

# CATALOGUE

» EN (790 700 000 | Rev. 0515)



## ORBITAL CUTTING & BEVELING

» Orbital cutting & beveling machines for high-purity process piping



## New products.



### GFX 6.6 | Pipe Cutting and Beveling Machine

New, innovative saw from Orbitalum Tools for cutting and beveling of tubes and elbows in just seconds. The perfect preparation for orbital welding!

**Advantages:**

- 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

[...more on page 15](#)



### ESG MAX | Tungsten Grinder

Precisely and rapidly cutting, grinding and planning electrodes which are used in WIG/TIG welding machines.

**Advantages:**

- Lateral adjustment of the head for increased service life of the grinding wheel
- Grinding head with 72 holes: 36 holes for the grinding wheel with coarse grain, 36 holes for the grinding wheel with fine grain and cutting edge
- Continuously adjustable cutting device from 9.0 to 34.5 mm (0.354" - 1.358") (available option)
- Including dust protection against grinding dust
- Adapter for extraction device for up to 96% less grinding dust particles (available option)
- Table mount included

[...more on page 66](#)



### BRB 2 FullAuto | Boiler Pipe Preparation Machine

The ideal machine for shortening heat exchanger pipes and for cutting pipes out of heat exchanger walls!

**Advantages:**

- Standard-compliant, precise and reproducible weld seam preparation.
- Rapid processing, ideal for serial processing
- Handy, ergonomic and compact design, all control elements for operating the machine are integrated in it, no external control box or pedal required

[...more on page 46](#)

# Order hotline: +49 (0) 77 31 792-0



# orbital | cutting + beveling + welding.

## Pipe Cutting and Beveling Technology

### Pipe Cutting and Beveling Machines GF 4, GF 6 (AVM/MVM)..... 5

### Pipe Cutting and Beveling Machines RA 8, RA 12 (AVM/MVM) .... 8

Pipe Cutting and Beveling Machine GF 20 AVM .....	11
Lifting bench .....	13
Extension unit .....	13
Continuous cooling system.....	13
Aluminum clamping shells.....	14

Pipe Cutting and Beveling Machines GFX 3.0, GFX 6.6 .....	15
Set of stainless steel caps.....	17
Quick-mounting base plates .....	17
Durable storage and shipping case .....	17

Accessories for GF and RA machines .....	18
Aluminum clamping shells.....	19
Clamping jaws .....	19
Set of stainless steel clamping attachments.....	19
Continuous cooling system.....	20
Saw blade lubricant GF TOP .....	20
Saw blade lubricant GF LUB .....	20
Special gear oil.....	20
Intermediate gearbox retrofit kit.....	21
Swivel cable .....	21
Quick-mounting base plates with integrated screw clamps.....	21
Pipe feeder base unit and extension unit.....	22
Mobile Workstation .....	23

Saw blades and bevel cutters for GF and RA machines .....	24
Saw blades.....	25
Saw blade/bevel cutter combinations .....	26
Weld-prep saw blade/bevel cutter combinations .....	26
Support disc for saw blade/bevel cutter combinations .....	26
Press fitting saw blade/bevel cutter combinations.....	26
Bevel cutters .....	27
Saw blades for SCORP machines .....	28
Saw blade TCT .....	28
Cutting blade Diamond.....	28
Saw blade Cermet.....	28

Portable Tube Saws PS 4.5, PS 6.6 .....	29
Quick-mounting plate with screw clamps.....	31
Saw blades.....	31
Tripod .....	31
Clamping jaws replacement set .....	31
Laser retrofitting kit .....	31

Metal Tube Cutter MRA .....	32
Multi-roller cutting chains .....	34
Clamping shells .....	34

## Tube Squaring Technology

Tube Squaring Machines RPG XS, RPG ONE, RPG 1.5, RPG 2.5 .....	35
One-piece stainless steel clamping shells .....	38
Tool holder WH .....	40
Multifunctional tool MFW .....	40

Tube Squaring Machines RPG 4.5, RPG 4.5 S, RPG 8.6 .....	41
Clamping shells .....	43
Tool holder WH .....	45
Multifunctional tool MFW .....	45

## Pipe Beveling Technology

### Boiler Pipe Preparation Machine BRB 2 FullAuto ..... 46 |

### Boiler Pipe Preparation Machines BRB 2, BRB 4 ..... 49 |

### Pipe End Preparation Machines REB 6, REB 14 ..... 42 |

Accessories for BRB and REB machines .....	56
Tool holder WH .....	56
Multifunctional tool MFW "Economy" .....	57
Multifunctional tool MFW "High-Performance" .....	57
Tool Bits TB .....	58
Tool retainer for Tool Bits TB.....	58
Tool retainer for tool combinations WH/MFW .....	58
Upgrade sets BRB 2 for dimension extension.....	59
Balancer spring .....	59
Hoist bracket.....	59
Bevel cutter head for BRB 2 (V-/Y-prep) .....	60
Bevel cutter head for BRB 4 (V-prep) .....	60
Adjustable spacer .....	60
Mobile air unit DWE 10 .....	61
Air hose with quick coupling .....	61
Cutting lubrication KSS-TOP .....	61
Elbow clamping system .....	61
Optional clamping wedges .....	62
Plastic (POM) clamping shell segments .....	62
ID-Tracking for REB 14.....	62
Combination possibilities of tool holder WH and multifunctional tools MFW for REB and BRB machines .....	63

# Contents

3



## Complete solutions. One source.

### Tungsten Grinding Technology

<b>Tungsten Grinder ESG MAX, ESG Plus, ESG Plus<sup>2</sup></b> .....	66
Diamond grinding wheels.....	68
Cutting devices.....	68
Electrode holder and collets .....	69
Wall-/table-/vice-mounting plate.....	69
Adapter for extraction device .....	69
Protective cover.....	69
Double-Decker Kit.....	69

### Threading, Jointing and Sealing Technology

<b>Accessories for Pipe Threading Technology</b> .....	70
Replacement sets of threading chasers .....	71
Nipple holder .....	71
Thread cutting compound NORMOLIC Red <sup>®</sup> .....	71

<b>Thread Jointing Technology</b> .....	72
Thread jointing compound PARALIQ <sup>®</sup> PM 35 .....	72
Flax dispenser "Sales Display Package" .....	72
Flax dispenser .....	72
Flax dispenser "Pocket dispenser" .....	72

<b>Seals</b> .....	73
Seal dispenser .....	73
Seals for seal dispenser .....	73

### Copper Pipe Installation Technology

<b>Accessories for LAM 1500, LAM 1600</b> .....	74
Clamp holder with carbon V-electrode .....	75
Carbon V-electrode .....	75
Stick electrode .....	75

### Accessories for Workshop and Site

<b>Work benches</b> .....	76
Tool box .....	77
Pipe vices.....	77
Deburring tool .....	77



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

5



## 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 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 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 (40 - 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.

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	40 - 215 rpm	40 - 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 <sup>2</sup> in accordance with DIN EN 28662, part 1	

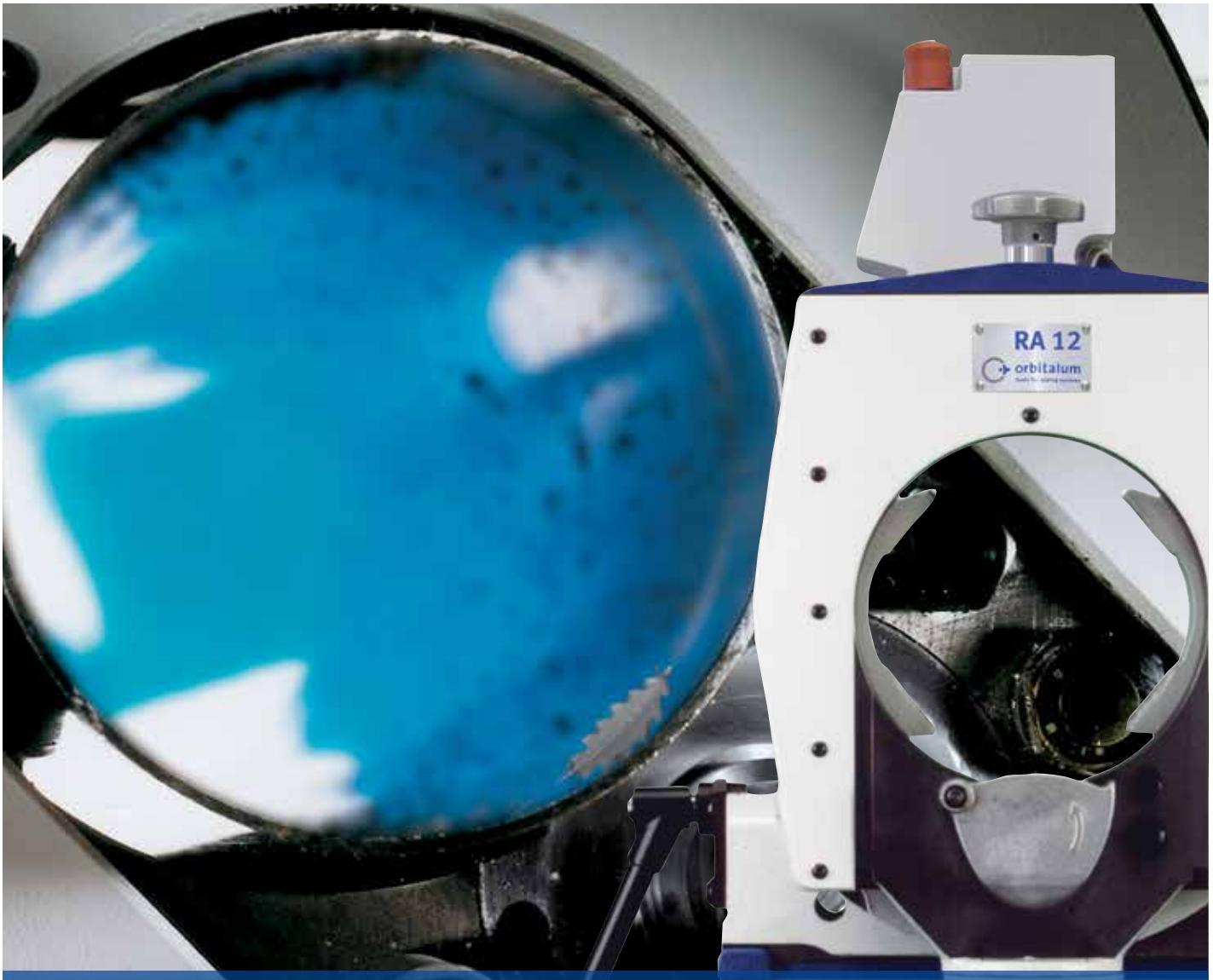
\* Increased wall thickness possible with manual feed or by adding an additional cut (depending on the saw blade diameter).

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



## Pipe Cutting and Beveling Technology

⑦



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

⑧

## Pipe Cutting and Beveling Machines RA

# 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 8, RA 12 (AVM/MVM)

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 40 - 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
- More corrosion protection through clamping jaw attachments (included)

### Feed versions:

#### RA AVM\*

Pipe Cutting and Beveling Machines **with integrated crown wheel and 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.

#### RA 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 8: Code 790 043 018, RA 12: Code 790 043 018)
- 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 8, RA 8 AVM, RA 8 MVM



RA 12, RA 12 AVM, RA 12 MVM

# Pipe Cutting and Beveling Technology

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

<b>Application range</b>		<b>RA 8 (AVM/MVM)</b>	<b>RA 12 (AVM/MVM)</b>
Pipe OD	[mm]	114 - 230	154 - 325
	[inch]	4.488 - 9.055	6.063 - 12.795
Wall thickness, depends on material**	[mm]	2 - 10	2 - 10
	[inch]	0.079 - 0.394	0.079 - 0.394
Pipe ID min. (saw blade-Ø 63 mm/2.480 inch)	[mm]	137	190
	[inch]	5.394	7.480
Pipe ID min. (saw blade-Ø 68 mm/2.677 inch)	[mm]	132	185
	[inch]	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
<b>Technical data</b>		<b>Drive with single-phase AC motor</b>	
Dimensions (lxwxh) RA	[mm]	778 x 485 x 430	940 x 592 x 374
	[inch]	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 / 1.9 / 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]	40 - 215	40 - 215
Vibration level in accordance with 28662, part 1	[m/s <sup>2</sup> ]	< 2.5	< 2.5
Noise level at the workplace approx.	[dB (A)]	79	79

\* 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 19.

<b>Article</b>	<b>Version</b>	<b>Code</b>	<b>Weight of machine kg</b>	<b>Dispatch weight kg</b>
RA 8	230 V, 50/60 Hz EU	<b>790 045 095</b>	102.500	149.000
RA 8	120 V, 50/60 Hz EU/US	<b>790 045 096</b>	102.500	149.000
RA 8 AVM	230 V, 50/60 Hz EU	<b>790 045 001</b>	110.000	165.000
RA 8 AVM	120 V, 50/60 Hz EU/US	<b>790 045 007</b>	110.000	165.000
RA 8 MVM	230 V, 50/60 Hz EU	<b>790 045 069</b>	103.000	153.000
RA 8 MVM	120 V, 50/60 Hz EU/US	<b>790 045 082</b>	103.000	153.000
RA 12	230 V, 50/60 Hz EU	<b>790 047 095</b>	138.600	177.000
RA 12	120 V, 50/60 Hz EU/US	<b>790 047 096</b>	138.600	177.000
RA 12 AVM	230 V, 50/60 Hz EU	<b>790 047 001</b>	146.000	205.000
RA 12 AVM	120 V, 50/60 Hz EU/US	<b>790 047 007</b>	146.000	205.000
RA 12 MVM	230 V, 50/60 Hz EU	<b>790 047 069</b>	140.700	200.000
RA 12 MVM	120 V, 50/60 Hz EU/US	<b>790 047 082</b>	140.700	200.000



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



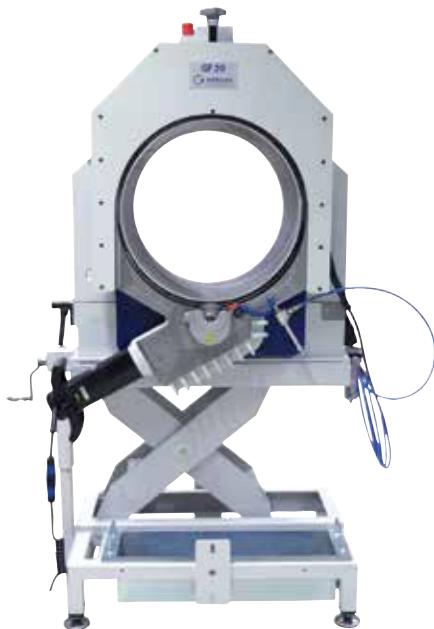
An even higher operating life of the tools is guaranteed by the continual cooling system (available as special accessory)

## Pipe Cutting and Beveling Machine GF 20 AVM

11

## 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 with 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 30 - 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.

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 (hxwxd) approx.	145 - 171 x 94 x 63 cm / 57.1 - 67.3 x 37 x 24.8 inch
Dimensions of lifting bench (hxwxd) 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	30 - 163 rpm
Protection class	Protection isolated class I, DIN VDE 0740

Application range		GF 20 AVM			
Vibration level in accordance with 28662, part 1		2.5 m/s <sup>2</sup>			
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		482.000	554.000
GF 20 AVM	120 V, 50/60 Hz EU/US	790 050 002		482.000	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.



Lifting bench

Technical data		Lifting bench for GF 20 AVM and RA 12		
Dimensions of lifting bench (hxwxd) 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

## 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.



Extension unit

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

## 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).



Continuous cooling system

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

# Pipe Cutting and Beveling Technology



Aluminum clamping shells

## Aluminum clamping shells

For GF 20 AVM. Ideal for clamping thin-walled pipes.

Further clamping shells for customized outer diameters are available on request.  
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	Tube OD [mm]	Tube OD [inch]	Code		kg
Aluminum clamping shells for GF 20 AVM	508.00	20.000	790 050 800		3.700
Aluminum clamping shells for GF 20 AVM	457.20	18.000	790 050 802		3.700
Aluminum clamping shells for GF 20 AVM	406.40	16.000	790 050 803		3.700
Aluminum clamping shells for GF 20 AVM	355.60	14.000	790 050 804		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 over-  
load protection and  
ergonomically designed  
motor handle



Cast iron clamping jaws  
with stainless steel caps



Integrated line laser  
to mark the cut off  
point

## Pipe Cutting and Beveling Machines

15

## 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

### GFX 3.0, GFX 6.6

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 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
- Direct mounting on workbench possible with GFX 3.0

#### Machine comes with:

- 1 Pipe Cutting and Beveling Machine GFX 3.0 or GFX 6.6
- 1 Transportation case
- 1 Saw blade (GFX 3.0: Code 790 041 035, GFX 6.6: Code 790 042 064)
- 1 Quick-mounting plate without screw clamps\* (only with GFX 6.6)
- 1 Set of stainless steel caps\*\*
- 1 Line laser with holder and fastening screws\*\*\*
- 1 Tool set
- 1 Tube of saw blade lubricant GF TOP (Code 790 060 228)
- 1 Set of operating instructions and spare parts list

\* The GFX 3.0 can be mounted directly on the workbench without a quick-mounting plate. Quick-mounting plates with screw clamps for GFX 3.0 and GFX 6.6 are available optionally.

\*\* Already mounted on the sliding clamping jaws of the GFX at delivery.

\*\*\* The line laser has to be mounted on the GFX before commissioning.



GFX 6.6

Application range	GFX 3.0	GFX 6.6
Tube OD	[mm] 6.0 - 78.0 [inch] 0.236 - 2.874	21.3 - 168.3 0.838 - 6.659
Wall thickness	[mm] 0.8 - 7.0 [inch] 0.031 - 0.275	0.8 - 7.0 0.031 - 0.275
Tube ID min. (Sägeblatt-Ø 63/2.248")	[mm] 0 [inch] 0	23.0 0.905
OD range (saw blade Ø 63/2.248")	[mm] 6.0 - 78.0 [inch] 0.236 - 2.874	24.6 - 168.3 1.008 - 6.659
OD range (saw blade Ø 68/2.677")	[mm] 0 [inch] 0	18 0.708

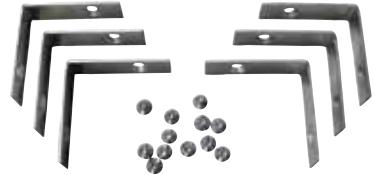
<b>Application range</b>	<b>GFX 3.0</b>		<b>GFX 6.6</b>	
OD range (saw blade Ø 68/2.677")	[mm]	6.0 - 73.0	21.3 - 168.3	
	[inch]	0.236 - 2.874	0.838 - 6.659	
OD range (saw blade Ø 80/3.149")	[mm]	-	6.0	
	[inch]	-	0.236	
OD range (saw blade Ø 80/3.149")	[mm]	-	21.3 - 156.0	
	[inch]	-	0.838 - 2.205	
Tube materials	Unalloyed, low-alloy and high-alloy steel, stainless steel, non-ferrous metal, aluminum alloy, titanium alloy, composite material and plastic			
<b>Technical data</b>	<b>Electric drive with single-phase AC motor</b>			
Dimensions (lhxw)	[mm]	570 x 280 x 330	575 x 671 x 350	
	[inch]	22.44 x 11.02 x 12.99	22.64 x 26.42 x 13.78	
Protection class	[Class]	II	II	
Power	[W]	1200	1200	
Built-in electronic speed regulation with speed stabilisation	[rpm]	30 - 200	30 - 200	
Vibration level in accordance with 50144	[m/s <sup>2</sup> ]	< 2.5	< 2.5	

<b>Article</b>	<b>Version</b>	<b>Code</b>	<b>Weight of machine kg</b>	<b>Dispatch weight kg</b>
GFX 3.0	230 V, 50/60 Hz EU	<b>790 144 001</b>	28.000	44.000
GFX 3.0	120 V, 50/60 Hz US	<b>790 144 002</b>	28.000	44.000
GFX 6.6	230 V, 50/60 Hz EU	<b>790 146 001</b>	74.400	104.000
GFX 6.6	120 V, 50/60 Hz US	<b>790 146 002</b>	74.400	104.000

## Accessories for GFX machines

### Set of stainless steel caps

Already included on delivery of the GFX series.  
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 of stainless steel caps*

#### Set comes with:

- Stainless steel caps (Qty.): 6 (GFX 3.0) / 4 (GFX 6.6)
- Countersunk screws (Qty.): 12 (GFX 3.0) / 16 (GFX 6.6)
- Allen key (Qty.): 1

<b>Article</b>	<b>Code</b>	<b>kg</b>
Set of stainless steel caps for GFX 3.0	<b>790 144 200</b>	0.150
Set of stainless steel caps for GFX 6.6	<b>790 146 200</b>	0.792

### Durable storage and shipping case

High-quality padded blue shipping case.



*Durable storage and shipping case*

<b>Article</b>	<b>Code</b>	<b>kg</b>
Durable storage and shipping case for GFX 3.0	<b>790 144 019</b>	12.500

### Other suitable accessories:

**Quick-mounting base plate** with screw clamps, see page 21.  
**Tripod** made of aluminum, see page 31.



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 20)



Clamping shells or jaws for deformation- or corrosion-free clamping of tubes (page 19)



Quick-mounting base plates – ideal for frequent changes of location (page 21)



Pipe feeder for accurately feeding long and heavy pipes into GF and RA machines (page 22)

Our Mobile Workstation for the mobile site and/or workshop (page 23):



Lockable tool box with 4 drawers



Lifting table with height adjustment



Swarf collection tray



Roller pipe support

## 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.



Aluminum clamping shells

Article	Version	Pipe OD [mm]	Pipe OD [inch]	Code	kg
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	5.800
Aluminum clamping shells	for RA 12	306.0	12.047	790 047 225	5.800

### Clamping jaws

In pairs. Retrofit. While stock last.



Special clamping jaws for RA 2 and RA 21 S

Article	Code	kg
Special clamping jaws for RA 2 and RA 21 S	790 041 323	1.035
Aluminum clamping jaws for RA 4 and RA 41 Plus	790 046 250	2.600

### 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).



Set of stainless steel clamping attachments

Article	Version	Code	kg
Set of stainless steel clamping attachments for GF 4	right + left	790 142 241	0.310
Set of stainless steel clamping attachments for GF 6	right + left	790 143 200	0.510

## Pipe Cutting and Beveling Technology

(19)

## Continuous cooling system

On request for GF 4, GF 6, RA 8 and RA 12 available. For details, see page 13.



GF TOP



GF LUB



Special gear oil

## 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	0.160

## 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).

Article	Version	Cable length [m/ft]	Code		kg
Swivel cable complete	230 V, 50/60 Hz EU	4/13.1	<b>790 142 081</b>		0.680
Swivel cable complete	120 V, 50/60 Hz US/CA	4/13.1	<b>790 142 082</b>		0.654
Swivel cable complete	230 V, 50/60 Hz CH	4/13.1	<b>790 142 083</b>		0.595
Swivel cable complete	230 V, 50/60 Hz AU	4/13.1	<b>790 142 084</b>		0.655
Swivel cable complete	120 V, 50/60 Hz GB	4/13.1	<b>790 142 087</b>		0.740
Swivel cable	230 V, 50/60 Hz EU	4/13.1	<b>790 142 076</b>		0.560
Swivel cable	120 V, 50/60 Hz US/CA	4/13.1	<b>790 142 077</b>		0.740
Swivel cable	230 V, 50/60 Hz CH	4/13.1	<b>790 142 078</b>		0.520
Swivel cable	120 V, 50/60 Hz GB	4/13.1	<b>790 142 079</b>		0.630
Swivel cable	230 V, 50/60 Hz AU	4/13.1	<b>790 142 080</b>		0.560



Swivel cable



Swivel cable complete

## 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, RA 21 S	790 041 027	4.230
Quick-mounting base plate for GF 4, GF 6, GFX 6.6, RA 4, RA 6, RA 8, RA 41 Plus	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.

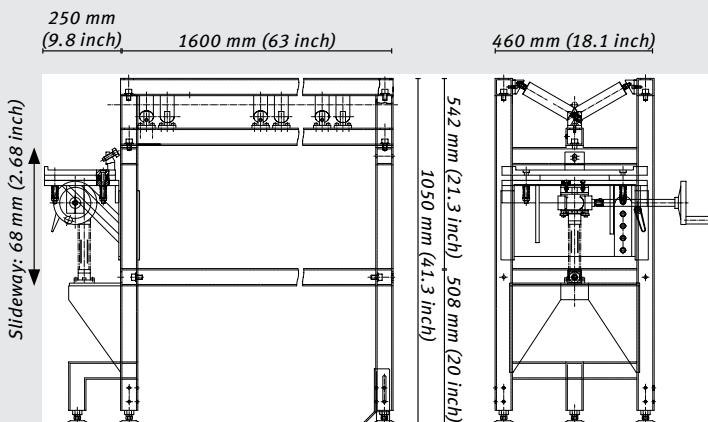
### Advantages:

- 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 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 hand-wheel-operated mechanical height adjustment. The machine is securely fastened to the base plate.



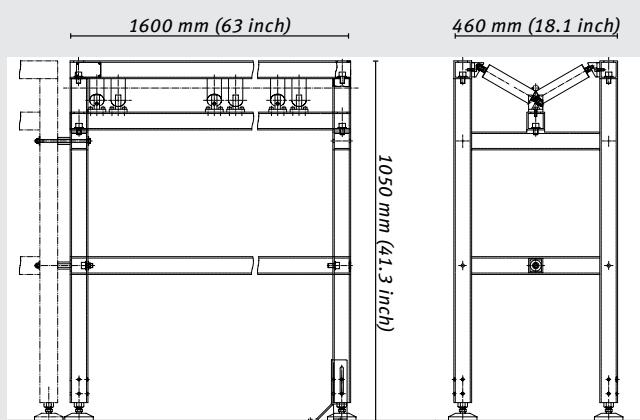
Pipe feeder base unit



Pipe feeder extension unit

### Extension unit:

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



**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 0	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, 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



*Mobile Workstation*

Technical data	Mobile Workstation	
Dimensions (hxlwxw)	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

# Pipe Cutting and Beveling Technology



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	<b>790 041 135</b>		0.035
Economy*	1.5 - 6.0	.059 - .236	68	2.677	<b>790 042 063</b>		0.036
Economy	2.0 - 5.5	.079 - .217	63	2.480	<b>790 041 020</b>		0.032
Economy	2.5 - 7.0	.098 - .276	68	2.677	<b>790 042 148</b>		0.040
Economy*	5.0 - 12.0	.197 - .472	80	2.953	<b>790 043 030</b>		0.075
Economy*	6.0 - 15.0	.236 - .591	100	3.937	<b>790 047 030</b>		0.117
Performance	0.6 - 1.2	.024 - .047	63	2.480	<b>790 041 036</b>		0.027
Performance	1.0 - 1.6	.039 - .063	68	2.677	<b>790 042 049</b>		0.050
Performance	1.0 - 3.0	.039 - .118	63	2.480	<b>790 048 072</b>		0.035
Performance	1.2 - 2.5	.047 - .098	63	2.480	<b>790 041 035</b>		0.040
Performance	1.2 - 2.5	.047 - .098	68	2.677	<b>790 042 064</b>		0.045
Performance**	1.2 - 2.5	.047 - .098	100	3.937	<b>790 043 036</b>		0.104
Performance	1.2 - 3.0	.047 - .118	83	3.268	<b>790 043 024</b>		0.075
Performance	1.5 - 2.5	.059 - .098	80	3.150	<b>790 046 022</b>		0.065
Performance	2.5 - 5.5	.098 - .217	63	2.480	<b>790 041 048</b>		0.035
Performance**	2.5 - 5.5	.098 - .217	100	3.937	<b>790 043 038</b>		0.120
Performance	2.5 - 7.0	.098 - .276	68	2.677	<b>790 042 048</b>		0.045
Performance	2.5 - 7.0	.098 - .276	80	3.150	<b>790 043 018</b>		0.080
Performance	6.0 - 10.0	.236 - .394	80	2.953	<b>790 043 022</b>		0.075
Performance**	6.0 - 15.0	.236 - .591	100	3.937	<b>790 047 026</b>		0.105
High-Performance	1.2 - 2.5	.047 - .098	80	3.150	<b>790 046 021</b>		0.064
High-Performance	1.2 - 2.5	.047 - .098	63	2.480	<b>790 041 034</b>		0.040
High-Performance	2.5 - 7.0	.098 - .267	68	2.677	<b>790 042 058</b>		0.045
Premium	1.2 - 2.5	.047 - .098	63	2.480	<b>790 041 049</b>		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

# Pipe Cutting and Beveling Technology



Saw blade with additional borehole



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

## 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	1.0 - 2.0	.039 - .079	63	2.480	790 048 472		0.035
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		0.047
Performance	1.5 - 2.5	.059 - .098	80	3.150	790 046 422		0.052
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]			
Performance	1.2 - 3.0	.047 - .118	30	3	.118	63	2.480	790 044 050		0.100
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

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

## 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 combinations\*

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

\* 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.

# Pipe Cutting and Beveling Technology

## 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

## 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 [mm] [inch]		Code		kg
		[mm]	[inch]	[mm]	[inch]			
Economy	30.0	9.5	.374	72	2.835	790 042 045		0.165
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	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



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		0.160



GFLUB

# Pipe Cutting and Beveling Technology



Saw blade TCT

## Saw blades for SCORP machines

### 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		0.215

\* only for SCORP 360. While stock last.



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 PS

29

## 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

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	
Vibration level (EN 28662, part 1)	< 2.5 m/s <sup>2</sup>	
Noise level at the workplace	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.

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



Saw blade Performance

### Tripod

**Made of aluminum.**  
Suitable for PS 4.5, PS 6.6 and GFX 3.0.  
For easy mounting of machines directly on the tripod with no base plate.  
Space saving – fast application – easy handling.

Article	Code	kg
Tripod for PS 4.5, PS 6.6, GFX 3.0	790 048 390	7.400



Tripod

### 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).**

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



Clamping jaws replacement set

### 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.

Article	Code	kg
Laser retrofitting kit for PS 4.5 and PS 6.6	790 048 060	0.110



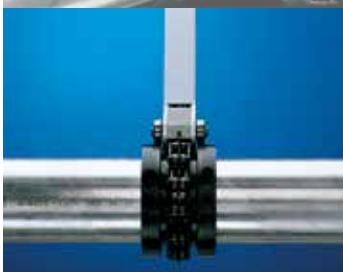
Laser retrofitting kit

# Pipe Cutting and Beveling Technology

(31)



Manual cutting of metal tubes in any position!



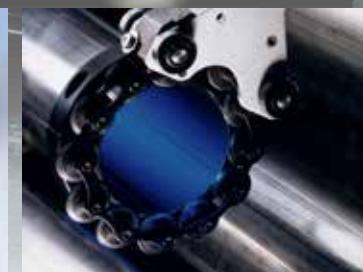
Guiding of the multi-roller cutting chain and the MRA through the clamping shells



Diameter-specific clamping shells



Durable storage and shipping case



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

(32)

## 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

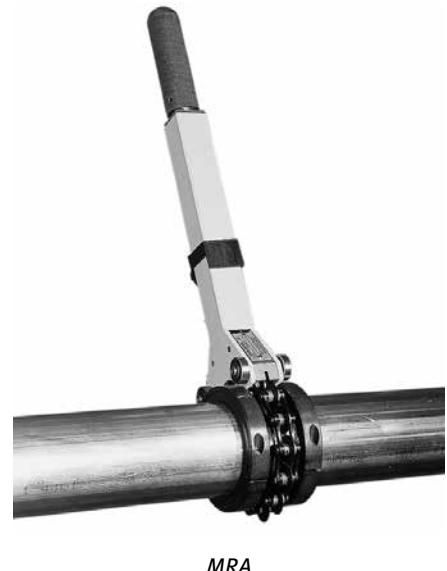
### For tube materials:

- 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)



MRA

Application range	MRA
Tube OD	25.0 - 254.0 mm 0.984 - 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

# Pipe Cutting and Beveling Technology

(33)

## Accessories for MRA

### Multi-roller cutting chains

Cutting wheels made from hardened steel.



Multi-roller cutting chain



Clamping shells

### 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]	Number of cutting wheels [pieces]	Code	kg
Multi-roller cutting chain for MRA	25.0 - 114.3	0.984 - 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



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 cord-  
less versions thanks to lithium-  
ion technology and AIR-COOLED  
technology for short charging  
times and long service life

## Tube Squaring Machines RPG XS, ONE, 1.5, 2.5

35



RPG XS Cordless



RPG XS Cordless angle drive



RPG ONE



RPG ONE Cordless



RPG 1.5



RPG 1.5 Cordless

## 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).

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 [inch] 0.118* - 0.75	3.0* - 25.4 0.118* - 1.0	3.0* - 25.4 0.118* - 1.0	3.0* - 38.1 0.118* - 1.5	3.0* - 38.1 0.118* - 1.5	3.0* - 63.5 0.118* - 2.5	3.0* - 63.5 0.118* - 2.5
Wall thickness max.	[mm] 2.0 [inch] 0.079	3.0 0.118	3.0 0.118	3.0 0.118	3.0 0.118	3.0 0.118	3.0 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.						
<b>Technical data</b>							
Dimensions (lxhxw)	[mm] 217x187x53 [inch] 8.5x7.4x2.1	390x200x70	261x255x80	400x350x160	275x255x90	500x300x170	260x300x320
Built-in electronic variable cutting speed	[rpm] 0 - 350	145 - 380	0 - 400	145 - 380	0 - 400	1. speed: 9 - 2	1. speed: 0 - 24 2. speed: 27 - 153
Power	[W]	-	1100	-	1100	-	1100
Voltage of rechargeable battery	[V]	10.8	-	18	-	18	-
Capacity	[Ah]	1.5	-	2.6	-	2.6	-
Sound pressure level (EN 23741)	[dB (A)]	approx.78	approx.78	approx.78	approx.78	approx.78.2	approx.78.2
Vibration level (EN 50144)	[m/s <sup>2</sup> ]	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5



RPG 2.5



RPG 2.5 Cordless

\* Application range with standard tool holder (Code 790 037 152) is from 6.0 mm/0.236" OD. With special tool holder (Code 790 037 161) 3.0 mm/0.118" OD is possible. For the RPG 2.5 (battery) only with a special adapter clamping shell (included in the standard scope of delivery of the 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	<b>790 033 001</b>	1.320	4.300
RPG XS Cordless (10.8 V)	115 V, 60 Hz US	<b>790 033 002</b>	1.320	4.300
RPG XS Cordless angle drive (10.8 V)	230 V, 50/60 Hz EU	<b>790 033 011</b>	1.520	6.300
RPG XS Cordless angle drive (10.8 V)	115 V, 60 Hz US	<b>790 033 012</b>	1.520	6.300
RPG ONE	230 V, 50/60 Hz EU	<b>790 036 031</b>	4.140	9.600
RPG ONE	120 V, 50/60 Hz US	<b>790 036 032</b>	4.140	9.600
RPG ONE	110 V, 50/60 Hz EU	<b>790 036 033</b>	4.140	9.600
RPG ONE Cordless (18 V)	230 V, 50/60 Hz EU	<b>790 036 021</b>	2.880	8.200
RPG ONE Cordless (18 V)	115 V, 60 Hz US	<b>790 036 022</b>	2.880	8.200
RPG 1.5	230 V, 50/60 Hz EU	<b>790 037 001</b>	4.700	9.500
RPG 1.5	120 V, 50/60 Hz US	<b>790 037 002</b>	4.700	9.500
RPG 1.5	110 V, 50/60 Hz EU	<b>790 037 003</b>	4.700	9.500
RPG 1.5 Cordless (18 V)	230 V, 50/60 Hz EU	<b>790 037 011</b>	3.440	10.100
RPG 1.5 Cordless (18 V)	115 V, 60 Hz US	<b>790 037 012</b>	3.440	10.100
RPG 2.5	230 V, 50/60 Hz EU	<b>790 030 001</b>	6.600	12.500
RPG 2.5	120 V, 50/60 Hz US	<b>790 030 002</b>	6.600	12.500
RPG 2.5	110 V, 50/60 Hz EU	<b>790 030 003</b>	6.600	12.500
RPG 2.5 Cordless (18 V)	230 V, 50/60 Hz EU	<b>790 030 011</b>	5.340	11.320
RPG 2.5 Cordless (18 V)	110 V, 60 Hz US	<b>790 030 012</b>	5.340	11.320

## Tube Squaring Technology

37

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

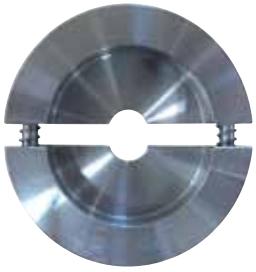
*Please check the outer diameter of the tubes before ordering the clamping shells.*

### 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.



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 XS	Tubes	6.35	0.250	10.00	0.394	790 033 202		0.083
RPG XS	Tubes	8.00	0.315	10.00	0.394	790 033 203		0.082
RPG XS	Tubes	9.53	0.375	10.00	0.394	790 033 204		0.080
RPG XS	Tubes	10.00	0.394	10.00	0.394	790 033 205		0.080
RPG XS	Tubes	12.70	0.500	10.00	0.394	790 033 206		0.076
RPG XS	Tubes	13.50	0.531	10.00	0.394	790 033 207		0.075
RPG XS	Tubes	19.05	0.750	10.00	0.394	790 033 209		0.065
RPG XS	Micro fittings	6.35	0.250	10.00	0.394	790 033 301		0.049
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		0.310
RPG 1.5	Tubes	4.78	0.188	15.00	0.591	790 037 223		0.310
RPG 1.5	Tubes	5.00	0.197	15.00	0.591	790 037 224		0.308
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
RPG 1.5, RPG 2.5	Tubes	9.53	0.375	15.00	0.591	790 037 228		0.297

Applicable with	Applicable for	Tube OD		Tube clamping length		Code		kg
		[mm]	[inch]	[mm]	[inch]			
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		0.295
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		0.287
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		0.285
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		0.275
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		0.255
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		0.240
RPG 1.5, RPG 2.5	Tubes	29.00	1.142	15.00	0.591	790 037 251		0.232
RPG 1.5, RPG 2.5	Tubes	30.00	1.181	15.00	0.591	790 037 252		0.228
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		0.215
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		0.483
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		0.225
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		0.226
RPG 1.5	Micro fittings	4.78	0.188	4.00	0.157	790 037 303		0.234
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

## Tube Squaring Technology

39

Applicable with	Applicable for	Tube OD		Tube clamping length		Code		kg
		[mm]	[inch]	[mm]	[inch]			
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] [inch]	6.0 - 12.7 0.236 - 0.5	-	6.0 - 25.4 0.236 - 1.0	6.0 - 38.1 0.236 - 1.5
WH12-I Code 790 037 161	x	-	-	[mm] [inch]	3.0 - 6.0 0.118 - 0.236	-	3.0 - 6.0 0.118 - 0.236	3.0 - 6.0 0.118 - 0.236
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. 35.0 max. 1.378	max. 60.3 max. 2.374
WH3-V-35 Code 790 037 159	-	x	35°	[mm] [inch]	-	-	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] [inch]	3.0 - 12.0 0.118 - 0.472	3.0 - 19.05 0.118 - 0.75	-	-
WH-I Code 790 033 151	x	-	-	[mm] [inch]	12.0 - 19.05 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	790 037 161	0.026
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	0.020
Tool holder WH-I	790 033 151	0.020

\* 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.



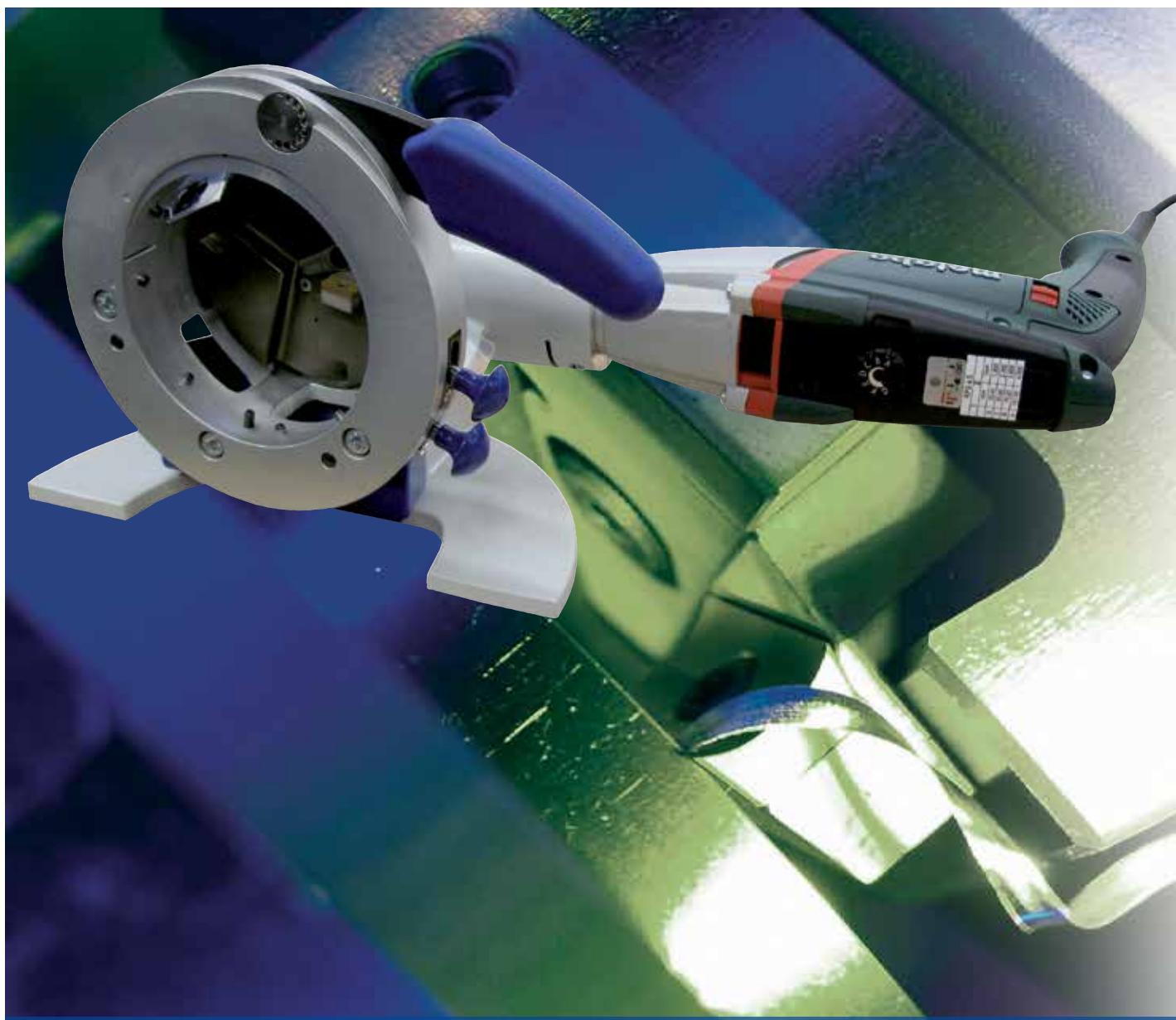
Multifunctional tool MFW

## Multifunctional tool MFW

Two-sided tool bit with 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

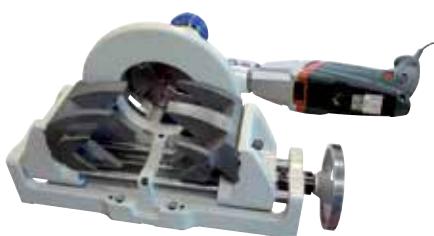
(41)

## 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
- Space saving, light weight and portable machine for a mobile and secure application



RPG 4.5



RPG 4.5 S



RPG 8.6

### 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 [inch] 0.5 - 4.5	12.7 - 114.3 0.5 - 4.5	50.8 - 219.1 2 - 8.6
Wall thickness max.	[mm] 3.0 [inch] 0.118	3.0 0.118	3.6 0.142
Tube materials	High-alloy steels, unalloyed and low-alloy steels and aluminum. Others on request.		
Technical data	<b>Electric drive with single-phase AC motor</b>		
Dimensions (including motor)	[mm] 460 x 260 x 230 [inch] 18.1 x 10.2 x 9.1	610 x 380 x 270 24 x 15 x 10.6	500 x 350 x 350 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 (EN 60745)	[m/s <sup>2</sup> ] < 2.5	< 2.5	< 2.5
Noise level at the workplace (EN 23741)	[dB (A)] Idle running approx. 83	Idle running approx. 83	Idle running 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

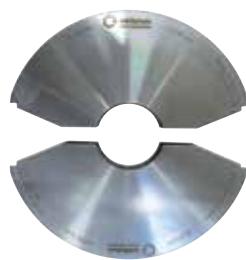
# Accessories for RPG 4.5, RPG 8.6

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		2.180
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		1.865
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		2.115
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

## Tube Squaring Technology

(43)

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		1.725
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		1.460
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		1.490
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		1.420
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		1.124
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		4.500
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		3.750
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		2.980
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		2.500
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		1.350
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		4.950
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		6.000
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.



Tool holder WH

Application range	Possible application		Beveling angle [°]
	Squaring	Beveling	
Tool holder WH12-I	x	–	–
Tool holder WH12-V-30°	–	x	30
Tool holder WH12-V-35°	–	x	35
Tool holder WH12-V-45°	–	x	45
Tool holder WH12-U-20°	–	x	20

Article	Code	kg
Tool holder WH12-I	790 038 320	0.025
Tool holder WH12-V-30°	790 038 329	0.034
Tool holder WH12-V-35°	790 038 282	0.054
Tool holder WH12-V-45°	790 038 280	0.044
Tool holder WH12-U-20°	790 038 326	0.031

## Multifunctional tool MFW

Two-sided tool bit with protective coating against tool wear. Usable for all machines of the RPG series.

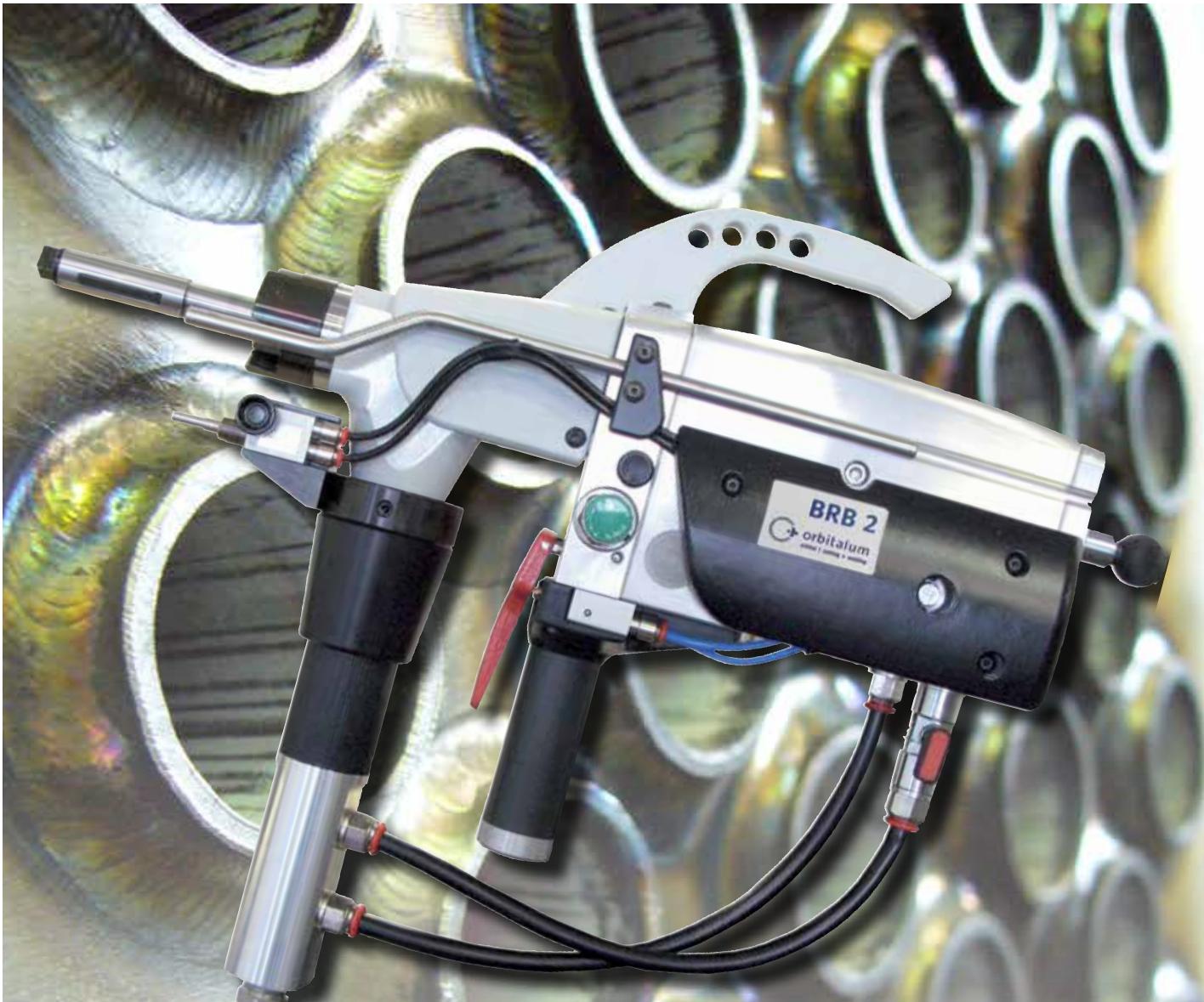


Multifunctional tool MFW

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

# Tube Squaring Technology

45



## The highest level of boiler pipe processing!

» The ideal machine for shortening heat exchanger pipes and for cutting pipes out of heat exchanger walls «



Exact squaring and beveling through the use of up to four extremely inexpensive tool bits (available optionally).



Automatic starting of the working process (pipe clamping and machining) with only one tip switch.



Standard-compliant, precise and reproducible weld seam preparation.



Handy, ergonomic and compact design: all control elements for operating the machine are integrated in the machine.



The "NC" clamping system cannot be lost thanks to its clamping wedges anchored in the mandrel!

(46)

## Boiler Pipe Prep Machine BRB 2 FullAuto

# Boiler Pipe Preparation Machine BRB

- Ideal for shortening heat exchanger pipes and for cutting pipes out of heat exchanger walls
- Starting of the working process, automatic feeding and automatic clamping by using one tip switch only
- Standard-compliant, precise and reproducible weld seam preparation
- Rapid processing, ideal for serial processing
- Handy, ergonomic and compact design, all control elements for operating the machine are integrated in it, no external control box or pedal required
- Continuous adjustment of the feed speed
- Integrated rapid feed sensing device
- Very robust length-adjustable end switch. Terminates the process of shortening exactly at the desired final size
- Integrated length stop for easier positioning of the machine in the pipe, protects the cutting edges
- Compressed-air motor with speed regulation and low-maintenance gearing with grease lubrication
- Optimized speed range, ideal for heat exchanger applications
- The exhaust air ring can be rotated, which allows the air flow to be kept away from the workpiece and user
- Integrated balancer device for safe, relaxed and fatigue-free working, also during longer working periods
- The perfect addition to Orbitalum's WIG pipe-in-sheet weld heads



BRB 2 FullAuto

## BRB 2 FullAuto

The pneumatically-operated BRB 2 FullAuto pipe processing machine is particularly economical and ensures the highest levels of precision and quality when shortening and welding in of thousands of pipes on heat exchangers. The machine provides users the same precision and efficiency during maintenance and service – defective pipes can be easily cut out of the pipe sheet.

The integrated interchangeable tool retainer for processing with our **new Tool Bit cutting system** is suitable for exact squaring and beveling. This system is particularly economical through the use of up to four extremely inexpensive Tool Bits (Tool Bits available optionally, see page 58).

A tool retainer for working with the **conventional tool combination (WH/MFW)** continues to be available optionally (see page 58).

### Machine comes with:

- 1 Boiler Pipe Preparation Machine BRB 2 FullAuto
- 1 Storage and shipping case
- 9 Clamping sets and 1 mandrel Ø 19.05 mm (0.75 inch)
- 1 Tool holder for Tool Bits (Tool Bits have to be ordered separately, see page 58)
- 1 KSS-TOP lubricant spray pump (Code 790 060 226)
- 1 Tool set
- 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 (page 61).

Overview of the clamping wedge sets:

Clamping sets for interior pipe diameter			Clamping range		Mandrel Ø	
[mm]	[inch]	Code	[mm]	[inch]	[mm]	[inch]
19.1 - 23.0	0.75 - 0.91	790 086 390				
22.0 - 26.0	0.87 - 1.02	790 086 391				
25.0 - 29.0	0.98 - 1.14	790 086 392				
28.0 - 32.0	1.10 - 1.26	790 086 393				
31.0 - 35.0	1.22 - 1.38	790 086 394	19.1 - 47.0	0.75 - 1.85	19.05	0.750
34.0 - 38.0	1.34 - 1.50	790 086 395				
37.0 - 41.0	1.46 - 1.61	790 086 396				
40.0 - 44.0	1.57 - 1.73	790 086 397				
43.0 - 47.0	1.69 - 1.85	790 086 398				

Application range		BRB 2 FullAuto	
Pipe ID (Ø clamping range)*	[mm]	19.1 - 47.0	
	[inch]	0.75 - 1.85	
Wall thickness	[mm]	1.2 - 3.0	
	[inch]	0.047 - 0.118	
Materials	Unalloyed and low-alloy steels, high-alloy steels (high-grade steel, material no. 1.40. - 1.45. in accordance with DIN 17 455 and DIN 17 456), aluminum. Others on request.		

Technical data	
Dimensions (l x w x h)	[mm] 515 x 105 x 400
	[inch] 20.3 x 4.1 x 15.7
Weight gross/net, approx.	[kg] 21.6 / 12.1
	[lbs] 47.6 / 26.7
Power (pneumatic power drive)	[kW] 0.38
	[hp] 0.51
Air consumption (at 6 bar)	[m³/min] 0.7
Speed max. idling speed	[min⁻¹] 139
LAeq sound pressure level (EN 23741)	[dB (A)] approx. 83 (mid-range speed)
Vibration level (EN 28662, part 1)	[m/s²] > 2.5

\* Smaller dimensions on request.

Article	Version	Code		Weight of machine kg	Dispatch weight kg
BRB 2 FullAuto	Pneumatic	790 185 052		12.100	21.600

## Suitable accessories:

**Tool Bits TB**, see page 58.

**Tool retainer for Tool Bits TB**, see page 58.

**Tool holder WH**, see page 56.

**Multifunctional tools MFW**, see page 57.

**Tool retainer for tool combinations WH/MFW**, see page 58.

**Combination possibilities of tool holder and multifunctional tools**, see page 63.

**Bevel cutter heads** for BRB 2 (V-/Y-prep), see page 60.

**Balancer spring**, see page 59.

**Mobile air unit DWE 10 and air hose with quick coupling**, see page 61.

**Cutting lubrication KSS-TOP**, see page 61.



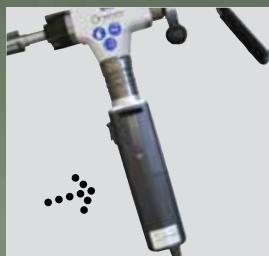
## Powerful and robust boiler pipe preparation machine!



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 Prep Machines BRB 2, BRB 4

(49)



**BRB 2 Electric**  
with clamping system "Standard"



**BRB 2 Pneumatic**  
with clamping system "Standard"



**BRB 2 Pneumatic/Auto**  
with clamping system "Standard"

## 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
- Up to 3 tools can be used at the same time

### BRB 2, BRB 4

**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 61).
- **Pneumatic/Auto:** Pneumatic multi-disc motor with additional pneumatic clamping system. Time is of the essence when installing or repairing boiler pipes, the 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 m³/min	0.7 m³/min	-	1.0 m³/min	1.0 m³/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/s²	2.5 m/s²	2.5 m/s²	2.5 m/s²	2.5 m/s²	2.5 m/s²

The various **clamping systems:**

The "**NC**" **clamping system** with its clamping wedges anchored in the mandrel is ideal for applications in which foreign objects may not enter the pipe inside or a tank. The "**NC**" clamping system provides additional certainty in particular at vertical applications.

The "**Standard**" **clamping system** has proven itself in many years of use through its stability and reliability. You can continue to use this system.

#### Machine comes with:

- 1 Boiler Pipe Preparation Machine BRB 2 or BRB 4
- 1 Durable storage and shipping case
- Tool retainer, clamping sets and mandrels (depending on the machine kit)
- 1 KSS-TOP lubricant spray pump (Code 790 060 226)

Clamping system "NC"

- 1 Tool set
- 1 Set of operating instructions and spare parts list

Application range	BRB 2 Kit 1	BRB 2 Kit 2	BRB 4 Kit 3	BRB 4 Kit 5
Clampingsystem	Standard	NC	NC	NC
Pipe ID (Ø clamping range)	[mm] 12.75 - 25.5 [inch] 0.502 - 1.004	19.1 - 47.0 0.752 - 1.850	35.0 - 108.0 1.378 - 4.252	19.1 - 108.0 0.752 - 4.252
Tool retainer Ø	[mm] 50.0 / 12.75	50.0 / 16.0	120.0 / 27.0	68.0 / 19.0 68.0 / 27.0 120.0 / 27.0
	[inch] 1.969 / 0.502	1.969 - 0.630	4.724 / 1.063	2.677 / 0.748 2.677 / 1.063 4.724 / 1.063
Clamping wedges	[Sets] 6	6	18 (8+10)	24 (14+10)
Mandrel Ø	[mm] 12.75	19.05	34.5	19.05 34.5
	[inch] 0.502	0.750	1.358	0.750 1.358
Pipe OD	[mm] 16.75 - 41.5 [inch] 0.659 - 1.634	23.0 - 62.0 0.906 - 2.441	114.3 4.50	114.3 4.50
Wall thickness*	[mm] 2 - 8 min. - max.	2 - 8	2 - 15	2 - 15
	[inch] 0.079 - 0.315	0.079 - 0.315	0.079 - 0.590	0.079 - 0.590

\* Depending on pipe material and dimension  
With BRB 4: Aluminum up to 15 mm/0.59" wall thickness. Stainless steel up to 8 mm/0.315" wall thickness.  
Steel up to 10 mm/0.39" wall thickness.

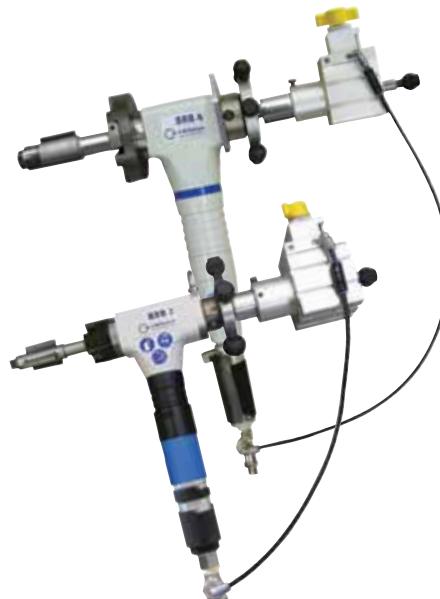


**BRB 2 and BRB 4 Electric  
with clamping system "NC"**

Article	Version	Clamping system	Code		Weight of machine kg	Dispatch weight kg
BRB 2 EL, Kit 1	230 V, 50/60 Hz EU	Standard	<b>790 085 011</b>		4.100	12.200
BRB 2 EL, Kit 1	120 V, 50/60 Hz EU/US	Standard	<b>790 085 021</b>		4.100	12.200
BRB 2 DL, Kit 1	Pneumatic	Standard	<b>790 085 007</b>		3.800	11.900
BRB 2 DL/Auto, Kit 1	Pneumatic/Auto	Standard	<b>790 085 041</b>		4.600	13.300
BRB 2 EL, Kit 2	230 V, 50/60 Hz EU	NC	<b>790 185 012</b>		4.900	13.000
BRB 2 EL, Kit 2	120 V, 50/60 Hz EU/US	NC	<b>790 185 022</b>		4.900	13.000
BRB 2 DL, Kit 2	Pneumatic	NC	<b>790 185 002</b>		4.400	12.500
BRB 2 DL/Auto, Kit 2	Pneumatic/Auto	NC	<b>790 185 042</b>		5.100	13.800
BRB 4 EL, Kit 3	230 V, 50/60 Hz EU	NC	<b>790 186 013</b>			23.300
BRB 4 EL, Kit 3	120 V, 50/60 Hz EU/US	NC	<b>790 186 023</b>			23.300
BRB 4 DL, Kit 3	Pneumatic	NC	<b>790 186 003</b>			22.200
BRB 4 DL/Auto, Kit 3	Pneumatic/Auto	NC	<b>790 186 033</b>			23.400
BRB 4 EL, Kit 5	230 V, 50/60 Hz EU	NC	<b>790 186 015</b>		11.400	26.400
BRB 4 EL, Kit 5	120 V, 50/60 Hz EU/US	NC	<b>790 186 025</b>		11.400	26.000
BRB 4 DL, Kit 5	Pneumatic	NC	<b>790 186 005</b>			25.500
BRB 4 DL/Auto, Kit 5	Pneumatic/Auto	NC	<b>790 186 035</b>			26.000



**BRB 2 and BRB 4 Pneumatic  
with clamping system "NC"**



**BRB 2 and BRB 4 Pneumatic/Auto  
with clamping system "NC"**

## Suitable accessories:

**Tool holder WH**, see page 56.

**Multifunctional tools MFW**, see page 57.

**Combination possibilities of tool holder and multifunctional tools**, see page 63.

**Tool Bits TB**, see page 58.

**Tool retainer for Tool Bits TB**, see page 58.

**Bevel cutter heads for BRB 2 (V-/Y-prep)**, see page 60.

**Bevel cutter heads for BRB 4 (V-prep)**, see page 60.

**Upgrade sets BRB 2 for dimension extension**, see page 59.

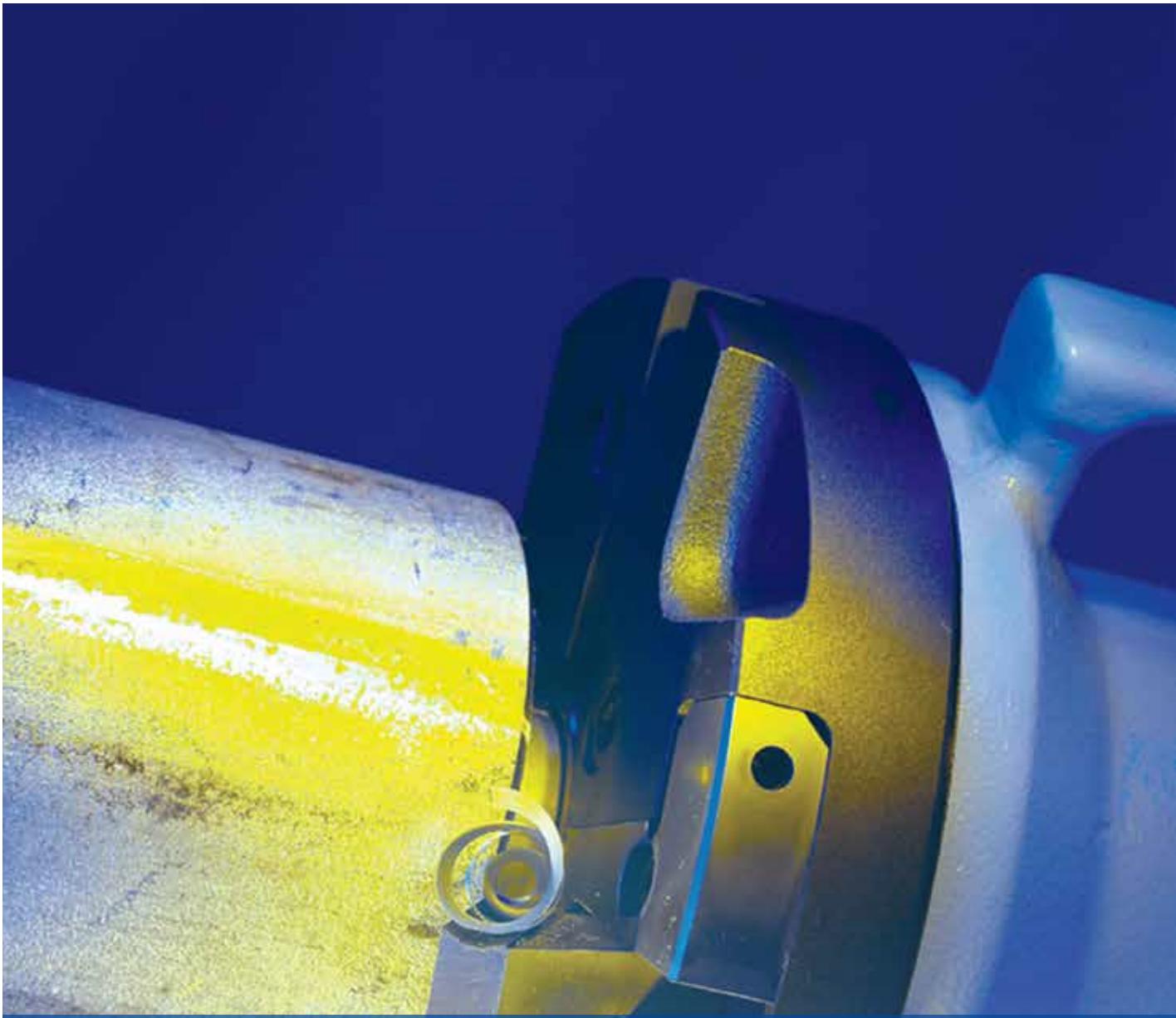
**Balancer spring**, see page 59.

**Hoist bracket**, see page 59.

**Mobile air unit DWE 10 and air hose with quick coupling**, see page 61.

**Cutting lubrication KSS-TOP**, see page 61.

# Pipe Beveling Technology



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

**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 or REB 14
- 1 Transportation case
- 1 Clamping chuck
- 5 Clamping sets, each with 3 clamping wedges (REB 6) or 6 Clamping sets, each with 3 clamping wedges (REB 14)
- 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 61).



REB 6 Electric



REB 14 Pneumatic

Application range*	REB 6 Pneumatic	REB 6 Electric	REB 14 Pneumatic	REB 14 Electric
Pipe ID	[mm] 49 - 159 [inch] 1.93 - 6.26	49 - 159 1.93 - 6.26	92 - 320 3.62 - 12.60	92 - 320 3.62 - 12.60
Wall thickness	[mm] 3 - 22 [inch] 0.12 - 0.87	3 - 22 0.12 - 0.87	4 - 30 0.16 - 1.18	4 - 22 0.16 - 0.87
Pipe OD	[mm] 56 - 168 [inch] 2.20 - 6.61	56 - 168 2.20 - 6.61	100 - 355.6 3.94 - 14.00	100 - 355.6 3.94 - 14.00
Pipe materials	Unalloyed and low-alloyed steels, high-alloyed steels (stainless steel), aluminum			
Technical data				
Dimensions	[mm] [inch]	560 x 260 x 400 22 x 10.2 x 15.8	640 x 260 x 420 25.2 x 10.2 x 16.5	625 x 375 x 490 24.6 x 14.8 x 19.3
Power	[kW]	1.8	1.2	1.8
Air consumption (at 6 bar)	[m³/ min]	2.0	—	2.0
Speed	[min-1]	0 - 26	10 - 32	0 - 13
Vibration level (EN 28662, Part 1)	[m/s²]	< 2.5	< 2.5	< 2.5
Noise level in the workplace	[dB (A)]	at idle-speed: approx. 75 (average speed range) under load: approx. 77		

\* 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
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

# Pipe Beveling Technology

(53)

## **Suitable accessories:**

- Tool holder WH**, see page 56.
- Multifunctional tools MFW**, see page 57.
- Combination possibilities of tool holder and multifunctional tools**, see page 63.
- Mobile air unit DWE 10 and air hose with quick coupling**, see page 61.
- Cutting lubrication KSS-TOP**, see page 61.
- Elbow clamping system**, see page 61.
- Optional clamping wedges**, see page 62.
- Plastic (POM) clamping shell segments**, see page 62.
- ID tracking for REB 14**, see page 62.

## The different weld prep profiles:



Facing  
I-prep



Plain beveling  
V-prep



Beveling, facing  
Y-prep



J-prepping  
U-prep



Counterboring  
ID-prep

## Description of the tools made by Orbitalum Tools:

Samples:

Multifunctional tool MFW for working on the pipe OD (MFW 30-V/I-4-R5):

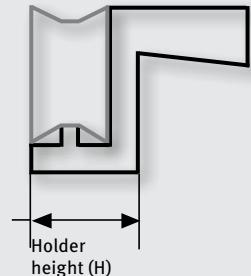
MULTIFUNCTIONAL TOOL	MAX. WORKABLE WALL THICKNESS	WELD PREP PROFILES	NUMBER OF CUTTING EDGES	PREP RADIUS IN MM
MFW	30	V/I	4	R5

Multifunctional tool MFW for working on the pipe ID (MFW 10-ID-2-R0,8):

MULTIFUNCTIONAL TOOL	MAX. LENGTH ON THE COUNTERBORE / BEVEL	FOR WORKING ON THE INNER DIAMETER	NUMBER OF CUTTING EDGES	PREP RADIUS IN MM
MFW	10	ID	2	R0,8

Tool holder WH for beveling (WH 30-V-30°):

TOOL HOLDER	MAX. WORKABLE WALL THICKNESS	WELD PREP PROFILE	PREP ANGLE
WH	30	V	30°



Tool holder WH for facing (WH 30-I-H27):

TOOL HOLDER	MAX. WORKABLE WALL THICKNESS	WELD PREP PROFILE	HOLDER HEIGHT IN MM
WH	30	I	H27

Tool holder WH for counterboring ID (WH 10-ID-14°):

TOOL HOLDER	MAX. LENGTH ON THE COUNTERBORE / BEVEL	FOR WORKING ON THE INNER DIAMETER	COUNTERBORE ANGLE
WH	10	ID	14°

# Accessories for BRB and REB machines

## Tool holder WH

With Torx screw. Combination possibilities of tool holder and multifunctional tools, see page 63.

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
WH12-I / short	I	BRB 2 / BRB 4	14	0.551	790 086 281		0.032
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-30° / short	V	BRB 2 / BRB 4	—	—	790 086 282		0.036
WH12-V-37.5°	V/Y	BRB 4	—	—	790 086 216		0.040
WH12-V-45°	V/Y	BRB 4	—	—	790 086 474		0.052
WH12-V-80°	V/Y	BRB 4 / REB	—	—	790 093 462		0.115
WH12-V-35°	V/Y	BRB 4	—	—	790 086 272		0.048
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
WH12-V-37.5° / short	V	BRB 2 / BRB 4	—	—	790 086 283		0.035
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		0.209
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		0.190
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 2 / BRB 4 / REB	—	—	790 086 218		0.055
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		0.160
WH10-ID-14° / 30 mm (1.181") deep	ID	BRB 4 / REB	—	—	790 093 466		0.265
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		0.100
WH10-ID-45°	ID	REB	—	—	790 093 494		0.107
WH10-ID-80°***	ID	BRB 2 / BRB 4	—	—	790 086 275		0.075

\* 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.



WH15-V-30°



WH12-U-15°



WH5-ID-14°

## 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-U-2-R0.4	High-Performance	max. 6	max. 0.236	WH5-I and WH5-U-20° radius 0.4 mm	BRB 2	790 085 030		0.002
MFW5-U-2-R2	High-Performance	max. 6	max. 0.236	WH5-I and WH5-U-20° radius 2 mm	BRB 2	790 085 032		0.002
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	V, Y, I, U radius 5 mm	REB	790 093 034		0.055
MFW30-U-4-R2	High-Performance	2 - 30	0.079 - 1.181	V, Y, I, U radius 2 mm	REB	790 093 035		0.060
MFW30-U-4-R1	High-Performance	2 - 30	0.079 - 1.181	V, Y, I, U radius 1 mm	REB	790 093 036		0.060
MFW30-U-4-R0.4	High-Performance	2 - 30	0.079 - 1.181	V, Y, I, 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 mm	BRB 4	790 086 060		0.003
MFW12-U-2-R2	High-Performance	2 - 12	0.079 - 0.472	V, Y, I, U radius 2.0 mm	BRB 4	790 086 064		0.003
MFW5-ID-2-R0.4 (14°)	High-Performance	-	-	WH5-ID-14° radius 0.4 mm	BRB 4 / REB	790 093 039		0.003
MFW5-ID-2-R0.4 (45°)	High-Performance	-	-	WH5-ID-45° radius 0.4 mm	BRB 4 / REB	790 086 061		0.002
MFW10-ID-2-R0.4 (80°)	High-Performance	-	-	WH10-ID-80° radius 0.4 mm	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 (14°)	High-Performance	-	-	WH10-ID-14° radius 3 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°)

## Pipe Beveling Technology

57



Tool Bits TB

## Tool Bits TB

Can only be used with the BRB 2 and BRB 2 FullAuto.

With a width of only 4.5 mm (0.177 inch) the tool bits are ideal for shortening heat exchanger pipes. This allows even heat exchangers with minimal pipe spacing to be processed without problems. The opposing tool holders or cutting edges furthermore ensure improved force transmission.

The corresponding **tool retainer for Tool Bits** is already included in the scope of delivery at the BRB 2 FullAuto. At the BRB 2 it has to be ordered separately (see below).

Article	Weld prep profile	Applicable with	Width [mm]	Width [inch]	Prep angle [°]	Code		kg
TB4.5-I	I	BRB 2 / BRB 2 FullAuto	4.5	0.177	–	790 085 500		0.012
TB4.5-V-30°	V	BRB 2 / BRB 2 FullAuto	4.5	0.177	30	790 085 501		0.014
TB4.5-V-37.5°	V	BRB 2 / BRB 2 FullAuto	4.5	0.177	37.5	790 085 502		0.015
TB4.5-V-45°	V	BRB 2 / BRB 2 FullAuto	4.5	0.177	45	790 085 503		0.015
TB6-REMOVE-45°		BRB 2 / BRB 2 FullAuto	6.0	0.236	45	790 085 504		0.012



Tool retainer for Tool Bits TB

## Tool retainer for Tool Bits TB

Already included in the scope of delivery of the **BRB 2 FullAuto**.

This tool retainer is available separately for the **BRB 2**.

Depending on the application (for example the processing of heat exchangers) the use of tool bits (see above) as well as the corresponding tool retainer is required. This retainer can be mounted on the BRB 2 and BRB 2 FullAuto in just a few steps.

Article	Code	kg
Tool retainer for Tool Bits	790 085 510	0.235



Tool retainer for tool combinations WH/MFW

## Tool retainer for tool combinations WH/MFW

Already included in the scope of delivery of the **BRB 2**. This tool retainer is available separately for the **BRB 2 FullAuto**.

Depending on the application, the use of conventional tool holders WH (see page 56) and multifunctional tools MFW (page 57) as well as the associated tool retainer is required. This holder can be mounted on the BRB 2 and BRB 2 FullAuto in just a few steps.

Advantages:

- Only one multifunctional tool required for different types of processing (beveling, squaring), different pipe wall thickness and different pipe materials
- High-performance coated tool bits with up to 4 cutting edges
- Up to 3 tools can be used simultaneously

Article	Code	kg
Tool retainer for tool combinations WH/MFW	790 085 261	0.300

## Upgrade sets BRB 2 for dimension extension

For dimension extension of BRB 2 machines through upgrading from Kit 2 to Kit 1 (BRB 2 Standard) or from Kit 1 to Kit 2 (BRB 2 NC).

Machine, clamping system	Upgrading from Kit to Kit	Mandrel Ø		Tool holder Ø		Dimension extension to							
		[mm]	[inch]	[mm]	[inch]	Pipe ID		Pipe OD		[mm]	[inch]	[mm]	[inch]
BRB 2, Standard	Kit 2 > Kit 1	12.75	0.500	50.0	1.968	12.75 - 25.5	0.500 - 1.004	16.75 - 41.5	0.659 - 1.634				
BRB 2, NC	Kit 1 > Kit 2	19.05	0.750	50.0 / 16.0	1.969 / 0.630	19.1 - 47.0	0.752 - 1.850	23.0 - 62.0	0.906 - 2.441				



Upgrade set BRB Standard  
"Dimension extension"

Article	Code	kg
Upgrade set BRB 2, standard "Kit 2 to Kit 1"	790 085 017	0.800
Upgrade set BRB 2, NC "Kit 1 to Kit 2"	790 185 018	1.870

## Balancer spring

For load-free hanging of BRB machines with a balancer. Ideal for series machining!  
Using a balancer enables optimal machining results from relaxed and fatigue-free work with longer work duration, and at the same time ensures more safety for the user (machine is safeguarded from falling).

Article	Code	kg
Balancer spring	832 030 002	3.800



Balancer spring

## 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



Hoist bracket



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)
- 2 tool bits (Tool Bit R4.5-I, Code 790 085 390)
- 2 torx screws
- 6 threaded pins
- 3 fastening screws each, 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°	16 - 46	0.630 - 1.810	–	–	790 085 380		–			
Bevel cutter head 37,5°	16 - 36	0.630 - 1.420	–	–	790 085 381		0.316			
Bevel cutter head 45°	16 - 33	0.630 - 1.300	–	–	790 085 382		0.330			
Bevel cutter head 30°	–	–	19 - 43	0.750 - 1.690	790 085 383		0.360			
Bevel cutter head 37,5°	–	–	19 - 39	0.750 - 1.540	790 085 384		–			
Bevel cutter head 45°	–	–	19 - 36	0.750 - 1.420	790 085 385		0.356			



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	10	0.394	790 086 500		0.465
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

## 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 2	790 085 055	0.513

## Mobile air unit DWE 10

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

Flow max. 2.6 m<sup>3</sup>/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



Mobile air unit DWE 10

## 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



Air hose with quick coupling

## 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



Cutting lubrication KSS-TOP

## 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



Elbow clamping system

# Pipe Beveling Technology



*Clamping wedges optional*



*Plastic (POM) clamping shell segments*

## Optional clamping wedges

To extend the dimension of the REB standard machines.

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 and REB 14 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.

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	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	790 094 198		5.880
Plastic clamping shell segment	REB 14		250.0	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	790 094 226		4.800
Plastic clamping shell segment	REB 14		347.7	790 094 224		4.750



*ID-Tracking*

## ID-Tracking for REB 14

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	[mm]	[inch]
Pipe ID	150 - 320	5.910 - 12.600
Wall thickness max.	15	0.591
Article	Code	kg
ID-Tracking for REB 14	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
<b>Tools for "I-prep"</b>			
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
790 086 281	WH 12-I / short	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
<b>Tools for "V-prep" and "Y-prep"</b>			
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
790 086 282	WH 12-V-30° / short	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
790 086 283	WH 12-V-37.5° / short	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
<b>Tools for "U-prep"</b>			
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
<b>Tools for "beveling / counterboring"</b>			
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 ( $\alpha$ )	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	–	–

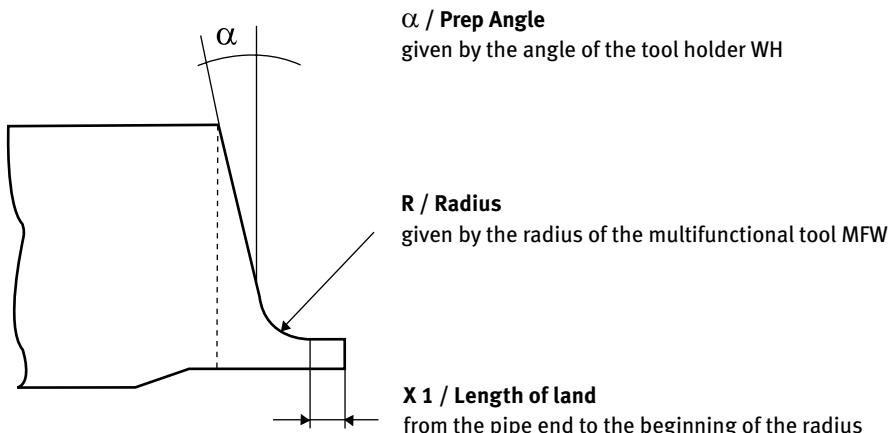
## **Length of land with the use of tool holder for facing 790 093 410 (adjustable)**

Code-No.	Description ( $\alpha$ )	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  
(ESG MAX)



Durable storage and  
shipping case



ESG MAX:  
Laterally adjustable  
grinding head with  
72 holes

66

## Tungsten Grinder ESG

# 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
- 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 MAX

## ESG MAX, ESG Plus, ESG Plus<sup>2</sup>

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.

### Additional properties ESG MAX:

- Lateral adjustment of the head for increased service life of the grinding wheel
- Grinding head with 72 holes: 36 holes for the grinding wheel with coarse grain, 36 holes for the grinding wheel with fine grain and cutting edge
- Continuously adjustable cutting device from 9.0 to 34.5 mm / 0.354" to 1.358" (available option)
- Including dust protection against grinding dust
- Adapter for extraction device for up to 96% less grinding dust particles (available option)
- Table mount included



ESG Plus

### Additional properties ESG Plus<sup>2</sup> and ESG MAX:

- 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.



ESG Plus<sup>2</sup>

Scope of supply	ESG MAX	ESG Plus	ESG Plus <sup>2</sup>
Tungsten Grinder, including:			
Storage and shipping case	1 pcs.	x	x
Grinding head for electrodes Ø 1.0 - 1.6 - 2.0 - 2.4 - 3.2 - 4.0 mm*	1 pcs.	x	x
(0.04" - 1/16" - 0.08" - 3/32" - 1/8" - 5/32")*			
Grinding head for grinding angle 15° - 18° - 22.5° - 30° - 45° - 60°	1 pcs.	x	
Grinding head for grinding angle 15° - 18° - 22.5° - 30° or 15° - 30° - 45° - 60°	1 pcs.		x
Diamond grinding wheel Fine (790 052 517)	1 pcs.	x	
Diamond grinding wheel Coarse (790 052 518)	1 pcs.	x	
Diamond grinding wheel Fine (790 052 487)	1 pcs.		x
Diamond grinding wheel Medium (790 052 488)	1 pcs.	x	
Diamond grinding wheel Coarse (790 052 550)	1 pcs.		x
Table mounting plate	1 pcs.	x	
Tool to replace the grinding wheel	1 pcs.	x	x
Set of operating instructions & spare parts list	1 pcs.	x	x
Technical data			
Dimensions (with drive)			
[mm]	Ø 65 x 350	Ø 65 x 350	Ø 65 x 350
[inch]	Ø 2.56 x 13.78	Ø 2.56 x 13.78	Ø 2.56 x 13.78
Power	[W]	500	500
Power-on time	[%]	100	100
Rotary speed	[rpm]	30.000	30.000

# Tungsten Grinding Technology

Scope of supply		ESG MAX	ESG Plus	ESG Plus <sup>2</sup>
Main supply cable (length)	[m]	3	3	3
	[inch]	118.1	118.1	118.1
Vibration level in accordance with 28662, part 1	[m/s <sup>2</sup> ]	< 2.5	< 2.5	< 2.5
Noise level at the workplace (idle running)	[dB (A)]	approx. 83	approx. 83	approx. 83

\* An electrode holder is required to grind electrodes with 4.0 mm (5/32") diameter (available option).

Article	Version	Grinding angles [°]	Code		Weight of machine kg	Dispatch weight kg
ESG MAX	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30 / 45 / 60	790 052 591		1.560	3.680
ESG MAX	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30 / 45 / 60	790 052 592		1.560	3.680
ESG Plus	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 485		1.430	3.560
ESG Plus	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 486		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	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 645		1.430	3.560
ESG Plus <sup>2</sup>	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 585		1.520	3.825
ESG Plus <sup>2</sup>	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 586		1.520	3.825
ESG Plus <sup>2</sup>	230 V, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 546		1.520	3.825
ESG Plus <sup>2</sup>	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 646		1.520	3.825



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

Article	Applicable with	Grain	Wheel Ø		s		Code		kg
			[mm]	[inch]	[mm]	[inch]			
Diamond grinding wheel	ESG MAX	Fine	40.0	1.574	2.1	0.083	790 052 517		0.017
Diamond grinding wheel	ESG MAX	Coarse	37.0	1.574	2.2	0.087	790 052 518		0.016
Diamond grinding wheel	ESG 4	Standard	32.0	1.290	1.2	0.047	790 052 460		0.005
Diamond grinding wheel	ESG Plus, ESG Plus <sup>2</sup>	Fine	33.5	1.319	2.2	0.087	790 052 487		0.010
Diamond grinding wheel	ESG Plus, ESG Plus <sup>2</sup>	Medium	33.5	1.319	2.2	0.087	790 052 488		0.011
Diamond grinding wheel	ESG Plus, ESG Plus <sup>2</sup>	Coarse	33.5	1.319	2.2	0.087	790 052 550		0.011



Cutting device for ESG MAX

## Cutting devices

**For simple separating of the electrodes.**

Electrode minimum length for grinding with ESG MAX:

15° = 24.8 mm (0.976")

18° = 22.3 mm (0.878")

22.5° = 20.6 mm (0.811")

30° = 19.1 mm (0.752")

45° = 18.6 mm (0.339")

60° = 19.5 mm (0.768")

Article	Applicable with	Setting	Cutting lengths [mm]	Cutting lengths [inch]	Code		kg	
Cutting device	ESG MAX	continuous	9.0 - 34.5	0.354 - 1.358	790 052 613		0.033	
Cutting device	ESG Plus, ESG Plus <sup>2</sup>	fixed*			12.0 13.0 15.0 17.0	0.472 0.512 0.591 0.669	790 052 513	0.030

\* Further cutting lengths possible on request.

## Electrode holder and collets

For machining smaller electrodes. The **electrode holder for the ESG MAX** is available in a set including collets for 6 different electrode diameters.

The **electrode holder for the ESG Plus or ESG Plus<sup>2</sup>** is supplied including 1 flexible collet.

Article	Applicable with	Setting	Electrode Ø [mm]	Electrode Ø [inch]	Code		kg
Electrode holder with 6 collets	ESG MAX	fixed	1.0 1.6 2.0 2.4 3.2 4.0	0.039 1/16 0.080 3/32 1/8 5/32	790 052 614		0.027
Electrode holder with collet	ESG Plus, ESG Plus <sup>2</sup>	continuous	1.0 - 3.2	0.039 - 0.126	790 052 457		0.023
Spare collet	ESG Plus, ESG Plus <sup>2</sup>	continuous	1.0 - 3.2	0.039 - 0.126	790 052 481		0.002

*Electrode holder with 6 collets  
(for ESG MAX)*



*Electrode holder with collet  
(for ESG Plus, ESG Plus<sup>2</sup>)*



*Spare collet  
(for ESG Plus, ESG Plus<sup>2</sup>)*

## Wall-/table-/vice-mounting plate

For stationary use of the ESG Plus and ESG Plus<sup>2</sup>.  
Simple and rapid mounting to a wall, a table or a vice.

Article	Applicable with	Code		kg
Wall-/table-/vice-mounting plate	ESG Plus, ESG Plus <sup>2</sup>	790 052 483		0.102

*Wall-/table-/vice-mounting plate*



*Wall-/table-/vice-mounting plate*

## Adapter for extraction device

This adapter for an extraction device can be placed rapidly and simply on the ESG MAX grinding head and reduces grinding dust by up to 96% less particles. For use on electrodes with thorium. Consider country-specific regulations, standards and guidelines.

Article	Applicable with	Code		kg
Adapter for extraction device ESG MAX	ESG MAX	790 052 612		0.077



*Adapter for extraction device ESG MAX*

## 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	Applicable with	Code		kg
Protective cover ESG Plus	ESG Plus	790 052 496		0.170
Protective cover ESG Plus <sup>2</sup>	ESG Plus <sup>2</sup>	790 052 596		0.220



*Protective cover*

## Double-Decker Kit

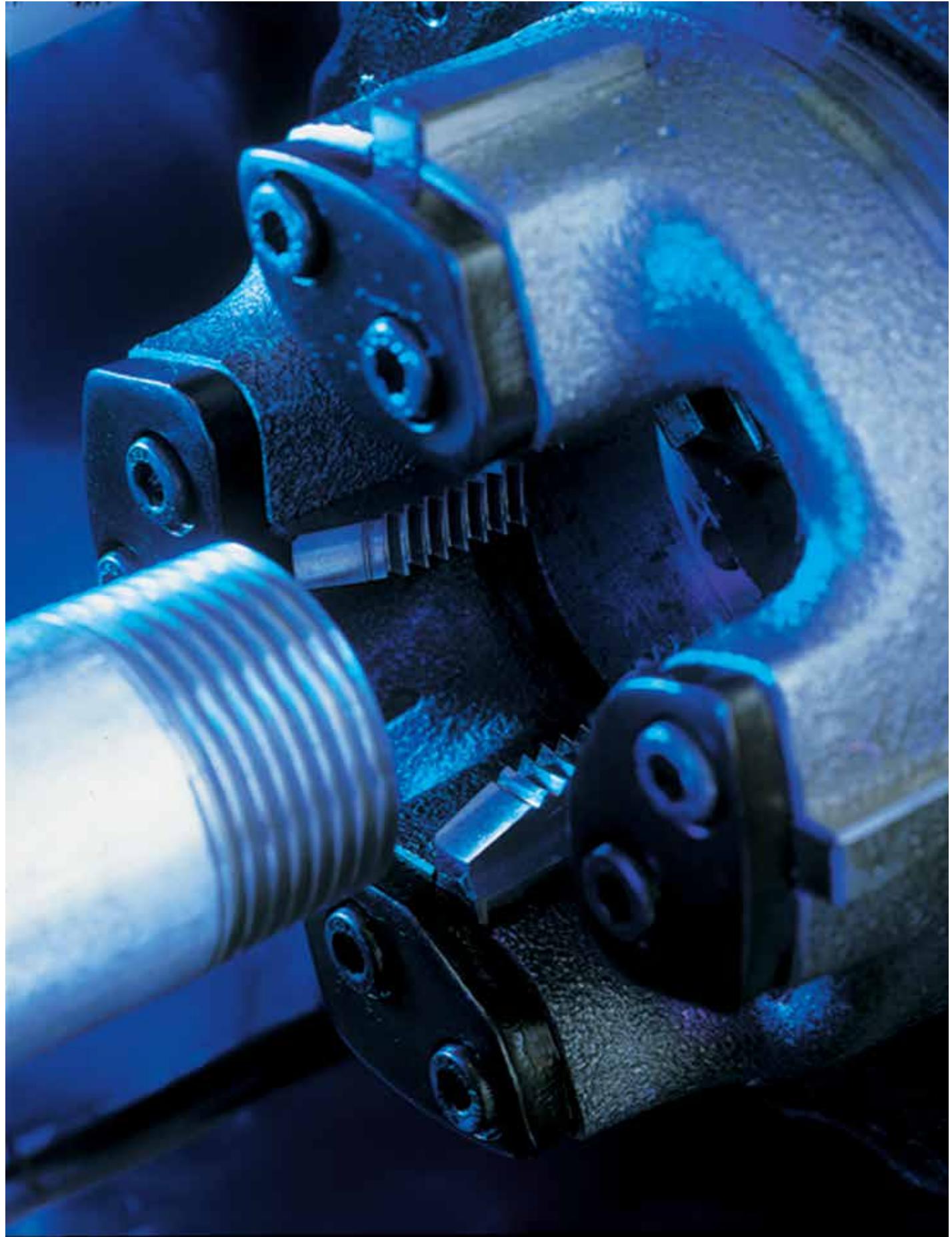
Easy to mount to the ESG Plus. This attachment makes it possible to use 2 different grinding wheels at the same time. Including 1 grinding head, 1 diamond grinding wheel (coarse), 1 cylinder-head screw with collar (M4x34); 1 shaft extension.

Article	Applicable with	Grinding angles [°]	Code		kg
Double-Decker Kit	ESG Plus	15 / 18 / 22.5 / 30	790 052 490		0.160
Double-Decker Kit	ESG Plus	15 / 30 / 45 / 60	790 052 390		0.100



*Double-Decker Kit*

# Tungsten Grinding Technology



⑦〇

## Threading, Jointing and Sealing Technology

# Accessories for Pipe Threading Technology

## 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 3/8	<b>790 003 503</b>		0.100
Replacement set of threading chasers for ASK	R 1/2	<b>790 003 504</b>		0.145
Replacement set of threading chasers for ASK	R 3/4	<b>790 003 505</b>		0.130
Replacement set of threading chasers for ASK	R 1	<b>790 003 506</b>		0.170
Replacement set of threading chasers for ASK	R 1 1/4	<b>790 003 507</b>		0.145
Replacement set of threading chasers for ASK	R 1 1/2*	<b>790 003 508</b>		0.205
Replacement set of threading chasers for ASK	R 2*	<b>790 003 509</b>		0.260

\* not for TGA

## Nipple holder

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



Nipple holder

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

\* not for TGA

## 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).



Thread cutting compound  
NORMOLIC Red®

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

# Threading, Jointing and Sealing Technology

## Thread Jointing Technology



Thread jointing compound PARALIQ® PM 35



Flax dispenser "Sales Display Package"



Flax dispenser



Flax dispenser "Pocket Dispenser"

### 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.

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

### Flax dispenser "Sales Display Package"

Cardboard box including 10 flax bobbins.

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

Article	Version	Code	kg
Flax dispenser, sales display package	including 10 flax bobbins	790 052 716	0.780

### Flax dispenser

Empty (without flax bobbin). For mounting on a wall or a work bench.

Ideal for single-dosage use of flax bobbins.

Including fixing plate for mounting on wall or work bench.

Easy to use, no waste, optimal proportioning.

Article	Version	Code	kg
Flax dispenser	without flax bobbin	790 052 701	0.304

### Flax dispenser "Pocket Dispenser"

Empty (without flax bobbin). For the fitters pocket.

Ideal for single-dosage use of flax bobbins.

Easy to use, no waste, optimal proportioning.

Article	Version	Code	kg
Flax dispenser "Pocket Dispenser"	without flax bobbin	790 052 708	0.135

# Seals

## Seal dispenser

For gas and water installations. Approved by the DVGW in accordance with DIN 3535, Part 6.

With 225 asbestos-free seals. Including transparent labeled protective cover.

Very robust, shock-proof and break-proof seal dispenser block made of elastic material that protects the seals against moisture, falling out or damage. The seals can be removed singly and are always at hand.



Seal dispenser

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



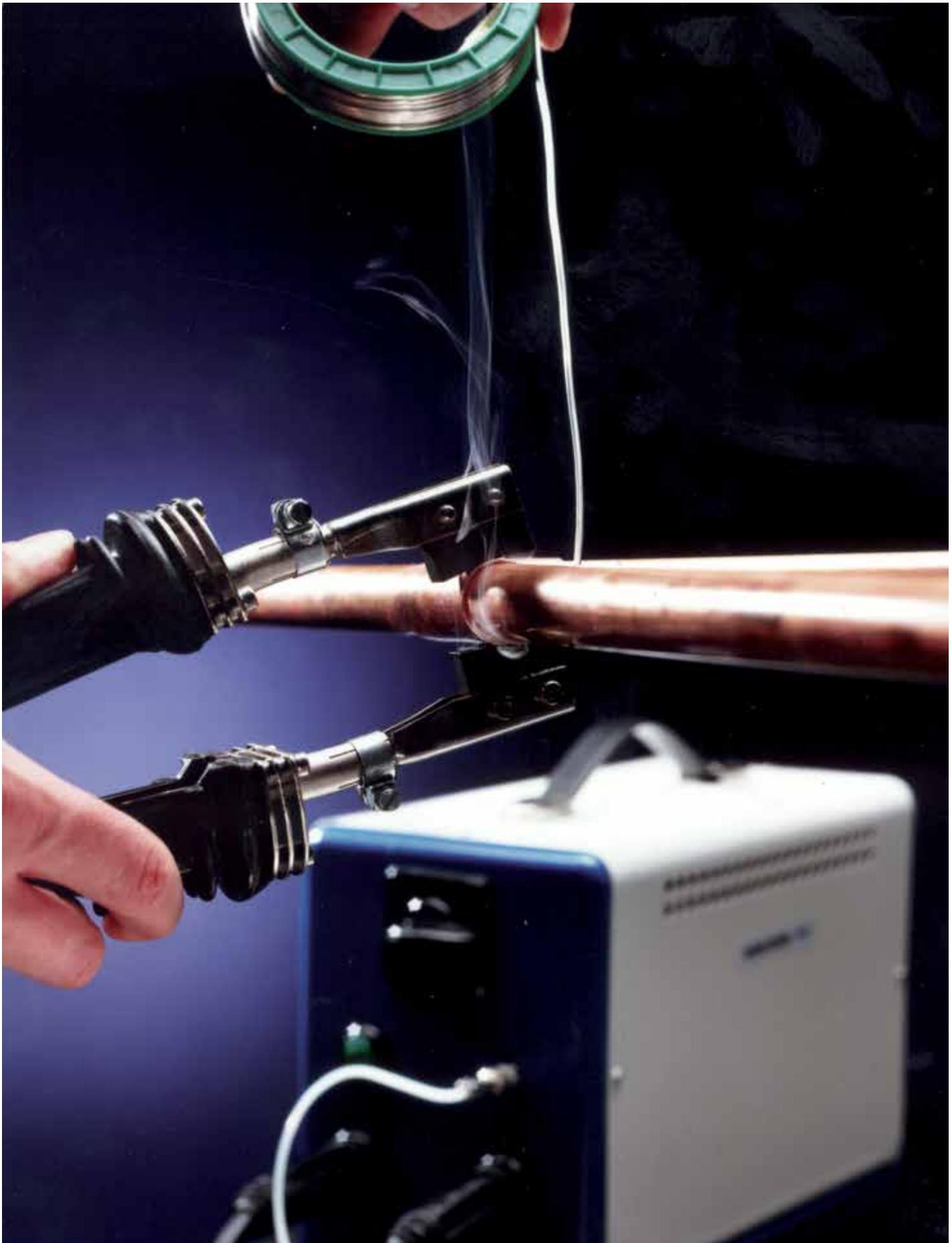
Seals

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	0.002
Seals	R 3/8	15 x 8	100	790 052 728	0.002
Seals	R 3/8	15 x 10	100	790 052 729	0.002
Seals	R 1/2	18 x 10	100	790 052 730	0.002
Seals	R 1/2	18 x 11	100	790 052 731	0.002
Seals	R 1/2	18 x 12	100	790 052 732	0.002
Seals	R 3/4	23 x 17	100	790 052 733	0.002
Seals	R 3/4	24 x 15	100	790 052 734	0.002
Seals	R 1	30 x 22	100	790 052 735	0.003
Seals	R 1 1/4	37 x 29	100	790 052 736	0.002
Seals	R 1 1/4	39 x 32	100	790 052 737	0.002
Seals	R 1 1/2	44 x 37	100	790 052 738	0.003
Seals	R 2	56 x 48	50	790 052 739	0.002
Seals	Leather 3/4	23 x 16	100	790 052 740	0.002
Seals	RV 3/4	23 x 17	100	790 052 741	0.002
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	0.002
Seals	HK 1/2	30 x 21	100	790 052 748	0.003
Seals	HG 3/8	27 x 19	100	790 052 749	0.002
Seals	HG 1/2	34 x 23	100	790 052 750	0.002

\* Weight per seal

# Threading, Jointing and Sealing Technology

(73)



74

## Copper Pipe Installation Technology

## Accessories for LAM 1500, LAM 1600

### Clamp holder with carbon V-electrode

Made of stainless steel.



Clamp holder with carbon V-electrode

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

### Carbon V-electrode

Minimum purchase: 10 pieces.



Carbon V-electrode

Article	Code	kg
Carbon V-electrode	790 057 025	0.010

### Stick electrode

Minimum purchase: 6 pieces.

Article	Code	kg
Stick electrode	790 057 026	0.020



Stick electrode



76

## Accessories for Workshop and Site

# 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	64.000
Work bench, large*, dismountable, with 2 tool box supports	790 052 004	95.000
Collapsible work bench, load capacity: 650 kg/1433 lbs	790 052 030	30.000

\*while stock last.



Work bench, small



Collapsible work bench

## Tool box

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

Dimensions	Tool box
Outside dimensions (l x w x h)	100 x 44 x 45 cm / 39.37 x 17.32 x 17.72 inch
Outside dimensions with handles (l x w x h)	100 x 46 x 45 cm / 39.37 x 18.11 x 17.72 inch

Article	Code	kg
Tool box	790 052 101	50.000



Tool box

## 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	5.500
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



Chain pipe vice



Bench vice for plastic and stainless steel pipes

## 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



Deburring tool

# Accessories for Workshop and Site

# 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:

» Call **+49 (0) 77 31 792-0** or e-mail to **tools@orbitalum.com**.

### 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

Service hotline: +49 (0) 77 31 792-789



The ITW ORBITAL CUTTING & WELDING group provides global customers one source for the finest in pipe & tube cutting, beveling and orbital welding products.

For more information about us >> [www.itw-ocw.com](http://www.itw-ocw.com)



## worldwide | sales + service

### NORTH AMERICA

#### UNITED STATES

E.H. Wachs  
600 Knightsbridge Parkway  
Lincolnshire, IL 60699, USA  
Tel. +1 847 537 8800  
Fax +1 847 520 1147  
Toll Free 800 323 8185

Gulf States Service & Rental Center  
2220 South Philippe Avenue  
Gonzales, LA 70737, USA  
Tel. +1 225 644 7780  
Fax +1 225 644 7785

West Coast Sales & Rental Center  
5130 Fulton Drive, Unit J  
Fairfield, California 94534, USA  
Tel. +1 707 439 3763  
Fax +1 707 439 3766

Wachs Subsea LLC  
E.H. Wachs  
11050 West Little York  
Building N  
Houston, TX 77041, USA  
Tel. +1 713 983 0784  
Fax +1 713 983 0703

#### CANADA

Wachs Canada Ltd  
Eastern Canada Sales & Service Center  
1166 Gorham Street, Unit 8  
Newmarket, Ontario L3Y 8W4, Canada  
Tel. +1 905 830 8888  
Fax +1 905 830 6050  
Toll Free 888 785 2000

Wachs Canada Ltd  
Western Canada Sales & Service Center  
5411 82nd Avenue  
Edmonton, Alberta T6B 2J6, Canada  
Tel. +1 780 469 6402  
Fax +1 780 463 0654  
Toll Free 800 661 4235

### EUROPE

#### GERMANY

Orbitalum Tools GmbH  
Josef-Schuetter-Str. 17  
78224 Singen  
Germany  
Tel. +49 (0) 77 31 - 792 0  
Fax +49 (0) 77 31 - 792 500

#### UNITED KINGDOM

Wachs UK  
UK Sales, Rental & Service Centre  
Units 4 & 5 Navigation Park  
Road One, Winsford Industrial Estate  
Winsford, Cheshire CW7 3 RL  
United Kingdom  
Tel. +44 (0) 1606 861 423  
Fax +44 (0) 1606 556 364

### ASIA

#### CHINA

Orbitalum Tools  
New Caoheling International  
Business Centre  
Room 1501, Building B  
No 391 Gui Ping Road  
Shanghai 200052  
China  
Tel. +86 (0) 21 52 30 37-51  
Fax +86 (0) 21 52 30 37-58

#### INDIA

ITW India Limited  
4A/19, IDA, Phase - 1  
Patancheru Medak District  
Andhra Pradesh 502 319  
India  
Tel. +91 (0) 99 00 01 28 80  
Fax +91 (0) 40 3048 0815

#### SINGAPORE

E.H. WACHS Asia Pacific  
23 Tagore Lane #04-06/07  
Tagore 23 Warehouse  
Singapore, 787601  
Singapore  
Tel. +65 9634 5432  
Fax +1 847 484 2692

### AFRICA & MIDDLE EAST

#### UNITED ARAB EMIRATES

Wachs Middle East & Africa Operations  
P O Box 262543  
Free Zone South FZS 5, AC06  
Jebel Ali Free Zone (South-5), Dubai  
United Arab Emirates  
Tel. +971 4 88 65 211  
Fax +971 4 88 65 212

