

RA 8, RA 12 (AVM/MVM)

Pipe cutting and beveling machines

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

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.



The perfect preparation for orbital welding

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	✓
Multiple point clamping	✓
Fast adjustment of dimensions	✓
Regulated cutting speed	✓
Fast tool replacement	✓

"Enhanced safety due to stationary tube - rotating tool". The tested process of planetary cutting is another important feature, which characterizes all ORBITALUM pipe cutting machines. The saw blade rises into the cutting area and is driven orbitally around the tube. The advantage is that a small saw blade can cut a large tube diameter, without heating the tube.

An innovative clamping principle which clamps the tube at several points: Thanks to the deformation-free clamping system, pipes with a wall-thickness of 2 up to 10 mm (0.079" - 0.394") can be prepared easily and quickly. It is possible to cut all high-alloyed, un- and low-alloyed steels, black and galvanized steel pipes, general structural steels, annealed cast iron pipes (GGG), aluminum, brass, copper and plastics.

Besides the completely manual operation, users also have the possibility to choose between

manual operation with manual feed module (MVM) or automatic feed module (AVM) = both optional. The latter option optimizes the cutting result, increases the tool life and reduces the operator impact. The result: Maximum safety and productivity.

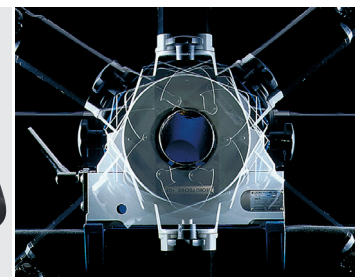
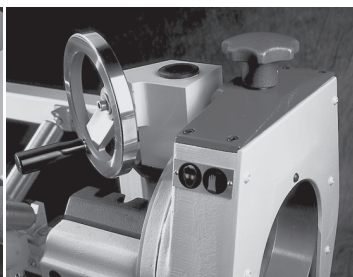
FURTHER ADVANTAGES:

- Reduced operator impact by optional feed module AVM or MVM for an automated or manual cutting process
- Optimal tool contact
- Optimized speed range (40-215 rpm), ideal for cutting high-performance materials (Hastelloy®, P91, etc.)
- An ergonomically-designed motor handle for a safe and comfortable operating position
- Cutting in seconds
- Simultaneous or separate cutting and beveling
- Increased productivity

- Increased service life of tools
- More corrosion protection through clamping jaw attachments (included)
- All RA's are fitted with the swivel cable with a quick-disconnect coupler

FEED VERSIONS:

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. 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.



Available with automatic or manual feed modules (AVM/MVM)

Manual feed module MVM

Optimized speed range

Planetary cutting technology

APPLICATION RANGE		RA 8	RA 8 AVM*	RA 8 MVM*	RA 12	RA 12 AVM*	RA 12 MVM*
Code	[230 V] [120 V]	790 045 095 790 045 096	790 045 001 790 045 007	790 045 069 790 045 082	790 047 095 790 047 096	790 047 001 790 047 007	790 047 069 790 047 082
Tube OD	[mm] [inch]	114 - 230 4.488 - 9.055	114 - 230 4.488 - 9.055	114 - 230 4.488 - 9.055	157 - 325 6.181 - 12.795	157 - 325 6.181 - 12.795	157 - 325 6.181 - 12.795
Wall thickness (depends on material)**	[mm] [inch]	2 - 10 0.079 - 0.394	2 - 10 0.079 - 0.394	2 - 10 0.079 - 0.394	2 - 10 0.079 - 0.394	2 - 10 0.079 - 0.394	2 - 10 0.079 - 0.394
Tube ID min. (saw blade Ø 63 mm)	[mm]	137	137	137	190	190	190
Tube ID min. (saw blade Ø 2.480")	[inch]	5.394	5.394	5.394	7.480	7.480	7.480
Tube ID min. (saw blade Ø 68 mm)	[mm]	132	132	132	185	185	185
Tube ID min. (saw blade Ø 2.677")	[inch]	5.197	5.197	5.197	7.283	7.283	7.283
Tube ID min. (saw blade Ø 80 mm)	[mm]	120	120	120	173	173	173
Tube ID min. (saw blade Ø 3.150")	[inch]	4.724	4.724	4.724	6.811	6.811	6.811
Tube ID min. (saw blade Ø 100 mm)	[mm]	100	100	100	153	153	153
Tube ID min. (saw blade Ø 3.937")	[inch]	3.937	3.937	3.937	6.024	6.024	6.024
Tube materials		High-quality steel (any Cr and Mo content); high-quality stainless steel (any Cr and Mo content); high-quality steel (Cr < 12% and Mo < 2.5%; Cr < 20% and Mo = 0%); case hardened steels, high-speed steels, tempering steels, bearing steels, tool steels; black and galvanized steel pipe; general structural steel; annealed cast iron pipe (GGG); aluminum; brass; copper; plastics (PE, PP, PVDE, PVC)					
TECHNICAL DATA		RA 8	RA 8 AVM*	RA 8 MVM*	RA 12	RA 12 AVM*	RA 12 MVM*
Power	[kW] [hp]	1.8 2.41	1.9 2.54	1.8 2.41	1.8 2.41	1.9 2.54	1.8 2.41
Power AVM	[kW] [hp]	-	0.05 0.07	-	-	0.05 0.07	-
Built-in electronic variable cutting speed with restart inhibitor	[rpm]	40 - 215	40 - 215	40 - 215	40 - 215	40 - 215	40 - 215
Slide housing speed with AVM	[rpm]	-	0.1 - 2.3	-	-	0.1 - 1.8	-
Slide housing torque max. with AVM	[Nm]	-	165	-	-	210	-
Protection class	[class]	II (DIN EN 60745-1)	I (DIN EN 60204-1)	II (DIN EN 60745-1)	II (DIN EN 60745-1)	I (DIN EN 60204-1)	II (DIN EN 60745-1)
Noise level at the workplace approx.	[dB (A)]	79	79	79	79	79	79
Vibration level (according to DIN EN 28662, part 1)	[m/s²]	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Mains fuse by customer	[A]	16	16	16	16	16	16
Dimensions (l x w x h)	[mm] [inch]	778 x 430 x 485 30.6 x 16.9 x 19.1	918 x 430 x 485 36.1 x 16.9 x 19.1	788 x 430 x 485 31.0 x 16.1 x 19.1	940 x 374 x 592 37.0 x 14.7 x 23.3	1,070 x 374 x 592 42.1 x 14.7 x 23.3	1,090 x 374 x 592 42.9 x 14.7 x 23.3
Weight of machine approx.***	[kg] [lbs]	102.5 225.9	110.0 242.5	104.6 230.6	138.6 305.6	146.1 322.1	140.7 310.2
Versions (single-phase AC)	[V, Hz]	230 V, 50/60 Hz 120 V, 50/60 Hz	230 V, 50/60 Hz 120 V, 50/60 Hz	230 V, 50/60 Hz 120 V, 50/60 Hz	230 V, 50/60 Hz 120 V, 50/60 Hz	230 V, 50/60 Hz 120 V, 50/60 Hz	230 V, 50/60 Hz 120 V, 50/60 Hz
SCOPE OF DELIVERY		RA 8	RA 8 AVM*	RA 8 MVM*	RA 12	RA 12 AVM*	RA 12 MVM*
Pipe cutting and beveling machine	Pc.	1	1	1	1	1	1
Transportation case	Pc.	1	1	1	1	1	1
Saw blade (Code 790 043 018)	Pc.	1	1	1	1	1	1
Mounting plate	Pc.	1	1	1	1	1	1
Tool set	Set	1	1	1	1	1	1
Saw blade lubricant GF TOP (Code 790 060 228)	Tube	1	1	1	1	1	1
Special gear oil (Code 790 041 030)	Bottle	1	1	1	1	1	1
Operating instructions and spare parts list	Set	1	1	1	1	1	1

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

- * The automatic/manual feed module AVM/MVM is already fitted to the pipe cutter upon delivery.
- ** With automatic cutting process. Increased wall thickness possible with manual feed or by adding an additional cut (depending on the saw blade diameter).
- *** Weight without packaging and accessories.

