

BRB 2, BRB 4

Boiler pipe preparation machines

The solution when space is limited! Only very limited space is often available between welded boiler pipes. The compact body design of BRB machines is optimized for the application in question to provide the operator with the best possible access in every position and is therefore the best solution for pipe end and tube sheet joint preparations in boiler, tank and apparatus construction.



Counterboring and axial turning of pipes made from high-alloy steel (stainless steel), low-alloy and carbon steel with the unique tool system QTC®.



Ideal for series machining



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

Powerful und robust boiler prep machine! The BRB series from Orbitalum, developed for boiler applications with the lowest space availability, makes precise welding preparations possible using optimal torque, together with low weight.

With the Orbitalum patented Quick-Tool-Change (QTC®), tools can be replaced easily and quickly. All multifunctional tools (MFW) are multi-edge tool bits with protective coating against tool wear. Thus pipe-ends made from unalloyed, low-alloy and high-alloy steels, with a high percentage of chromium and nickel, can be processed quickly, cost-effectively, and very precisely.

The machines and accessories are supplied in a durable storage and shipping case.

- Handy, ergonomic and compact design
- Precise and reproducible weld seam 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 simultaneously

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.

DRIVE VERSIONS:

Electric: 230 V, 50/60 Hz or 120 V, 50/60 Hz; Single-phase AC motor, Protection class II; Built-in electronic variable cutting speed.

Pneumatic: Pneumatic power drive.

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.

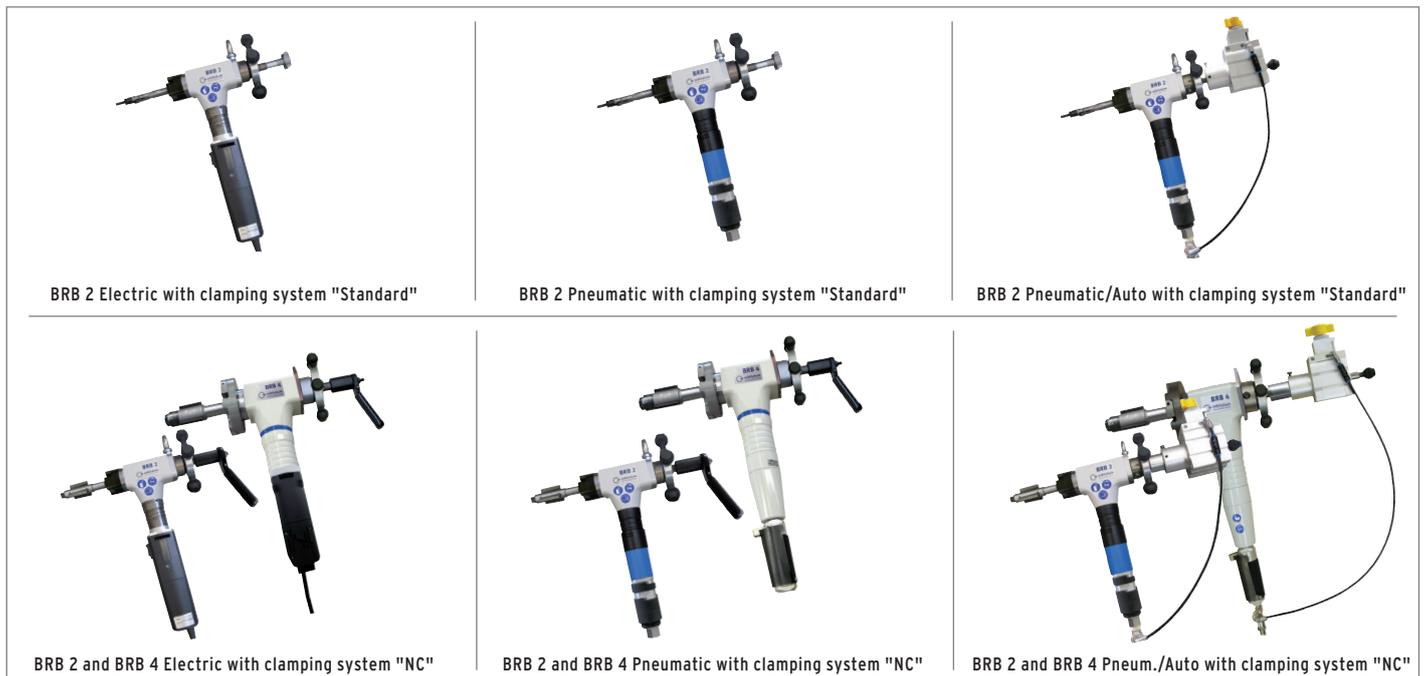
Manufacturer's warranty can only be given when using a mobile air unit. We recommend the mobile air unit from Orbitalum Tools, Code 790 093 060.

TECHNICAL DATA		BRB 2	BRB 2	BRB 2	BRB 4	BRB 4	BRB 4
Drive version		Electric	Pneumatic	Pneum./Auto	Electric	Pneumatic	Pneum./Auto
Power	[kW]	0.5	0.38	0.38	1.5	1.0	1.0
Speed	[rpm]	18 - 118	0 - 120	0 - 120	12 - 37	0 - 110	0 - 110
Air consumption (at 6 bar)	[m³/min]	-	0.7	0.7	-	1.0	1.0
Noise level Laeq 1 m (EN 23741), approx.	[dB (A)]	76	82	82	82	84	84
Vibration level (EN 28662, part 1)	[m/s²]	2.5	2.5	2.5	2.5	2.5	2.5

APPLICATION RANGE		BRB 2	BRB 2	BRB 4	BRB 4
		KIT 1	KIT 2	KIT 3	KIT 5
Clamping system		Standard	NC	NC	NC
Code	[230 V]	790 085 011	790 185 012	790 186 013	790 186 015
	[120 V]	790 085 021	790 185 022	790 186 023	790 186 025
	[Pneumatic]	790 085 007	790 185 002	790 186 003	790 186 005
	[Pneu./Auto]	790 085 041	790 185 042	790 186 033	790 186 035
Tube ID / Clamping range Ø	[mm]	12.75 - 25.5	19.1 - 47.0	35.0 - 108.0	19.1 - 108.0
	[inch]	0.502 - 1.004	0.752 - 1.850	1.378 - 4.252	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
Mandrel Ø	[mm]	12.75	19.05	34.5	19.05 34.5
	[inch]	0.502	0.750	1.358	0.750 1.358
Tube OD	[mm]	16.75 - 41.5	23.0 - 62.0	38.5 - 114.3	23.0 - 114.3
	[inch]	0.659 - 1.634	0.906 - 2.441	1.516 - 4.50	0.906 - 4.50
Wall thickness* min. - max.	[mm]	1.5 - 5.0	2.0 - 6.0	2.0 - 15.0	2.0 - 15.0
	[inch]	0.059 - 0.197	0.079 - 0.236	0.079 - 0.590	0.079 - 0.590
SCOPE OF DELIVERY		BRB 2	BRB 2	BRB 4	BRB 4
		KIT 1	KIT 2	KIT 3	KIT 5
Boiler pipe preparation machine	Pc.	1	1	1	1
Durable storage and shipping case	Pc.	1	1	1	1
Tool retainers (For dimensions, please see the table above)	Pc.	1	1	1	3
Clamping sets (For dimensions, please see the table above)	Set	6	6	18 (8+10)	24 (14+10)
Mandrel (For dimensions, please see the table above)	Pc.	1	1	1	2
Cutting lubrication KSS-TOP (Code 790 060 226)	Spray pump	1	1	1	1
Tool set	Set	1	1	1	1
Operating instructions and spare parts list	Set	1	1	1	1

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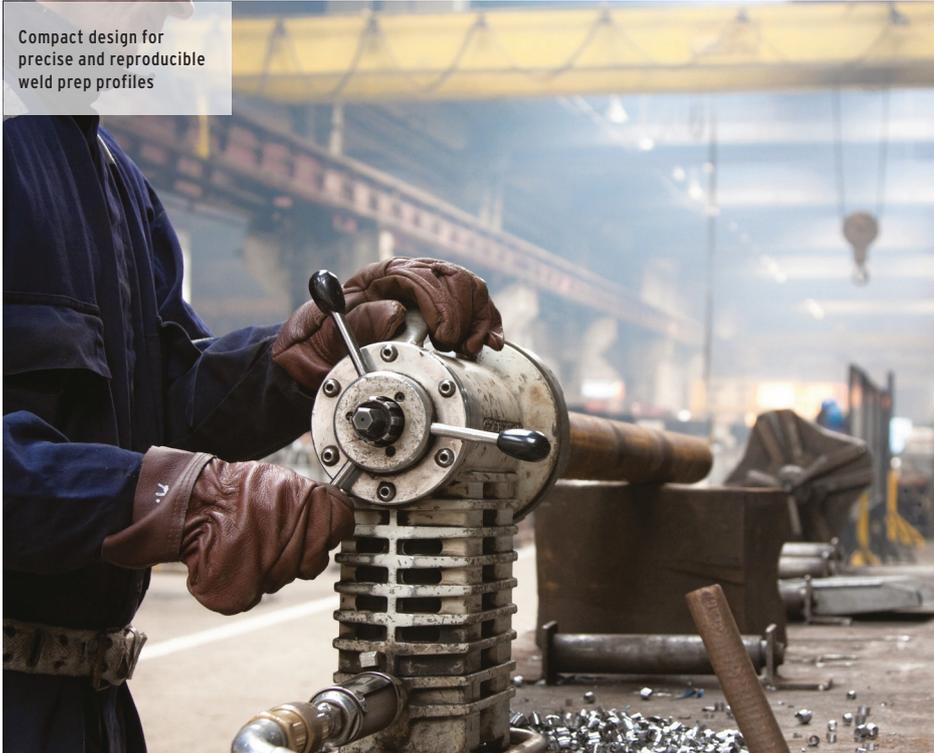
* Depending on pipe material and dimension. With BRB 4: Aluminum up to 15 mm/0.59" wall thickness. Stainless steel up to 8 mm/0.315" wall thickness. Steel up to 10 mm/0.39" wall thickness



REB 6, REB 14

Pipe end preparation machines

The portable pipe end preparation machines REB are setting new standards in the weld prepping of metal pipes. Take advantage of this latest technology to reduce your tool and manufacturing costs and to increase your productivity when making precise and reproduceable weld prep profiles, both on site and in the prefab workshop.



Compact design for precise and reproducible weld prep profiles

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	✓

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.

With the Orbitalum patented Quick-Tool-Change (QTC®), tools can be replaced easily and quickly. All multifunctional tools (MFW) are multi-edge tool bits with protective coating against tool wear. Thus pipe-ends made from unalloyed, low-alloy and high-alloy steels, with a high percentage of chromium and nickel, can be processed quickly, cost-effectively, and very precisely.

The REB machines are available in the following drive versions:

- **Electric:** 230 V, 50/60 Hz or 120 V, 50/60 Hz.
- **Pneumatic** power drive.

The machines and accessories are supplied in a durable storage and shipping case.



Quick-Tool-Change QTC®



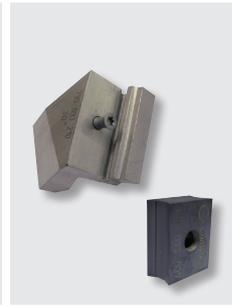
Fast adjustment of the pipe dimension



Available with compressed air or electric drive



Cutting lubrication KSS-TOP included



A wide range of tool holder and multifunctional tools (available option)



Mobile air unit (available option)

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.

APPLICATION RANGE*		REB 6	REB 6	REB 14	REB 14
		PNEUMATIC	ELECTRIC	PNEUMATIC	ELECTRIC
Code	[Pneum.]	790 093 001	-	790 094 001	-
	[230 V]	-	790 093 002	-	790 094 002
	[120 V]	-	790 093 005	-	790 094 005
Tube ID	[mm]	49 - 159	49 - 159	92 - 320	92 - 320
	[inch]	1.93 - 6.26	1.93 - 6.26	3.62 - 12.60	3.62 - 12.60
Wall thickness	[mm]	3 - 22	3 - 22	4 - 30	4 - 22
	[inch]	0.12 - 0.87	0.12 - 0.87	0.16 - 1.18	0.16 - 0.87
Tube OD	[mm]	56 - 168.3	56 - 168.3	100 - 358.0	100 - 358.0
	[inch]	2.20 - 6.61	2.20 - 6.61	3.94 - 14.00	3.94 - 14.00
Tube materials		Unalloyed and low-alloyed steels, high-alloyed steels (stainless steel), aluminum			
TECHNICAL DATA		REB 6	REB 6	REB 14	REB 14
		PNEUMATIC	ELECTRIC	PNEUMATIC	ELECTRIC
Dimensions	[mm]	560 x 260 x 400	640 x 260 x 420	625 x 375 x 490	700 x 375 x 510
	[inch]	22 x 10.2 x 15.8	25.2 x 10.2 x 16.5	24.6 x 14.8 x 19.3	27.6 x 14.8 x 20
Power	[kW]	1.8	1.2	1.8	1.2
Air consumption (at 6 bar)	[m³/min]	2.0	-	2.0	-
Speed	[min⁻¹]	0 - 26	10 - 32	0 - 13	5 - 16
Vibration level (EN 28662, part 1)	[m/s²]	< 2.5	< 2.5	< 2.5	< 2.5
Noise level at the workplace (average speed range), approx.	[dB (A)]	At idle-speed: 75 Under load: 77	At idle-speed: 75 Under load: 77	At idle-speed: 75 Under load: 77	At idle-speed: 75 Under load: 77
SCOPE OF DELIVERY		REB 6	REB 6	REB 14	REB 14
		PNEUMATIC	ELECTRIC	PNEUMATIC	ELECTRIC
Pipe end preparation machine	Pc.	1	1	1	1
Transportation case	Pc.	1	1	1	1
Clamping chuck	Pc.	1	1	1	1
Clamping sets each with 3 clamping wedges	Pc.	5	5	6	6
Cutting lubrication KSS-TOP (Code 790 060 226)	Spray pump	1	1	1	1
Tool set	Set	1	1	1	1
Operating instructions and spare parts list	Set	1	1	1	1



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



REB 6 Pneumatic



REB 6 Electric



REB 14 Pneumatic



REB 14 Electric