (REB 6) or
- 6 Clamping sets, each with 3 clamping wedges (REB 14 and REB 20)
- 1 Tool set
- 1 KSS-TOP lubricant spray pump (Code 790 060 226)
- 1 Set of operating instructions and spare parts list

Manufacturer's warranty can only be given when using a mobile air unit. We recommend the mobile air unit from Orbitalum Tools, Code 790 093 060 (see page 65).



REB 6 Electric



REB 14 Pneumatic



REB 20 Pneumatic

Application range*	REB 6 Pneumatic	REB 6 Electric	REB 14 Pneumatic	REB 14 Electric	REB 20 Pneumatic
Pipe ID	49 - 159 mm 1.93 - 6.26 inch	49 - 159 mm 1.93 - 6.26 inch	92 - 320 mm 3.62 - 12.60 inch	92 - 320 mm 3.62 - 12.60 inch	282 - 500 mm 11.10 - 19.69 inch
Wall thickness	3 - 22 mm 0.12 - 0.87 inch	3 - 22 mm 0.12 - 0.87 inch	4 - 30 mm 0.16 - 1.18 inch	4 - 22 mm 0.16 - 0.87 inch	4 - 10 mm 0.16 - 0.39 inch
Pipe OD	56 - 168 mm 2.20 - 6.61 inch	56 - 168 mm 2.20 - 6.61 inch	100 - 355.6 mm 3.94 - 14.00 inch	100 - 355.6 mm 3.94 - 14.00 inch	290 - 508 mm 11.42 - 20 inch
Pipe materials	Unalloyed and low-alloyed steels, high-alloyed steels (stainless steel), aluminum				
Technical data					
Dimensions	560 x 260 x 400 mm 22 x 10.2 x 15.8 inch	640 x 260 x 420 mm 25.2 x 10.2 x 16.5 inch	625 x 375 x 490 mm 24.6 x 14.8 x 19.3 inch	700 x 375 x 510 mm 27.6 x 14.8 x 20 inch	700 x 510 x 570 mm 27.6 x 20 x 22.4 inch
Power	1.8 kW	1.2 kW	1.8 kW	1.2 kW	1.8 kW
Air consumption (at 6 bar)	2.0 m ³ /min	-	2.0 m ³ /min	-	2.0 m ³ /min
Speed	0 - 26 min ⁻¹	10 - 32 min ⁻¹	0 - 13 min ⁻¹	5 - 16 min ⁻¹	0 - 13 min ⁻¹
Vibration level according to EN 28662, Part 1	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²
Noise level in the workplace	at idle-speed: approx. 75 dB (A) (average speed range); under load: approx. 77 dB (A)				

* It is possible to extend the dimensions by using the optional clamping wedges (accessories).

Article	Version	Code	Weight of machine kg	Dispatch weight kg
REB 6	Pneumatic	790 093 001	32.000	52.000
REB 6	230 V, 50/60 Hz EU	790 093 002	35.000	55.000
REB 6	120 V, 50/60 Hz US	790 093 005	35.000	55.000



Article	Version	Code		Weight of machine kg	Dispatch weight kg
REB 14	Pneumatic	790 094 001		61.000	90.000
REB 14	230 V, 50/60 Hz EU	790 094 002		64.000	93.000
REB 14	120 V, 50/60 Hz US	790 094 005		64.000	93.000
REB 20	Pneumatic	790 094 010		88.000	135.000

Accessories for BRB- and REB machines

Description of the tools made by Orbitalum Tools:

Multifunctional tool MFW for working on the pipe OD:

MFW 30-V / I-4-R5

Prep radius in mm	R5
Number of cutting edges	4
Weld prep profiles	V and I
max. workable wall thickness	30 mm

Multifunctional tool MFW for working on the pipe ID:

MFW 10-ID-2-R0,8

Prep radius in mm	R0.8
Number of cutting edges	2
for working on the inner diameter	ID
max. length on the counterbore / bevel	10 mm

Tool holder WH for beveling:

WH 30-V-30°

Prep angle	30°
Weld prep profile	V
max. workable wall thickness	30 mm

Tool holder WH for facing:

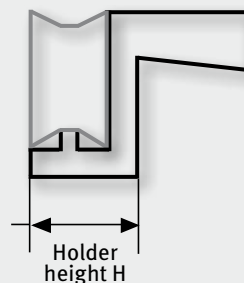
WH 30-I-H27

Holder height in mm	H27
Weld prep profile	I
max. workable wall thickness	30 mm

Tool holder WH for counterboring ID:

WH 10-ID-14°

Counterbore angle	14°
for working on the inner diameter	ID
max. length on the counterbore / bevel	10 mm



The different weld prep profiles:



Facing
I-prep



Plain beveling
V-prep



Beveling, facing
Y-prep



J-prepping
U-prep



Counterboring
ID-prep



Tool holder WH

With Torx screw. Combination possibilities of tool holder and multifunctional tools, see page 69.

Article	Weld prep profile	Applicable with	Height [mm]	Height [inch]	Code	kg
WH5-I	I	BRB 2 / REB	10	0.394	790 085 230	0.005
WH4-I*	I	BRB 2	10	0.394	790 085 234	0.033
WH12-I	I	BRB 4	20	0.787	790 086 210	0.035
WH15-I	I	BRB 4 / REB	20	0.787	790 092 202	0.100
WH15-I	I	BRB 4 / REB	27	1.063	790 092 204	0.100
WH15-I**	I	BRB 4 / REB	16.5 - 23	0.650 - 0.906	790 093 410	0.247
WH30-I	I	REB	20	0.787	790 093 202	0.166
WH30-I	I	REB	27	1.063	790 093 204	0.235
WH5-V-30°	V/Y	BRB 2	-	-	790 085 236	0.015
WH12-V-30°	V/Y	BRB 4	-	-	790 086 214	0.040
WH12-V-37,5°	V/Y	BRB 4	-	-	790 086 216	0.115
WH12-V-45°	V/Y	BRB 4	-	-	790 086 474	0.054
WH12-V-80°	V/Y	BRB 4 / REB	-	-	790 093 462	0.048
WH12-V-35°	V/Y	BRB 4	-	-	790 086 272	0.100
WH15-V-30°	V/Y	BRB 4 / REB	-	-	790 092 210	0.100
WH15-V-37,5°	V/Y	BRB 4 / REB	-	-	790 092 216	0.100
WH15-V-45°	V/Y	BRB 4 / REB	-	-	790 092 218	0.144
WH15-V-60°	V/Y	BRB 4 / REB	-	-	790 092 212	0.100
WH30-V-15°	V/Y	REB	-	-	790 093 468	0.200
WH30-V-25°	V/Y	REB	-	-	790 093 476	0.206
WH30-V-30°	V/Y	REB	-	-	790 093 210	0.192
WH30-V-32,5°	V/Y	REB	-	-	790 093 424	0.234
WH30-V-37,5°	V/Y	REB	-	-	790 093 216	0.199
WH30-V-40°	V/Y	REB	-	-	790 093 510	0.237
WH30-V-45°	V/Y	REB	-	-	790 093 404	0.204
WH5-U-20°	U	BRB 2	-	-	790 085 228	0.014
WH12-U-10°	U	BRB 4	-	-	790 086 208	0.044
WH12-U-15°	U	BRB 4 / REB	-	-	790 086 213	0.044
WH12-U-20°	U	BRB 4	-	-	790 086 224	0.047
WH12-U-20° / large clamping surface	U	BRB 4 / REB	-	-	790 086 476	0.091
WH12-U-25°	U	BRB 4	-	-	790 086 212	0.051
WH30-U-5°	U	REB	-	-	790 093 509	0.210
WH30-U-7°	U	BRB 4 / REB	-	-	790 093 408	0.206
WH30-U-10°	U	BRB 4 / REB	-	-	790 093 220	0.174
WH30-U-14°	U	REB	-	-	790 093 474	0.174
WH30-U-20°	U	BRB 4 / REB	-	-	790 093 218	0.184
WH30-U-25°	U	REB	-	-	790 093 478	0.165
WH5-ID-14° / 10 mm (0.394") deep	ID	BRB 2	-	-	790 085 232	0.017
WH5-ID-14°	ID	BRB 4 / REB	-	-	790 093 406	0.139
WH5-ID-45°	ID	BRB 4	-	-	790 086 218	0.160
WH10-ID-5° / short	ID	BRB 4 / REB	-	-	790 093 398	0.135
WH10-ID-5° / long	ID	BRB 4 / REB	-	-	790 093 400	0.152
WH10-ID-14°	ID	BRB 4 / REB	-	-	790 093 402	0.170
WH10-ID-14° / 30 mm (1.181") deep	ID	BRB 4 / REB	-	-	790 093 466	0.155
WH12-ID-10° / from ID 50 (1.969")	ID	BRB 4 / REB	-	-	790 086 280	0.060
WH10-ID-30°	ID	BRB 4 / REB	-	-	790 093 493	0.042
WH10-ID-45°	ID	REB	-	-	790 093 494	0.107
WH10-ID-80°***	ID	BRB 2 / BRB 4	-	-	790 086 275	0.075
WH5-ID-45°***	ID	BRB 2 / BRB 4 / REB	-	-	790 086 218	0.155



WH12-I



WH15-I**



WH15-V-30°



WH12-U-15°



WH5-ID-14°

* Special tool holder for facing pipes in pipe plates.

** Adjustable tool holder WH for I-prep. Comes with adjustable tool holder, multifunctional tool MFW15-V/I-4 (Code 790 093 037), Torx screws and adjusting plates.

*** Special tool holder WH for cutting tubes from tube sheets.

Multifunctional tool MFW “Economy”

Two- or four-sided tool bits without coating.

For low-alloy steel, carbon steel, aluminum and cast iron pipes.

Article	Version	For wall thickness		Applicable with tool holder / for weld prep profile	Applicable with	Code		kg
		[mm]	[inch]					
MFW15-V/I-4	Economy	2 - 15	0.079 - 0.591	V, Y, I	BRB 4 / REB	790 093 047		0.033
MFW30-V/I-4	Economy	2 - 30	0.079 - 1.181	V, Y, I	REB	790 093 043		0.055

Multifunctional tool MFW “High-Performance”

Two- and/or four-sided tool bits with high-performance protective coating against tool wear.

For high-alloy steel (stainless steel) low-alloy steel, carbon steel, aluminum and cast iron pipes.

Article	Version	For wall thickness		Applicable with tool holder / for weld prep profile	Applicable with	Code		kg
		[mm]	[inch]					
MFW5-V / I-2	High-Performance	max. 6	max. 0.236	WH5-I and WH5-U-20°	BRB 2	790 085 030		0.155
MFW30-V / I-4	High-Performance	2 - 30	0.079 - 1.181	V, Y, I	REB	790 093 033		0.055
MFW30-U-4-R5	High-Performance	2 - 30	0.079 - 1.181	I-, V-, Y-, U radius 5 mm	REB	790 093 034		0.055
MFW30-U-4-R2	High-Performance	2 - 30	0.079 - 1.181	I-, V-, Y-, U radius 2 mm	REB	790 093 035		0.060
MFW30-U-4-R1	High-Performance	2 - 30	0.079 - 1.181	I-, V-, Y-, U radius 1 mm	REB	790 093 036		0.060
MFW30-U-4-R0.4	High-Performance	2 - 30	0.079 - 1.181	I-, V-, Y-, U radius 0,4 mm	REB	790 093 042		0.060
MFW4-I-2	High-Performance	max. 4	max. 0.157	WH4-I-2 (special holder)	BRB 2	790 085 031		0.002
MFW15-V / I-4	High-Performance	2 - 15	0.079 - 0.591	V, Y, I	BRB 4 / REB	790 093 037		0.055
MFW12-V / I-2	High-Performance	2 - 12	0.079 - 0.472	V, Y, I, U radius 1.2	BRB 4	790 086 060		0.025
MFW12-U-2-R2	High-Performance	2 - 12	0.079 - 0.472	V, Y, I, U radius 2.0	BRB 4	790 086 064		0.025
MFW5-ID-2-R0.4 (14°)	High-Performance	-	-	WH5-ID-14° radius 0.4	BRB 4 / REB	790 093 039		0.003
MFW5-ID-2-R0.4 (45°)	High-Performance	-	-	WH5-ID-45° radius 0.4	BRB 4 / REB	790 086 061		0.002
MFW10-ID-2-R0.4 (80°)	High-Performance	-	-	WH10-ID-80° radius 0.4	BRB 4	790 086 062		0.002
MFW10-ID-2-R0.8 (14°)	High-Performance	-	-	WH10-ID-14° radius 0.8 mm	REB	790 093 038		0.002
MFW10-ID-2-R3.0 (14°)	High-Performance	-	-	WH10-ID-14° radius 3.0 mm	REB	790 093 041		0.004



MFW15-V/I-4 "Economy"



MFW30-U-4-R1



MFW15-V/I-4



MFW5-ID-2-R0.4 (14°)



Mobile air unit DWE 10



Air hose with quick coupling



Cutting lubrication KSS-TOP



Elbow clamping system

Mobile air unit DWE 10

Lubricator and air filter adjustable pressure range 0 - 10 bar.

Flow max. 2.6 m³/min (91.8 cfm). Air inlet side: 1/2" clutch coupling (DIN 3481).

Air outlet side: 1/2" quick coupling. Suitable for air hose 790 093 061.

Article	Code	kg
Mobile air unit DWE 10	790 093 060	4.200

Air hose with quick coupling

To connect the REB or BRB machine with the mobile air unit DWE 10.

Length: 4 m (157.5 inch). ID: 19.1 mm (0.752 inch). Air inlet side: 1/2" quick coupling.

Air outlet side: 90° angle screw with 1/2" quick coupling and a nipple to screw into the speed regulation handle on REB or BRB.

Article	Code	kg
Air hose with quick coupling	790 093 061	2.000

Cutting lubrication KSS-TOP

The water soluble, fully synthetic cooling fluid extends the tool life of the tool bits.

Contains no hazardous substances (no labeling requirements according to GefStoffV1) and is well corrosion resistant. Developed conforming to drinking water requirements according to DVGW work sheet W521 (thread cutting compounds for drinking water installations) and basically complies with these specifications. Is biologically degradable (OECD 302 B).

Article	Version	Code	kg
Cutting lubrication KSS-TOP	Pump sprayer with 500 ml	790 060 226	0.630
Cutting lubrication KSS-TOP refill canister	Canister with 10 l	790 060 227	11.000

Elbow clamping system

For preparing elbows with the REB 6 with an ID of 75 - 157 mm (2.95 - 6.18 inch).

Comes with:

- 1 Durable storage and shipping case
- 1 Mandrel with clamping mechanism for elbows
- 1 Straightening tool
- 8 Sets with 3 pins for dimension range 75 - 157 mm (2.95 - 6.18 inch).

Article	Code	kg
Elbow clamping system for REB 6 complete	790 093 015	9.900

Optional clamping wedges

To extend the dimension of the REB standard machines.



Clamping wedges optional

Article	Applicable with	Pipe ID [mm]	Pipe ID [inch]	Code		kg
Clamping wedges	REB 6	155 - 166	6.102 - 6.535	790 093 295		1.300
Clamping wedges	REB 14	320 - 339	12.598 - 13.346	790 094 189		3.600
Clamping wedges	REB 14	331 - 350	13.031 - 13.780	790 094 190		3.850

Plastic (POM) clamping shell segments

Customized plastic (POM) clamping shell segments for REB 6, REB 14 and REB 20 for thin-walled pipes. Deformation-free clamping system.

These clamping shell segments are especially manufactured for an individual ID of a pipe and can be utilized only for this diameter. Please specify the exact pipe ID with your order.

Comes with:

- 6 Cylinder head screws
- 3 Clamping shells
- 3 Plastic (POM) clamping shell segments

Other dimensions on request.



Plastic (POM) clamping shell segments

Article	Applicable with	Pipe ID [mm]	Pipe ID [inch]	Code		kg
Plastic clamping shell segment	REB 6	108.2 - 110.1	4.260 - 4.335	790 093 297		1.600
Plastic clamping shell segment	REB 6	147.0 - 149.0	5.787 - 5.866	790 093 298		1.905
Plastic clamping shell segment	REB 14	160.0	6.299	790 094 203		3.700
Plastic clamping shell segment	REB 14	161.5 - 162.7	6.358 - 6.406	790 094 202		3.800
Plastic clamping shell segment	REB 14	211.6 - 213.5	8.331 - 8.401	790 094 206		5.600
Plastic clamping shell segment	REB 14	227.58	8.960	790 094 198		5.880
Plastic clamping shell segment	REB 14	250.0	9.843	790 094 208		5.600
Plastic clamping shell segment	REB 14	264.7 - 266.2	10.421 - 10.480	790 094 210		5.600
Plastic clamping shell segment	REB 14	314.7 - 315.9	12.390 - 12.437	790 094 222		4.100
Plastic clamping shell segment	REB 14	342.9	13.500	790 094 226		4.800
Plastic clamping shell segment	REB 14	347.7	13.689	790 094 224		4.750





ID-Tracking

ID tracking for REB 14 and REB 20

The REB ID tracking can be used to prepare thin-walled, large-scale pipes for welding, where precise pipe end preparation and an exact base height are required.

The module measures the pipe ID. The force of the spring on the inside diameter ensures that the roller “tracks” any irregularities of the pipe, producing a weld prep exactly in accordance with the ID. Thus maintaining a perfect weld prep. All weld preparations such as V-, Y- and U-preps can be realized with the ID tracking module.

Comes with:

- ID tracking module
- Mount for plane
- Assembly instructions

Application range	ID Tracking for REB 14		ID Tracking for REB 20	
	[mm]	[inch]	[mm]	[inch]
Pipe ID	150 - 320	5.910 - 12.600	290 - 500	11.417 - 19.685
Wall thickness max.	15	0.591	10	0.394

Article	Code	kg
ID-Tracking for REB 14, REB 20	790 094 013	5.750

Combination possibilities of tool holder WH and multifunctional tools MFW for REB and BRB machines

Code-No.	Tool holder	Torx screw	Suitable multifunctional tools
Tools for "I-prep"			
790 085 234	WH 4-I	790 085 244	790 085 031 with R 0
790 085 230	WH 5-I	790 093 224	790 085 030 with R 0.4
790 086 210	WH 12-I-H 20 mm	790 086 220	790 086 060 with R 1.2
790 092 202	WH 15-I-H 20 mm	790 093 226	790 093 037 with R 0
790 092 204	WH 15-I-H 27 mm	790 093 226	790 093 037 with R 0
790 093 202	WH 30-I-H 20 mm	790 093 226	790 093 033 with R 0
790 093 204	WH 30-I-H 27 mm	790 093 226	790 093 033 with R 0
790 093 410	WH 15-I-H 16.5-23 mm (adjustable)	790 093 226 / 790 093 425	790 093 037 with R 0
Tools for "V-prep" and "Y-prep"			
790 085 236	WH 5-V-30°	790 093 224	790 085 030 with R 0.4
790 086 214	WH 12-V-30°	790 086 220	790 086 060 with R 1.2
790 086 272	WH 12-V-35°	790 086 220	790 086 060 with R 1.2
790 086 216	WH 12-V-37.5°	790 086 220	790 086 060 with R 1.2
790 086 474	WH 12-V-45°	790 086 022	790 086 060 with R 1.2
790 093 462	WH 12-V-80°	790 086 220	790 086 060 with R 1.2
790 092 210	WH 15-V-30°	790 093 226	790 093 037 with R 0 / 790 093 047
790 092 216	WH 15-V-37.5°	790 093 226	790 093 037 with R 0 / 790 093 047
790 092 218	WH 15-V-45°	790 093 226	790 093 037 with R 0 / 790 093 047
790 092 212	WH 15-V-60°	790 093 226	790 093 037 with R 0 / 790 093 047
790 093 468	WH 30-V-15°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 476	WH 30-V/U-25°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 210	WH 30-V-30°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 424	WH 30-V-32.5°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 216	WH 30-V-37.5°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 404	WH 30-V-45°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 470	WH 30-V-50°	790 093 226	790 093 033 with R 0 / 790 093 043
790 093 472	WH 30-V-55°	790 093 226	790 093 033 with R 0 / 790 093 043
Tools for "U-prep"			
790 085 228	WH 5-U-20°	790 093 224	790 085 030 with R 0.4
790 086 208	WH 12-U-10°	790 086 220	790 086 060 with R 1.2 / 790 086 064 with R 2
790 086 213	WH 12-U-15°	790 086 220	790 086 060 with R 1.2 / 790 086 064 with R 2
790 086 224	WH 12-U-20°	790 086 220	790 086 060 with R 1.2 / 790 086 064 with R 2
790 086 476	WH 12-U-20° large clamping surface	790 086 220	790 086 060 with R 1.2 / 790 086 064 with R 2
790 086 212	WH 12-U-25°	790 086 220	790 086 060 with R 1.2 / 790 086 064 with R 2
790 093 408	WH 30-U-7°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2 / 790 093 036 with R 1
790 093 220	WH 30-U-10°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2
790 093 474	WH 30-U-14°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2
790 093 468	WH 30-V/U-15°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2
790 093 218	WH 30-U-20°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2
790 093 478	WH 30-U-25°	790 093 226	790 093 034 with R 5 / 790 093 035 with R 2
Tools for "beveling / counterboring"			
790 085 232	WH 5-ID-14°	790 093 224	790 093 039 with R 0.4
790 093 406	WH 5-ID-14°	790 093 224	790 093 039 with R 0.4
790 086 218	WH 5-ID-45°	790 093 224	790 086 061 with R 0.4
790 093 398	WH 10-ID-5° / short	790 093 225	790 093 038 with R 0.8 / 790 093 041 with R 3
790 093 400	WH 10-ID-5° / long	790 093 225	790 093 038 with R 0.8 / 790 093 041 with R 3
790 093 402	WH 10-ID-14°	790 093 225	790 093 038 with R 0.8 / 790 093 041 with R 3
790 093 466	WH 10-ID-14° / 30 mm deep	790 093 225	790 093 038 with R 0.8 / 790 093 041 with R 3
790 086 296	WH 10-ID-60°	790 093 225	790 093 038 with R 0.8 / 790 093 041 with R 3
790 086 275	WH 10-ID-80°	790 086 220	790 086 062 with R 0.4
790 086 280	WH 12-ID-10° from ID 50	790 086 217	790 086 060 with R 1.2
790 093 494	WH 10-ID-45°	790 086 220	790 093 040 with R 0.8
790 093 493	WH 10-ID-30°	790 086 220	790 093 040 with R 0.8



Application range of tool holder for J-prep

		BRB 2 Mandrel Ø 12,7 WZT-Ø 51		BRB 2 Mandrel Ø 19 WZT-Ø 51		BRB 4 Mandrel Ø 19 WZT-Ø 68		BRB 4 Mandrel Ø 32 WZT-Ø 68		BRB 4 Mandrel Ø 32 WZT-Ø 90		BRB 4 Mandrel Ø 32 WZT-Ø 120		REB 6 Mandrel Ø 40 WZT-Ø 183		REB 14 Mandrel Ø 63 WZT-Ø 375	
		Max. ID with a height of land 1 mm (0.039 inch)															
Code-No.	Description	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]
790 085 228	WH 5-U-20°	34 1.339	15 0.591	38 1.496	21 0.827	-	-	-	-	-	-	104 4.094	34 1.339	159 6.260	49 1.929	320 12.598	65 2.559
790 093 220	WH 30-U-10°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 093 474	WH 30-U-14°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 093 468	WH 30-V/U-15°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 093 218	WH 30-U-20°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 093 478	WH 30-U-25°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 093 408	WH 30-U-7°	-	-	-	-	-	-	-	-	-	-	58 2.283	34 1.339	121 4.764	49 1.929	313 12.323	65 2.559
790 086 208	WH 12-U-10°	-	-	-	-	32 1.260	21 0.827	-	-	54 2.126	34 1.339	84 3.307	34 1.339	147 5.787	49 1.929	320 12.598	65 2.559
790 086 224	WH 12-U-20°	-	-	-	-	32 1.260	21 0.827	-	-	54 2.126	34 1.339	84 3.307	34 1.339	147 5.787	49 1.929	320 12.598	65 2.559
790 086 212	WH 12-U-25°	-	-	-	-	32 1.260	21 0.827	-	-	54 2.126	34 1.339	84 3.307	34 1.339	147 5.787	49 1.929	320 12.598	65 2.559

Application range of tool holders for counterboring

		BRB 2 Mandrel Ø 12.7 WZT-Ø 51		BRB 2 Mandrel Ø 19 WZT-Ø 51		BRB 4 Mandrel Ø 19 WZT-Ø 68		BRB 4 Mandrel Ø 32 WZT-Ø 68		BRB 4 Mandrel Ø 32 WZT-Ø 90		BRB 4 Mandrel Ø 32 WZT-Ø 120		REB 6 Mandrel Ø 40 WZT-Ø 183		REB 14 Mandrel Ø 63 WZT-Ø 375	
		Workable pipe inner diameter (0.5 mm / 0.020 inch safe distance to mandrel)															
Code-No.	Description	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]	ID max. [mm] [inch]	ID min. [mm] [inch]
790 085 232	WH 5-ID-14° / 10 mm deep	38 1.496	27 1.063	38 1.496	36 1.417	55 2.165	36 1.417	55 2.165	42 1.654	77 3.031	42 1.654	107 4.213	42 1.654	159 6.260	53 2.087	320 12.598	92 3.622
790 093 398	WH 10-ID-5° / short	-	-	-	-	-	-	-	-	72 2.835	59 2.323	105 4.134	61 2.402	159 6.260	71 2.795	320 12.598	95 3.740
790 093 400	WH 10-ID-5° / long	-	-	-	-	-	-	-	-	72 2.835	59 2.323	105 4.134	61 2.402	159 6.260	71 2.795	320 12.598	95 3.740
790 093 402	WH 10-ID-14°	-	-	-	-	-	-	-	-	72 2.835	59 2.323	105 4.134	61 2.402	159 6.260	71 2.795	320 12.598	95 3.740
790 093 406	WH 5-ID-14°	-	-	-	-	-	-	-	-	60 2.362	39 1.535	96 3.780	43 1.693	159 6.260	60 2.362	320 12.598	92 3.622
790 093 466	WH 10-ID-14° / 30 mm deep	-	-	-	-	-	-	-	-	61 2.402	53 2.087	105 4.134	61 2.402	159 6.260	78 3.071	320 12.598	101 3.976
790 086 218	WH 5-ID-45°	24 0.945	20* 0.787	37 1.457	24 0.945	49 1.929	27 1.063	49 1.929	37 1.457	40 1.575	40 1.575	107 4.213	37 1.457	159 6.260	58 2.283	320 12.598	92 3.622
Application range of tool holders for facing																	
790 086 275	WH 10-ID-80°	41 1.614	37 1.457	41 1.614	43 1.693	58 2.283	43 1.693	58 2.283	56 2.205	80 3.150	56 2.205	110 4.331	56 2.205	159 6.260	64 2.520	320 12.598	92 3.622

* With diameter 20 mm: max. length of bevel 4 - 5 mm (0.157 - 0.197 inch).

Abbreviations:
WH = Tool holder
WZT = Tool support / Tool retainer

Length of land with the use of tool holder for facing 790 092 202 / 790 093 202 and 790 086 210

Code-No.	Description (α)	MFW 12-V/I-2-R1.2 790 086 060	MFW 30-U-4-R2 790 093 035	MFW 30-U-4-R5 790 093 034
		Length of land (X1)		
790 085 228	WH 5-U-20°	-	-	-
790 093 218	WH 30-U-20°	-	1.4 mm / 0.055 inch	0 mm / 0 inch
790 093 220	WH 30-U-10°	-	2.5 mm / 0.098 inch	0.5 mm / 0.020 inch
790 093 408	WH 30-U-7°	-	3.8 mm / 0.150 inch	1.1 mm / 0.043 inch
790 093 474	WH 30-U-14°	-	2.3 mm / 0.091 inch	0 mm / 0 inch
790 093 478	WH 30-U-25°	-	1.1 mm / 0.043 inch	0 mm / 0 inch
790 086 208	WH 12-U-10°	1.5 mm / 0.059 inch	-	-
790 086 212	WH 12-U-25°	1.5 mm / 0.059 inch	-	-
790 086 224	WH 12-U-20°	1.5 mm / 0.059 inch	-	-

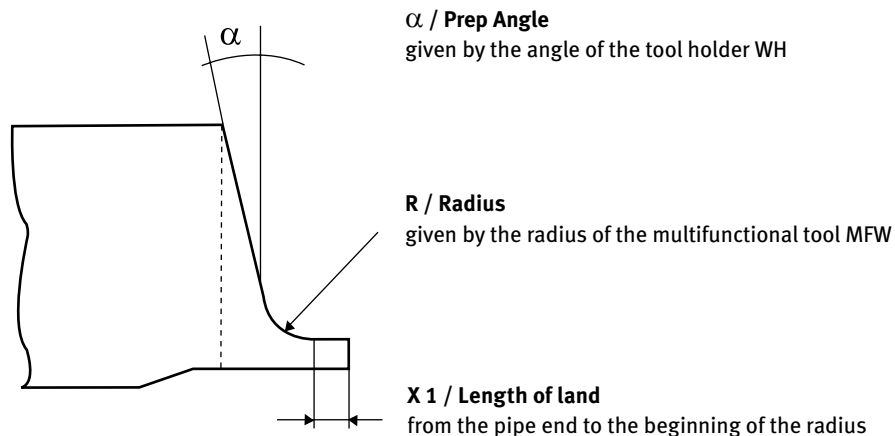
Length of land with the use of tool holder for facing 790 093 410 (adjustable)

Code-No.	Description (α)	MFW 12-V/I-2-R1.2 790 086 060	MFW 30-U-4-R2 790 093 035	MFW 30-U-4-R5 790 093 034
		Length of land (X1)		
790 093 408	WH 30-U-7°	-	1 - 7 mm / 0.039 - 0.276 inch	0 - 2.5 mm / 0 - 0.098 inch
790 093 220	WH 30-U-10°	-	0 - 6 mm / 0 - 0.236 inch	0 - 3 mm / 0 - 0.118 inch
790 093 474	WH 30-U-14°	-	0 - 6.5 mm / 0 - 0.256 inch	0 - 1 mm / 0 - 0.039 inch
790 093 218	WH 30-U-20°	-	0 - 5 mm / 0 - 0.197 inch	0 - 3.5 mm / 0 - 0.138 inch
790 093 478	WH 30-U-25°	-	0 - 5 mm / 0 - 0.197 inch	0 - 1 mm / 0 - 0.039 inch
790 086 208	WH 12-U-10°	0 - 5 mm / 0 - 0.197 inch	-	-
790 086 224	WH 12-U-20°	0 - 5 mm / 0 - 0.197 inch	-	-
790 086 212	WH 12-U-25°	0 - 5 mm / 0 - 0.197 inch	-	-

Abbreviations:

WH = Tool holder

MFW = Multifunctional tool





One machine – complete electrode preparation!



Grinding electrodes:
4 different angles and
6 different electrode sizes



Facing electrodes



Cutting electrodes



Durable storage and
shipping case



Exchangeable diamond
grinding wheels for
optimal performance

Tungsten Grinder

- Repeatable points every time due to preset grinding angles
- Easy and fast to use
- Optimum preparation for orbital and manual welding
- Longitudinal grinding for optimum arc ignition and excellent arc stability
- Guarantees longer tool life and ease of ignition of the tungsten electrode
- Specially designed for one-off jobs on site
- Compact design, optimum resilience and perfect reproducibility
- Solid, functional design
- Precise orbital grinding
- Grinding angles 15° / 18° / 22,5° / 30° or 15° / 30° / 45° / 60°
- Facility for easy trimming of the electrodes (optional)
- External dust extractor can be easily adapted
- Short preparation times with high grinding performance
- No adjustment needs to be done before operation

ESG Plus, ESG Plus²

This ESG Plus is the perfect hand-held grinder for cutting, grinding and planing electrodes which are used in WIG/TIG welding machines. Consider country-specific regulations, standards and guidelines when using tungsten electrodes with thorium.

ESG Plus²: The first portable tungsten grinder with two different grinding wheels. This allows the electrode to be pre-ground with the coarse diamond wheel then finished with the fine diamond wheel.

Machine comes with:

- 1 Tungsten Grinder ESG Plus or ESG Plus²
- 1 Durable storage and shipping case
- ESG Plus: 1 Diamond grinding wheel (medium, Code 790 052 488)
ESG Plus²: 1 Diamond grinding wheel (coarse, Code 790 052 550) and 1 diamond grinding wheel (fine, Code 790 052 487)
- 1 Tool to replace the grinding wheel
- 1 Set of operating instructions and spare parts list



ESG Plus



ESG Plus²

Application range	ESG Plus, ESG Plus ²
Electrode Ø	1.0 / 1.6 / 2.0 / 2.4 / 3.2 / 4.0 mm 0.040 / 1/16 / 0.080 / 3/32 / 1/8 / 5/32 inch
Grinding angles	15° / 18° / 22.5° / 30° or 15° / 30° / 45° / 60°
Technical data	Electric drive with single-phase AC motor
Dimensions (with drive)	Ø 65 x 350 mm / 2.56 x 13.78 inch
Power	500 W
Power-on time	100 %
Rotary speed	30,000 rpm
Main supply cable (length)	3 m / 118.1 inch
Vibration level in accordance with 28662, part 1	< 2.5 m/s ²
Noise level at the workplace	Idle running approx. 83 dB (A)

Article	Version	Grinding angles [°]	Code	Weight of machine kg	Dispatch weight kg
ESG Plus	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 485	1.430	3.560
ESG Plus	230 V, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 545	1.430	3.560
ESG Plus ²	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 585	1.520	3.825
ESG Plus ²	230 V, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 546	1.520	3.825
ESG Plus	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 486	1.560	3.570
ESG Plus	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 645	1.560	3.570
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 586	1.520	3.825
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 646	1.520	3.825



Accessories for ESG Plus



Diamond grinding wheels

Diamond grinding wheels

Replaceable grinding wheel diamond-coated on both sides for optimal performance.

For 1.0 and 1.6 mm (0.039 and 0.063 inch) electrodes we recommend the standard grinding wheel. For 2.0 and 2.4 mm (0.078 and 0.094 inch) electrodes a medium grained grinding wheel and for 3.2 and 4.0 mm (0.126 and 0.157 inch) a coarse grained grinding wheel is advisable.

Article	Version	Grinding wheel Ø [mm/inch]	s [mm/inch]	Code	kg
Diamond grinding wheel*	Standard	32.0/1.260	1.2/0.047	790 052 460	0.005
Diamond grinding wheel**	Fine	33.5/1.319	2.2/0.087	790 052 487	0.010
Diamond grinding wheel**	Medium	33.5/1.319	2.2/0.087	790 052 488	0.011
Diamond grinding wheel**	Coarse	33.5/1.319	2.2/0.087	790 052 550	0.011

* for ESG 4

** for ESG Plus



Cutting device

Cutting device

To cut tungsten electrodes to length.

Application range	[mm]	[inch]
Electrode Ø	1.0 / 1.6 / 2.0 / 2.4	0.040 / 1/16 / 0.080 / 3/32
Fixed cutting lengths*	12 / 13 / 15 / 17	0.472 / 0.512 / 0.591 / 0.669

* Other cutting lengths possible.

Article	Code	kg
Cutting device for ESG Plus	790 052 513	0.030



Electrode holder

Electrode holder

With clamping collet (Code 790 052 481) for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch).

Article	Code	kg
Electrode holder	790 052 457	0.023



Clamping collet

Clamping collet

To center the electrode in the holder.

For easy grinding of smaller electrodes.

Flexible clamping collet for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch).

Article	Clamping range [mm]	Clamping range [inch]	Code	kg
Clamping collet	1.0 - 3.2	0.039 - 0.126	790 052 481	0.002

Wall-/table-/vice-mounting plate

For stationary ESG Plus set-up.

Article	Code	kg
Wall-/table-/vice-mounting plate	790 052 483	0.102



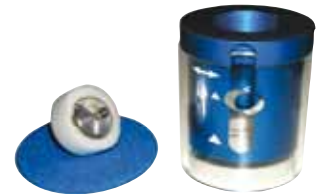
Wall-/table-/vice-mounting plate

Protective cover

Easy to adapt on the ESG Plus head.

With integrated retainer for suction units. For use on electrodes with thorium. Consider country-specific regulations, standards and guidelines.

Article	Code	kg
Protective cover for ESG Plus	790 052 496	0.220
Protective cover for ESG Plus ²	790 052 596	0.220



Protective cover

Double-Decker Kit

Easy to mount to the ESG Plus. This attachment makes it possible to use 2 different grinding wheels at the same time. The kit contains a head and a diamond grinding wheel (Code 790 052 550) with an extension shaft.

Article	Grinding angles [°]	Code	kg
Double-Decker Kit	15 / 18 / 22.5 / 30	790 052 490	0.160
Double-Decker Kit	15 / 30 / 45 / 60	790 052 390	0.160



Double-Decker Kit



Accessories for Pipe Threading Technology

Automatic quick-change die-heads ASK

for Whitworth pipe threads according to DIN 2999

For threaded pipes according to DIN 2440 and 2441 as well as for stainless steel pipes.
For KM 2. Die-heads are equipped with threading chasers made of HSS (high-speed steel). In the factory the die-heads are precision-adjusted to the requirements according to the thread standards. Right-handed.

Die-heads ASK are also applicable for:

- up to R 2 on KM 2 and GTM 2
- up to R 1 1/4 on TGA



Automatic quick-change die-head ASK

Article	Version	Code	kg
Automatic quick-change die-head ASK	R 3/8	790 003 403	2.200
Automatic quick-change die-head ASK	R 1/2	790 003 404	2.380
Automatic quick-change die-head ASK	R 3/4	790 003 405	2.400
Automatic quick-change die-head ASK	R 1	790 003 406	2.950
Automatic quick-change die-head ASK	R 1 1/4	790 003 407	2.870
Automatic quick-change die-head ASK	R 1 1/2*	790 003 408	3.165
Automatic quick-change die-head ASK	R 2*	790 003 409	4.055

* not for TGA

Replacement sets of threading chasers

for Whitworth pipe threads according to DIN 2999

Made of HSS (high-speed steel). Right-handed.



Replacement set of threading chasers for ASK

Article	Version	Code	kg
Replacement set of threading chasers for ASK	R 1/4	790 003 502	0.110
Replacement set of threading chasers for ASK	R 3/8	790 003 503	0.100
Replacement set of threading chasers for ASK	R 1/2	790 003 504	0.145
Replacement set of threading chasers for ASK	R 3/4	790 003 505	0.130
Replacement set of threading chasers for ASK	R 1	790 003 506	0.170
Replacement set of threading chasers for ASK	R 1 1/4	790 003 507	0.145
Replacement set of threading chasers for ASK	R 1 1/2*	790 003 508	0.205
Replacement set of threading chasers for ASK	R 2*	790 003 509	0.260

* not for TGA

Replacement sets of threading chasers

for pipe threads according to DIN 2440 and 2441

Made of HSS (high-speed steel). Right-handed.



Replacement set of threading chasers for ASK

Article	Version	Code	kg
Replacement set of threading chasers	G 1	790 005 310	0.175
Replacement set of threading chasers	G 1 1/4	790 005 311	0.145
Replacement set of threading chasers	G 2*	790 005 313	0.200

* not for TGA





Nipple holder

Nipple holder

With internal clamping. Self-clamping. For pipes according to DIN 2440.

Article	Version	Thread	Code	kg
Nipple holder	DN 15	R 1/2	790 002 101	0.345
Nipple holder	DN 20	R 3/4	790 002 102	0.566
Nipple holder	DN 25	R 1	790 002 103	0.740
Nipple holder	DN 32	R 1 1/4	790 002 104	1.120
Nipple holder	DN 40*	R 1 1/2	790 002 105	1.420
Nipple holder	DN 50*	R 2	790 002 106	2.120

* not for TGA



Thread cutting compound
SPN PARALIQU® PLUS

Thread cutting compound SPN PARALIQU® PLUS

Pressure absorption capacity 4 times higher than required according to DVGW worksheet W521. Readily biodegradable. On synthetic basis for drinking-water installations and for the food industries, conforms to requirements regarding food and beverage stuff legislation set out in DVGW/ SVGW/ ÖVGW, environmentally friendly.

Article	Version	Code	kg
SPN PARALIQU® PLUS*	Canister with 10 l (352 fl oz)	790 060 202	11.100

* while stock last.



Thread cutting compound
NORMOLIC Red®

Thread cutting compound NORMOLIC Red®

Normolic Red is a DVGW-tested (German Technical and Scientific Association for Gas and Water) thread cutting compound for drinking water installations.

Coloured red. Free from mineral oils. Water-soluble. Easily rinsed out without affecting the appearance, taste and smell of the drinking water when rinsed according to DIN 1988. Dyn. viscosity: at 20 °C: > 20 mPas (ISO 3104).

Article	Version	Code	kg
NORMOLIC Red®	Canister with 10 l (352 fl oz)	790 051 263	11.500

Thread Jointing Technology

Thread jointing compound PARALIQ® PM 35

For gas, air and water up to 130 °C.

Approved by the DVGW/SVGW/ÖVGW in accordance with DIN EN 751, part 2 (DIN 30 660) in the house installation, especially for drinking-water installations. For use with flax.



Thread jointing compound PARALIQ® PM 35

Article	Version	Code	kg
Thread jointing compound PARALIQ® PM 35	Can of 600 g	790 060 102	0.690

Thread sealing tape PARALIQ® PM 35

For gas, air and water up to 130 °C.

Approved by the DVGW/SVGW/ÖVGW in accordance with DIN EN 751, part 2 (DIN 30 660) in the house installation, especially for drinking-water installations. Also applicable for sealing requirements conforming to standards for petrol, heating oil, diesel and fuel installations. Synthetic tape. For use without flax.



Thread sealing tape PARALIQ® PM 35

Article	Version	Code	kg
Thread sealing tape PARALIQ® PM 35	Roll of 25 m, 16 mm wide (82 ft, 0.630 inch wide)	790 060 112	0.050

Flax dispenser (retail pack)

Including 10 flax bobbins.

Innovative and unique retail pack for the presentable display of flax bobbins at the sales counter.



Flax dispenser (retail pack)

Article	Code	kg
Flax dispenser, retail pack of 10 bobbins	790 052 702	* 0.780
Flax dispenser, retail pack of 10 bobbins, Set incl. flax pocket dispenser	790 052 703	1.000

* Price refers to a single flax bobbin. Minimum purchase: 10 bobbins = 1 retail pack.

Flax dispenser

Empty, with fixing plate for mounting on wall or work bench.

Easy to use, no waste, optimal proportioning.



Flax dispenser

Article	Code	kg
Flax dispenser	790 052 701	0.304

Flax bobbin pocket dispenser

For the fitters pocket. Easy to use, no waste, optimal proportioning.



Flax bobbin pocket dispenser

Article	Version	Code	kg
Flax bobbin pocket dispenser	with flax bobbin	790 052 710	0.225
Flax bobbin pocket dispenser	without flax bobbin	790 052 708	0.135



Seals



Seal dispenser



Seals

Seal dispenser

For gas and water installations. Approved by the DVGW in accordance with DIN 3535, Part 6. With 225 asbestos-free seals and protective covering.

Article	Code		kg
Seal dispenser	790 052 721		0.682
Seal dispenser, empty	790 052 722		0.335
Protective covering for seal dispenser	790 052 723		0.049

Seals for seal dispenser

IT-seals, asbestos-free.

Explanations

R = Raccord (union/fittings)

RV = Radiator valve

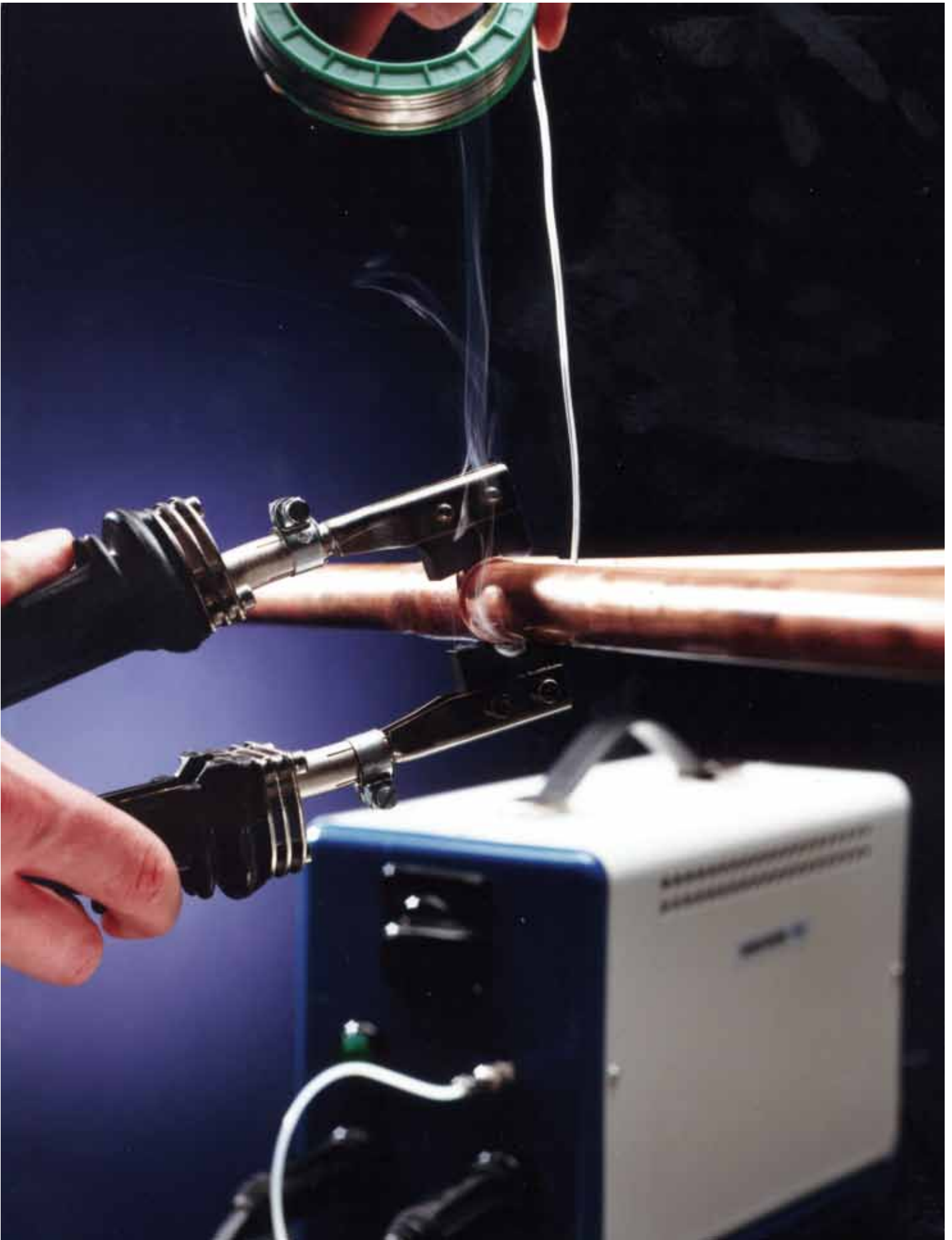
H = Dutchman seal

HK = Dutchman seal, small

HG = Dutchman seal, large

Article	Version	Dimension	Quantity per pack	Code		kg*
Seals	R 1/4	10 x 6	100	790 052 726		0.001
Seals	R 3/8	14 x 10	100	790 052 727		0.001
Seals	R 3/8	15 x 8	100	790 052 728		0.001
Seals	R 3/8	15 x 10	100	790 052 729		0.001
Seals	R 1/2	18 x 10	100	790 052 730		0.001
Seals	R 1/2	18 x 11	100	790 052 731		0.001
Seals	R 1/2	18 x 12	100	790 052 732		0.001
Seals	R 3/4	23 x 17	100	790 052 733		0.001
Seals	R 3/4	24 x 15	100	790 052 734		0.001
Seals	R 1	30 x 22	100	790 052 735		0.001
Seals	R 1 1/4	37 x 29	100	790 052 736		0.001
Seals	R 1 1/4	39 x 32	100	790 052 737		0.001
Seals	R 1 1/2	44 x 37	100	790 052 738		0.001
Seals	R 2	56 x 48	50	790 052 739		0.002
Seals	Leather 3/4	23 x 16	100	790 052 740		0.001
Seals	RV 3/4	23 x 17	100	790 052 741		0.001
Seals	H 3/4	38 x 27	100	790 052 742		0.002
Seals	H 1	44 x 32	100	790 052 743		0.002
Seals	H 1 1/4	55 x 42	50	790 052 744		0.004
Seals	H 1 1/2	62 x 46	50	790 052 745		0.002
Seals	H 2	78 x 60	50	790 052 746		0.007
Seals	HK 3/8	24 x 17	100	790 052 747		0.001
Seals	HK 1/2	30 x 21	100	790 052 748		0.001
Seals	HG 3/8	27 x 19	100	790 052 749		0.001
Seals	HG 1/2	34 x 23	100	790 052 750		0.001

* Weight per seal



Copper Pipe Installation Technology

81

Accessories for LAM 1500, LAM 1600



Clamp holder with carbon V-electrode

Clamp holder with carbon V-electrode

Made of stainless steel.

Article	Code		kg
Clamp holder with carbon V-electrode	790 057 020		0.038



Carbon V-electrode

Carbon V-electrode

Minimum purchase: 10 pieces.

Article	Code		kg
Carbon V-electrode	790 057 025		0.010



Stick electrode

Stick electrode

Minimum purchase: 6 pieces.

Article	Code		kg
Stick electrode	790 057 026		0.020



Heating tongs with cable

Heating tongs with cable

Complete. Cable length 2.7 m (106.3 inch).
Only for LAM 1600.

Article	Code		kg
Heating tongs with cable	790 057 351		2.090

Cleaning brushes and calibrating tools

Cleaning brushes

Metal brushes to clean copper fittings on the inner diameter

Extended service life through high-grade steel alloy.



Metal brushes to clean copper fittings on the inner diameter

Article	Pipe ID [mm]	Pipe ID [inch]	Code	kg
Metal brushes to clean copper fittings on the inner diameter	12	0.472	790 072 283	0.025
Metal brushes to clean copper fittings on the inner diameter	15	0.591	790 072 285	0.022
Metal brushes to clean copper fittings on the inner diameter	18	0.709	790 072 288	0.025
Metal brushes to clean copper fittings on the inner diameter	22	0.866	790 072 289	0.027

Cleaning brushes

Ring brushes to clean copper pipes on the outer diameter

Extended service life through high-grade steel alloy.



Ring brushes to clean copper pipes on the outer diameter

Article	Pipe OD [mm]	Pipe OD [inch]	Code	kg
Ring brushes to clean copper pipes on the outer diameter	10	0.394	790 072 301	0.021
Ring brushes to clean copper pipes on the outer diameter	18	0.709	790 072 307	0.032

Calibrating tools

In order to get a capillary gap according to standard DIN 1786.



Calibrating tools

Article	Pipe OD [mm]	Pipe OD [inch]	Pipe ID [mm]	Pipe ID [inch]	Code	kg
Calibrating tools	12	0.472	10	0.394	790 072 417	0.120
Calibrating tools	15	0.591	13	0.512	790 072 421	0.175
Calibrating tools	18	0.709	16	0.630	790 072 427	0.250



Work benches, tool box, pipe vices, deburring tool

Work benches

Dimensions	Work bench, small	Work bench, large	Collapsible work bench
Dimensions (l x w x h)	120 x 75 x 85 cm	150 x 100 x 85 cm	100 x 70 x 85 cm
Article	Code		kg
Work bench, small, dismountable, with 1 tool box support	790 052 001		655,00
Work bench, large*, dismountable, with 2 tool box supports	790 052 004		855,00
Collapsible work bench, load capacity: 650 kg/1433 lbs	790 052 030		214,00

* while stock last.

Tool box

For mounting under the work benches Code 790 052 001 and 790 052 004.

Dimensions	Tool box		
Outside dimensions	100 x 40 x 65 cm / 39.37 x 15.75 x 25.59 inch		
Article	Code		kg
Tool box	790 052 101		50.000

Pipe vices

Application range	Chain pipe vice	Chain pipe vice with extension roller chain	Bench vice
Pipe OD	up to 165 mm / 6.496 inch	up to 230 mm / 9.055 inch	20 - 250 mm / 0.8 - 9.8 inch
Article	Code		kg
Chain pipe vice, complete with pipe support	790 052 201		6.200
Extension roller chain	790 052 859		0.870
Bench vice for plastic and stainless steel pipes	790 052 231		5.500
Spare belt (930 x 28 mm / 36.6 x 1.1 inch) for bench vice	790 052 247		0.100

Deburring tool

For inner and outer deburring of stainless steel, mild steel, aluminum, non-ferrous metal and plastic tubes and pipes.

Application range	Deburring tool		
Pipe OD max.	54 mm / 2.126 inch		
Pipe ID max.	10 mm / 0.394 inch		
Article	Code		kg
Deburring tool	790 052 052		0.455



Work bench, small



Collapsible work bench



Tool box



Chain pipe vice



Bench vice for plastic and stainless steel pipes



Deburring tool

Convenient renting and rent-to-own-options.

More efficiency, more reliability, more performance.

We supply equipment over a short and long term rental condition – a cost effective alternative to purchasing. We take care of our rental equipment so it is in top condition for you and we can help you to match the right rental equipment to your specific projects. Renting from Orbitalum is the ideal opportunity to try out a model you're thinking of purchasing. Ask about our convenient renting and rent-to-own-options:

Your benefits of renting:

- Reducing need for storage
- Eliminating repair costs
- Conserving your capital
- Having the most up-to-date technology
- Minimizing down-time

Our rental and used machine service includes:

- Weekly rental charges
- Hire purchase
- Long-term rental

Easy handling – safe operation.

We as Orbitalum emphasize on the safe operation of our equipment as it has the utmost priority. We generally recommend a product safety and user training to clearly understand the proper usage of the equipment and in order to avoid any possible dangers and accidents.

We offer:

- Training on daily or weekly basis
- At any location
- Skilled trainers
- Certification after successful participation
- Fully equipped training centre in Singen
- State-of-the-art training equipment





Worldwide customer focus.

Inspiring customer service.

You can count on our comprehensive range of services. Our aim is to offer you inspiring customer service – you can measure us against this promise.

- Acclaimed state-of-the-art technology
- Competent contact partners
- Fast, comprehensive delivery service
- Reliable product support
- Practical training programs
- Certified company

Our wide range of services:

Technical support

- Repairs, maintenance, replacement
- Advance cost estimates
- On-site service
- Service training for our customers
- Cost-effective replacement devices on request

Spare parts service

- Approx. 2,000 spare parts always in stock
- State-of-the-art logistics systems

Rental/used machine service

- Weekly rental charges
- Hire purchase
- Long-term rental
- Rental with operator on request

Further support services

- Pick-up service from the customer
- Used machines with warranty

Waste disposal / environmental protection



Disposal of electrical (electronic) devices



(RL 2002/96/EC)

Electrical (electronic) devices which are marked with the symbol above, may not be disposed of with household waste in accordance to the EU directive 2002/96/EC.

By actively using the offered return and collection systems, you actively contribute to the reuse, recycling and utilisation of electrical (electronic) devices.

Electrical (electronic) used devices contain parts which must be handled selectively according to the EU directive. Separate collection and selective treatment is the basis for environment-friendly disposal and the protection of human health.

Our products that were sold to you after August 13th, 2005 are taken back and treated according to legal standards. These products have to be sent free of charge.

The return of used devices which pose a health or safety risk for human beings due to contamination during use may be refused.

The legally compliant disposal of electrical (electronic) devices that were placed on the market before August 13th, 2005 are in the responsibility of the end-user.



Returning of batteries

Some of our products work with batteries. Batteries which are marked with the symbol above may not be disposed of together with household waste according to the applicable EU directive 91/157/EEC.

With batteries containing hazardous substances, the chemical symbol for the heavy metal content is indicated below the waste bin.

Cd = Cadmium
Hg = Mercury
Pb = Lead

Precision.

Orbital Welding Systems.



Catalogue EN

orbital

cutting.
beveling.
facing.
welding.

❖ complete solutions.
one source.



precision.
power.
simplicity.



New products.



OP 46-102 (AVC/OSC) | Open orbital weld heads

Open weld heads for applications with limited space availability.

Benefits:

- Can be used with or without additional wire.
- Smallest space requirement thanks to compact design.
- Also available with electronic arc voltage control (AVC) and oscillation (OSC).

...more on page 48



HX 16 series | Open orbital weld heads

Open weld heads especially made for heat exchanger applications.

Benefits:

- Optimum solutions for weld pre-mounted elbows.
- Smallest space requirements thanks to compact design.
- Highly durable thanks to water-cooled earth plate and rotor housing.
- Horizontal, vertical and tilted welding positions are possible.

...more on page 52



P16 AVC | Tube-to-tube-sheet orbital weld head

Tube-to-tube-sheet orbital weld head with electronic arc voltage control (AVC).

Benefits:

- Simple handling with maximum functionality.
- Water coolant that extends into the WIG burner head.
- Fitted with a cold wire feed mounted directly on the welding head including a retaining mechanism for 100 mm/1kg (3.937 inch) standard wire reel.

...more on page 57



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Orbitalum Tools GmbH – The company

Complete solutions for highest requirements in tube and pipe welding preparation up to orbital welding – all from one source. Orbitalum Tools GmbH is your competent partner for orbital tube and pipe preparation and orbital welding technology for industrial piping systems, prefabrication and maintenance.

Orbitalum Tools develops and produces portable tube saws, tube facing machines, pipe end preparation machines, computer controlled orbital welding power sources as well as closed and open weld heads.

There are numerous areas of application. The spectrum ranges from the construction of process plants (ultra pure media e.g. semiconductor, electronic, pharmaceutical and biotechnology; chemical, food and beverage industry, aviation and aerospace technology, shipbuilding), includes the construction of energy plants (power plants, refineries, oil, gas and petrochemical industry) and even utilities (water and gas supply, heating, air conditioning and cooling, as well as sprinkler).

The wide range of products is based on customer requirements. The company is certified according to ISO 9001:2008 and is setting high value on sustainability.

Our customers appreciate our sound application know-how and our first class customer service. Our continuous success is based on our customer oriented innovations and the quality of our people, products and processes which we constantly strive to improve.

Orbitalum Tools GmbH, formerly known as Georg Fischer Rohrverbindungstechnik GmbH, was an independent subsidiary within the Georg Fischer Piping Systems group of companies since its foundation in the year 1960 until 2005, with its head office in Schaffhausen (CH). Since January 1st 2006, Orbitalum Tools GmbH belongs to the US American industrial company Illinois Tool Works Inc. (ITW).

Orbimatic GmbH was found in 1990 and very quickly established themselves as an innovative and leading manufacturer for orbital welding systems. Orbimatic has been acquired by ITW in 2008.

In 2009 both companies – Orbitalum Tools GmbH and Orbimatic Welding Systems – have been merged to the new “OrbitalumTools GmbH”.



Our Mission: Complete solutions – from one source.

The performance attributes of Orbitalum Tools „Precision. Power. Simplicity.“reflect the high precision, powerful and robust drive and tool designs as well as the ease and safe use of the products produced in Singen and Buseck (Germany). Orbitalum products excel with high efficiency, ease of operation and a safe and mobile setup conforming to the latest safety standards.

precision.

A square, deformation- and burr-free cut or a reproducible pipe end preparation is a must for an automated orbital welding process.

The Orbitalum Tools GmbH develops, produces and markets these highly precise machines and tools as well as the corresponding consumables for the piping industries as well as for utilities. Orbitalum orbital welding systems enable a precise, documentable and safe welding of piping systems.

power.

Durable, robust and powerful systems and machines enable a continuous and effective usage for your individual application.

Either for a professional weld preparation or for an automated orbital welding solution, even in challenging conditions – Orbitalum Tools GmbH is your global partner with a worldwide presence and logistics network.

simplicity.

As complexity and demand are continuously increasing in our surroundings, Orbitalum Tools GmbH is focusing on systems and machines that are ergonomic and user friendly and specially made for pipeline constructors.

Intuitive operator guidance and a simplified service diagnostic enable a fast practice and an efficient completion.

Tube OD to Standards

Tube OD		DIN (DIN 11850)	ISO (EN ISO 1127)	Inch (ASME BPE 1997)
[mm]	[inch]			
3,17	0.125			
6,00	0.236			
6,35	0.250			1/4"
8,00	0.315	6		
9,35	0.368			3/8"
10,00	0.394	8		
10,20	0.402		10,2	
12,00	0.472			
12,70	0.500			1/2"
13,00	0.512	10		
13,50	0.531		13,5	
15,88	0.625			
16,00	0.630			
17,20	0.677		17,2	
18,00	0.709			
19,00	0.748	15		
19,05	0.750			3/4"
20,00	0.787			
21,30	0.839		21,3	
22,00	0.866			
23,00	0.906	20		
25,40	1.000			1"
26,90	1.059		26,9	
28,00	1.102			
29,00	1.142	25		
30,00	1.181			
33,70	1.327		33,7	
35,00	1.378	32		
38,10	1.500			1 1/2"
40,00	1.575			
41,00	1.614	40		
42,40	1.669		42,4	
44,50	1.752			
48,30	1.902		48,3	
50,80	2.000			2"
51,00	2.008			
52,00	2.047			
53,00	2.087	50		
54,00	2.126			
60,30	2.374		60,3	
63,50	2.500			2 1/2"
70,00	2.756	65		
76,10	2.996		76,1	
76,20	3.000			3"
85,00	3.346	80		
88,90	3.500		88,9	
101,60	4.000			4"
104,00	4.094	100		
108,00	4.252			
114,30	4.500		114,3	
127,00	5.000			
129,00	5.079	125		
139,70	5.500		139,7	
152,40	6.000			6"
154,00	6.063	150		
165,10	6.500			
168,30	6.626		168,3	
177,80	7.000			
190,50	7.500			
204,00	8.031	200		
219,10	8.626		219,1	



ORBIMAT CAdvanced - compact orbital welding power supply!



Automatic programming which generates welding parameters by entering the tube diameter, wall thickness, material and welding gas.



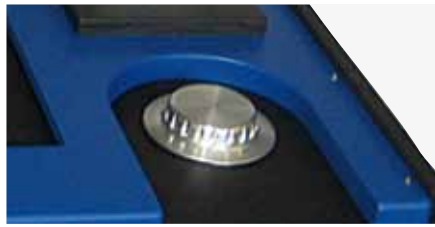
Swivel mount 10,5" colour with multilingual menu navigation via color display.



Capacity to store over 5,000 welding programs.



Simple and convenient operation thanks to multifunctional rotary actuator.



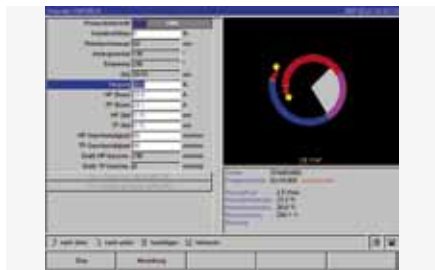
Simple and convenient operation thanks to multifunctional rotary actuator



Clearly laid-out 10.5" swivel monitor



Integrated job printer allows actual values to be printed out



Automatic programming and multilingual menu navigation via color display



*PSS Pro-Service System:
Simple functional test with no need to open the unit*

Orbital welding power supplies ORBIMAT CA

The ORBIMAT CAAdvanced series of orbital welding power supplies are equipped with a new and unique operating concept.

In addition to the reliable automatic programming which generates welding parameters by entering the tube diameter, wall thickness, material, and welding gas all ORBIMAT CA models also have the exclusive new development FLOW FORCE to reduce the pre-flow gas time when the weld heads are closed in the standard model and BUP control function with controllable, position-dependent tube internal pressure control as an optional extra.

The basic model of the ORBIMAT CA series includes the following functions and equipment:

- Simple and convenient operation thanks to multifunctional rotary actuator.
- Control option for cold wire feed.
- DC welding.
- Optimal visibility and operating conditions thanks to clearly laid-out 10.5" swivel monitor.
- Graphically-supported operating interface and multilingual menu navigation via color display.
- Capacity to store over 5,000 welding programs, providing systematic and clear program management thanks to the creation of folder structures.
- Welding data logging and printout of actual values.
- A multcard reader enables data to be transferred easily to an external PC.
- It is possible to extend memory and data exchange using CompactFlash card (CF), SD, MMC, Sony memory stick.
- (Optional) PC-offline software with the capability to convert data protocols to PDF.
- Extremely easy to service thanks to PSS (Pro Service System):
 - Simple functional test with no need to open the unit.
 - Easy to service and components can be replaced quickly thanks to systematic component structure.
- Power and motor slope adjustment between the individual sectors.
- Coolant water and welding gas are monitored.
- Option to program up to 99 sectors.
- Possibility of connecting a monitor or printer (through VGA).
- Integrated printer.
- Metric and imperial units.

Scope of delivery ORBIMAT CA power supplies:

- 1 orbital welding power supply of the ORBIMAT CA series
- 1 connection hose set ORBIMAT
- 1 blind plug
- 1 welding connector adapter 165A/300A
- 1 external keyboard
- 1 liter antifreeze
- 1 filling funnel
- 2 keys for key switch
- 1 operation manual

ORBIMAT 165 CA

Computer-controlled 165 A compact power supply for orbital welding
– ideal for mobile use on building sites.

See page 8 for the basic model; additional functions and equipment:

- Integrated water cooling system for cooling the connected weld heads.
- WIDE RANGE input voltages for safe operation of power sets or voltage networks with extreme fluctuations in voltage.

Technical Data	ORBIMAT 165 CA
Connection voltage (WIDE-RANGE)	90 - 260 V, 50/60 Hz, single-phase
Control range	2 - 165 A for a connection voltage > 160 V 2 - 110 A for a connection voltage < 160 V
Power-on time	30% at 165 A 100% at 120 A
Weight	26 kg
Dimensions	510 x 360 x 220 mm

Article	Code	kg
ORBIMAT 165 CA	871 000 001	26,000

ORBIMAT 300 CA

Computer-controlled 300 A power supply for orbital welding.

See page 8 for basic model.

Please note that the ORBIMAT 300 CA may only be operated in conjunction with a water cooling system that must be ordered separately (see page 14).

Technical Data	ORBIMAT 300 CA
Connection voltage	400 V +/- 15%, 50/60 Hz, 3 phase
Control range	5 - 300 A
Power-on time	40% at 300 A 60% at 260 A 100% at 220 A
Weight	33 kg
Dimensions	530 x 400 x 400 mm

Article	Code	kg
ORBIMAT 300 CA	872 000 001	33,000



ORBIMAT 165 CA



ORBIMAT 300 CA



ORBIMAT 300 CA AC/DC

ORBIMAT 300 CA AC/DC

Computer-controlled 300 A power supply for orbital welding, also for aluminum materials.

See page 8 for the basic model; additional functions and equipment:

- Alongside the benefits of the ORBIMAT 300 CA power supply, this device also offers the option of AC welding.
- Option to set a positive and negative half-cycle in the ratio 20 - 80%.
- Frequency setting 50 - 200 Hz.
- Detection of actual values for the welding reports in the DC regime.

Please note that the ORBIMAT 300 CA AC/DC may only be operated in conjunction with a water cooling system that must be ordered separately (see page 14).

Technical Data	ORBIMAT 300 CA AC/DC
Connection voltage	400 V +/- 15%, 50/60 Hz, 3 phase
Control range	5 - 300 A
DC and AC currently (switch selectable)	40% at 300 A 60% at 260 A 100% at 220 A
Power-on time	
Weight	41,4 kg
Dimensions	530 x 400 x 400 mm

Article	Code	kg
ORBIMAT 300 CA AC/DC	877 000 001	41,400



ORBIMAT 300 CA AVC/OSC
incl. remote control

ORBIMAT 300 CA AVC/OSC

Computer-controlled 300 A power supply for orbital welding with arc voltage control (AVC) and oscillation (OSC).

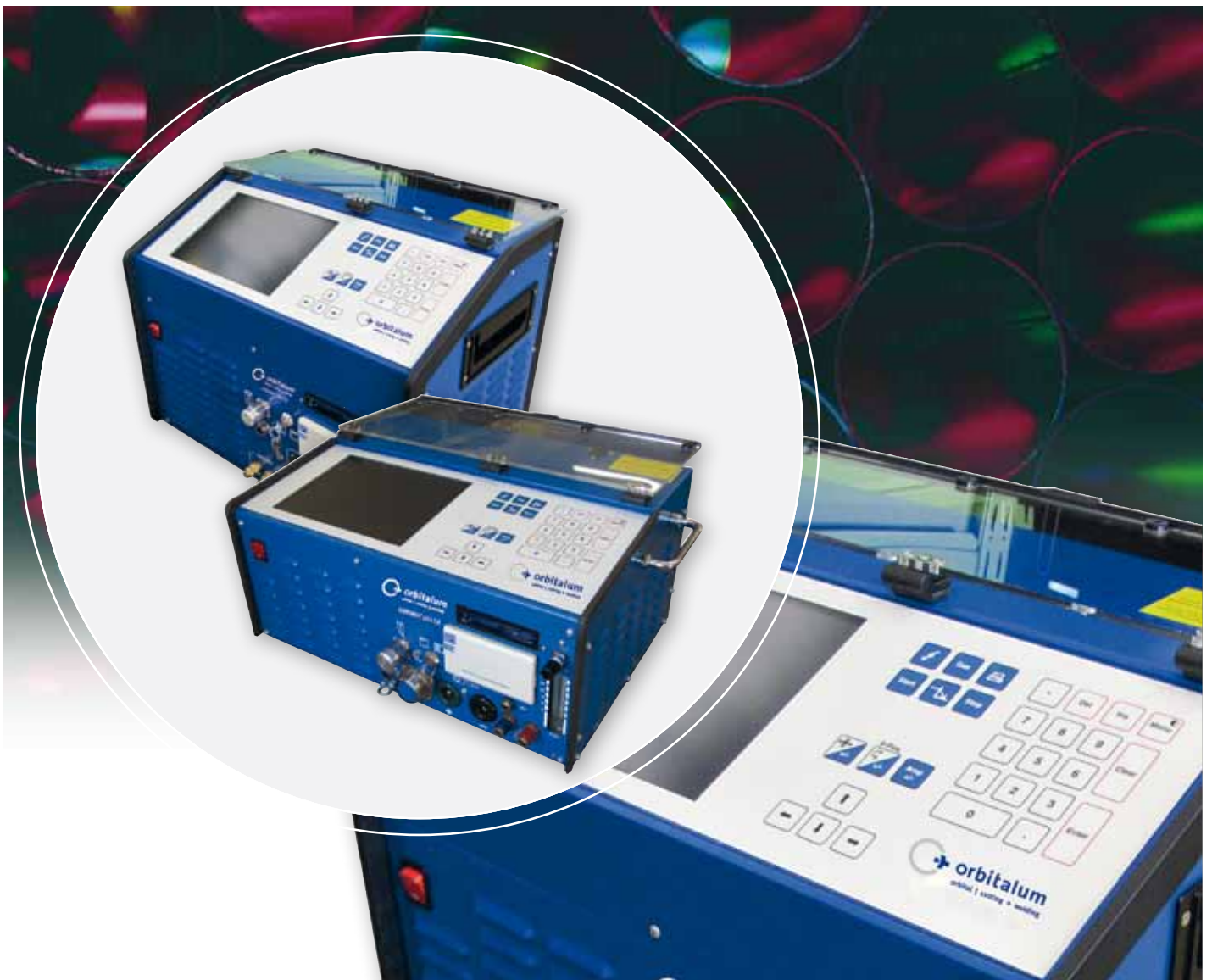
See page 8 for the basic model; additional functions and equipment:

- The new arc voltage control calculates and programs the length of the arc automatically in „mm“ from the current voltage characteristics. This avoids the usual time spent calculating the necessary arc voltage each time the weld power changes to maintain the arc at a consistent length in the individual sectors.
- During oscillation each of the edge holding times can be synchronized with the high-pulse settings.
- The center of the seam can be accessed manually and be determined using an automatic scanner. The electrode accesses each of side of the seam and then calculates the center of the path automatically. For asymmetric weld seam configurations this is compensated by an OFFSET function.
- Including remote control (cable length: 7,5 m) *Code 875 050 001.*
- There is the option of an HF-free touch start ignition.

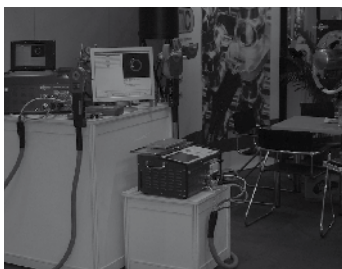
Please note that the ORBIMAT 300 CA AVC/OSC may only be operated in conjunction with a water cooling system that must be ordered separately (see page 14).

Technical Data	ORBIMAT 300 CA AVC/OSC
Connection voltage	400 V +/- 15%, 50/60 Hz, 3 phase
Control range	5 - 300 A
Power-on time	40% at 300 A 60% at 260 A 100% at 220 A
Weight	37,3 kg
Dimensions	530 x 400 x 400 mm

Article	Code	kg
ORBIMAT 300 CA AVC/OSC	872 000 002	37,300



ORBIMAT CBasic - compact orbital welding power supplies!



PSS Pro-Service-System:
Easily detecting failures on the system which permits rapid maintenance on site.



Auto-programming, multi-language operation and highly visible 10.5" colour monitor.



PC offline software (optional) with simple conversion of data log files into pdf-files.



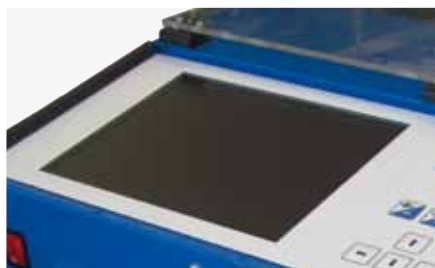
Storage extension and data transfer via CompactFlashCard.



*Multilingual menu navigation
via color display*



High quality function and numeric keypad



*Optimal visibility and operating conditions
thanks to clearly laid-out 10.5" monitor*



Integrated printer



*PSS Pro-Service System:
Simple functional test with no need
to open the unit*

Orbital welding power supplies ORBIMAT CB

Orbital welding power supplies of the ORBIMAT CBasic series include the tried and tested and classic operating concept from Orbitalum with entry of all parameters via a high quality function and numeric keypad. All values can be programmed directly and without a conversion factor.

The ORBIMAT CB series includes the tried and tested automatic programming with programming help when entering the tube diameter, wall thickness, material and welding gas.

The basic model of the ORBIMAT CB series includes the following functions and equipment:

- DC welding.
- Control option for cold wire feed.
- Optimal visibility and operating conditions thanks to clearly laid-out 10.5" monitor.
- Multilingual menu navigation via color display.
- Capacity to store over 5,000 welding programs.
- Welding data logging and printout of actual values.
- A multcard reader enables data to be transferred easily to an external PC.
- Memory can be extended and data exchanged using CompactFlash card (CF), SD, MMC, SM, Sony memory stick.
- (Optional) PC-offline software with the capability to convert data protocols to PDF.
- Extremely easy to service thanks to PSS (Pro Service System):
 - Simple functional test with no need to open the unit.
 - Easy to service and components can be replaced quickly thanks systematic component structure.
- Power slope adjustment between the individual sectors.
- Coolant water and welding gas are monitored.
- Option to program up to 99 sectors.
- Possibility of connecting a monitor or printer (through VGA).
- Integrated printer.
- Metric and imperial units.

Scope of delivery ORBIMAT CB power supplies:

- 1 orbital welding power supply of the ORBIMAT CB series
- 1 connection hose set ORBIMAT
- 1 blind plug
- 1 welding connector adapter 165A/300A
- 1 external keyboard
- 1 liter antifreeze
- 1 filling funnel
- 2 keys for key switch
- 1 operation manual

ORBIMAT 165 CB

Computer-controlled 165 A compact power supply for orbital welding
 – Ideal for mobile use on building sites.

See page 12 for the basic model; additional functions and equipment:

- Integrated water cooling system for cooling the connected weld heads.
- WIDE RANGE input voltages for safe operation of power sets or voltage networks with extreme fluctuations in voltage.

Technical Data	ORBIMAT 165 CB
Connection voltage (WIDE-RANGE)	90 - 265 V, 50/60 Hz, 1 phase
Control range	2 - 165 A for a connection voltage > 160 V 2 - 110 A for a connection voltage < 160 V
Power-on time	30% at 165 A 100% at 120 A
Weight including water coolant system	24 kg
Dimensions including water coolant system	510 x 360 x 220 mm

Article	Code	kg
ORBIMAT 165 CB	875 000 001	24,000



ORBIMAT 165 CB

ORBIMAT 300 CB

Computer-controlled 300 A power supply for orbital welding.

See page 12 for basic model.

Please note that the ORBIMAT 300 CB may only be operated in conjunction with a water cooling system that must be ordered separately (see page 14).

Technical Data	ORBIMAT 300 CB
Connection voltage	400 V +/- 15%, 50/60 Hz, 3 phase
Control range	5 - 300 A
Power-on time	40% bei 300 A 60% bei 260 A 100% bei 220 A
Weight	34 kg
Dimensions	530 x 400 x 400 mm

Article	Code	kg
ORBIMAT 300 CB	874 000 001	34,000



ORBIMAT 300 CB

Water cooling systems for ORBIMAT power supplies

ORBICAR W trolley with integrated water coolant

The ORBICAR W trolley is the perfect accessory for the Orbitalum 300 A power supplies due to the integrated water cooling. In addition to the water cooling the trolley has a gas bottle holder.



*ORBICAR W trolley
with integrated water coolant*

Article	Suitable for ORBIMAT	Code	kg
ORBICAR W trolley with integrated water coolant	300 CB, 300 CA, 300 CA AC/DC	884 000 002	58,200
ORBICAR W trolley with integrated water coolant*	165 CA, 165 CB	884 000 004	58,200

ORBICOOL Active

Very efficient compressor cooling device with constant and adjustable water temperature. Including water flow sensor. Significantly increases cooling performance for the weld heads. Particularly suitable for welding units in series production.

Suitable for all* ORBIMAT orbital welding power supplies.



ORBICOOL Active

Technical Data	ORBICOOL Active
Coolant capacity	814 W
Connected load	0,58 kW
Maximum power consumption	6,2 A
Mains voltage	230 V, 50 Hz
Water tank capacity	6 l
Coolant type	air-cooled
Dimensions (lxwxh)	565 x 440 x 335 mm

Article	Code	kg
ORBICOOL Active for OM 165 CA/CB*	889 000 001	40,000
ORBICOOL Active for OM 300 CA/CB	889 000 002	40,000

**The power supply ORBIMAT 165A series has to be modified in our plant.*

Other accessories for ORBIMAT power supplies

ORBITWIN switching device

To increase productivity, the switching unit ORBITWIN is available, with which 2 welding heads can be operated alternately on the ORBIMAT. The previously assigned program is recalled automatically when the start key of the weld head is actuated. The welding head that is not being used is locked and can be prepared for the next welding operation.



ORBIMAT 300 switching device

Article	Suitable for ORBIMAT	Code	kg
ORBIMAT 165 CB switching device	165 CB	860 000 001	8,800
ORBIMAT 165 CA switching device	165 CA	861 000 001	8,800
ORBITWIN 300 switching device*	all ORBIMAT 300	876 000 001	8,800

* not suitable for AVC/OSC machines.

ORBICAR S trolley

The ORBICAR S is a practical trolley with storage shelf and an option of securing a gas cylinder. The ORBICAR S trolley can be combined with all power supplies of the ORBIMAT series. This trolley is most commonly used an orbital welding power supply of the ORBIMAT 165 A series.



ORBICAR S trolley

Article	Code	kg
ORBICAR S trolley	884 000 001	19,100

Durable carrying case

With castors. Protects the power supply during transport and during on-site storage. Can be supplied for ORBIMAT 165 CB/CA and ORBIMAT 300 CB/CA (incl. ORBICOOL Compact).

Article	Suitable for ORBIMAT	Code	kg
Carrying case	165 CB, 165 CA	875 050 002	17,500
Carrying case	300 CB, 300 CA, 300 CA AC/DC	874 050 001	20,800



Durable carrying case
 ((the ORBIMAT 300 CA series shown here is not supplied))

Oxygen meter ORB 1001

To determine the residual oxygen in forming gases. Maintenance-free. Complete in a dust-and water-proof transport container.

See page 67 for detailed information and the order number.



Oxygen Meter ORB 1001



ORBIPURGE forming set



BUP Control Box
incl. ORBIPURGE forming set



CompactFlash Card



Soft-/Hardware package

ORBIPURGE forming set

Complete with Teflon gas hose and quick release couplings.

The ORBIPURGE forming set for tube internal diameter 12 - 110 mm (0.472 - 4.331 inch) includes all accessories for fast and efficient internal forming during orbital welding.

See page 68 for detailed information and the order number.

BUP Control Box

The power supplies of the ORBIMAT CA-series offer the option in conjunction with the BUP control attachment to adjust the forming gas pressure in the inner tube via a pressure sensor, which compensates almost entirely for the often otherwise annoying entry of the seam weld into the sump position. At the same time, the gas pressure is modified automatically during welding by the system between a programmable minimum and maximum value depending on the position of the electrodes.

Including ORBIPURGE forming set for tube internal diameter 12 - 110 mm (0.472 - 4.331 inch). Complete with (3) Teflon gas hoses and rapid-action couplings.

Article	Suitable for ORBIMAT	Code	kg
BUP Control Box	165 CA, 300 CA	886 000 001	2,700

CompactFlash Card

For storing weld data protocols or for extending the program memory (one is already included in the soft/hardware package). Capacity to store over 5,000 welding programs.

Article	Code	kg
CompactFlash Card	875 012 056	0,010

Soft-/Hardware package

Suitable for all ORBIMAT orbital welding power supplies.

For external programming and data documentation, consisting of:

- 1 CompactFlash card 32 MB for transferring data between the machine and PC.
- 1 USB card reader for exporting the CompactFlash card on the PC (no further device required).
- ORBIPROG_CA software allows programs and protocols to be stored on the PC. All data can further be converted into PDF format, enabling this data to be read with practically any standard PC. Additionally, programs from C-series machines (e.g. OM 160 C) and CB-series can be converted to CA format with the help of software. The parameters of the CA programs can be edited using the software and can be transferred back to CA models and used there after processing.

Article	Code	kg
Soft-/Hardware package	875 050 003	0,200

Remote control with cable

Suitable for all ORBIMAT orbital welding power supplies (the and ORBIMAT 300 CA AVC/OSC already include the remote control).
Is required when connecting closed orbital weld heads.



Remote control with cable

Article	Cable length [m]	Cable length [ft]	Code	kg
Remote control with cable	7,5	24.6	875 050 001	1,350

Paper roll for integrated printer

Paper roll for integrated printer.
Suitable for all ORBIMAT orbital welding power supplies.



Paper roll for integrated printer

Article	Code	kg
Paper roll for integrated printer (contains 3 paper rolls)	875.050.017	0,150

Ribbon cartridge for integrated printer

Ribbon cartridge for integrated printer.



Ribbon cartridge for integrated printer

Article	Code	kg
Ribbon cartridge for integrated printer CA*	875 030 004	0,010
Ribbon cartridge for integrated printer CB*	875 030 002	0,020

* Article is part of scope of delivery of all ORBIMAT power supplies.

Anti freeze

Anti freeze for avoiding freezing of the cooling water.
Protects undiluted up to -60° degree.
Suitable for ORBICOOL Active, ORBIMAT 165 CB and ORBIMAT 165 CA.



Anti freeze 1 liter

Article	Code	kg
Anti freeze 1 Liter*	875 030 011	1,350

* Article is part of scope of delivery of all ORBIMAT power supplies.

Hose connection set ORBIMAT

Consists of:

- Teflon gas hose
- Ear clamps with insert
- Hose clips 3/8"
- Water hose for tank
- Gas input connector
- Swivel nuts 3/8"
- Hose clips 1/4"
- Swivel nuts 1/4"



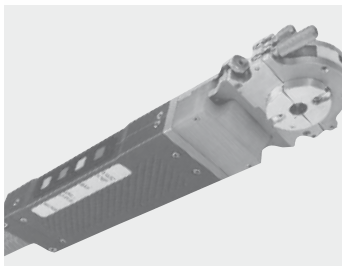
Hose connection set ORBIMAT

Article	Code	kg
Hose connection set ORBIMAT*	875 030 018	0,404

* Article is part of scope of delivery of all ORBIMAT power supplies.



ORBIWELD - totally enclosed, extra thin orbital tube weld heads!



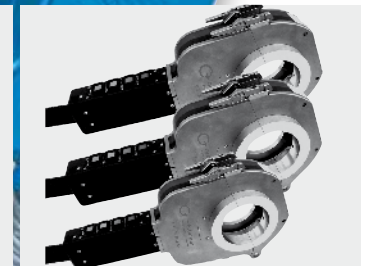
ORBIWELD 12
Microweldhead for tubes from \varnothing 3 - 12.7 mm (0.118 - 0.500"). The ideal solution for semiconductor industries and wherever you have extreme low clearances.



ORBIWELD 19
Closed orbital weld head for tube diameters from 3 19.05 mm (0.118 - 0.750"). Extremely small yet rugged design provides very high duty cycle production rates through an integral watercooled body design.



ORBIWELD 38S, 76S, 115S, 170S
Totally enclosed, extra thin orbital tube weld heads for applications with tight access restrictions.



ORBIWELD 65, 115, 170
Enclosed orbital weld heads with sturdy design for highest thermal requirements.

Overview enclosed weld heads

Enclosed weld heads ORBIWELD / ORBIWELD S

Model		OW 12	OW 19	OW 38S	OW 65	OW 76S	OW 115	OW 115S	OW 170
Code		821 000 001	822 000 001	826 000 001	823 000 001	827 000 001	824 000 001	828 000 001	825 000 001
Tube Ø	[mm]	3 - 12,7	3 - 19,05	3 - 39	6 - 70	6 - 77	20 - 115	20 - 115	50 - 170
	[inch]	¼ - 5	⅛ - 7.5	⅛ - 1.5	¼ - 2.5	¼ - 3	¾ - 4.5	¾ - 4.5	2 - 6
Rotor Ø	[mm]	40	58	82	129	122	183	191	252
	[inch]	1.575	22.83	32.28	50.79	48.03	72.05	75.2	99.21

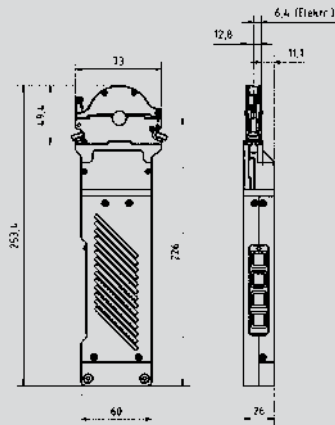
Electrode lengths/diameter for enclosed weld heads

Model	OW 12		OW 19		OW 38S		OW 65		OW 76S		OW 115		OW 115S		OW 170		
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	
Rotor Ø	40,00	1.575	58,00	2.283	82,00	3.228	129,00	5.079	122,00	4.803	183,00	7.204	191,00	7.520	252,00	9.921	
Tungsten Electrode Ø	1,0	0.039	1,6	0.063	1,6	0.063	1,6	0.063	1,6	0.063	1,6	0.063	1,6	0.063	1,6	0.063	
Tube Ø	Electrode length min. - max. with weld head:																
[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
3,17	0.125	13,5	0.50	22,5	0.90	34,5	1.35										
6,00	0.236	12,5	0.45	21,5	0.80	33,5	1.30	57,0	2.20	53,5	2.10						
6,35	0.250	12,0	0.45	21,0	0.80	33,0	1.30	56,5	2.20	53,0	2.05						
8,00	0.315	11,5	0.45	20,5	0.80	32,5	1.25	56,0	2.20	52,5	2.05						
9,53	0.375	10,5	0.40	19,5	0.75	31,5	1.20	55,0	2.15	51,5	2.00						
10,00	0.394	10,5	0.40	19,5	0.75	31,5	1.20	55,0	2.15	51,5	2.00						
10,20	0.402	10,0	0.40	19,0	0.75	31,0	1.20	54,5	2.15	51,0	2.00						
12,00	0.472	9,5	0.35	18,5	0.70	30,5	1.20	54,0	2.10	50,5	1.95						
12,70	0.500	9,0	0.35	18,0	0.70	30,0	1.15	53,5	2.10	50,0	1.95						
13,00	0.512			18,0	0.70	30,0	1.15	53,5	2.10	50,0	1.95						
13,50	0.531			17,5	0.65	29,5	1.15	53,0	2.05	49,5	1.95						
15,88	0.625			16,5	0.65	28,5	1.10	52,0	2.00	48,5	1.90						
16,00	0.630			16,5	0.60	28,5	1.10	52,0	2.00	48,5	1.90						
17,20	0.677			15,5	0.60	27,5	1.05	51,0	2.00	47,5	1.85						
18,00	0.709			15,5	0.60	27,5	1.05	51,0	2.00	47,5	1.85						
19,00	0.748			15,0	0.55	27,0	1.05	50,5	1.95	47,0	1.85						
19,05	0.750			14,5	0.55	26,5	1.05	50,0	1.95	46,5	1.80						
20,00	0.787					26,5	1.00	50,0	1.95	46,5	1.80	77,0	3.00	81,0	3.15		
21,30	0.839					25,5	1.00	49,0	1.90	45,5	1.80	76,0	3.00	80,0	3.15		
22,00	0.866					25,5	1.00	49,0	1.90	45,5	1.75	76,0	2.95	80,0	3.10		
23,00	0.906					25,0	0.95	48,5	1.90	45,0	1.75	75,5	2.95	79,5	3.10		
25,40	1.000					23,5	0.90	47,0	1.85	43,5	1.70	74,0	2.90	78,0	3.05		
26,90	1.059					23,0	0.90	46,5	1.80	43,0	1.65	73,5	2.85	77,5	3.05		
28,00	1.102					22,5	0.85	46,0	1.80	42,5	1.65	73,0	2.85	77,0	3.00		
29,00	1.142					22,0	0.85	45,5	1.75	42,0	1.65	72,5	2.85	76,5	3.00		
30,00	1.181					21,5	0.80	45,0	1.75	41,5	1.60	72,0	2.80	76,0	2.95		
33,70	1.327					19,5	0.75	43,0	1.65	39,5	1.55	70,0	2.75	74,0	2.90		
35,00	1.378					19,0	0.70	42,5	1.65	39,0	1.50	69,5	2.70	73,5	2.85		
38,10	1.500					17,0	0.65	40,5	1.60	37,0	1.45	67,5	2.65	71,5	2.80		
40,00	1.575							40,0	1.55	36,5	1.40	67,0	2.60	71,0	2.75		
41,00	1.614							39,5	1.55	36,0	1.40	66,5	2.60	70,5	2.75		
42,40	1.669							38,5	1.50	35,0	1.35	65,5	2.55	69,5	2.70		
44,50	1.752							37,5	1.45	34,0	1.30	64,5	2.50	68,5	2.70		
48,30	1.902							35,5	1.40	32,0	1.25	62,5	2.45	66,5	2.60		
50,80	2.000							34,5	1.35	31,0	1.20	61,5	2.40	65,5	2.55	96,0	3.75
51,00	2.008							34,5	1.35	31,0	1.20	61,5	2.40	65,5	2.55	96,0	3.75
52,00	2.047							34,0	1.30	30,5	1.20	61,0	2.40	65,0	2.55	95,5	3.75
53,00	2.087							33,5	1.30	30,0	1.15	60,5	2.35	64,5	2.50	95,0	3.70
54,00	2.126							33,0	1.25	29,5	1.15	60,0	2.35	64,0	2.50	94,5	3.70
60,30	2.374							29,5	1.15	26,0	1.00	56,5	2.20	60,5	2.35	91,0	3.55
63,50	2.500							28,0	1.10	24,5	0.95	55,0	2.15	59,0	2.30	89,5	3.50
70,00	2.756							25,0	0.95	21,5	0.80	52,0	2.00	56,0	2.20	86,5	3.40
76,10	2.996									18,0	0.70	48,5	1.90	52,5	2.05	83,0	3.25
76,20	3.000									18,0	0.70	48,5	1.90	52,5	2.05	83,0	3.25
85,00	3.346											44,5	1.75	48,5	1.90	79,0	3.10
88,90	3.500											42,5	1.65	46,5	1.80	77,0	3.00
101,60	4.000											36,0	1.40	40,0	1.55	70,5	2.75
104,00	4.094											35,0	1.35	39,0	1.50	69,5	2.70
108,00	4.252											33,0	1.25	37,0	1.45	67,5	2.65
114,30	4.500											2,5	1.15	33,5	1.30	64,0	2.50
127,00	5.000															58,0	2.25
129,00	5.079															57,0	2.20
139,70	5.500															51,5	2.00
152,40	6.000															45,0	1.75
154,00	6.063															44,5	1.75
165,10	6.500															38,5	1.50
168,30	6.626															37,0	1.45

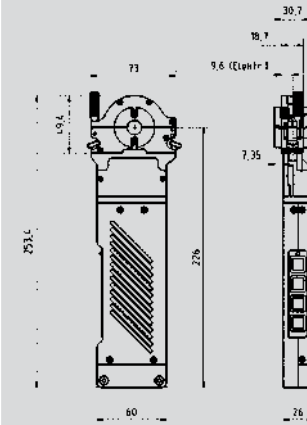
Formula: Electrode length = $\frac{\text{Rotor } \varnothing - \text{Tube } \varnothing}{2}$ – Electrode interval (generally 1,5 mm) – 3

Dimensions (mm) Enclosed Orbital Weld Heads

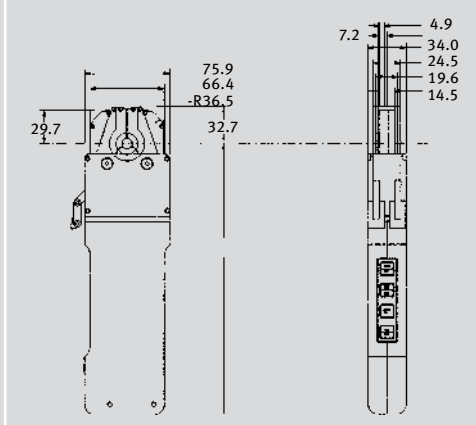
OW 12 Version A (narrow)



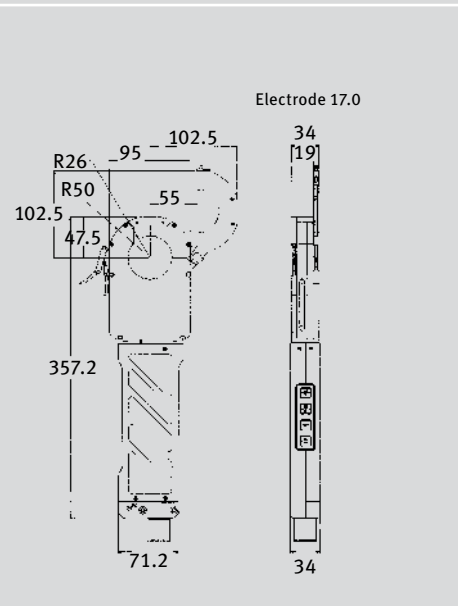
OW 12 Version B (wide)



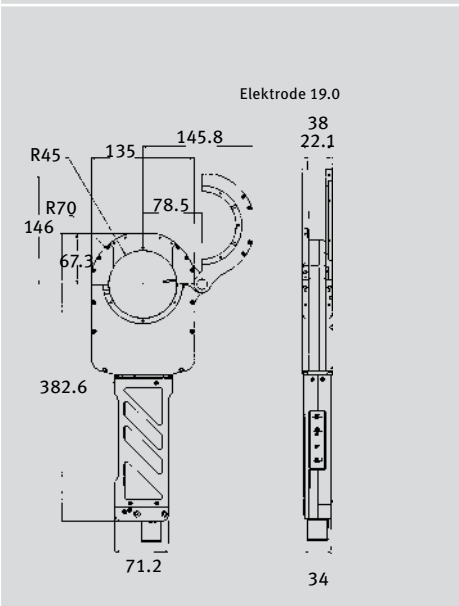
ORBIWELD 19



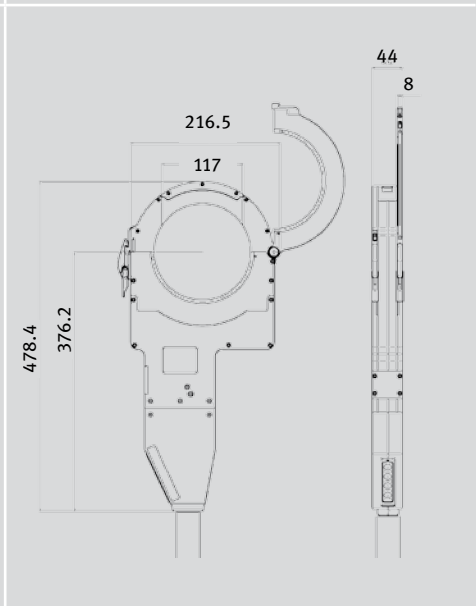
ORBIWELD 385



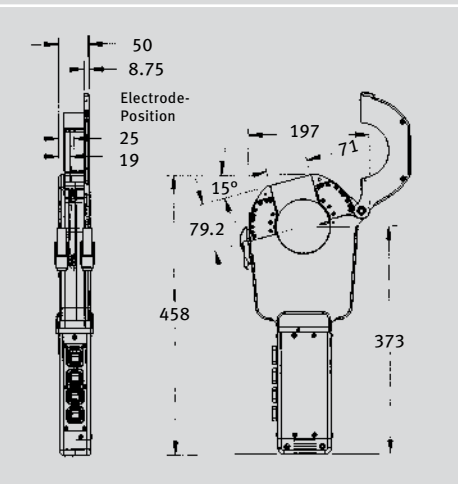
ORBIWELD 765



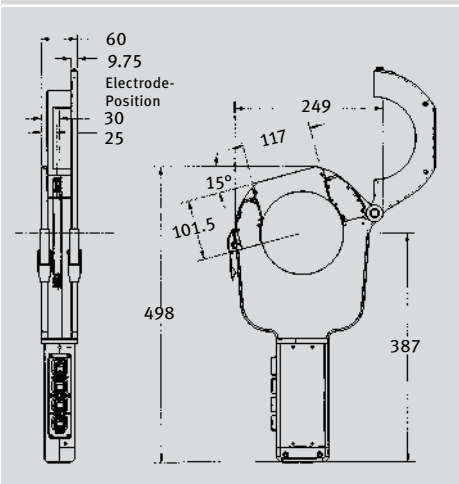
ORBIWELD 115S



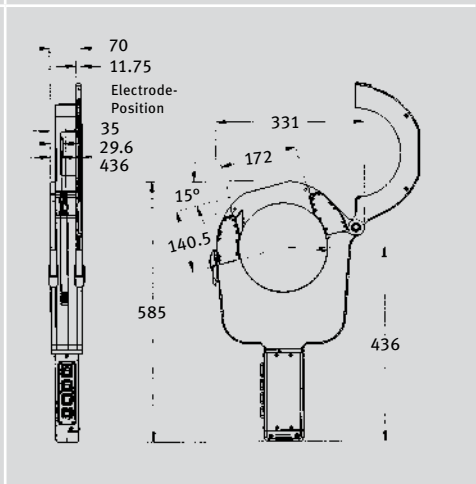
ORBIWELD 65



ORBIWELD 115



ORBIWELD 170



Enclosed orbital weld heads ORBIWELD

Microweld head ORBIWELD 12

The ideal solution for welds in the semiconductor industry and in all applications where space is very limited. Also particularly suitable for welding all common microfittings.

With its extremely compact design and different clamping cartridges, the ORBIWELD 12 microweld head offers a uniquely versatile functionality and a high power-on time previously unknown for weld heads of this size thanks to the water coolant system. With an ORBIMAT series power supply you now have a highly accurate welding system that is yet simple to handle.

- Quick change system for clamping shells.
- Remote control built into the handle.
- Extremely narrow clamping cartridges (Version A).
- Wide clamping cartridge (Version B) with exchangeable clamping shells for standard applications.
- The removable clamping cartridge enables accurate alignment with the parts to be welded, even where there is very little space.

Including 7.5 m (24.6 ft) hose package and tool set.
For cable assembly extensions see page 40.
The clamping cartridges and clamping shell shells should be ordered separately (see below).



OW 12 with wide clamping cartridge (version B) and exchangeable clamping shells



OW 12 with narrow clamping cartridge (version A) especially for welding microfittings.

Article	Tube OD [mm]	Tube OD [inch]	Code	Weight weld head [kg]	Dispatch weight [kg]
Microweld head OW 12	3,00 - 12,70	0.118 - 0.500	821 000 001	5,700	11,000

Exchangeable clamping cartridges for OW 12 version A (narrow)

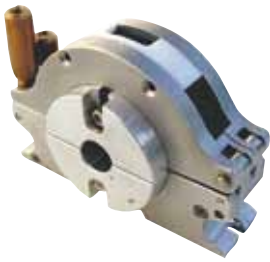
Clamping cartridges with a total width of only 12.7 mm (0.5 inch) can be supplied (version A, see below) for welding microfittings and other applications with very limited chuck lengths. For version A a separate clamping cartridge is required for every tube diameter.

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Clamping cartridge OW 12 version A narrow	3,00	0.118	821 050 101	-
Clamping cartridge OW 12 version A narrow	3,17	0.125	821 050 102	-
Clamping cartridge OW 12 version A narrow	4,00	0.157	821 050 103	-
Clamping cartridge OW 12 version A narrow	4,76	0.187	821 050 104	-
Clamping cartridge OW 12 version A narrow	4,78	0.188	821 050 105	-
Clamping cartridge OW 12 version A narrow	5,00	0.197	821 050 106	-
Clamping cartridge OW 12 version A narrow	6,00	0.236	821 050 107	-
Clamping cartridge OW 12 version A narrow	6,35	0.250	821 050 108	-
Clamping cartridge OW 12 version A narrow	7,00	0.276	821 050 109	-
Clamping cartridge OW 12 version A narrow	7,94	0.313	821 050 110	-
Clamping cartridge OW 12 version A narrow	8,00	0.315	821 050 111	-
Clamping cartridge OW 12 version A narrow	9,00	0.354	821 050 112	-
Clamping cartridge OW 12 version A narrow	9,53	0.375	821 050 113	-
Clamping cartridge OW 12 version A narrow	10,00	0.394	821 050 114	-
Clamping cartridge OW 12 version A narrow	10,10	0.398	821 050 115	-
Clamping cartridge OW 12 version A narrow	10,20	0.402	821 050 116	-
Clamping cartridge OW 12 version A narrow	10,30	0.406	821 050 117	-
Clamping cartridge OW 12 version A narrow	10,50	0.413	821 050 118	-
Clamping cartridge OW 12 version A narrow	11,00	0.433	821 050 119	-
Clamping cartridge OW 12 version A narrow	11,90	0.469	821 050 120	-



Clamping cartridge for OW 12 Version A (schmal)

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Clamping cartridge OW 12 version A narrow	12,00	0.472	821 050 121		-
Clamping cartridge OW 12 version A narrow	12,10	0.476	821 050 122		-
Clamping cartridge OW 12 version A narrow	12,20	0.480	821 050 123		-
Clamping cartridge OW 12 version A narrow	12,50	0.492	821 050 124		-
Clamping cartridge OW 12 version A narrow	12,70	0.500	821 050 125		-



Exchangeable clamping cartridges for OW 12 version B wide

Exchangeable clamping cartridge for OW 12 Version B (wide)

When using the exchangeable clamping cartridge version B a set of clamping shells is required in addition for each tube OD (see below).

Article	Code		kg
Exchangeable clamping cartridge for OW 12 version B wide	821 050 002		0,095

Clamping shells sets for OW 12 Version B (wide)

When using the exchangeable clamping cartridge version B a set of clamping shells is required in addition for each tube OD.



Clamping shells set OW 12 version B wide (4pcs.)

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Clamping shells set OW 12 version B wide (4pcs.)	3,00	0.118	821 002 220		-
Clamping shells set OW 12 version B wide (4pcs.)	3,17	0.125	821 002 221		-
Clamping shells set OW 12 version B wide (4pcs.)	3,18	0.125	821 002 222		-
Clamping shells set OW 12 version B wide (4pcs.)	3,95	0.156	821 002 223		-
Clamping shells set OW 12 version B wide (4pcs.)	4,00	0.157	821 002 224		-
Clamping shells set OW 12 version B wide (4pcs.)	4,76	0.187	821 002 225		-
Clamping shells set OW 12 version B wide (4pcs.)	4,78	0.188	821 002 226		-
Clamping shells set OW 12 version B wide (4pcs.)	5,95	0.234	821 002 227		-
Clamping shells set OW 12 version B wide (4pcs.)	6,00	0.236	821 002 228		-
Clamping shells set OW 12 version B wide (4pcs.)	6,35	0.250	821 002 229		-
Clamping shells set OW 12 version B wide (4pcs.)	7,00	0.276	821 002 230		-
Clamping shells set OW 12 version B wide (4pcs.)	7,50	0.295	821 002 231		-
Clamping shells set OW 12 version B wide (4pcs.)	7,94	0.313	821 002 232		-
Clamping shells set OW 12 version B wide (4pcs.)	8,00	0.315	821 002 233		-
Clamping shells set OW 12 version B wide (4pcs.)	9,00	0.354	821 002 234		-
Clamping shells set OW 12 version B wide (4pcs.)	9,53	0.375	821 002 235		-
Clamping shells set OW 12 version B wide (4pcs.)	9,95	0.392	821 002 236		-
Clamping shells set OW 12 version B wide (4pcs.)	10,00	0.394	821 002 237		-
Clamping shells set OW 12 version B wide (4pcs.)	10,10	0.398	821 002 238		-
Clamping shells set OW 12 version B wide (4pcs.)	10,20	0.402	821 002 239		-
Clamping shells set OW 12 version B wide (4pcs.)	11,00	0.433	821 002 240		-
Clamping shells set OW 12 version B wide (4pcs.)	11,11	0.437	821 002 241		-
Clamping shells set OW 12 version B wide (4pcs.)	11,95	0.470	821 002 242		-
Clamping shells set OW 12 version B wide (4pcs.)	12,00	0.472	821 002 243		-
Clamping shells set OW 12 version B wide (4pcs.)	12,10	0.476	821 002 244		-
Clamping shells set OW 12 version B wide (4pcs.)	12,70	0.500	821 002 245		-



Clamping cartridge microfitting for ORBIWELD 12

Clamping cartridge for OW 12 for microfittings

Clamping cartridge especially designed for microfittings applications. a separate clamping cartridge is required for each tube OD.

Possible welding applications:

- Microfitting to microfitting.
- Microfitting to tube.
- Tube to tube.

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Clamping cartridge OW 12 microfitting	3,17	0.125	821 050 029		-
Clamping cartridge OW 12 microfitting	6,00	0.236	821 050 040		-
Clamping cartridge OW 12 microfitting	6,35	0.250	821 050 030		-
Clamping cartridge OW 12 microfitting	8,00	0.315	821 050 041		-
Clamping cartridge OW 12 microfitting	9,53	0.375	821 050 050		-
Clamping cartridge OW 12 microfitting	10,00	0.394	821 050 042		-
Clamping cartridge OW 12 microfitting	12,00	0.472	821 050 055		-
Clamping cartridge OW 12 microfitting	12,70	0.500	821 050 060		-

Orbital weld head OW 19

Enclosed orbital weld heads for tubes and microfittings.

Extremely narrow design and yet highly durable thanks to intensive water cooling system. The small dimensions of the OW 19 weld head make it ideal for applications where space is very limited, as is often the case in the semiconductor, air and aerospace, pharmaceutical and ultra pure water supply sectors.

- The 3-part clamping mechanism ensures that the head can be clamped in the most confined spaces, as even when open no parts protrude beyond the contour of the head. Equally, an exact alignment, with no misalignment is guaranteed with the parts to be welded.
- Using the keypad built into the handle, it is possible to specify all the necessary commands to the power supply without an additional remote control.

Including 7.5 m (24.6 ft) hose package and tool set.

The clamping shell should be ordered separately.



Orbital weld head OW 19

Article	Tube OD [mm]	Tube OD [inch]	Code		Weight weld head [kg]	Dispatch weight [kg]
Orbital weld head OW 19	3,00 - 19,05	0.118 - 0.750	822 000 001		7,500	14,800

Clamping shells set for OW 19

One set of clamping shells consists of 6 shells.

There are 2 version of clamping shells:

- Version „W“ (wide) for standard applications.
- Version „S“ (narrow) for applications in extremely conditions with low clearances.



Clamping shells set W OW 19 wide (6 pcs.)

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Clamping shells set W OW 19 wide (6pcs.)	3,00	0.118	822 002 120		-
Clamping shells set W OW 19 wide (6pcs.)	3,17	0.125	822 002 121		-
Clamping shells set W OW 19 wide (6pcs.)	3,18	0.125	822 002 122		-
Clamping shells set W OW 19 wide (6pcs.)	3,95	0.156	822 002 123		-
Clamping shells set W OW 19 wide (6pcs.)	4,00	0.157	822 002 124		-
Clamping shells set W OW 19 wide (6pcs.)	4,76	0.187	822 002 125		-
Clamping shells set W OW 19 wide (6pcs.)	4,78	0.188	822 002 126		-
Clamping shells set W OW 19 wide (6pcs.)	5,95	0.234	822 002 127		-
Clamping shells set W OW 19 wide (6pcs.)	6,00	0.236	822 002 128		-
Clamping shells set W OW 19 wide (6pcs.)	6,35	0.250	822 002 129		-
Clamping shells set W OW 19 wide (6pcs.)	7,00	0.276	822 002 130		-
Clamping shells set W OW 19 wide (6pcs.)	7,50	0.295	822 002 131		-
Clamping shells set W OW 19 wide (6pcs.)	7,94	0.313	822 002 132		-
Clamping shells set W OW 19 wide (6pcs.)	8,00	0.315	822 002 133		-
Clamping shells set W OW 19 wide (6pcs.)	9,00	0.354	822 002 134		-
Clamping shells set W OW 19 wide (6pcs.)	9,53	0.375	822 002 135		-
Clamping shells set W OW 19 wide (6pcs.)	9,95	0.392	822 002 136		-



*Clamping shells set S OW 19 S narrow
(6 pcs.)*

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Clamping shells set W OW 19 wide (6pcs.)	10,00	0.394	822 002 137	-
Clamping shells set W OW 19 wide (6pcs.)	10,10	0.398	822 002 138	-
Clamping shells set W OW 19 wide (6pcs.)	10,20	0.402	822 002 139	-
Clamping shells set W OW 19 wide (6pcs.)	11,00	0.433	822 002 140	-
Clamping shells set W OW 19 wide (6pcs.)	11,11	0.437	822 002 141	-
Clamping shells set W OW 19 wide (6pcs.)	11,95	0.470	822 002 142	-
Clamping shells set W OW 19 wide (6pcs.)	12,00	0.472	822 002 143	-
Clamping shells set W OW 19 wide (6pcs.)	12,10	0.476	822 002 144	-
Clamping shells set W OW 19 wide (6pcs.)	12,70	0.500	822 002 145	-
Clamping shells set W OW 19 wide (6pcs.)	13,00	0.512	822 002 146	-
Clamping shells set W OW 19 wide (6pcs.)	13,20	0.520	822 002 147	-
Clamping shells set W OW 19 wide (6pcs.)	13,50	0.531	822 002 148	-
Clamping shells set W OW 19 wide (6pcs.)	13,70	0.539	822 002 149	-
Clamping shells set W OW 19 wide (6pcs.)	14,00	0.551	822 002 150	-
Clamping shells set W OW 19 wide (6pcs.)	14,30	0.563	822 002 151	-
Clamping shells set W OW 19 wide (6pcs.)	14,70	0.579	822 002 152	-
Clamping shells set W OW 19 wide (6pcs.)	15,00	0.591	822 002 153	-
Clamping shells set W OW 19 wide (6pcs.)	15,30	0.602	822 002 154	-
Clamping shells set W OW 19 wide (6pcs.)	15,60	0.614	822 002 155	-
Clamping shells set W OW 19 wide (6pcs.)	15,70	0.618	822 002 156	-
Clamping shells set W OW 19 wide (6pcs.)	15,88	0.625	822 002 157	-
Clamping shells set W OW 19 wide (6pcs.)	16,00	0.630	822 002 158	-
Clamping shells set W OW 19 wide (6pcs.)	16,70	0.657	822 002 159	-
Clamping shells set W OW 19 wide (6pcs.)	17,00	0.669	822 002 160	-
Clamping shells set W OW 19 wide (6pcs.)	17,08	0.672	822 002 161	-
Clamping shells set W OW 19 wide (6pcs.)	17,20	0.677	822 002 162	-
Clamping shells set W OW 19 wide (6pcs.)	17,30	0.681	822 002 163	-
Clamping shells set W OW 19 wide (6pcs.)	18,00	0.709	822 002 164	-
Clamping shells set W OW 19 wide (6pcs.)	19,00	0.748	822 002 165	-
Clamping shells set W OW 19 wide (6pcs.)	19,05	0.750	822 002 166	-
Clamping shells set S OW 19 narrow (6pcs.)	3,00	0.118	822 002 320	-
Clamping shells set S OW 19 narrow (6pcs.)	3,17	0.125	822 002 321	-
Clamping shells set S OW 19 narrow (6pcs.)	3,18	0.156	822 002 322	-
Clamping shells set S OW 19 narrow (6pcs.)	3,95	0.157	822 002 323	-
Clamping shells set S OW 19 narrow (6pcs.)	4,00	0.187	822 002 324	-
Clamping shells set S OW 19 narrow (6pcs.)	4,76	0.188	822 002 325	-
Clamping shells set S OW 19 narrow (6pcs.)	4,78	0.234	822 002 326	-
Clamping shells set S OW 19 narrow (6pcs.)	5,95	0.236	822 002 327	-
Clamping shells set S OW 19 narrow (6pcs.)	6,00	0.250	822 002 328	-
Clamping shells set S OW 19 narrow (6pcs.)	6,35	0.276	822 002 329	-
Clamping shells set S OW 19 narrow (6pcs.)	7,00	0.295	822 002 330	-
Clamping shells set S OW 19 narrow (6pcs.)	7,50	0.313	822 002 331	-
Clamping shells set S OW 19 narrow (6pcs.)	7,94	0.315	822 002 332	-
Clamping shells set S OW 19 narrow (6pcs.)	8,00	0.354	822 002 333	-
Clamping shells set S OW 19 narrow (6pcs.)	9,00	0.375	822 002 334	-
Clamping shells set S OW 19 narrow (6pcs.)	9,53	0.392	822 002 335	-
Clamping shells set S OW 19 narrow (6pcs.)	9,95	0.394	822 002 336	-
Clamping shells set S OW 19 narrow (6pcs.)	10,00	0.398	822 002 337	-
Clamping shells set S OW 19 narrow (6pcs.)	10,10	0.402	822 002 338	-
Clamping shells set S OW 19 narrow (6pcs.)	10,20	0.433	822 002 339	-
Clamping shells set S OW 19 narrow (6pcs.)	11,00	0.437	822 002 340	-
Clamping shells set S OW 19 narrow (6pcs.)	11,11	0.470	822 002 341	-
Clamping shells set S OW 19 narrow (6pcs.)	11,95	0.472	822 002 342	-
Clamping shells set S OW 19 narrow (6pcs.)	12,00	0.476	822 002 343	-
Clamping shells set S OW 19 narrow (6pcs.)	12,10	0.500	822 002 344	-
Clamping shells set S OW 19 narrow (6pcs.)	12,70	0.512	822 002 345	-
Clamping shells set S OW 19 narrow (6pcs.)	13,00	0.520	822 002 346	-
Clamping shells set S OW 19 narrow (6pcs.)	13,20	0.531	822 002 347	-
Clamping shells set S OW 19 narrow (6pcs.)	13,50	0.539	822 002 348	-
Clamping shells set S OW 19 narrow (6pcs.)	13,70	0.539	822 002 349	-
Clamping shells set S OW 19 narrow (6pcs.)	14,00	0.551	822 002 350	-
Clamping shells set S OW 19 narrow (6pcs.)	14,30	0.563	822 002 351	-
Clamping shells set S OW 19 narrow (6pcs.)	14,70	0.579	822 002 352	-
Clamping shells set S OW 19 narrow (6pcs.)	15,00	0.591	822 002 353	-
Clamping shells set S OW 19 narrow (6pcs.)	15,30	0.602	822 002 354	-

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Clamping shells set S OW 19 narrow (6pcs.)	15,60	0.614	822 002 355		-
Clamping shells set S OW 19 narrow (6pcs.)	15,70	0.618	822 002 356		-
Clamping shells set S OW 19 narrow (6pcs.)	15,88	0.625	822 002 357		-
Clamping shells set S OW 19 narrow (6pcs.)	16,00	0.630	822 002 358		-
Clamping shells set S OW 19 narrow (6pcs.)	16,70	0.657	822 002 359		-
Clamping shells set S OW 19 narrow (6pcs.)	17,00	0.669	822 002 360		-
Clamping shells set S OW 19 narrow (6pcs.)	17,08	0.672	822 002 361		-
Clamping shells set S OW 19 narrow (6pcs.)	17,20	0.677	822 002 362		-
Clamping shells set S OW 19 narrow (6pcs.)	17,30	0.681	822 002 363		-
Clamping shells set S OW 19 narrow (6pcs.)	18,00	0.709	822 002 364		-
Clamping shells set S OW 19 narrow (6pcs.)	19,00	0.748	822 002 365		-
Clamping shells set S OW 19 narrow (6pcs.)	19,05	0.750	822 002 366		-

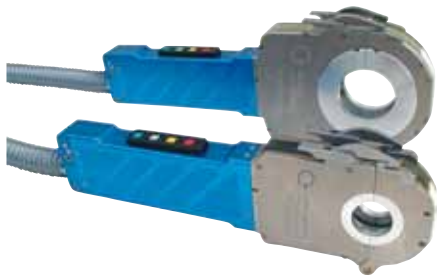
Enclosed orbital weld heads ORBIWELD S

Orbital weld heads ORBIWELD 38S, 76S, 115S

Enclosed orbital weld heads with extremely narrow design and therefore highly durable thanks to the intensive water cooling system. The small dimensions of the ORBIWELD S-weld head series make it ideal for applications where space is very limited, as is often the case in pharmaceutical and similar application sectors.

- Quick change system for clamping shells. The clamping shells are simply clipped in and out without any additional tools.
- Completely water cooled.
- Thanks to the extremely narrow design of the ORBIWELD S series, parts with short straight welding lengths can also be processed.
- Durable clamping connections in conjunction with clamping shells available for all tube dimensions guarantee that the parts to be welded are clamped securely without misalignment.
- All the important commands for welding can be transmitted to the power supply via a control panel built into the robust and durable aluminum handle, so that no additional remote control is required.

Including 7.5 m (24.6 ft) hose package and tool set.
For cable assembly extensions see page 40.
The clamping shells should be ordered separately.



ORBIWELD 38S and ORBIWELD 76S



ORBIWELD 115S

Article	Tube OD [mm]	Tube OD [inch]	Code	Weight weld head [kg]	Dispatch weight [kg]
Orbital weld head OW 38S	3,00 - 38,10	1/8" - 1.5"	826 000 001	9,000	16,500
Orbital weld head OW 76S	6,00 - 77,00	1/4" - 3.0"	827 000 001	9,400	16,900
Orbital weld head OW 115S	20,00 - 115,00	3/4" - 4.5"	828 000 001	13,000	18,600

Enclosed orbital weld heads ORBIWELD

Orbital weld heads ORBIWELD 65, 115, 170

The ORBIWELD series is characterized by very high thermal load bearing capacity: It is therefore particularly suitable for applications in the chemical, pharmaceutical, and food industry, where ever greater demands are made on the closed weld heads by ever greater tube diameters and wall thicknesses.

Coolant channels running through the entire weld head body have provided for excellent heat dissipation that enable the ORBIWELD weld heads to work continuously even at high welding currents and intensive load. The closed design of the ORBIWELD series and the gas management system of the head ensure a permanent infiltration of the weld seam with during welding with insert gas, guaranteeing seams that are very low in welding colors.

- Quick change system for clamping shells. The clamping shells are simply clipped in and out without any additional tooling.
- Completely water cooled.
- Stable clamp connections in conjunction with clamping shells available for all tube dimensions guarantee secure clamping and centering of the parts to be welded without misalignment.
- All the important commands for welding can be transmitted to the power supply via a control panel built into the robust and durable aluminum handle, so that no additional remote control is required.

Including 7.5 m (24.6 ft) hose package and tool set.

For cable assembly extensions see page 40.

The clamping shells should be ordered separately.



ORBIWELD 115

Article	Tube OD [mm]	Tube OD [inch]	Code	Weight weld head [kg]	Dispatch weight [kg]
Orbital weld head OW 65	6,00 - 70,00	1/4" - 2.5"	823 000 001	13,100	20,600
Orbital weld head OW 115	20,00 - 115,00	3/4" - 4.5"	824 000 001	15,100	22,600
Orbital weld head OW 170	50,00 - 170,00	2.0" - 6.0"	825 000 001	20,700	36,200

Accessories for ORBIWELD S and ORBIWELD

NOTE! NEW CLAMPING SYSTEM!

1 pair clamping shell consists of 2 clamping shells for 1 clamping side.
Thus for each tube OD 2 pairs of clamping shells are required.

We offer you the opportunity to choose between wide „W“ and narrow „S“ clamping shells for orbital weld heads ORBIWELD 115, 115S and 170, which can be combined as needed.

Pairs of clamping shells for ORBIWELD 38S

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells OW 38S (2pcs.)	3,00	0.118	826 002 120		-
Pair of clamping shells OW 38S (2pcs.)	3,17	0.125	826 002 121		-
Pair of clamping shells OW 38S (2pcs.)	3,18	0.125	826 002 122		-
Pair of clamping shells OW 38S (2pcs.)	3,95	0.156	826 002 123		-
Pair of clamping shells OW 38S (2pcs.)	4,00	0.157	826 002 124		-
Pair of clamping shells OW 38S (2pcs.)	4,76	0.187	826 002 125		-
Pair of clamping shells OW 38S (2pcs.)	4,78	0.188	826 002 126		-
Pair of clamping shells OW 38S (2pcs.)	5,95	0.234	826 002 127		-
Pair of clamping shells OW 38S (2pcs.)	6,00	0.236	826 002 128		-
Pair of clamping shells OW 38S (2pcs.)	6,35	0.250	826 002 129		-
Pair of clamping shells OW 38S (2pcs.)	7,00	0.276	826 002 130		-
Pair of clamping shells OW 38S (2pcs.)	7,50	0.295	826 002 131		-
Pair of clamping shells OW 38S (2pcs.)	7,94	0.313	826 002 132		-
Pair of clamping shells OW 38S (2pcs.)	8,00	0.315	826 002 133		-
Pair of clamping shells OW 38S (2pcs.)	9,00	0.354	826 002 134		-
Pair of clamping shells OW 38S (2pcs.)	9,53	0.375	826 002 135		-
Pair of clamping shells OW 38S (2pcs.)	9,95	0.392	826 002 136		-
Pair of clamping shells OW 38S (2pcs.)	10,00	0.394	826 002 137		-
Pair of clamping shells OW 38S (2pcs.)	10,10	0.398	826 002 138		-
Pair of clamping shells OW 38S (2pcs.)	10,20	0.402	826 002 139		-
Pair of clamping shells OW 38S (2pcs.)	11,00	0.433	826 002 140		-
Pair of clamping shells OW 38S (2pcs.)	11,11	0.437	826 002 141		-
Pair of clamping shells OW 38S (2pcs.)	11,95	0.470	826 002 142		-
Pair of clamping shells OW 38S (2pcs.)	12,00	0.472	826 002 143		-
Pair of clamping shells OW 38S (2pcs.)	12,10	0.476	826 002 144		-
Pair of clamping shells OW 38S (2pcs.)	12,70	0.500	826 002 145		-
Pair of clamping shells OW 38S (2pcs.)	13,00	0.512	826 002 146		-
Pair of clamping shells OW 38S (2pcs.)	13,20	0.520	826 002 147		-
Pair of clamping shells OW 38S (2pcs.)	13,50	0.531	826 002 148		-
Pair of clamping shells OW 38S (2pcs.)	13,70	0.539	826 002 149		-
Pair of clamping shells OW 38S (2pcs.)	14,00	0.551	826 002 150		-
Pair of clamping shells OW 38S (2pcs.)	14,30	0.563	826 002 151		-
Pair of clamping shells OW 38S (2pcs.)	14,70	0.579	826 002 152		-
Pair of clamping shells OW 38S (2pcs.)	15,00	0.591	826 002 153		-
Pair of clamping shells OW 38S (2pcs.)	15,30	0.602	826 002 154		-
Pair of clamping shells OW 38S (2pcs.)	15,60	0.614	826 002 155		-
Pair of clamping shells OW 38S (2pcs.)	15,70	0.618	826 002 156		-
Pair of clamping shells OW 38S (2pcs.)	15,88	0.625	826 002 157		-
Pair of clamping shells OW 38S (2pcs.)	16,00	0.630	826 002 158		-
Pair of clamping shells OW 38S (2pcs.)	16,70	0.657	826 002 159		-
Pair of clamping shells OW 38S (2pcs.)	17,00	0.669	826 002 160		-
Pair of clamping shells OW 38S (2pcs.)	17,08	0.672	826 002 161		-
Pair of clamping shells OW 38S (2pcs.)	17,20	0.677	826 002 162		-
Pair of clamping shells OW 38S (2pcs.)	17,30	0.681	826 002 163		-
Pair of clamping shells OW 38S (2pcs.)	18,00	0.709	826 002 164		-
Pair of clamping shells OW 38S (2pcs.)	19,00	0.748	826 002 165		-
Pair of clamping shells OW 38S (2pcs.)	19,05	0.750	826 002 166		-
Pair of clamping shells OW 38S (2pcs.)	19,50	0.768	826 002 167		-
Pair of clamping shells OW 38S (2pcs.)	20,00	0.787	826 002 168		-



Pair of clamping shells OW 38S (2pcs.)
for one clamping side

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells OW 38S (2pcs.)	21,00	0.827	826 002 169	-
Pair of clamping shells OW 38S (2pcs.)	21,30	0.839	826 002 170	-
Pair of clamping shells OW 38S (2pcs.)	21,70	0.854	826 002 171	-
Pair of clamping shells OW 38S (2pcs.)	22,00	0.866	826 002 172	-
Pair of clamping shells OW 38S (2pcs.)	22,22	0.875	826 002 173	-
Pair of clamping shells OW 38S (2pcs.)	22,23	0.875	826 002 174	-
Pair of clamping shells OW 38S (2pcs.)	22,55	0.888	826 002 175	-
Pair of clamping shells OW 38S (2pcs.)	23,00	0.906	826 002 176	-
Pair of clamping shells OW 38S (2pcs.)	24,00	0.945	826 002 177	-
Pair of clamping shells OW 38S (2pcs.)	24,13	0.950	826 002 178	-
Pair of clamping shells OW 38S (2pcs.)	25,00	0.984	826 002 179	-
Pair of clamping shells OW 38S (2pcs.)	25,25	0.994	826 002 180	-
Pair of clamping shells OW 38S (2pcs.)	25,40	1.000	826 002 181	-
Pair of clamping shells OW 38S (2pcs.)	26,00	1.024	826 002 182	-
Pair of clamping shells OW 38S (2pcs.)	26,70	1.051	826 002 183	-
Pair of clamping shells OW 38S (2pcs.)	26,90	1.059	826 002 184	-
Pair of clamping shells OW 38S (2pcs.)	27,00	1.063	826 002 185	-
Pair of clamping shells OW 38S (2pcs.)	27,20	1.071	826 002 186	-
Pair of clamping shells OW 38S (2pcs.)	28,00	1.102	826 002 187	-
Pair of clamping shells OW 38S (2pcs.)	29,00	1.142	826 002 188	-
Pair of clamping shells OW 38S (2pcs.)	30,00	1.181	826 002 189	-
Pair of clamping shells OW 38S (2pcs.)	30,53	1.202	826 002 190	-
Pair of clamping shells OW 38S (2pcs.)	31,75	1.250	826 002 191	-
Pair of clamping shells OW 38S (2pcs.)	31,80	1.252	826 002 192	-
Pair of clamping shells OW 38S (2pcs.)	32,00	1.260	826 002 193	-
Pair of clamping shells OW 38S (2pcs.)	33,00	1.299	826 002 194	-
Pair of clamping shells OW 38S (2pcs.)	33,40	1.315	826 002 195	-
Pair of clamping shells OW 38S (2pcs.)	33,70	1.327	826 002 196	-
Pair of clamping shells OW 38S (2pcs.)	34,00	1.339	826 002 197	-
Pair of clamping shells OW 38S (2pcs.)	35,00	1.378	826 002 198	-
Pair of clamping shells OW 38S (2pcs.)	36,00	1.417	826 002 199	-
Pair of clamping shells OW 38S (2pcs.)	38,00	1.496	826 002 200	-
Pair of clamping shells OW 38S (2pcs.)	38,10	1.500	826 002 201	-

Pairs of clamping shells for ORBIWELD 76S

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells OW 76S (2pcs.)	6,00	0.236	827 002 120	-
Pair of clamping shells OW 76S (2pcs.)	6,35	0.250	827 002 121	-
Pair of clamping shells OW 76S (2pcs.)	7,00	0.276	827 002 122	-
Pair of clamping shells OW 76S (2pcs.)	7,50	0.295	827 002 123	-
Pair of clamping shells OW 76S (2pcs.)	7,94	0.313	827 002 124	-
Pair of clamping shells OW 76S (2pcs.)	8,00	0.315	827 002 125	-
Pair of clamping shells OW 76S (2pcs.)	9,00	0.354	827 002 126	-
Pair of clamping shells OW 76S (2pcs.)	9,53	0.375	827 002 127	-
Pair of clamping shells OW 76S (2pcs.)	9,95	0.392	827 002 128	-
Pair of clamping shells OW 76S (2pcs.)	10,00	0.394	827 002 129	-
Pair of clamping shells OW 76S (2pcs.)	10,10	0.398	827 002 130	-
Pair of clamping shells OW 76S (2pcs.)	10,20	0.402	827 002 131	-
Pair of clamping shells OW 76S (2pcs.)	11,00	0.433	827 002 132	-
Pair of clamping shells OW 76S (2pcs.)	11,11	0.437	827 002 133	-
Pair of clamping shells OW 76S (2pcs.)	11,95	0.470	827 002 134	-
Pair of clamping shells OW 76S (2pcs.)	12,00	0.472	827 002 135	-
Pair of clamping shells OW 76S (2pcs.)	12,10	0.476	827 002 136	-
Pair of clamping shells OW 76S (2pcs.)	12,70	0.500	827 002 137	-
Pair of clamping shells OW 76S (2pcs.)	13,00	0.512	827 002 138	-
Pair of clamping shells OW 76S (2pcs.)	13,20	0.520	827 002 139	-
Pair of clamping shells OW 76S (2pcs.)	13,50	0.531	827 002 140	-
Pair of clamping shells OW 76S (2pcs.)	13,70	0.539	827 002 141	-
Pair of clamping shells OW 76S (2pcs.)	14,00	0.551	827 002 142	-
Pair of clamping shells OW 76S (2pcs.)	14,30	0.563	827 002 143	-
Pair of clamping shells OW 76S (2pcs.)	14,70	0.579	827 002 144	-
Pair of clamping shells OW 76S (2pcs.)	15,00	0.591	827 002 145	-
Pair of clamping shells OW 76S (2pcs.)	15,30	0.602	827 002 146	-



*Pair of clamping shells OW 76S (2pcs.)
for one clamping side*

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells OW 76S (2pcs.)	15,60	0.614	827 002 147		-
Pair of clamping shells OW 76S (2pcs.)	15,70	0.618	827 002 148		-
Pair of clamping shells OW 76S (2pcs.)	15,88	0.625	827 002 149		-
Pair of clamping shells OW 76S (2pcs.)	16,00	0.630	827 002 150		-
Pair of clamping shells OW 76S (2pcs.)	16,70	0.657	827 002 151		-
Pair of clamping shells OW 76S (2pcs.)	17,00	0.669	827 002 152		-
Pair of clamping shells OW 76S (2pcs.)	17,08	0.672	827 002 153		-
Pair of clamping shells OW 76S (2pcs.)	17,20	0.677	827 002 154		-
Pair of clamping shells OW 76S (2pcs.)	17,30	0.681	827 002 155		-
Pair of clamping shells OW 76S (2pcs.)	18,00	0.709	827 002 156		-
Pair of clamping shells OW 76S (2pcs.)	19,00	0.748	827 002 157		-
Pair of clamping shells OW 76S (2pcs.)	19,05	0.750	827 002 158		-
Pair of clamping shells OW 76S (2pcs.)	19,50	0.768	827 002 159		-
Pair of clamping shells OW 76S (2pcs.)	20,00	0.787	827 002 160		-
Pair of clamping shells OW 76S (2pcs.)	21,00	0.827	827 002 161		-
Pair of clamping shells OW 76S (2pcs.)	21,30	0.839	827 002 162		-
Pair of clamping shells OW 76S (2pcs.)	21,70	0.854	827 002 163		-
Pair of clamping shells OW 76S (2pcs.)	22,00	0.866	827 002 164		-
Pair of clamping shells OW 76S (2pcs.)	22,22	0.875	827 002 165		-
Pair of clamping shells OW 76S (2pcs.)	22,23	0.875	827 002 166		-
Pair of clamping shells OW 76S (2pcs.)	22,55	0.888	827 002 167		-
Pair of clamping shells OW 76S (2pcs.)	23,00	0.906	827 002 168		-
Pair of clamping shells OW 76S (2pcs.)	24,00	0.945	827 002 169		-
Pair of clamping shells OW 76S (2pcs.)	24,13	0.950	827 002 170		-
Pair of clamping shells OW 76S (2pcs.)	25,00	0.984	827 002 171		-
Pair of clamping shells OW 76S (2pcs.)	25,25	0.994	827 002 172		-
Pair of clamping shells OW 76S (2pcs.)	25,40	1.000	827 002 173		-
Pair of clamping shells OW 76S (2pcs.)	26,00	1.024	827 002 174		-
Pair of clamping shells OW 76S (2pcs.)	26,70	1.051	827 002 175		-
Pair of clamping shells OW 76S (2pcs.)	26,90	1.059	827 002 176		-
Pair of clamping shells OW 76S (2pcs.)	27,00	1.063	827 002 177		-
Pair of clamping shells OW 76S (2pcs.)	27,20	1.071	827 002 178		-
Pair of clamping shells OW 76S (2pcs.)	28,00	1.102	827 002 179		-
Pair of clamping shells OW 76S (2pcs.)	29,00	1.142	827 002 180		-
Pair of clamping shells OW 76S (2pcs.)	30,00	1.181	827 002 181		-
Pair of clamping shells OW 76S (2pcs.)	30,53	1.202	827 002 182		-
Pair of clamping shells OW 76S (2pcs.)	31,75	1.250	827 002 183		-
Pair of clamping shells OW 76S (2pcs.)	31,80	1.252	827 002 184		-
Pair of clamping shells OW 76S (2pcs.)	32,00	1.260	827 002 185		-
Pair of clamping shells OW 76S (2pcs.)	33,00	1.299	827 002 186		-
Pair of clamping shells OW 76S (2pcs.)	33,40	1.315	827 002 187		-
Pair of clamping shells OW 76S (2pcs.)	33,70	1.327	827 002 188		-
Pair of clamping shells OW 76S (2pcs.)	34,00	1.339	827 002 189		-
Pair of clamping shells OW 76S (2pcs.)	35,00	1.378	827 002 190		-
Pair of clamping shells OW 76S (2pcs.)	36,00	1.417	827 002 191		-
Pair of clamping shells OW 76S (2pcs.)	38,00	1.496	827 002 192		-
Pair of clamping shells OW 76S (2pcs.)	38,10	1.500	827 002 193		-
Pair of clamping shells OW 76S (2pcs.)	40,00	1.575	827 002 194		-
Pair of clamping shells OW 76S (2pcs.)	41,00	1.614	827 002 195		-
Pair of clamping shells OW 76S (2pcs.)	42,00	1.654	827 002 196		-
Pair of clamping shells OW 76S (2pcs.)	42,16	1.660	827 002 197		-
Pair of clamping shells OW 76S (2pcs.)	42,30	1.665	827 002 198		-
Pair of clamping shells OW 76S (2pcs.)	42,40	1.669	827 002 199		-
Pair of clamping shells OW 76S (2pcs.)	42,70	1.681	827 002 200		-
Pair of clamping shells OW 76S (2pcs.)	43,00	1.693	827 002 201		-
Pair of clamping shells OW 76S (2pcs.)	43,20	1.701	827 002 202		-
Pair of clamping shells OW 76S (2pcs.)	44,00	1.732	827 002 203		-
Pair of clamping shells OW 76S (2pcs.)	44,45	1.750	827 002 204		-
Pair of clamping shells OW 76S (2pcs.)	44,50	1.752	827 002 205		-
Pair of clamping shells OW 76S (2pcs.)	45,00	1.772	827 002 206		-
Pair of clamping shells OW 76S (2pcs.)	45,80	1.803	827 002 207		-
Pair of clamping shells OW 76S (2pcs.)	48,00	1.890	827 002 208		-
Pair of clamping shells OW 76S (2pcs.)	48,26	1.900	827 002 209		-
Pair of clamping shells OW 76S (2pcs.)	48,30	1.902	827 002 210		-
Pair of clamping shells OW 76S (2pcs.)	48,60	1.913	827 002 211		-
Pair of clamping shells OW 76S (2pcs.)	50,00	1.969	827 002 212		-
Pair of clamping shells OW 76S (2pcs.)	50,80	2.000	827 002 213		-

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells OW 76S (2pcs.)	51,00	2.008	827 002 214	-
Pair of clamping shells OW 76S (2pcs.)	52,00	2.047	827 002 215	-
Pair of clamping shells OW 76S (2pcs.)	53,00	2.087	827 002 216	-
Pair of clamping shells OW 76S (2pcs.)	54,00	2.126	827 002 217	-
Pair of clamping shells OW 76S (2pcs.)	57,00	2.244	827 002 218	-
Pair of clamping shells OW 76S (2pcs.)	60,00	2.363	827 002 219	-
Pair of clamping shells OW 76S (2pcs.)	60,10	2.366	827 002 220	-
Pair of clamping shells OW 76S (2pcs.)	60,30	2.374	827 002 221	-
Pair of clamping shells OW 76S (2pcs.)	60,45	2.380	827 002 222	-
Pair of clamping shells OW 76S (2pcs.)	60,50	2.382	827 002 223	-
Pair of clamping shells OW 76S (2pcs.)	63,00	2.480	827 002 224	-
Pair of clamping shells OW 76S (2pcs.)	63,20	2.488	827 002 225	-
Pair of clamping shells OW 76S (2pcs.)	63,50	2.500	827 002 226	-
Pair of clamping shells OW 76S (2pcs.)	65,00	2.559	827 002 227	-
Pair of clamping shells OW 76S (2pcs.)	70,00	2.756	827 002 228	-
Pair of clamping shells OW 76S (2pcs.)	70,20	2.764	827 002 229	-
Pair of clamping shells OW 76S (2pcs.)	73,00	2.874	827 002 230	-
Pair of clamping shells OW 76S (2pcs.)	73,03	2.875	827 002 231	-
Pair of clamping shells OW 76S (2pcs.)	73,15	2.880	827 002 232	-
Pair of clamping shells OW 76S (2pcs.)	75,00	2.953	827 002 233	-
Pair of clamping shells OW 76S (2pcs.)	76,00	2.992	827 002 234	-
Pair of clamping shells OW 76S (2pcs.)	76,10	2.996	827 002 235	-
Pair of clamping shells OW 76S (2pcs.)	76,20	3.000	827 002 236	-
Pair of clamping shells OW 76S (2pcs.)	76,30	3.004	827 002 237	-

Pairs of clamping shells for ORBIWELD 65

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells OW 65 (2pcs.)	6,00	0.236	823 002 120	-
Pair of clamping shells OW 65 (2pcs.)	6,35	0.250	823 002 121	-
Pair of clamping shells OW 65 (2pcs.)	7,00	0.276	823 002 122	-
Pair of clamping shells OW 65 (2pcs.)	7,50	0.295	823 002 123	-
Pair of clamping shells OW 65 (2pcs.)	7,94	0.313	823 002 124	-
Pair of clamping shells OW 65 (2pcs.)	8,00	0.315	823 002 125	-
Pair of clamping shells OW 65 (2pcs.)	9,00	0.354	823 002 126	-
Pair of clamping shells OW 65 (2pcs.)	9,53	0.375	823 002 127	-
Pair of clamping shells OW 65 (2pcs.)	9,95	0.392	823 002 128	-
Pair of clamping shells OW 65 (2pcs.)	10,00	0.394	823 002 129	-
Pair of clamping shells OW 65 (2pcs.)	10,10	0.398	823 002 130	-
Pair of clamping shells OW 65 (2pcs.)	10,20	0.402	823 002 131	-
Pair of clamping shells OW 65 (2pcs.)	11,00	0.433	823 002 132	-
Pair of clamping shells OW 65 (2pcs.)	11,11	0.437	823 002 133	-
Pair of clamping shells OW 65 (2pcs.)	11,95	0.470	823 002 134	-
Pair of clamping shells OW 65 (2pcs.)	12,00	0.472	823 002 135	-
Pair of clamping shells OW 65 (2pcs.)	12,10	0.476	823 002 136	-
Pair of clamping shells OW 65 (2pcs.)	12,70	0.500	823 002 137	-
Pair of clamping shells OW 65 (2pcs.)	13,00	0.512	823 002 138	-
Pair of clamping shells OW 65 (2pcs.)	13,20	0.520	823 002 139	-
Pair of clamping shells OW 65 (2pcs.)	13,50	0.531	823 002 140	-
Pair of clamping shells OW 65 (2pcs.)	13,70	0.539	823 002 141	-
Pair of clamping shells OW 65 (2pcs.)	14,00	0.551	823 002 142	-
Pair of clamping shells OW 65 (2pcs.)	14,30	0.563	823 002 143	-
Pair of clamping shells OW 65 (2pcs.)	14,70	0.579	823 002 144	-
Pair of clamping shells OW 65 (2pcs.)	15,00	0.591	823 002 145	-
Pair of clamping shells OW 65 (2pcs.)	15,30	0.602	823 002 146	-
Pair of clamping shells OW 65 (2pcs.)	15,60	0.614	823 002 147	-
Pair of clamping shells OW 65 (2pcs.)	15,70	0.618	823 002 148	-
Pair of clamping shells OW 65 (2pcs.)	15,88	0.625	823 002 149	-
Pair of clamping shells OW 65 (2pcs.)	16,00	0.630	823 002 150	-
Pair of clamping shells OW 65 (2pcs.)	16,70	0.657	823 002 151	-
Pair of clamping shells OW 65 (2pcs.)	17,00	0.669	823 002 152	-
Pair of clamping shells OW 65 (2pcs.)	17,08	0.672	823 002 153	-
Pair of clamping shells OW 65 (2pcs.)	17,20	0.677	823 002 154	-
Pair of clamping shells OW 65 (2pcs.)	17,30	0.681	823 002 155	-

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells OW 65 (2pcs.)	18,00	0.709	823 002 156		-
Pair of clamping shells OW 65 (2pcs.)	19,00	0.748	823 002 157		-
Pair of clamping shells OW 65 (2pcs.)	19,05	0.750	823 002 158		-
Pair of clamping shells OW 65 (2pcs.)	19,50	0.768	823 002 159		-
Pair of clamping shells OW 65 (2pcs.)	20,00	0.787	823 002 160		-
Pair of clamping shells OW 65 (2pcs.)	21,00	0.827	823 002 161		-
Pair of clamping shells OW 65 (2pcs.)	21,30	0.839	823 002 162		-
Pair of clamping shells OW 65 (2pcs.)	21,70	0.854	823 002 163		-
Pair of clamping shells OW 65 (2pcs.)	22,00	0.866	823 002 164		-
Pair of clamping shells OW 65 (2pcs.)	22,22	0.875	823 002 165		-
Pair of clamping shells OW 65 (2pcs.)	22,23	0.875	823 002 166		-
Pair of clamping shells OW 65 (2pcs.)	22,55	0.888	823 002 167		-
Pair of clamping shells OW 65 (2pcs.)	23,00	0.906	823 002 168		-
Pair of clamping shells OW 65 (2pcs.)	24,00	0.945	823 002 169		-
Pair of clamping shells OW 65 (2pcs.)	24,13	0.950	823 002 170		-
Pair of clamping shells OW 65 (2pcs.)	25,00	0.984	823 002 171		-
Pair of clamping shells OW 65 (2pcs.)	25,25	0.994	823 002 172		-
Pair of clamping shells OW 65 (2pcs.)	25,40	1.000	823 002 173		-
Pair of clamping shells OW 65 (2pcs.)	26,00	1.024	823 002 174		-
Pair of clamping shells OW 65 (2pcs.)	26,70	1.051	823 002 175		-
Pair of clamping shells OW 65 (2pcs.)	26,90	1.059	823 002 176		-
Pair of clamping shells OW 65 (2pcs.)	27,00	1.063	823 002 177		-
Pair of clamping shells OW 65 (2pcs.)	27,20	1.071	823 002 178		-
Pair of clamping shells OW 65 (2pcs.)	28,00	1.102	823 002 179		-
Pair of clamping shells OW 65 (2pcs.)	29,00	1.142	823 002 180		-
Pair of clamping shells OW 65 (2pcs.)	30,00	1.181	823 002 181		-
Pair of clamping shells OW 65 (2pcs.)	30,53	1.202	823 002 182		-
Pair of clamping shells OW 65 (2pcs.)	31,75	1.250	823 002 183		-
Pair of clamping shells OW 65 (2pcs.)	31,80	1.252	823 002 184		-
Pair of clamping shells OW 65 (2pcs.)	32,00	1.260	823 002 185		-
Pair of clamping shells OW 65 (2pcs.)	33,00	1.299	823 002 186		-
Pair of clamping shells OW 65 (2pcs.)	33,40	1.315	823 002 187		-
Pair of clamping shells OW 65 (2pcs.)	33,70	1.327	823 002 188		-
Pair of clamping shells OW 65 (2pcs.)	34,00	1.339	823 002 189		-
Pair of clamping shells OW 65 (2pcs.)	35,00	1.378	823 002 190		-
Pair of clamping shells OW 65 (2pcs.)	36,00	1.417	823 002 191		-
Pair of clamping shells OW 65 (2pcs.)	38,00	1.496	823 002 192		-
Pair of clamping shells OW 65 (2pcs.)	38,10	1.500	823 002 193		-
Pair of clamping shells OW 65 (2pcs.)	40,00	1.575	823 002 194		-
Pair of clamping shells OW 65 (2pcs.)	41,00	1.614	823 002 195		-
Pair of clamping shells OW 65 (2pcs.)	42,00	1.654	823 002 196		-
Pair of clamping shells OW 65 (2pcs.)	42,16	1.660	823 002 197		-
Pair of clamping shells OW 65 (2pcs.)	42,30	1.665	823 002 198		-
Pair of clamping shells OW 65 (2pcs.)	42,40	1.669	823 002 199		-
Pair of clamping shells OW 65 (2pcs.)	42,70	1.681	823 002 200		-
Pair of clamping shells OW 65 (2pcs.)	43,00	1.693	823 002 201		-
Pair of clamping shells OW 65 (2pcs.)	43,20	1.701	823 002 202		-
Pair of clamping shells OW 65 (2pcs.)	44,00	1.732	823 002 203		-
Pair of clamping shells OW 65 (2pcs.)	44,45	1.750	823 002 204		-
Pair of clamping shells OW 65 (2pcs.)	44,50	1.752	823 002 205		-
Pair of clamping shells OW 65 (2pcs.)	45,00	1.772	823 002 206		-
Pair of clamping shells OW 65 (2pcs.)	45,80	1.803	823 002 207		-
Pair of clamping shells OW 65 (2pcs.)	48,00	1.890	823 002 208		-
Pair of clamping shells OW 65 (2pcs.)	48,26	1.900	823 002 209		-
Pair of clamping shells OW 65 (2pcs.)	48,30	1.902	823 002 210		-
Pair of clamping shells OW 65 (2pcs.)	48,60	1.913	823 002 211		-
Pair of clamping shells OW 65 (2pcs.)	50,00	1.969	823 002 212		-
Pair of clamping shells OW 65 (2pcs.)	50,80	2.000	823 002 213		-
Pair of clamping shells OW 65 (2pcs.)	51,00	2.008	823 002 214		-
Pair of clamping shells OW 65 (2pcs.)	52,00	2.047	823 002 215		-
Pair of clamping shells OW 65 (2pcs.)	53,00	2.087	823 002 216		-
Pair of clamping shells OW 65 (2pcs.)	54,00	2.126	823 002 217		-
Pair of clamping shells OW 65 (2pcs.)	57,00	2.244	823 002 218		-
Pair of clamping shells OW 65 (2pcs.)	60,00	2.363	823 002 219		-
Pair of clamping shells OW 65 (2pcs.)	60,10	2.366	823 002 220		-
Pair of clamping shells OW 65 (2pcs.)	60,30	2.374	823 002 221		-
Pair of clamping shells OW 65 (2pcs.)	60,45	2.380	823 002 222		-

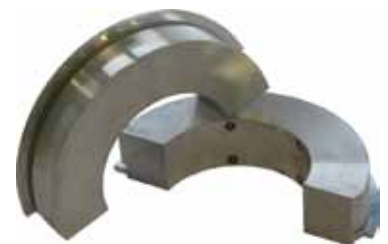
Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells OW 65 (2pcs.)	60,50	2.382	823 002 223	-
Pair of clamping shells OW 65 (2pcs.)	63,00	2.480	823 002 224	-
Pair of clamping shells OW 65 (2pcs.)	63,20	2.488	823 002 225	-
Pair of clamping shells OW 65 (2pcs.)	63,50	2.500	823 002 226	-
Pair of clamping shells OW 65 (2pcs.)	65,00	2.559	823 002 227	-
Pair of clamping shells OW 65 (2pcs.)	70,00	2.756	823 002 228	-
Pair of clamping shells OW 65 (2pcs.)	70,20	2.764	823 002 229	-

Pairs of clamping shells for ORBIWELD 115/115S

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells S OW 115/115S narrow (2pcs.)	20,00	0.787	824 002 120	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	21,00	0.827	824 002 121	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	21,30	0.839	824 002 122	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	21,70	0.854	824 002 123	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	22,00	0.866	824 002 124	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	22,22	0.875	824 002 125	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	22,23	0.875	824 002 126	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	22,55	0.888	824 002 127	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	23,00	0.906	824 002 128	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	24,00	0.945	824 002 129	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	24,13	0.950	824 002 130	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	25,00	0.984	824 002 131	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	25,25	0.994	824 002 132	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	25,40	1.000	824 002 133	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	26,00	1.024	824 002 134	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	26,70	1.051	824 002 135	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	26,90	1.059	824 002 136	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	27,00	1.063	824 002 137	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	27,20	1.071	824 002 138	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	28,00	1.102	824 002 139	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	29,00	1.142	824 002 140	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	30,00	1.181	824 002 141	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	30,53	1.202	824 002 142	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	31,75	1.250	824 002 143	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	31,80	1.252	824 002 144	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	32,00	1.260	824 002 145	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	33,00	1.299	824 002 146	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	33,40	1.315	824 002 147	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	33,70	1.327	824 002 148	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	34,00	1.339	824 002 149	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	35,00	1.378	824 002 150	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	36,00	1.417	824 002 151	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	38,00	1.496	824 002 152	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	38,10	1.500	824 002 153	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	40,00	1.575	824 002 154	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	41,00	1.614	824 002 155	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	42,00	1.654	824 002 156	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	42,16	1.660	824 002 157	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	42,30	1.665	824 002 158	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	42,40	1.669	824 002 159	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	42,70	1.681	824 002 160	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	43,00	1.693	824 002 161	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	43,20	1.701	824 002 162	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	44,00	1.732	824 002 163	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	44,45	1.750	824 002 164	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	44,50	1.752	824 002 165	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	45,00	1.772	824 002 166	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	45,80	1.803	824 002 167	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	48,00	1.890	824 002 168	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	48,26	1.900	824 002 169	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	48,30	1.902	824 002 170	-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	48,60	1.913	824 002 171	-



Pair of clamping shells S OW 115 / 115S narrow (2pcs.) for one clamping side



Pair of clamping shells W OW 115/115S wide (2pcs.) for one clamping side

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells S OW 115/115S narrow (2pcs.)	50,00	1.969	824 002 172		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	50,80	2.000	824 002 173		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	51,00	2.008	824 002 174		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	52,00	2.047	824 002 175		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	53,00	2.087	824 002 176		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	54,00	2.126	824 002 177		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	57,00	2.244	824 002 178		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	60,00	2.363	824 002 179		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	60,10	2.366	824 002 180		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	60,30	2.374	824 002 181		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	60,45	2.380	824 002 182		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	60,50	2.382	824 002 183		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	63,00	2.480	824 002 184		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	63,20	2.488	824 002 185		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	63,50	2.500	824 002 186		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	65,00	2.559	824 002 187		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	70,00	2.756	824 002 188		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	70,20	2.764	824 002 189		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	73,00	2.874	824 002 190		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	73,03	2.875	824 002 191		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	73,15	2.880	824 002 192		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	75,00	2.953	824 002 193		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	76,00	2.992	824 002 194		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	76,10	2.996	824 002 195		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	76,20	3.000	824 002 196		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	76,30	3.004	824 002 197		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	80,00	3.150	824 002 198		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	82,00	3.228	824 002 199		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	82,30	3.240	824 002 200		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	85,00	3.346	824 002 201		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	85,90	3.382	824 002 202		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	88,90	3.500	824 002 203		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	89,00	3.504	824 002 204		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	89,10	3.508	824 002 205		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	90,00	3.543	824 002 206		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	93,00	3.661	824 002 207		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	95,00	3.740	824 002 208		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	100,00	3.937	824 002 209		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	101,60	4.000	824 002 210		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	104,00	4.094	824 002 211		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	108,00	4.252	824 002 212		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	110,00	4.331	824 002 213		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	113,50	4.468	824 002 214		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	114,00	4.488	824 002 215		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	114,30	4.500	824 002 216		-
Pair of clamping shells S OW 115/115S narrow (2pcs.)	115,00	4.528	824 002 217		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	20,00	0.787	824 002 320		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	21,00	0.827	824 002 321		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	21,30	0.839	824 002 322		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	21,70	0.854	824 002 323		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	22,00	0.866	824 002 324		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	22,22	0.875	824 002 325		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	22,23	0.875	824 002 326		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	22,55	0.888	824 002 327		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	23,00	0.906	824 002 328		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	24,00	0.945	824 002 329		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	24,13	0.950	824 002 330		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	25,00	0.984	824 002 331		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	25,25	0.994	824 002 332		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	25,40	1.000	824 002 333		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	26,00	1.024	824 002 334		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	26,70	1.051	824 002 335		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	26,90	1.059	824 002 336		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	27,00	1.063	824 002 337		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	27,20	1.071	824 002 338		-

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells W OW 115/115S wide (2pcs.)	28,00	1.102	824 002 339	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	29,00	1.142	824 002 340	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	30,00	1.181	824 002 341	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	30,53	1.202	824 002 342	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	31,75	1.250	824 002 343	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	31,80	1.252	824 002 344	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	32,00	1.260	824 002 345	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	33,00	1.299	824 002 346	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	33,40	1.315	824 002 347	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	33,70	1.327	824 002 348	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	34,00	1.339	824 002 349	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	35,00	1.378	824 002 350	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	36,00	1.417	824 002 351	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	38,00	1.496	824 002 352	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	38,10	1.500	824 002 353	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	40,00	1.575	824 002 354	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	41,00	1.614	824 002 355	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	42,00	1.654	824 002 356	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	42,16	1.660	824 002 357	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	42,30	1.665	824 002 358	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	42,40	1.669	824 002 359	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	42,70	1.681	824 002 360	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	43,00	1.693	824 002 361	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	43,20	1.701	824 002 362	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	44,00	1.732	824 002 363	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	44,45	1.750	824 002 364	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	44,50	1.752	824 002 365	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	45,00	1.772	824 002 366	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	45,80	1.803	824 002 367	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	48,00	1.890	824 002 368	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	48,26	1.900	824 002 369	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	48,30	1.902	824 002 370	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	48,60	1.913	824 002 371	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	50,00	1.969	824 002 372	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	50,80	2.000	824 002 373	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	51,00	2.008	824 002 374	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	52,00	2.047	824 002 375	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	53,00	2.087	824 002 376	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	54,00	2.126	824 002 377	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	57,00	2.244	824 002 378	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	60,00	2.363	824 002 379	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	60,10	2.366	824 002 380	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	60,30	2.374	824 002 381	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	60,45	2.380	824 002 382	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	60,50	2.382	824 002 383	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	63,00	2.480	824 002 384	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	63,20	2.488	824 002 385	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	63,50	2.500	824 002 386	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	65,00	2.559	824 002 387	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	70,00	2.756	824 002 388	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	70,20	2.764	824 002 389	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	73,00	2.874	824 002 390	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	73,03	2.875	824 002 391	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	73,15	2.880	824 002 392	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	75,00	2.953	824 002 393	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	76,00	2.992	824 002 394	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	76,10	2.996	824 002 395	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	76,20	3.000	824 002 396	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	76,30	3.004	824 002 397	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	80,00	3.150	824 002 398	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	82,00	3.228	824 002 399	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	82,30	3.240	824 002 400	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	85,00	3.346	824 002 401	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	85,90	3.382	824 002 402	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	88,90	3.500	824 002 403	-
Pair of clamping shells W OW 115/115S wide (2pcs.)	89,00	3.504	824 002 404	-

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells W OW 115/115S wide (2pcs.)	89,10	3.508	824 002 405		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	90,00	3.543	824 002 406		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	93,00	3.661	824 002 407		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	95,00	3.740	824 002 408		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	100,00	3.937	824 002 409		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	101,60	4.000	824 002 410		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	104,00	4.094	824 002 411		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	108,00	4.252	824 002 412		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	110,00	4.331	824 002 413		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	113,50	4.468	824 002 414		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	114,00	4.488	824 002 415		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	114,30	4.500	824 002 416		-
Pair of clamping shells W OW 115/115S wide (2pcs.)	115,00	4.528	824 002 417		-

Pairs of clamping shells for ORBIWELD 170

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells S OW 170 narrow (2pcs.)	50,00	1.969	825 002 120		-
Pair of clamping shells S OW 170 narrow (2pcs.)	50,80	2.000	825 002 121		-
Pair of clamping shells S OW 170 narrow (2pcs.)	51,00	2.008	825 002 122		-
Pair of clamping shells S OW 170 narrow (2pcs.)	52,00	2.047	825 002 123		-
Pair of clamping shells S OW 170 narrow (2pcs.)	53,00	2.087	825 002 124		-
Pair of clamping shells S OW 170 narrow (2pcs.)	54,00	2.126	825 002 125		-
Pair of clamping shells S OW 170 narrow (2pcs.)	57,00	2.244	825 002 126		-
Pair of clamping shells S OW 170 narrow (2pcs.)	60,00	2.363	825 002 127		-
Pair of clamping shells S OW 170 narrow (2pcs.)	60,10	2.366	825 002 128		-
Pair of clamping shells S OW 170 narrow (2pcs.)	60,30	2.374	825 002 129		-
Pair of clamping shells S OW 170 narrow (2pcs.)	60,45	2.380	825 002 130		-
Pair of clamping shells S OW 170 narrow (2pcs.)	60,50	2.382	825 002 131		-
Pair of clamping shells S OW 170 narrow (2pcs.)	63,00	2.480	825 002 132		-
Pair of clamping shells S OW 170 narrow (2pcs.)	63,20	2.488	825 002 133		-
Pair of clamping shells S OW 170 narrow (2pcs.)	63,50	2.500	825 002 134		-
Pair of clamping shells S OW 170 narrow (2pcs.)	65,00	2.559	825 002 135		-
Pair of clamping shells S OW 170 narrow (2pcs.)	70,00	2.756	825 002 136		-
Pair of clamping shells S OW 170 narrow (2pcs.)	70,20	2.764	825 002 137		-
Pair of clamping shells S OW 170 narrow (2pcs.)	73,00	2.874	825 002 138		-
Pair of clamping shells S OW 170 narrow (2pcs.)	73,03	2.875	825 002 139		-
Pair of clamping shells S OW 170 narrow (2pcs.)	73,15	2.880	825 002 140		-
Pair of clamping shells S OW 170 narrow (2pcs.)	75,00	2.953	825 002 141		-
Pair of clamping shells S OW 170 narrow (2pcs.)	76,00	2.992	825 002 142		-
Pair of clamping shells S OW 170 narrow (2pcs.)	76,10	2.996	825 002 143		-
Pair of clamping shells S OW 170 narrow (2pcs.)	76,20	3.000	825 002 144		-
Pair of clamping shells S OW 170 narrow (2pcs.)	76,30	3.004	825 002 145		-
Pair of clamping shells S OW 170 narrow (2pcs.)	80,00	3.150	825 002 146		-
Pair of clamping shells S OW 170 narrow (2pcs.)	82,00	3.228	825 002 147		-
Pair of clamping shells S OW 170 narrow (2pcs.)	82,30	3.240	825 002 148		-
Pair of clamping shells S OW 170 narrow (2pcs.)	85,00	3.346	825 002 149		-
Pair of clamping shells S OW 170 narrow (2pcs.)	85,90	3.382	825 002 150		-
Pair of clamping shells S OW 170 narrow (2pcs.)	88,90	3.500	825 002 151		-
Pair of clamping shells S OW 170 narrow (2pcs.)	89,00	3.504	825 002 152		-
Pair of clamping shells S OW 170 narrow (2pcs.)	89,10	3.508	825 002 153		-
Pair of clamping shells S OW 170 narrow (2pcs.)	90,00	3.543	825 002 154		-
Pair of clamping shells S OW 170 narrow (2pcs.)	93,00	3.661	825 002 155		-
Pair of clamping shells S OW 170 narrow (2pcs.)	95,00	3.740	825 002 156		-
Pair of clamping shells S OW 170 narrow (2pcs.)	100,00	3.937	825 002 157		-
Pair of clamping shells S OW 170 narrow (2pcs.)	101,60	4.000	825 002 158		-
Pair of clamping shells S OW 170 narrow (2pcs.)	104,00	4.094	825 002 159		-
Pair of clamping shells S OW 170 narrow (2pcs.)	108,00	4.252	825 002 160		-
Pair of clamping shells S OW 170 narrow (2pcs.)	110,00	4.331	825 002 161		-
Pair of clamping shells S OW 170 narrow (2pcs.)	113,50	4.468	825 002 162		-
Pair of clamping shells S OW 170 narrow (2pcs.)	114,00	4.488	825 002 163		-
Pair of clamping shells S OW 170 narrow (2pcs.)	114,30	4.500	825 002 164		-
Pair of clamping shells S OW 170 narrow (2pcs.)	115,00	4.528	825 002 165		-
Pair of clamping shells S OW 170 narrow (2pcs.)	125,00	4.921	825 002 166		-



Pair of clamping shells S OW 170 narrow (2pcs.) for one clamping side



Pair of clamping shells W OW 170 wide (2pcs.) for one clamping side

Article	Tube OD [mm]	Tube OD [inch]	Code	kg
Pair of clamping shells S OW 170 narrow (2pcs.)	127,00	5.000	825 002 167	
Pair of clamping shells S OW 170 narrow (2pcs.)	127,05	5.002	825 002 168	
Pair of clamping shells S OW 170 narrow (2pcs.)	129,00	5.079	825 002 169	
Pair of clamping shells S OW 170 narrow (2pcs.)	133,00	5.236	825 002 170	
Pair of clamping shells S OW 170 narrow (2pcs.)	139,70	5.500	825 002 171	
Pair of clamping shells S OW 170 narrow (2pcs.)	141,30	5.563	825 002 172	
Pair of clamping shells S OW 170 narrow (2pcs.)	152,40	6.000	825 002 173	
Pair of clamping shells S OW 170 narrow (2pcs.)	154,00	6.063	825 002 174	
Pair of clamping shells S OW 170 narrow (2pcs.)	159,00	6.260	825 002 175	
Pair of clamping shells S OW 170 narrow (2pcs.)	165,10	6.500	825 002 176	
Pair of clamping shells S OW 170 narrow (2pcs.)	165,20	6.504	825 002 177	
Pair of clamping shells S OW 170 narrow (2pcs.)	168,30	6.626	825 002 178	
Pair of clamping shells S OW 170 narrow (2pcs.)	170,00	6.693	825 002 179	
Pair of clamping shells W OW 170 wide (2pcs.)	50,00	1.969	825 002 320	-
Pair of clamping shells W OW 170 wide (2pcs.)	50,80	2.000	825 002 321	-
Pair of clamping shells W OW 170 wide (2pcs.)	51,00	2.008	825 002 322	-
Pair of clamping shells W OW 170 wide (2pcs.)	52,00	2.047	825 002 323	-
Pair of clamping shells W OW 170 wide (2pcs.)	53,00	2.087	825 002 324	-
Pair of clamping shells W OW 170 wide (2pcs.)	54,00	2.126	825 002 325	-
Pair of clamping shells W OW 170 wide (2pcs.)	57,00	2.244	825 002 326	-
Pair of clamping shells W OW 170 wide (2pcs.)	60,00	2.363	825 002 327	-
Pair of clamping shells W OW 170 wide (2pcs.)	60,10	2.366	825 002 328	-
Pair of clamping shells W OW 170 wide (2pcs.)	60,30	2.374	825 002 329	-
Pair of clamping shells W OW 170 wide (2pcs.)	60,45	2.380	825 002 330	-
Pair of clamping shells W OW 170 wide (2pcs.)	60,50	2.382	825 002 331	-
Pair of clamping shells W OW 170 wide (2pcs.)	63,00	2.480	825 002 332	-
Pair of clamping shells W OW 170 wide (2pcs.)	63,20	2.488	825 002 333	-
Pair of clamping shells W OW 170 wide (2pcs.)	63,50	2.500	825 002 334	-
Pair of clamping shells W OW 170 wide (2pcs.)	65,00	2.559	825 002 335	-
Pair of clamping shells W OW 170 wide (2pcs.)	70,00	2.756	825 002 336	-
Pair of clamping shells W OW 170 wide (2pcs.)	70,20	2.764	825 002 337	-
Pair of clamping shells W OW 170 wide (2pcs.)	73,00	2.874	825 002 338	-
Pair of clamping shells W OW 170 wide (2pcs.)	73,03	2.875	825 002 339	-
Pair of clamping shells W OW 170 wide (2pcs.)	73,15	2.880	825 002 340	-
Pair of clamping shells W OW 170 wide (2pcs.)	75,00	2.953	825 002 341	-
Pair of clamping shells W OW 170 wide (2pcs.)	76,00	2.992	825 002 342	-
Pair of clamping shells W OW 170 wide (2pcs.)	76,10	2.996	825 002 343	-
Pair of clamping shells W OW 170 wide (2pcs.)	76,20	3.000	825 002 344	-
Pair of clamping shells W OW 170 wide (2pcs.)	76,30	3.004	825 002 345	-
Pair of clamping shells W OW 170 wide (2pcs.)	80,00	3.150	825 002 346	-
Pair of clamping shells W OW 170 wide (2pcs.)	82,00	3.228	825 002 347	-
Pair of clamping shells W OW 170 wide (2pcs.)	82,30	3.240	825 002 348	-
Pair of clamping shells W OW 170 wide (2pcs.)	85,00	3.346	825 002 349	-
Pair of clamping shells W OW 170 wide (2pcs.)	85,90	3.382	825 002 350	-
Pair of clamping shells W OW 170 wide (2pcs.)	88,90	3.500	825 002 351	-
Pair of clamping shells W OW 170 wide (2pcs.)	89,00	3.504	825 002 352	-
Pair of clamping shells W OW 170 wide (2pcs.)	89,10	3.508	825 002 353	-
Pair of clamping shells W OW 170 wide (2pcs.)	90,00	3.543	825 002 354	-
Pair of clamping shells W OW 170 wide (2pcs.)	93,00	3.661	825 002 355	-
Pair of clamping shells W OW 170 wide (2pcs.)	95,00	3.740	825 002 356	-
Pair of clamping shells W OW 170 wide (2pcs.)	100,00	3.937	825 002 357	-
Pair of clamping shells W OW 170 wide (2pcs.)	101,60	4.000	825 002 358	-
Pair of clamping shells W OW 170 wide (2pcs.)	104,00	4.094	825 002 359	-
Pair of clamping shells W OW 170 wide (2pcs.)	108,00	4.252	825 002 360	-
Pair of clamping shells W OW 170 wide (2pcs.)	110,00	4.331	825 002 361	-
Pair of clamping shells W OW 170 wide (2pcs.)	113,50	4.468	825 002 362	-
Pair of clamping shells W OW 170 wide (2pcs.)	114,00	4.488	825 002 363	-
Pair of clamping shells W OW 170 wide (2pcs.)	114,30	4.500	825 002 364	-
Pair of clamping shells W OW 170 wide (2pcs.)	115,00	4.528	825 002 365	-
Pair of clamping shells W OW 170 wide (2pcs.)	125,00	4.921	825 002 366	-
Pair of clamping shells W OW 170 wide (2pcs.)	127,00	5.000	825 002 367	-
Pair of clamping shells W OW 170 wide (2pcs.)	127,05	5.002	825 002 368	-
Pair of clamping shells W OW 170 wide (2pcs.)	129,00	5.079	825 002 369	-
Pair of clamping shells W OW 170 wide (2pcs.)	133,00	5.236	825 002 370	-
Pair of clamping shells W OW 170 wide (2pcs.)	139,70	5.500	825 002 371	-

Article	Tube OD [mm]	Tube OD [inch]	Code		kg
Pair of clamping shells W OW 170 wide (2pcs.)	141,30	5.563	825 002 372		-
Pair of clamping shells W OW 170 wide (2pcs.)	152,40	6.000	825 002 373		-
Pair of clamping shells W OW 170 wide (2pcs.)	154,00	5.063	825 002 374		-
Pair of clamping shells W OW 170 wide (2pcs.)	159,00	6.260	825 002 375		-
Pair of clamping shells W OW 170 wide (2pcs.)	165,10	6.500	825 002 376		-
Pair of clamping shells W OW 170 wide (2pcs.)	165,20	6.504	825 002 377		-
Pair of clamping shells W OW 170 wide (2pcs.)	168,30	6.626	825 002 378		-
Pair of clamping shells W OW 170 wide (2pcs.)	170,00	6.693	825 002 379		-

Plastic case for clamping shells

With separate compartments to take up to 10 sets of standard shells.
Without clamping shells.

Article	Code		kg
Plastic case for clamping shells for OW 38S	826 020 001		0,350
Plastic case for clamping shells for OW 65 and OW 76S	827 020 006		1,388
Plastic case for OW 115 and 115S	824 020 002		1,443



Plastic case for clamping shells
(not included as standard, ordered as an accessory)



Cavity shell for moldings

Cavity shell for moldings (2 shells)

Clamping shell for welding shaped pieces (e.g. flange, flanged wheels and screw fittings in the food industry).

Article	Code		kg
Cavity shell for moldings OW 38S	826 050 010		0,146
Cavity shell for moldings for OW 76S	827 050 007		0,266
Cavity shell for moldings for OW 65	823 050 010		0,612
Cavity shell for moldings for OW 115/OW 115S	824 050 003		0,660
Cavity shell for moldings for OW 170	825 050 002		0,852

Shells for arc welding

For welding standard elbows without straight side attachment (elbow-to-elbow welding without straight side is not possible). When using this shell on a weld head side (left or right) only the gas protection around the elbow is guaranteed. There is no clamping so that the elbow has to be tacked in place before welding.

Shell consisting of:

- Two basic retainers independent of the tube diameter.
- Two covers independent of the tube diameter.

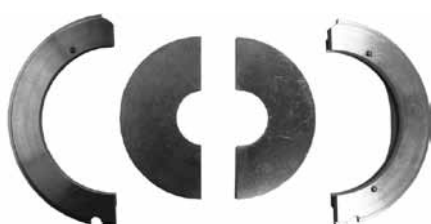
Please submit a drawing of the elbow or a sample part when placing the order

Retainer/Cover

The covers are placed into the retainer and can be turned so that the side of the elbow can exit at any angle from the welding held. The tube to be welded on the other side of the welding held must be straight and be clamped with shells from the particular standard clamping shell (standard shells not included).

Clamping shell for OW 38S

With the weld head OW 38S the covers are made to customer specification (2 halves) without retainers are placed directly into the head. A retainer is therefore not required. Please specify the required tube diameter when placing the order.



Shell for arc welding
(retainer/cover)

Please indicate the required pipe OD and inside radius of the elbow, in case an additional electrode adapter is needed.

Article	Code	kg
Elbow shell for OW 38S complete*	826 050 031	0,018
Retainer for elbow shell for OW 76S	827 002 018	0,089
Cover for elbow shell for OW 76S	827 050 021	0,029
Retainer for elbow shell for OW 65	823 050 029	0,089
Cover for elbow shell for OW 65*	823 050 030	0,028
Retainer for elbow shell for OW 115 and OW 115S	824 050 006	0,149
Cover for elbow shell for OW 115S*	828 050 016	0,035
Cover for elbow shell for OW 115*	824 050 020	0,035
Retainer for elbow shell for OW 170	825 050 005	0,260
Cover for elbow shell for OW 170*	825 050 020	0,043

* Please submit a drawing of the elbow or a sample part when placing the order.

Special clamping shells for orbital weld heads

T-Piece clamping shells

Clamping shell with the ability to take the hollowed tube and the tube to be welded. A complete set is required for each task and dimension.

Inner centering with simultaneous forming system consisting of:

- Mandrel
- Milled nut
- Welded part retainer
- Hollowed tube piece retainer

Article	Tube OD max. [mm]	Tube OD max. [inch]	Code	kg
T-piece clamping shells for OW 38S	-	-	826 050 038	-
T-piece clamping shells for OW 76S	48,30	1.902	827 050 005	0.800
Inner centering for OW 76S	48,30	1.902	827 050 006	1.200
Inner centering for OW 115	85,00	3.346	824 050 005	2,000
T-piece clamping shells for OW 115	85,00	3.346	824 050 004	1,300
T-piece clamping shells for OW 170	154,00	6.063	825 050 003	3,700
Inner centering for OW 170	154,00	6.063	825 050 004	4,200

Electrode adapters

Robust brass adapter for transverse alignment of the tungsten electrode.

In the set or can be ordered individually. Please note that the maximum tube diameter that can be welded is reduced by using an electrode adapter.

Complete sets consisting of:

- Basic part for extension arms.
- For each extension arm 15°, 30° and 45°

Complete sets:	Code	kg
Electrode adapter for OW 38S, complete set	826 050 034	0,015
Electrode adapter for OW 76S, complete set	827 050 027	0,015
Electrode adapter for OW 65, complete set	823 050 028	0,045
Electrode adapter for OW 115 and OW 115S, complete set	824 050 021	0,064
Electrode adapter for OW 170, complete set	825 050 022	0,094
Individual parts for OW 38S:		
Base part to electrode adapter OW 38S	826 004 003	0,024
10 mm 15° extension arm for electrode adapter OW 38S	823 004 008	0,003



T-piece clamping shells



Inner centering



Electrode adapter for OW 38S, OW 76S



Electrode adapter for OW 170



Electrode adapter for internal weld seam (without rotor)



Example of internal seam weld.



Electrode adapter for i-seam weld (without rotor)



Example for i-seam weld.



Extension cable assembly

10 mm 30° extension arm for electrode adapter OW 38S	823 004 009		0,003
10 mm 45° extension arm for electrode adapter OW 38S	823 004 010		0,003
Individual parts for OW 76S:			
Base part to electrode adapter OW 76S	827 004 003		0,024
15 mm 15°/90° extension arm for electrode adapter OW 76S	823 004 002		0,003
15 mm 30°/90° extension arm for electrode adapter OW 76S	823 004 003		0,003
15 mm 45°/90° extension arm for electrode adapter OW 76S	823 004 004		0,003
Individual parts for OW 65			
Base part to electrode adapter OW 65	823 004 011		0,018
15 mm 15°/90° extension arm for electrode adapter OW 65	823 004 002		0,003
15 mm 30°/90° extension arm for electrode adapter OW 65	823 004 003		0,003
15 mm 45°/90° extension arm for electrode adapter OW 65	823 004 004		0,003
Individual parts for OW 115 und OW 115S			
Base part to electrode adapter OW 115 and OW 115S	824 004 004		0,037
25 mm 15°/90° extension arm for electrode adapter OW 115/115S	823 004 006		0,009
25 mm 30°/90° extension arm for electrode adapter OW 115/115S	823 004 005		0,009
25 mm 45°/90° extension arm for electrode adapter OW 115/115S	823 004 007		0,009
Individual parts for OW 170			
Base part to electrode adapter OW 170	825 004 001		0,067
25 mm 15°/90° extension arm for electrode adapter OW 170	823 004 006		0,009
25 mm 30°/90° extension arm for electrode adapter OW 170	823 004 005		0,009
25 mm 45°/90° extension arm for electrode adapter OW 170	823 004 007		0,009
Electrode adapter for i-seam weld*			
Electrode adapter for OW 38S i-seam weld, set	826 050 036		
Electrode adapter for OW 76S i-seam weld, set	827 050 038		-
Electrode adapter for OW 65 i-seam weld, set	823 050 034		-
Electrode adapter for OW 115 i-seam weld, set	824 050 022		-
Electrode adapter for internal weld seam*			
Electrode adapter for OW 38S internal weld seam, set	826 050 037		
Electrode adapter for OW 76S internal weld seam, set	827 050 039		-
Electrode adapter for OW 115 internal weld seam, set	824 050 023		-

* Further electrode adapter for other weld heads on request.

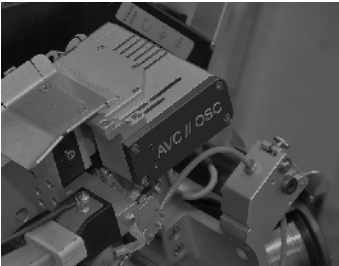
Extension cable assembly

Extension cable assembly suitable for all Orbitalum orbital weld heads, beside the AVC/OSC versions of the ORBIWELD TP heads. Further lengths on request.

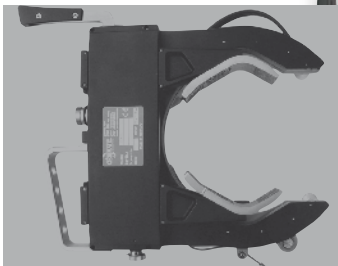
Article	Length (meter)	Code	kg
Extension cable assembly 5M	5	871 050 011	7,600
Extension cable assembly 10M	10	871 050 012	-
Extension cable assembly 15M	15	871 050 013	-



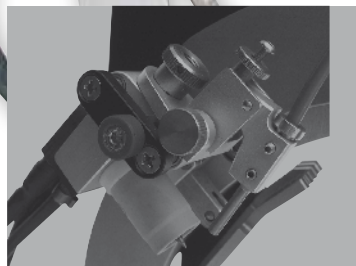
ORBIWELD TP - unique design and functionality!



Also with electronic arc voltage control (AVC) and oscillation (OSC).



Clamping mechanism and jaws move with a parallel motion..



The TIG torch is mounted on a precision slide to give precise, fine control of the electrode during welding.

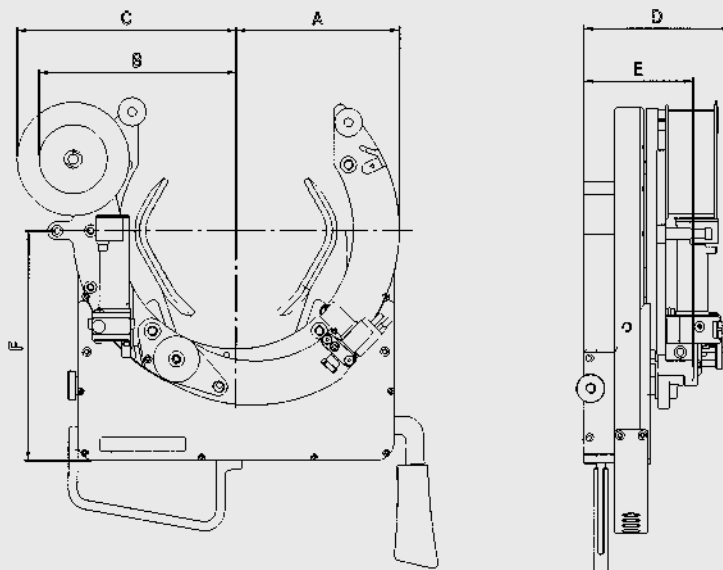


Built-in remote control panel.

Overview of open orbital weld heads ORBIWELD TP

Open orbital weld heads ORBIWELD TP / ORBIWELD TP AVC/OSC

Model		TP 250	TP 400	TP 400 KD3-100	TP 600	TP 600 AVC/OSC	TP 1000	TP 1000 AVC/OSC
Code		811 000 001	812 000 001	812 000 003	813 000 001	813 000 002	814 000 001	814 000 002
Application range	[mm]	20 - 77	30 - 115	30 - 115	70 - 170	70 - 170	120 - 275	120 - 275
	[inch]	1/2 - 3	1 1/2 - 4 1/2	1 1/2 - 4 1/2	3 - 6	3 - 6	5 - 10	5 - 10
Dimension „A“: excluding cold wire	[mm]	86,0	108,0	108,0	146,0	-	216,0	-
	[inch]	3.386	4.252	4.252	5.748	-	8.504	-
Dimension „B“: with cold wire KD 3-62	[mm]	x	155,0	180,0	176,0	-	216,0	-
	[inch]	x	6.102	7.087	6.929	-	8.504	-
Dimension „C“: with cold wire KD 3-100	[mm]	x	x	177,0	196,0	215,0	237,0	274,0
	[inch]	x	x	6.969	7.717	8.465	9.331	10.787
Dimension "D"	[mm]	85,0	120,0	182,0	140,0	186,0	170,0	206,0
	[inch]	3.346	4.724	7.165	4.724	7.323	6.299	8.110
Dimension "E": electrode	[mm]	74,0	90,0	162,0	97,0	172,0	146,0	191,0
	[inch]	2.913	3.543	6.378	3.819	6.772	5.748	7.520
Dimension "F"	[mm]	125,0	200,0	200,0	202,0	202,0	270,0	270,0
	[inch]	4.921	7.874	7.874	7.953	7.953	10.630	10.630
Weight excluding cold wire feed and hose package	[kg]	2,1	5,4	-	8,0	-	16,9	-
	[lbs]	4.630	11.905	-	17.637	-	37.258	-
Weight including cold wire feed and excluding hose package	[kg]	-	-	-	-	10,4	-	22,0
	[lbs]	-	-	-	-	22.928	-	48,500



Electrode lengths for TP weld heads

Model		TP 250	TP 400	TP 400 AVC/OSC	TP 600	TP 600 AVC/OSC	TP 1000	TP 1000 AVC/OSC
Code		811 000 001	812 000 001	812 000 002	813 000 001	813 000 001	814 000 001	814 000 002
Length	[mm]	18 - 32	30 - 55	30 - 55	30 - 55	30 - 55	30 - 55	30 - 55
	[inch]	0.709 - 1.260	1.181 - 2.165	1.181 - 2.165	1.181 - 2.165	1.181 - 2.165	1.181 - 2.165	1.181 - 2.165

Open orbital weld heads ORBIWELD TP

Open orbital weld heads ORBIWELD TP 250-1000

The ORBIWELD TP series has a unique design and functionality. An extremely compact design has been achieved thanks to the drive motor that is fully integrated into the housing. The completely new drive concept has made the well-known large and costly drives associated with conventional weld heads unnecessary.

Features:

- Can be used with and without cold wire attachment, as the cold wire feed nozzle can be adjusted exactly in both a vertical and horizontal direction via an adjustment unit.
- Open arc system.
- The arc length is kept at a constant gap mechanically.
- Infinitely variable clamping mechanism.
- The water-cooled TIG Torch head can be swiveled in any direction and allows fillet welds or short hollowed out tubes to be welded. In the models TP 400, 600, and 1000 the TIG Torch head is secured to a slide unit that allows the position of the electrodes to be finely adjusted with great accuracy even during welding.
- With a simple to operate control knob, it is possible to adjust the clamping area across the weld head's entire nominal range.
- The ORBIWELD TP weld heads with clamping shells made from tool steel ensures optimum retention to the tube's surface (very good grip properties).
- The weld heads are easily centered to the tube and are clamped in place with the help of a tension lever. No additional remote control is required thanks to the keys integrated directly into the weld head housing.
- The standard hose package length is 7.5 m (24.6 ft). Extensions are possible. See on page 40.

Please note that the weld head needs for operation an earth cable as well as a control cable that must be ordered separately.



ORBIWELD TP 600
with KD 3-100 cold wire feed



ORBIWELD TP 250
with external cold wire feed KD 4



ORBIWELD TP 400
with KD 3-62 cold wire feed

ORBIWELD TP 250 - 100 without cold wire unit

Article	Tube OD [mm]	Tube OD [inch]	Code	Weight weld head [kg]	Dispatch weight [kg]
Open weld head TP 250*	22,00 - 77,00	1/2 - 3	811 000 001	10,500	18,000
Open weld head TP 400*	30,00 - 115,00	1 1/2 - 4 1/2	812 000 001	12,500	20,000
Open weld head TP 600*	70,00 - 170,00	3 - 6	813 000 001	13,800	21,350
Open weld head TP 1000*	120,00 - 275,00	5 - 10	814 000 001	19,000	36,500

* Without cold wire unit (for retrofit see following page).

ORBIWELD TP 250 - 100 with cold wire unit

Article	Tube OD [mm]	Tube OD [inch]	Code	Gewicht Schweißzange [kg]	Versandgewicht [kg]
Open weld head TP 250 with KD 4	22,00 - 77,00	1/2 - 3	811 000 005	12,500	20,000
Open weld head TP 400 with KD 3-62	30,00 - 115,00	1 1/2 - 4 1/2	812 000 005	-	-
Open weld head TP 400 with KD 3-100	30,00 - 115,00	1 1/2 - 4 1/2	812 000 006	-	-
Open weld head TP 600 with KD 3-100	70,00 - 170,00	3 - 6	813 000 005	-	-
Open weld head TP 1000 with KD 3-100	120,00 - 275,00	5 - 10	814 000 005	-	-



ORBIWELD TP 400
with KD 3-100 cold wire feed

Cold wire feeds for TP heads for retrofit

Cold wire feed KD 4 for ORBIWELD TP 250

Cannot be used for ORBIWELD TP 400/600/1000.

Consisting of:

- Axis drive motor.
- Adjustable wire feed tips.
- Wire reel retainer for D 100 mm/1kg (3.937 inch) standard reels.
- External cold wire box.



KD 4 with open lift-off lid

Article	Code	kg
Cold wire feed KD 4 for ORBIWELD TP 250	811 050 001	2,000

Cold wire feed KD 3-62 and KD 3-100 for ORBIWELD TP 400

Can be assembled directly on the weld head, also making pulse synchronous wire feed possible.

Consisting of:

- Axis drive motor.
- Adjustable wire feed tip.
- Wire reel retainer with D 62 mm/1 kg (2.440 inch) special wire reel (empty reel) with D 100 mm/1 kg (3.937 inch) standard reel

Article	Code	kg
Cold wire feed KD 3-62 for ORBIWELD TP 400 including empty reel	812 050 001	5,500
Additional empty reel for KD 3-62	812 018 019	0,038
Cold wire feed KD 3-100 for ORBIWELD TP 400*	812 050 061	-

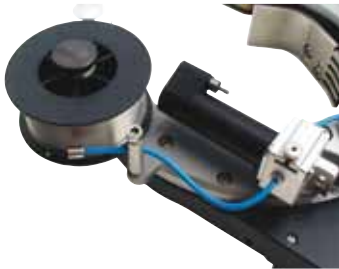
*For the retrofit the weld head has to be sent to the Orbitalum service department.

Cold wire feed KD 3-100 for ORBIWELD TP 600

Can be assembled directly on the weld head, also making pulse synchronous wire feed possible.

Consisting of:

- Axis drive motor.
- Adjustable wire feed tip.
- Wire reel retainer for D 100/1kg (3.937 inch) standard wire reels.



KD 3-100 with D 100 standard wire reels

Article	Code	kg
Cold wire feed KD 3-100 for ORBIWELD TP 600	813 050 001	0,680

Cold wire feed KD 3-100 for ORBIWELD TP 1000

Can be assembled directly on the weld head, also making pulse synchronous wire feed possible.

Consisting of:

- Axis drive motor.
- Adjustable wire feed tip.
- Wire reel retainer for D 100 mm/1kg (3.937 inch) standard wire reels.

Article	Code	kg
Cold wire feed KD 3-100 for ORBIWELD TP 1000	814 050 008	0,720

Open orbital weld heads ORBIWELD TP AVC/OSC

Open orbital weld heads ORBIWELD TP AVC/OSC with oscillation OSC and arc voltage control AVC

Can be used for thick wall tubes (multiple layer welds).

As ORBIWELD TP (see p. 43). The weld heads of the ORBIWELD TP AVC/OSC series are also provided with a motorized travel option for the TIG Torch across the nominal diameter, so that no additional mechanical basic presetting is required for any change in the tube diameter.

Additional properties of the tube-to-tube weld heads ORBIWELD TP AVC/OSC with oscillation OSC and arc voltage control AVC:

- The oscillation width is 20 mm (0.787 inch).
- Cold feed wire feed unit with mount for D 100/1kg (3.937 Inch) wire reels fitted directly on the weld head.
- With a simple to operate control knob, it is possible to adjust the clamping area across the weld head's entire nominal range.

Please note that the weld head needs for operation an earth cable as well as a control cable that must be ordered separately.



ORBIWELD TP 400 AVC/OSC

Article	Tube OD [mm]	Tube OD [inch]	Code	Weight weld head [kg]	Dispatch weight [kg]
Open weld head TP 400 AVC/OSC*	30,00 - 115,00	1 ½ - 4 ½	812 000 002	12,700	24,800
Open weld head TP 600 AVC/OSC*	70,00 - 170,00	3 - 6	813 000 002	15,500	33,300
Open weld head TP 1000 AVC/OSC*	120,00 - 275,00	5 - 10	814 000 002	27,500	45,300

* Only usable with an ORBIMAT CA AVC/OSC orbital welding power supply. See page 10.

Other accessories for open orbital weld heads



Expansion clamping shell set for ORBIWELD TP 250



Clamping shell set for ORBIWELD TP 250



Additional clamping stainless steel shell sets for ORBIWELD TP



Control cable



Earth cable

Expansion clamping shell set for ORBIWELD TP 250

To extend the clamping area up to a minimum diameter of \varnothing 12 mm (0.472 inch).

Article	Version	Tube OD [mm]	Tube OD [inch]	Code	kg
Expansion clamping shell set for TP 250 (4pcs.)	Stainless steel	12,00 - 45,00	0.472 - 1.772	811 050 002	0,096
Expansion clamping shell set for TP 250 (4pcs.)	Hardened steel	12,00 - 45,00	0.472 - 1.772	811 050 009	0,023
Clamping shell set for TP 250* (2pcs.)	-	12,00 - 22,00	0.472 - 0.866	811 002 001	0,030

* Please indicate requested tube OD when ordering.

Additional stainless steel clamping sheet set for ORBIWELD TP

The TP series are made from hardened tool steel as standard. For applications in stainless steel we recommend the following additional clamping shell sets made from stainless steel:

Article	Code	kg
Additional clamping shell set for TP 250 (4pcs.)	811 050 006	0,069
Additional clamping shell set for TP 400 (4pcs.)	812 050 002	0,100
Additional clamping shell set for TP 600 (4pcs.)	813 050 002	0,150
Additional clamping shell set for TP 1000 (4pcs.)	814 050 001	0,071

Control cable

Suitable for all ORBIWELD TP heads.

Article	Length [m]	Length [ft]	Code	kg
Control cable for all ORBIWELD TP heads	7,5	24.6	811 050 003	1,202

Earth cable

Article	Length [m]	Length [ft]	Code	kg
Earth cable for power supplies with 165 ampere	5,0	16.4	811 050 004	2,351
Earth cable for power supplies with 300 ampere	5,0	16.4	811 050 005	2,400
Earth cable for 300 AVC/OSC power supplies	5,0	16.4	812 050 046	2,850

Consumables for ORBIWELD TP heads

Clamp sleeves for ORBIWELD TP

Article	Code		kg
Clamp sleeve TP 250	811 020 018		-
Clamp sleeve TP 400/600/1000	812 020 024		-



Clamp sleeves

Plunger for clamp sleeves for ORBIWELD TP

Article	Code		kg
Plunger for clamp sleeve TP	812 005 002		-



Plunger for clamp sleeve

Torch isolators for ORBIWELD TP

Article	Code		kg
Torch isolator TP 250	811 013 001		-
Torch isolator TP 400/600/1000	812 005 001		-



isolator seals and torch seals

Wire cores for ORBIWELD TP

Article	Code		kg
Wire core TP 250 L3,5m d0,8mm	811 020 030		-
Wire core TP 400/600/1000 L1m d0,8mm	812 020 041		-

HF spiral zu ORBIWELD TP

Article	Code		kg
HF spiral TP	831 001 027		-



HF spiral

Torch seals for ORBIWELD TP 250

Article	Code		kg
Torch seal TP 250	811 005 020		-



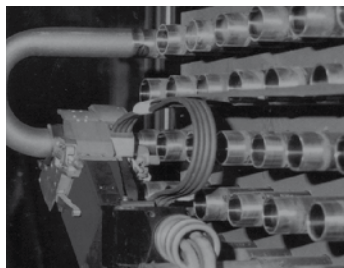
Wire cores



OP series - open weld heads for applications with limited space availability!



The OP 51 and 102 are also available with electronic arc voltage control (AVC) and oscillation (OSC).



The water-cooled torch head, machine body and clamping jaws assure highest resistance, even on preheated tubes.



Gas, water and electricity supply through a multiple hose made of viton enables safe and user-friendly working.



Horizontal, vertical and tilted welding positions are possible. Simple and fast assembly of the weld heads on the tube.

Open orbital weld heads OP series

Open orbital weld heads OP 46,OP 51,OP 102 (AVC/OSC)

The OP series is ideal for applications with limited space availability thanks to slim design.

Benefits:

- Can be used with or without additional wire.
- Smallest space requirement thanks to compact design.
- The OP 51 and OP 102 weld heads are also available with arc voltage control (AVC) and oscillation (OSC).
- The water-cooled torch head, machine body and clamping jaws assure highest resistance, even on preheated tubes.
- Horizontal, vertical and tilted welding positions are possible.
- Very robust and ergonomic design.
- Gas, water and electricity supply through a multiple hose made of viton enables safe and user-friendly working.
- Simple and fast assembly of the weld heads on the tube.

Delivery includes:

- 1 basic machine
- 1 weld head module
- 1 cold wire feed

To be able to operate the weld heads, clamping jaws and a suitable earth cable are also necessary, which are not included in the standard delivery and must be ordered separately.



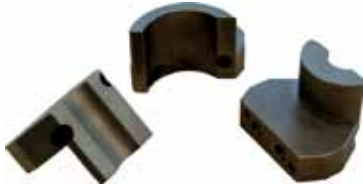
Open weld head OP 51-1

Minimum spacing between the tubes $\text{Formula: } \frac{\text{Weld head diameter} - \text{Tube OD}}{2} + 2$

Article	Tube OD [mm]	Weld head module Ø [mm]	Space requirement on tube (total) [mm]	Space requirement on tube (up to electrode) [mm]	Code	kg**
OP 46-1S	12,7 - 27,0	120	80	65	840 000 001	5,500
OP 46-2S	25,0 - 46,0	130	80	65	840 000 002	5,500
OP 46-1	12,7 - 27,0	85	135	120	841 000 001	5,500
OP 46-2	25,0 - 38,0	98	135	120	841 000 002	5,500
OP 46-3	25,0 - 46,0	115	135	120	841 000 003	5,500
OP 51-1	12,7 - 38,0	104	135	120	842 000 001	6,000
OP 51-2	25,0 - 51,0	120	135	120	842 000 002	6,000
OP 102	50,0 - 102,0	190	135	120	843 000 001	7,000
OP 51 AVC/OSC*	31,8 - 51,0	138	170	140	842 000 101	7,000
OP 102 AVC/OSC*	50,0 - 102,0	198	170	140	843 000 101	8,000

* Only usable with an ORBIMAT CA AVC/OSC orbital welding power supply. See page 10

** Weight without connecting cable



Clamping jaws for OP weld heads

Clamping jaws

The water-cooled clamping jaws are produced for specific customers and can only be used for one specific exterior tube diameter (e.g. Ø 25 mm).

Therefore when you place your order, please specify the code no. of the desired clamping jaw and the exact exterior tube diameter that you would like to weld.

Article	Tube OD [mm]	Tube OD [inch]	Suitable for	Code		kg
clamping jaw	12,7 - 27	-	OP 46-1S, 46-1, 51-1	840 030 003		-
clamping jaw	25 - 38	-	OP 42-2S, 46-2, 46-3, 51-1, OP 51-2, 51 AVC/OSC	840 030 004		-
clamping jaw	38 - 46	-	OP 42-2S, 51-2, 51 AVC/OSC	840 030 005		-
clamping jaw	46 - 51	-	OP 51-2, 51 AVC/OSC	842 030 003		-
clamping jaw	50 - 65	-	OP 102 (AVC/OSC)	843 030 001		-
clamping jaw	65 - 80	-	OP 102 (AVC/OSC)	843 030 002		-
clamping jaw	80 - 90	-	OP 102 (AVC/OSC)	843 030 003		-
clamping jaw	90 - 120	-	OP 102 (AVC/OSC)	843 030 004		-

Consumables for OP series open weld heads

Clamp sleeves for OP weld heads

Article	Code	kg
Clamp sleeve OP 46 / OP 51 / OP 51 AVC/OSC / OP 102 AVC/OSC	841 001 033	-
Clamp sleeve OP 102	843 001 004	-



Clamp sleeves

Plungers for clamp sleeves for OP weld heads

Article	Code	kg
Plunger for clamp sleeve OP	841 001 059	-



Plungers for clamp sleeves

Torch isolators for OP weld heads

Article	Code	kg
Torch isolator OP 46 / OP 51 / OP 51 AVC/OSC / OP 102	840 001 012	-
Torch isolator OP 102 AVC/OSC	843 001 005	-



Torch isolator and torch seals

Wire cores for OP weld heads

Article	Code	kg
Wire core OP 46-1	841 001 045	-
Wire core OP 46-2	841 001 071	-
Wire core OP 46-3 / OP 51	841 001 066	-
Wire core OP 51 AVC/OSC	842 001 009	-
Wire core OP 102	843 001 007	-
Wire core OP 102 AVC/OSC	843 001 008	-

HF spiral for OP weld heads

Article	Code	kg
HF spiral OP	840 001 013	-



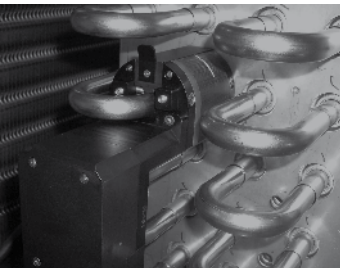
HF spiral



Wire cores



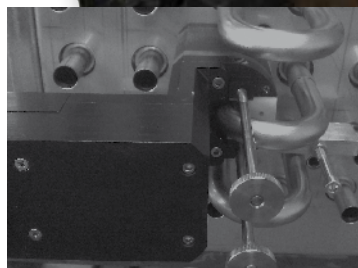
HX 16 - Open weld heads especially made for heat exchanger applications!



Optimum solution for welding pre-mounted elbows. Smallest space requirement thanks to compact design.



Highly durable thanks to water-cooled earth plate and rotor housing.



Horizontal, vertical and tilted welding positions are possible.



Simple and fast assembly of the weld heads on the tube. Self supporting weld head.

Open orbital weld heads HX 16 series

Open orbital weld heads HX 16P, HX 16S

Ideal for applications with the smallest space availability thanks to their compact design.

Benefits:

- Optimum solution for welding pre-mounted elbows.
- Time efficient and easy pneumatic clamping on the tube (only HX 16P).
- Smallest space requirement thanks to compact design.
- Exact stepless adjustment of the tungsten position (only HX 16P).
- Very robust and ergonomic design.
- Simple and fast assembly of the weld heads on the tube.
- Self supporting weld head.

To be able to operate the weld heads, clamping jaws and a suitable earth cable are also necessary, which are not included in the standard delivery and must be ordered separately.



Open weld head HX 16S

Electrode Ø 1,6 [mm]

Minimum spacing between the tubes Formula: $\frac{\text{Holder diameter} - \text{Tube OD}}{2} + 2$

Article	Tube OD [mm]	Holder module Ø [mm]	Code		kg
Open weld head HX 16P	15,0 - 16,0*	-	848 000 001		-
Open weld head HX 16S	12,7 - 16,0*	60	846 000 001		1,500

* Smaller diameters on request.

Clamping jaws for HX 16

Ideal for applications with the smallest space availability

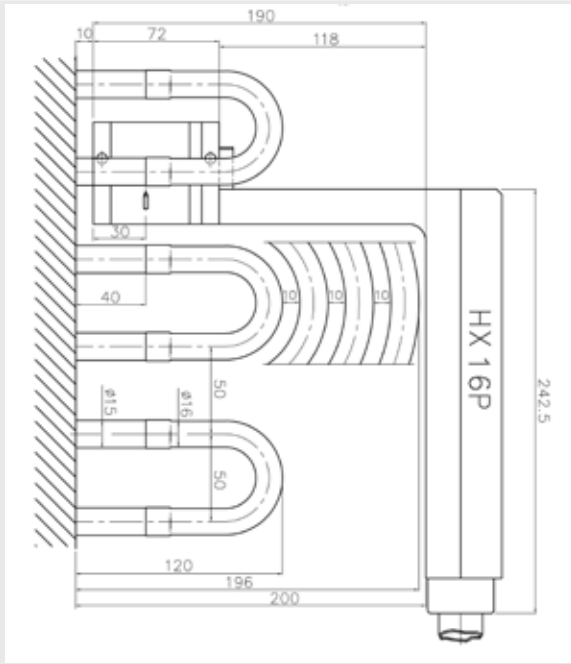
Article	Tube OD [mm]	Holder module Ø [mm]	Code		kg
Clamping jaws for HX 16	12,7 - 16	60	845 002 001		-



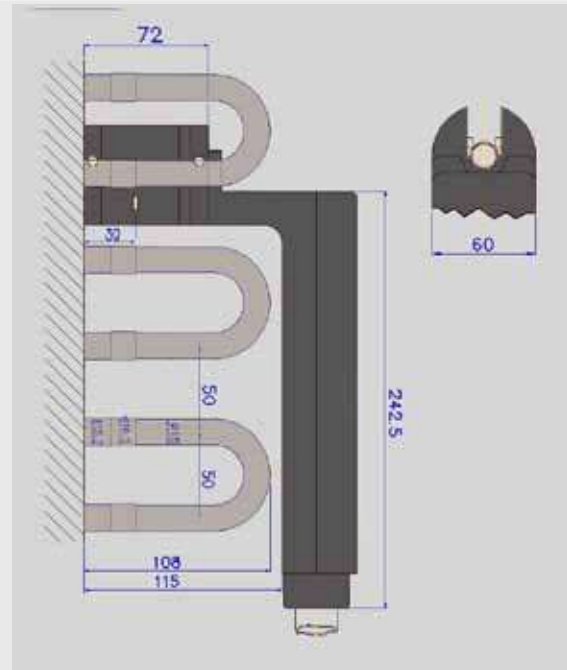
Clamping jaws for HX16

Dimensions HX 16

HX 16P

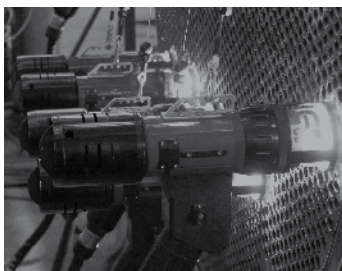


HX 16S

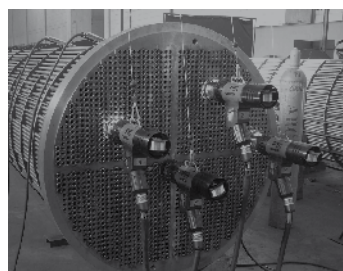




P16, P20 - Weld heads for tube-to-tube-sheet orbital welding!



Completely water-cooled machine body and torch.



Multifunctional adjustments of the electrode position.



Up to 30° continuous swivelling TIG torch. Rotating wire feed unit at torch axis.



Easy and safe handling with most functionality. Precise centering by means of exchangeable mandrels.

Tube-to-Tube-Sheet Orbital Weld Heads

Tube-to-tube-sheet orbital weld heads

Tube-to-tube-sheet orbital weld heads P16

With this TIG weld head, it easy problem to weld tubes to tubesheets with the highest of accuracy and consistent quality.

Features:

- Completely water-cooled weld head housing.
- Water coolant that extends into the TIG Torch head.
- Simple handling with maximum functionality.
- Burner head up to 30° stepless inclination (reduced diameter range).
- Positioning to the tube to be welded is by means of a centering tool that is placed on a retaining arbor.
- Fitted with a cold wire feed mounted directly on the weld head including a retaining mechanism for 100 mm (3.937 inch) standard wire reel.
(Only with P16 with cold wire, 831 000 001)
- Includes and three-point support.
- Revolving wire feed on the rotational axis of the TIG burner prevents the additional wire from twisting as it exits the wire nozzle.
- Wire reel retainer for D100/1kg (3.937 inch) standard reels.

The hose package length is 7.5 m (24.6 ft). For extension cables see on page 40.



Tube-to-tube-sheet weld head P16

Technical data P16
Cold wire unit 1 kg Midget spool, D 100 mm

Article	from tube ID of tube OD [mm]	from tube ID of tube OD [inch]	Code		Weight machine [kg]	Dispatch weight [kg]
P16 tube-to-tube-sheet orbital weld head with cold wire	10 - 78*	0.394 - 3.071	831 000 001		17,500	26,500
P16 tube-to-tube-sheet orbital weld head excluding cold wire	10 - 78*	0.394 - 3.071	831 000 003		16,200	25,100

***Please note that the centering tools, the retaining arbors and the earth cable must be ordered separately (see pages 59 and 61).**

Tube-to-tube-sheet orbital weld heads

Tube-to-tube-sheet orbital weld head P16 AVC

Like the weld head P16, this is also fitted with an electric arc voltage control (AVC).
Can only be used in conjunction with the ORBIMAT welding power supply
OM 300 CA AVC/OSC (see page 10). Including cold wire unit.

Technical data P16 AVC
Cold wire unit 1 kg Midget spool, D 100 mm

Article	from tube ID of tube OD [mm]	from tube ID of tube OD [inch]	Code	Weight machine [kg]	Dispatch weight [kg]
P16 AVC tube-to-tube-sheet orbital weld head with cold wire	20 - 100*	0.394 - 3.071	on request	18,300	27,300

***Please note that the centering tools, the retaining arbors and the earth cable must be ordered separately (see pages 59 and 61).**



Tube-to-tube-sheet weld head P16 AVC

Tube-to-tube-sheet orbital weld heads

Tube-to-tube-sheet orbital weld heads P20

With this TIG weld head, welding tubes to tube sheets with the greatest of accuracy and consistent quality is not a problem.

Features:

- Simple handling with maximum functionality.
- Water coolant that extends into the TIG burner head.
- Burner head up to 30° stepless inclination (reduced diameter range).
- Positioning to the tube to be welded is by means of a centering tool that is placed on a retaining arbor.
- Fitted with a cold wire feed mounted directly on the weld head including a retaining mechanism for D100 mm/1kg (3.937 inch) standard wire reel.
(Only with P20 with cold wire, 832 000 002))
- Includes three-point support.
- Wire reel retainer for D100/1kg (3.937 inch) standard reels.

The hose package length is 7.5 m (24.6 ft). For extension cables see on page 40



Tube-to-tube-sheet weld head P20
with cold wire

Technical data	P20
Cold wire unit	1 kg Midget spool, D 100 mm

Article	from tube ID to tube OD [mm]	from tube ID to tube OD [inch]	Code	Weight machine [kg]	Dispatch weight [kg]
P20 tube-to-tube-sheet orbital weld head with cold wire	10 - 70*	0.394 - 2.756	832 000 002	12,750	20,400
P20 tube-to-tube-sheet orbital weld head excluding cold wire	10 - 70*	0.394 - 2.756	832 000 001	11,500	20,350

***Please note that the centering tools, the retaining arbors and the earth cable must be ordered separately (see pages 59 and 61).**

Accessories for tube-to-tube-sheet orbital weld heads

Special Torches

individual torches for following welding position available on request:

- box header,
- Internal bore welding (I.B.W.).

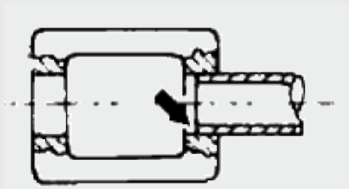


Internal bore welding (I.B.W.)

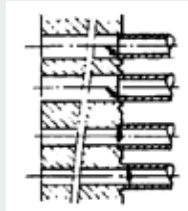


Box Header torch

Box Header



Hinterboden



Cold wire unit

For the retrofitting of tube-to-tube-sheet weld heads without cold wire unit. Suitable for all weld heads of Orbitalum P series.

- Wire reel retainer for D100/1kg (3.937 inch) standard reels.

Article	Code	kg
Cold wire unit P16	831 001 116	-
Cold wire unit P20	832 001 013	-

Earth cable

For use in combination with an orbital welding power supply from the ORBIMAT CB or CA series.

Article	Length [m]	Length [ft]	Code	kg
Earth cable for power supplies with 165 ampere	5,0	16.4	811 050 004	2,351
Earth cable for power supplies with 300 ampere	5,0	16.4	811 050 005	2,400
Earth cable for 300 AVC/OSC power supplies	5,0	16.4	812 050 046	2,850



Earth cable

Spring balance

For load-free suspension.

Article	Code	kg
Spring balance for P20	832 020 001	2,370
Spring balance for P16	832 030 002	3,800



Spring balance



Closed gas cover



Front cage



Pneumatic Centering device

Closed gas cover

For welding titanium tubes under a full gas cover.

Article	Code	kg
Closed gas cover for P20	832 020 002	1,200
Closed gas cover for P16	831 001 101	1,300

Front cage

With bearing ring.

Article	Code	kg
Front cage for P16	831 050 001	0,310
Front cage for P20	832 050 001	0,360

Pneumatic Centering Device

Pneumatic Centering Device for internal clamping of tube-to-tube-sheet welding. Centering tools have to be ordered separately.

Article	Code	kg
Pneumatische Fixiervorrichtung für P16	831 020 030	-

Pneumatic centering tools

Article	Tube ID [mm]	Tube ID [inch]	Code	kg
Pneumatic centering tool	14,5 - 16,0	0.570 - 0.630	831 020 031	-
Pneumatic centering tool	16,0 - 18,0	0.630 - 0.708	831 020 032	-
Pneumatic centering tool	18,0 - 22,0	0.708 - 0.866	831 020 033	-
Pneumatic centering tool	22,0 - 26,0	0.866 - 1.023	831 020 034	-
Pneumatic centering tool	24,0 - 28,0	0.945 - 1.102	831 020 035	-
Pneumatic centering tool	28,0 - 32,0	1.102 - 1.259	831 020 036	-
Pneumatic centering tool	30,0 - 34,0	1.181 - 1.338	831 020 037	-
Pneumatic centering tool	38,0 - 42,0	1.496 - 1.653	831 020 038	-
Pneumatic centering tool	44,0 - 48,0	1.732 - 1.889	831 020 039	-

Centering tools and retaining arbors for

tube-to-tube-sheet weld heads

The tube diameter is required to select the correct centering tool.

Article	Group	Cartridge size/no.	Tube ID* [mm]	Tube ID* [inch]	Code	kg
Retaining arbor for centering tools for group A					832 020 003	0,060
Centering tool	A	1	10,0 - 10,5	0.394 - 0.413	832 020 004	0,040
Centering tool	A	2	10,5 - 11,0	0.413 - 0.433	832 020 005	0,050
Centering tool	A	3	11,0 - 11,5	0.433 - 0.452	832 020 006	0,070
Centering tool	A	4	11,5 - 12,0	0.452 - 0.472	832 020 007	0,070
Centering tool	A	5	12,0 - 12,5	0.472 - 0.492	832 020 008	0,080
Centering tool	A	6	12,5 - 13,0	0.492 - 0.512	832 020 009	0,100
Centering tool	A	7	12,8 - 14,0	0.504 - 0.551	832 020 011	0,110
Retaining arbor for centering tools for group B					832 020 010	0,070
Centering tool	B	8	13,8 - 15,0	0.543 - 0.591	832 020 012	0,120
Centering tool	B	9	14,8 - 16,0	0.583 - 0.630	832 020 013	0,140
Centering tool	B	10	15,8 - 17,0	0.622 - 0.669	832 020 014	0,150
Centering tool	B	11	16,8 - 18,0	0.661 - 0.709	832 020 015	0,180
Centering tool	B	12	17,8 - 19,0	0.701 - 0.748	832 020 016	0,190
Centering tool	B	13	18,8 - 20,5	0.740 - 0.807	832 020 017	0,200
Centering tool	B	14	19,8 - 22,5	0.780 - 0.886	832 020 018	0,250
Retaining arbor for centering tools for group C					832 020 019	0,115
Centering tool	C	15	22,3 - 25,0	0.878 - 0.984	832 020 020	0,340
Centering tool	C	16	24,5 - 27,0	0.965 - 1.063	832 020 021	0,350
Centering tool	C	17	26,5 - 29,0	1.043 - 1.142	832 020 022	0,360
Centering tool	C	18	28,5 - 31,0	1.122 - 1.220	832 020 023	0,400
Centering tool	C	19	30,5 - 33,0	1.201 - 1.299	832 020 024	0,500
Centering tool	C	20	32,5 - 36,0	1.280 - 1.417	832 020 025	0,510
Centering tool	C	21	35,5 - 39,0	1.397 - 1.535	832 020 026	0,530
Centering tool	C	22	38,5 - 42,0	1.516 - 1.654	832 020 027	0,550
Centering tool	C	23	41,5 - 45,0	1.634 - 1.772	832 020 028	0,560
Centering tool	C	24	44,5 - 48,0	1.752 - 1.890	832 020 029	1,000
Centering tool	C	25	47,5 - 51,0	1.870 - 2.008	832 020 030	1,200
Retaining arbor for centering tools for group D					832 020 031	0,215
Centering tool	D	26	50,5 - 54,0	1.988 - 2.126	832 020 032	1,500
Centering tool	D	27	53,5 - 58,0	2.106 - 2.283	832 020 033	1,800
Centering tool	D	28	57,5 - 62,0	2.264 - 2.441	832 020 034	1,900
Centering tool	D	29	61,5 - 66,0	2.421 - 2.598	832 020 035	2,100
Centering tool	D	30	65,5 - 70,0	2.579 - 2.756	832 020 036	2,400
Centering tool	D	31	69,5 - 74,0	2.736 - 2.913	832 020 037	2,600
Centering tool	D	32	73,5 - 78,0	2.894 - 3.071	832 020 038	2,800
Centering tool	D	33	77,5 - 82,0	3.051 - 3.228	832 020 039	3,100
Centering tool	D	34	82,0 - 87,0	3.228 - 3.425	832 020 045	3,100
Centering tool	D	35	87,0 - 91,0	3.425 - 3.582	832 020 046	-
Centering tool	D	36	91,0 - 95,0	3.582 - 3.740	832 020 047	-
Centering tool	D	37	95,0 - 99,0	3.740 - 3.897	832 020 048	-
Centering tool	D	38	99,0 - 103,0	3.897 - 4.055	832 020 049	-
Centering tool	D	39	103,0 - 107,0	4.055 - 4.212	832 020 050	-
Centering tool	D	40	107,0 - 111,0	4.212 - 4.370	832 020 051	-
Centering tool	D	41	111,0 - 115,0	4.370 - 4.527	832 020 052	-
Centering tool	D	42	115,0 - 120,0	4.527 - 4.724	832 020 053	-

*smaller diameters on request.



Centering tools



Mandrels

Consumables for tube-to-tube-sheet orbital weld heads

Clamp sleeve for P16 / P20



Clamp sleeves

Article	Code	kg
Clamp sleeve P16/P20	831 001 058	-

Torch isolator for P16 / P20



Torch isolators and torch seals

Article	Code	kg
Torch isolator P16/P20	831 001 007	-

Wire cores for P16 / P20

Article	Code	kg
Wire core P16	831 001 022	-
Wire core P20	832 001 010	-

HF spiral for P16 / P20



HF spiral

Article	Code	kg
HF spiral P16/P20	831 001 027	-



Wire cores



Accessories - for orbital welding!



With ORBITWIN switching device 2 weld heads can be operated alternately on ORBITMATIC power supply.



ESG Plus hand-held grinder for cutting, grinding and planing electrodes.



The ORBIPURGE forming for fast and efficient internal forming during orbital welding.



WS electrodes are used for DC and AC welding.

Accessories for orbital welding

Tungsten Grinder ESG Plus



ESG Plus

- No adjustment needs to be done before operation.
- Repeatable points every time due to preset grinding angles.
- Easy and fast to use.
- Optimum preparation for orbital and manual welding.
- Longitudinal grinding for optimum arc ignition and excellent arc stability.
- Guarantees longer tool life and ease of ignition of the tungsten electrode.
- Specially designed for one-off jobs on site.
- Compact design, optimum resilience and perfect reproducibility.
- Solid, functional design.
- Precise orbital grinding, very well centered.
- Grinding angles 15°; 18°; 22.5°; 30° or 15°, 30°, 45°; 60°.
- Facility for easy trimming of the electrodes (optional).
- External dust extractor can be easily adapted.
- Short preparation times with high grinding performance.

This ESG Plus is the perfect hand-held grinder for cutting, grinding and planing electrodes which are used in WIG/TIG welding machines. Consider country-specific regulations, standards and guidelines when using tungsten electrodes with thorium.

Versions:

ESG Plus²: A sensation! The first portable tungsten grinder with two different grinding wheels. This allows the electrode to be pre-ground with the coarse diamond wheel then finished with the fine diamond wh.

Comes with:

- Tungsten Grinder ESG Plus or ESG Plus²
- 1 Powder-coated steel carrying case
- 1 Diamond grinding wheel (medium, Code 790 052 488)
- 1 Tool to replace the grinding wheel
- 1 Set of operating instructions and spare parts list

Optional for the ESG Plus²

- 1 Diamond grinding wheel (coarse, Code 790 052 550)

Electric drive with single-phase AC motor:

Power: 500 W

Speed drive: 30,000 rpm

100% power-on time



ESG Plus²

Application range	ESG Plus, ESG Plus ²	
Electrode Ø [mm/inch]	1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0	0.040 / 1/16 / 0.080 / 3/32 / 1/8 / 5/32
Grinding angles [°]		15 / 18 / 22,5 / 30 or 15 / 30 / 45 / 60

Article	Version	Grinding angles [°]	Code	kg
ESG Plus	230 Volt, 50/60 Hz EU	15 / 18 / 22,5 / 30	790 052 485	3,560
ESG Plus	230 Volt, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 545	3,560
ESG Plus ²	230 Volt, 50/60 Hz EU	15 / 18 / 22,5 / 30	790 052 585	3,720
ESG Plus ²	230 Volt, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 546	3,720
ESG Plus	110 V, 50/60 Hz EU/US	15 / 18 / 22,5 / 30	790 052 486	3,560
ESG Plus	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 645	3,560
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 18 / 22,5 / 30	790 052 586	3,720
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 646	3,720

Diamond grinding wheel

Replaceable grinding wheel diamond-coated on both sides for optimal performance. For 1.0 and 1.6 mm (0.039 and 0.063 inch) electrodes we recommend the standard grinding wheel. For 2.0 mm (0.078 inch) and larger electrodes, a medium to coarse grained grinding wheel is advisable.



Diamond grinding wheel

Article	Ausführung	Grinding wheel Ø [mm]	s [mm]	Code	kg
Diamond grinding wheel*	Standard	32,0	1,2	790 052 460	0,005
Diamond grinding wheel**	Fine	33,5	2,2	790 052 487	0,010
Diamond grinding wheel**	Medium	33,5	2,2	790 052 488	0,011
Diamond grinding wheel**	Coarse	33,5	2,2	790 052 550	0,011

* for ESG 4

** for ESG Plus

Cutting device

To cut tungsten electrodes to length.



Cutting device

Application range	[mm]	[inch]
Electrode Ø	1,0 / 1,6 / 2,0 / 2,4	0.040 / 1/16 / 0.080 / 3/32
Fixed cutting lengths*	12 / 13 / 15 / 17	0.472 / 0.512 / 0.591 / 0.669

* Other cutting lengths possible.

Article	Code	kg
Cutting device for ESG Plus	790 052 513	0,030

Electrode holder

With clamping collet for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch), Code 790 052 481.



Electrode holder

Article	Code	kg
Electrode holder	790 052 457	0,023

Clamping collet

To center the electrode in the holder. For easy grinding of smaller electrodes. Flexible clamping collet for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch).



Clamping collet

Article	Clamping range [mm]	Clamping range [inch]	Code	kg
Clamping collet	1,0 - 3,2	0.039 - 0.126	790 052 481	0,002



Wall-/table-/vice-mounting plate



Protective cover



Double-Decker Kit

Wall-/table-/vice-mounting plate

For stationary ESG Plus set-up.

Article	Code		kg
Wall-/table-/vice-mounting plate	790 052 483		0,102

Protective cover

Easy to adapt on the ESG Plus head.
With integrated retainer for suction units. For use on electrodes with thorium.

Article	Code		kg
Protective cover for ESG Plus	790 052 496		0,220
Protective cover for ESG Plus ²	790 052 596		0,220

Double-Decker Kit

Easy to mount to the ESG Plus. This attachment makes it possible to use 2 different grinding wheels at the same time. The kit contains a head and a diamond grinding wheel (Code 790 052 550) with an extension shaft.

Article	Grinding angles [°]	Code		kg
Double-Decker Kit	15 / 18 / 22,5 / 30	790 052 490		0,160
Double-Decker Kit	15 / 30 / 45 / 60	790 052 390		0,160

Other accessories for orbital welding technology

Oxygen meter ORB 1001

To determine the residual oxygen in the forming gases. Maintenance-free. Complete in a dust-and water-proof transport container.

To ensure a consistently low residual oxygen content in the forming gas atmosphere for orbital welding seams, this must be measured exactly, as this is the only way to guarantee that the inside of the tube is free from oxidation. Calculation formulae frequently used by installers of tubelines on time, gas volume, and volumes only deliver a very rough guide values that are no longer adequate in many applications. Even simple measuring devices are no longer able to meet the increasingly stringent requirements, particularly in the pharmaceutical, biotech, and semiconductor industry. With ORB 1001 Orbitalum has now developed a device that is simple to use and economical to buy. ORB 1001 also offers a direct connection with all ORBIMAT orbital welding power supplies, with which various supervisory and control functions of the welding process can be carried out.

Benefits:

- User-definable settings of the switching value for alarm and process control.
- Display in PPM.
- Acoustic signal if the set value has been exceeded.
- RS-232 interface to the PC link.
- Integrated suction pump.
- Simple control of the forming gas in the residual gas content.
- Can be used for ARGON and all common forming gas mixtures (with the exception of flammable mixtures).

Optional:

- Software for PC connection.
- Data cable ORB 1001 to PC
- Data cable ORB 1001 to ORBIMAT



Oxygen meter ORB 1001

Technical Data	ORB 1001
Connection voltage	230/115 V, 50/60 Hz
Measurement range	1.000 - 1 PPM
Accuracy	2% in the range 10 - 1,000 PPM
Service life of the measurement cell	up to 5 years
Warm-up time	approx. 2 minutes
Measurement rate	approx. 30 seconds

Article	Version	Code	kg
Oxygen meter ORB 1001	230/115 V, 50/60 Hz single-phase	882 000 001	3,100

Particle filter for ORB 1001 oxygen meter

Replacement particle filter for ORB 1001 oxygen meter.

Article	Code	kg
Particle filter 0,45µm ORB 1001	882 012 004	0,003
Particle filter 0,10µm ORB 1001	882 012 005	0,003



ORBIPURGE forming set

ORBIPURGE forming set

Complete with Teflon gas hose and rapid-action couplings.

The ORBIPURGE forming set for tube internal diameters 12 - 110 mm (0.472 - 4.331 inch) includes all accessories for fast and efficient internal forming during orbital welding.

- The various stoppers match the internal diameter of the tube exactly and therefore form an optimally sealed forming gas chamber.
- The complete set is supplied in a durable plastic carrying case.
- The scope of delivery includes 2 forming plugs in each size, a Teflon gas hose, and a set of rapid-action couplings.
- The forming plugs cater for the complete range of between 12 – 110 mm fully. Forming plugs for greater diameters are available on request.
- The ORBIPURGE forming set is also particularly suitable where there are very high demands for purity in the forming atmosphere and is an ideal addition to our residual oxygen meter ORB 1001.
- The rapid-action couplings allow for simple separation and connection without having to screw the pressure regulator on and off for every operation.

Article	Tube ID [mm]	Tube ID [inch]	Code	kg
ORBIPURGE forming set	12,0 - 110,0	0.472 - 4.331	881 000 001	3,150

Inert gas outlet for ORBIPURGE forming plugs

Suitable for all ORBIPURGE forming plugs.



Inert gas outlets

Article	Code	kg
Inert gas outlet ORBIPURGE 3/8"	881 020 014	-
Inert gas outlet ORBIPURGE M5	881 020 015	-

Pressure regulator

With 2 adjustable flow displays and option to connect welding and forming gas.

Technical data	Argon/hydrogen	Argon
max. inlet pressure	200 bar	230 bar
flow indicator	up to 50 L/min.	up to 30 L/min.
cylinder connection	W21,8x1/14" LH (left)	W21,8x1/14"
hose connection	9 3/8 LH (left)	9 1/4

Article	Version	Code	kg
Dual pressure regulator	argon	888 000 001	1,850
Dual pressure regulator	argon/hydrogen	888 000 002	1,850



Dual pressure regulator

Seals for pressure regulator

Seals for the cylinder connection of the pressure regulator.

Article	Code	kg
Seal for pressure regulator	888 000 005	-

Inspection set

Optimal tool for visually checking the welding seam, including lighting.

Minimum sensor (length: 110 mm) complete with handle and attachable mirrors Ø 16 mm and 20 mm.

Article	Code	kg
Inspections set	875 030 020	0,190



Inspections set

Bulb for inspection set

Replacement bulb for inspection set. Easy to change.

Article	Code	kg
Bulb inspection set	875 030 028	0,002

Tungsten electrodes WS2

WS electrodes are used for DC and AC welding and are a completely satisfactory replacement for the WT electrodes.

Benefits:

- High ignition safety.
- Low combustion.
- Long service life.
- High arc quality.

Content: 10 pieces. Length: 175 mm (6.890 inch).

Composition: WS2 = Rare earths (mixed oxides).

Color code: turquoise.

Article	Electrode Ø [mm]	Electrode Ø [inch]	Code	kg
Tungsten electrodes WS2	1,0	0.039	826 004 018	0,180
Tungsten electrodes WS2	1,6	0.063	826 004 019	0,180
Tungsten electrodes WS2	2,4	0.094	826 004 020	0,180



Tungsten electrodes WS2

TIG Manual Welding Torch

The TIG Manual Welding Torch from Orbitalum is a high productive welding torch for tacking and manual welding. The water cooled hand torch allows an ideal heat conduction and a long operating life. The compact design, the flexible cable assembly and the integrated operation control results in a high user-friendliness.

Max. 260 A power-on time at 60 %.

Article	Cable assembly (m)	Code	kg
TIG Manual Welding Torch	4,0	890 013 001	2,600
TIG Manual Welding Torch	8,0	890 013 002	-
TIG Manual Welding Torch	12,0	890 013 003	-



TIG Manual Welding Torch



Worldwide customer focus.

Our customer service | enthusiastic.

You can count on our comprehensive range of services. Our aim is to offer you customer service designed to inspire you – you can measure us against this promise.

- Acclaimed state-of-the-art technology
- Competent contact partners
- Fast, comprehensive delivery service
- Reliable product support
- Practical training programs
- Certified company

Our service benefits | overview:

Technical support

- Repairs, maintenance
- On-site service
- Service training for our customers
- Cost-effective replacement devices on request

Spare parts service

- Approx. 2,000 spare parts always on stock
- Modern logistic systems

Rental/used machine service

- Extensive rental pool
- Long-term rental
- Hire purchase

Further support services

- Pick-up service from the customer
- Used machines with warranty
- State-of-the-art logistics systems

Waste disposal / environmental protection



Disposal of electrical (electronic) devices



(RL 2002/96/EG)

Electrical (electronic) devices which are marked with the symbol above, may not be disposed of with household waste in accordance to the EU directive 2002/96/EC. By actively using the offered return and collection systems, you actively contribute to the reuse, recycling and utilisation of electrical (electronic) devices. Electrical (electronic) used devices contain parts which must be handled selectively according to the EU directive. Separate collection and selective treatment is the basis for environment-friendly disposal and the protection of human health. Our products that were sold to you after August 13th, 2005 are taken back and treated according to legal standards. These products have to be sent free of charge. The return of used devices which pose a health or safety risk for human beings due to contamination during use may be refused. The legally compliant disposal of electrical (electronic) devices that were placed on the market before August 13th, 2005 are in the responsibility of the end-user.



Returning of batteries

Some of our products work with batteries. Batteries which are marked with the symbol above may not be disposed of together with household waste according to the applicable EU directive 91/157/EEC. With batteries containing hazardous substances, the chemical symbol for the heavy metal content is indicated below the waste bin.

Cd = Cadmium
Hg = Mercury
Pb = Lead

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