

# 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.



Handy, ergonomic and compact design	✓
Precise and reproducible weld seam preparation	✓
Fast application with the BRB Pneum./Auto, ideal for continuous production e.g. boiler/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; up to 3 tools can be used simultaneously	✓
Tools adaptable on all BRB machines	✓

**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.

### 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.

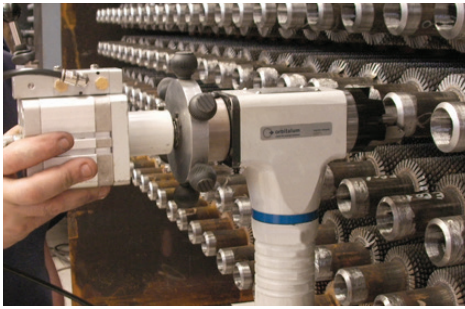
The **"Standard" clamping system** has proven itself in many years of use through its stability and reliability. You can continue to use this system.

### DRIVE VERSIONS:

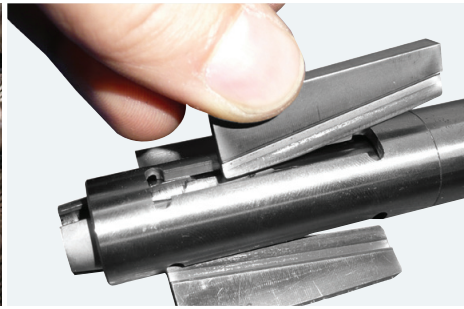
**Electric:** 230 V, 50/60 Hz or 120 V, 50/60 Hz; Single-phase AC motor, Protection class II; Built-in electronic variable cutting speed.

**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.



Ideal for series machining



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

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	1.2	1.0	1.0
Speed	[rpm]	18 - 118	0 - 120	0 - 120	12 - 37	0 - 110	0 - 110
Air consumption (at 6 bar)	[m <sup>3</sup> /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/s <sup>2</sup> ]	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
	[mm]	12.75	19.05	34.5	19.05 34.5
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 - 50.8	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 & shipping case	Pc.	1	1	1	1
Tool retainers (dimensions, please see the table above)	Pc.	1	1	1	3
Clamping sets (dimensions, please see the table above)	Set	6	6	18 (8+10)	24 (14+10)
Mandrel (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

\* 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

The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our general conditions of supply.



BRB 2 Electric with clamping system "Standard"



BRB 2 Pneumatic with clamping system "Standard"



BRB 2 Pneumatic/Auto with clamping system "Standard"



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



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



BRB 2 and BRB 4 Pneum./Auto with clamping system "NC"