

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



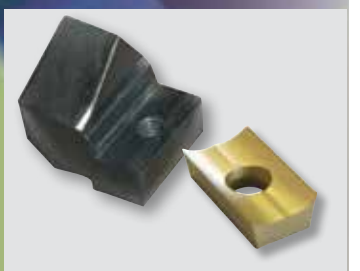
QTC® Quick-Tool-Change:
Quick clamping system for
tools, clamping shells and
tubes



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

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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

Additional advantages with the RPG 4.5 S:

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

RPG 4.5, RPG 4.5 S, RPG 8.6

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

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

Machine with rotating/removable bench stand.

Machine comes with:

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

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

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



RPG 4.5



RPG 4.5 S



RPG 8.6

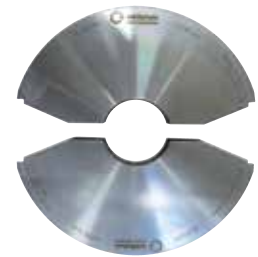
Accessories for RPG 4.5, RPG 8.6

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

Clamping shells

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

Applicable with	Version	Tube OD [mm]	Tube OD [inch]	Code	kg
RPG 4.5	Stainless steel	12.00	0.472	790 038 454	2.170
RPG 4.5	Stainless steel	12.70	0.500	790 038 438	2.177
RPG 4.5	Stainless steel	13.00	0.512	790 038 439	2.176
RPG 4.5	Stainless steel	13.50	0.531	790 038 440	2.175
RPG 4.5	Stainless steel	14.00	0.551	790 038 441	2.174
RPG 4.5	Stainless steel	16.00	0.630	790 038 442	2.168
RPG 4.5	Stainless steel	17.20	0.677	790 038 443	2.164
RPG 4.5	Stainless steel	18.00	0.709	790 038 444	2.161
RPG 4.5	Stainless steel	19.00	0.748	790 038 445	2.150
RPG 4.5	Stainless steel	19.05	0.750	790 038 446	2.157
RPG 4.5	Stainless steel	20.00	0.787	790 038 447	2.153
RPG 4.5	Stainless steel	21.30	0.839	790 038 448	2.100
RPG 4.5	Stainless steel	22.00	0.866	790 038 449	2.144
RPG 4.5	Stainless steel	22.22	0.875	790 038 050	2.195
RPG 4.5	Stainless steel	23.00	0.906	790 038 450	2.140
RPG 4.5	Stainless steel	24.00	0.945	790 038 451	2.133
RPG 4.5	Stainless steel	25.00	0.984	790 038 452	2.127
RPG 4.5	Stainless steel	25.25	0.994	790 038 049	2.180
RPG 4.5	Stainless steel	25.40	1.000	790 038 051	2.180
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

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 WH15-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 WH15-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



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!

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.