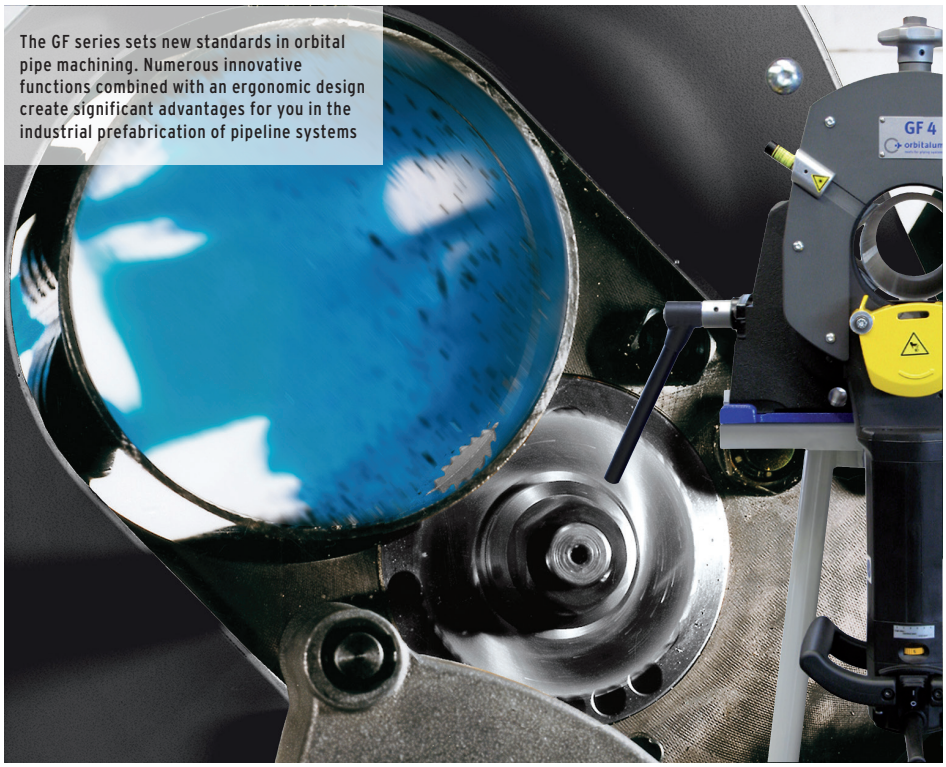
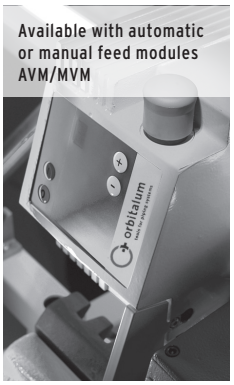
GF 4, GF 6 (AVM/MVM)

Pipe cutting and beveling machines

This saw has been designed for precise cutting of tubes and pipes in just seconds.
For more than 40 years construction companies rely on the standard set by Orbitalum in the industrial prefabrication of pipeline systems: From the chemical, biotechnology, pharmaceutical, food and beverage industry to the energy plant construction and shipbuilding.



The 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


Available with automatic or manual feed modules AVM/MVM


Multifunctional tool for all adjustments on the machine


Reversible clamping jaws for preparing thin- or thick-walled pipes


Integrated line laser to determine the cut off point

The basic requirement for the productive and high-quality welding of pipes with automated welding technology is a precise, right-angled and burrfree cut as well as a perfectly beveled pipe end.
The GF series cuts and bevels high-alloy steel (stainless steel), low- and unalloyed steel, plastics, casting materials and non-ferrous metals easily and in just seconds, using the "Planetary Cutting" method.
The powerful clamping is effected without any deformation of the workpiece.

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.

- 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 seperate cutting and beveling
- Cost-effective, increasing productivity
- Long tool life
- 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
- An 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
- Multifunctional tool for all adjustments on the machine
- Optimized speed range (40-215 rpm), ideal for cutting high-performance materials (Hastelloy®, P91, etc.)
- Swivel cable with a quick-disconnect coupler: for easy and comfortable replacement of the power cable
- Optimized saw blade guard protects the user against flying chips and comes with a measuring port (for GF 4 only)

APPLICATION RANGE		GF 4	GF 4 AVM*	GF 4 MVM*	GF 6	GF 6 AVM*	GF 6 MVM*
Tube OD	[mm] [inch]	12 - 120 0.472 - 4.724	12 - 120 0.472 - 4.724	12 - 120 0.472 - 4.724	21.3 - 168.3 0.839 - 6.626	21.3 - 168.3 0.839 - 6.626	21.3 - 168.3 0.839 - 6.626
Wall thickness (depends on material)**	[mm] [inch]	1 - 9 0.039 - 0.354	1 - 9 0.039 - 0.354	1 - 9 0.039 - 0.354	1.5 - 15 0.059 - 0.591	1.5 - 15 0.059 - 0.591	1.5 - 15 0.059 - 0.591
Tube ID min. (saw blade Ø 63 mm) Tube ID min. (saw blade Ø 2.480")	[mm] [inch]	21 0.827	21 0.827	21 0.827	30 1.181	30 1.181	30 1.181
Tube ID min. (saw blade Ø 68 mm) Tube ID min. (saw blade Ø 2.677")	[mm] [inch]	16 0.630	16 0.630	16 0.630	25 0.984	25 0.984	25 0.984
Tube ID min. (saw blade Ø 80 mm) Tube ID min. (saw blade Ø 3.150")	[mm] [inch]	4 0.157	4 0.157	4 0.157	13 0.512	13 0.512	13 0.512
Tube ID min. (saw blade Ø 100 mm) Tube ID min. (saw blade Ø 3.937")	[mm] [inch]	- -	- -	- -	0 0	0 0	0 0
Tube materials		High-quality steel (any Cr and Mo content); figh-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		**GF 4**	**GF 4 AVM***	**GF 4 MVM***	**GF 6**	**GF 6 AVM***	**GF 6 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 - 3.9	-	-	0.3 - 3.5	-
Slide housing torque max. with AVM	[Nm]	-	101	-	-	353	-
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 (lxwxh)	[mm] [inch]	480 x 325 x 680 18.9 x 12.8 x 26.8	480 x 325 x 810 18.9 x 12.8 x 31.9	480 x 325 x 780 18.9 x 12.8 x 30.7	574 x 352.7 x 920 22.6 x 13.9 x 36.2	574 x 352.7 x 972 22.6 x 13.9 x 38.3	574 x 352.7 x 920 22.6 x 13.9 x 36.2
Weight of machine approx.***	[kg] [lbs]	55.0 121.2	64.5 142.2	60.0 132.2	92.7 204.4	101.7 224.2	97.8 215.6
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		**GF 4**	**GF 4 AVM***	**GF 4 MVM***	**GF 6**	**GF 6 AVM***	**GF 6 MVM***
Pipe cutting and beveling machine	Pc.	1	1	1	1	1	1
Transportation case	Pc.	1	1	1	1	1	1
Set of stainless steel clamping attachments	Pc.	1	1	1	1	1	1
Saw blade (Code 790 ...)	Pc.	1 (...042 064)	1 (...042 064)	1 (...042 064)	1 (...043 018)	1 (...043 018)	1 (...043 018)
Mounting plate	Pc.	1	1	1	1	1	1
Line laser with fastening screw****	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.
**** The line laser is already mounted at the GF 4 (AVM/MVM) on delivery. At the GF 6 (AVM/MVM) the line laser is supplied separately and has to be mounted on the machine before commissioning

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.

GF 4 GF 4 AVM GF 4 MVM GF 6 GF 6 AVM GF 6 MVM