

Beaver S: state-of-the-art stationary pipe beveling machines

Robust, faster, more accurate and more efficient



- minimum machining times
- optimum ease-of-use
- precise, identical welding seams
- several welding seam types possible
- low-maintenance
- maximum reliability
- the ideal machine for every company that creates welding seams on butts



Copier Bevelmachines is developing pipe beveling machines since 1997 and stays developing to get the best quality

A heavy-duty machine that creates perfect welding preps quickly and with great precision. That is the Beaver S, the next generation of beveling machines from Copier Bevelmachines. Every part of the Beaver S is fully geared towards reliability and high-quality beveling. The Beaver S is available in four models, for pipes with diameters of up to 8, 16, 24 or 30 inches.

The Beaver S is the successor to the successful PBM series, which also served as a template for the innovative Beaver S. The design and construction have been further perfected, as a result of which the Beaver S offers more for less: it has a more competitive price, while its performance has improved.

Solid components and a smart construction make the Beaver S the fastest, most practical and most accurate beveling machine. Every machining step is exactly the same; a welding robot will not find any irregularities. Thanks to a smart prism clamp, the Beaver S doesn't have changeover times. Together with optimum ease-of-use, this means ultra-short machining times and maximum efficiency.

Highly precise

Heavy-duty guides

The solid machine construction and the heavy-duty guides of the Beaver S guarantee ultra-stable and accurate butting. The Beaver S creates perfectly formed,

identical welding seams, allowing the (automatic) welding process to run smoothly.

Fast prism clamp

No replaceable parts

To clamp the pipes, the Beaver S uses a sophisticated prism clamp that holds all of the pipe sizes within the range of the machine firmly in place. Together with a unique exchangeable disc holder set, this makes changeover time negligible. And the tool holder? You can move it quickly and simply with a hand wheel (types 8-30) or with an electrical drive.

Many options

Various diameters and welding types

All Beaver S models have a large range. The smallest Beaver S has a clamping range of 0.5-8 inches; the largest is suitable for all (thick-walled) pipes with a diameter of 24 to 56 inches. The Beaver S is also highly versatile when it comes to weld types. Almost any weld type (V seam, compound, flat, taper, chamber, etc.) can be created.

The Beaver S-series in detail

Beaver S-serie	Beaver 8 S	Beaver 16 S	Beaver 24 S	Beaver 30 S
usage	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling
clamping	prism	prism	prism	prism
machining range	25-219 mm	60-426 mm	219-630 mm	219-820 mm
maximum wall thickness	25 mm	25 mm	25 mm	25 mm
feed range	200 mm	300 mm	300 mm	300 mm
motor	400 volts/ 3 ph/ 5.5 kW	400 volts / 3 ph / 5.5 KW	400 volts / 3 ph / 9 KW	400 volts / 3 ph / 9 KW
operating clamping system	manual	manual	manual	electrical
operating feeding system	manual	manual	manual	electrical
speeds in RPM	96 / 192 RPM	48 / 64 / 96 / 128 RPM	48 / 64 / 96 / 128 RPM	36 / 48 / 72 / 96 RPM
cooling pump	built-in	built-in	built-in	built-in
carbide cutting bits	yes	yes	yes	yes

electrically controlled clamp	optional	optional	optional	standard
electrically controlled feeding	optional	optional	optional	standard
electrically controlled pipe stop.	optional	optional	optional	optional
heavy duty pipe stop	optional	optional	optional	optional
height adjustable base frame	optional	optional	optional	optional
Inside diameter tracker	optional	optional	optional	optional
heavy duty pipe stop	optional	optional	optional	-optional
height adjustable base frame	optional	optional	optional	optional

length (mm)	1300	1400	2200	2600
width (mm)	900	1100	1500	1800
height (mm)	1450	1950	1950	1950
weight (kgs)	1650	2350	4500	5600

Easy operation

Minimum effort

The smallest models have two speeds and are very easy to operate. The larger models of the Beaver S have a continuously controllable drive. All the important functions can be accessed via a control panel with a clear layout: start/stop, cooling pump on/off, speed high/low, etc.

Tooling, accessories and options

We can, of course, provide you with all kinds of cutting blades and other tools for your machine. We can also supply ID tracking, copying heads, auxiliary cooling systems, semi and fully automatic machines, central lubrication systems, roller benches and other accessories.

Maintenance

Regular maintenance preserves your machine. We will also be happy to do this for you, on an on-call basis or on the basis of a maintenance contract. Visit our website for more information: www.bevelmachines.com.

Want to learn more? Call us!

Please do not hesitate to ask us questions if you would like to learn more about the possibilities of the Beaver S or our other beveling machines. We will naturally be happy to organise an obligation-free demonstration for you and your colleagues. Call **+31 (0)183 44 13 13** or send an e-mail to sales@bevelmachines.com.



Beaver SHW: pipe beveling up to 45 mm wall thickness

Beaver SHW-serie	Beaver 16 SHW	Beaver 24 SHW	Beaver 30 SHW	Beaver 48 SHW	Beaver 56 SHW
usage	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling
clamping	prism	prism	prism	prism	prism
machining range	60-426 mm	219-630 mm	219 - 820 mm	406 - 1220 mm	610 - 1420 mm
maximum wall thickness	40 mm	45 mm	45 mm	45 mm	45 mm
feed range	200 mm	300 mm	300 mm	300 mm	300 mm
motor	400 volts/ 3 ph/ 9 KW	400 volts / 3 ph / 15 KW	400 volts / 3 ph / 18,5 KW	400 volts / 3 ph / 22,5 KW	400 volts / 3 ph / 25 KW
operating clamping system	manual	electrical	electrical	electrical	electrical
operating feeding system	manual	electrical	electrical	electrical	electrical
speeds in RPM	48 / 64 / 96 / 128 RPM	45 / 66 / 89 RPM	38 / 50 / 70 RPM	25 / 38 / 50 RPM	25 / 38 / 50 RPM
cooling pump	built-in	built-in	built-in	built-in	built-in
carbide cutting bits	yes	yes	yes	yes	yes
electrically controlled clamp	optional	standard	standard	standard	standard
electrically controlled feeding	optional	standard	standard	standard	standard
electrically controlled pipe stop.	optional	optional	optional	optional	optional
heavy duty pipe stop	optional	optional	optional	optional	optional
height adjustable base frame	optional	optional	optional	optional	optional
Inside diameter tracker	optional	optional	optional	optional	optional
heavy duty pipe stop	optional	optional	-	-	
height adjustable base frame	optional	optional	optional	optional	
length (mm)	1400	3000	3500	3700	4000
width (mm)	1100	2300	2400	2800	3200
height (mm)	1900	1800	1800	1900	2200
weight (kgs)	3100	11000	12000	18000	21000

The Beaver SHW-serie is designed for pipes with wall thickness up to 40 or 45 mm. The SHW range covers diameter range from 2" to 56", starting with Beaver 16 SHW. With this range we are offering a suitable solution for

the industry. From the 24 SHW and bigger all machinery standard have an electrical clamping and electrical feeding system. You can discuss your bevel angle, we will advise which tooling set to use.

Beaver S-CNC: CNC pipe bevel machines

Beaver S-CNC	Beaver 8 S CNC	Beaver 16 S CNC	Beaver 24 S CNC
usage	stationary pipe beveling	stationary pipe beveling	stationary pipe beveling
clamping	prism	prism	prism
machining range	25-219 mm	60-426 mm	219-630 mm
maximum wall thickness	85 mm	85 mm	85 mm
feed range	200 mm	300 mm	300 mm
motor	400 volts/ 3 ph/ 5.5 KW	400 volts / 3 ph / 5.5 KW	400 volts / 3 ph / 9 KW
speeds in RPM, infinitely variable	50 - 300 rpm	40-200 rpm	30 - 125 rpm
controls	CNC controlled	CNC controlled	CNC controlled
beveling cycle	automatic	automatic	automatic
electrically controlled clamp	standard	standard	standard
electrically controlled feeding	standard	standard	standard
electrically controlled pipe stop.	standard	standard	standard
feeding	radial and axial	radial and axial	radial and axial
cooling pump	built-in	built-in	built-in
carbide cutting bits	yes	yes	yes
length (mm)	1900	2200	2600
width (mm)	1600	1700	2100
height (mm)	1550	1950	1950
weight (kgs)	2600	3800	5700

The Beaver S-CNC is a stationary CNC controlled pipe bevel machine that has some major advantages. One of these advantages is that pipes can be easily bevelled up to 85 mm wall thickness. Another key feature of these

machines is that with one cutting bit many different kinds of bevels can be created, because of its radial and axial feeding. The machine is very easy to operate because of the completely automatic beveling cycle.



Out of round pipes with smooth bevel

Our innovation is based on the Beaver S-serie, it is called the Inside Diameter tracking system, this tracking system follows the inner pipe by a spring loaded roller and beveling mechanism.

The I.D tracking system is designed to keep track on out of round pipes and the result is a perfect accurate bevel on the edge of the pipe, the tool holders are to

be set in the head of the I.D tracking system to get your required angles.

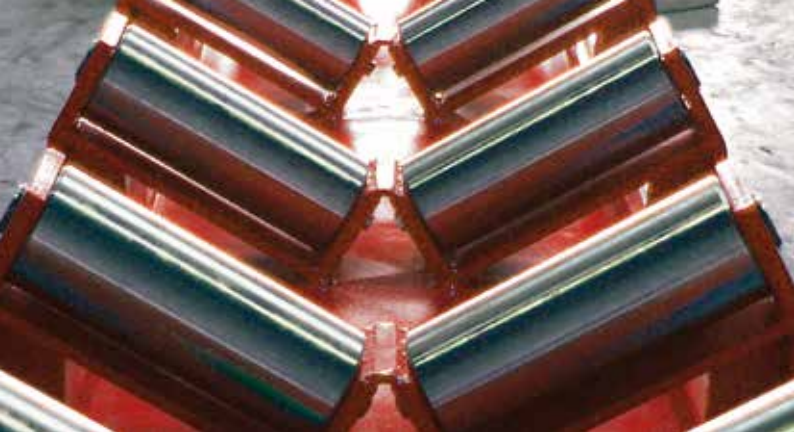
Tooling for beveling

Since beveling has become a serious business in several markets, also tooling for this machines has been developed.

However, due to the small amount of tool bits used, compared to other machining activities, the development of tooling for beveling still is a very specialised job. Therefore Copier has decided to pay special attention to tooling. Tooling in our believe is very important when

it comes to successful beveling. So far we have several tools for making a simple plain bevel, a compound bevel, a J prep bevel, a J prep compound bevel and for internal beveling. All required tooling for the machines we manufacture you could purchase from us:





“If you do business with Copier Bevelmachines, you are doing business with the inventors and manufacturers of your machine.”

Our pipe beveling machines are tested and continuously developed based on the latest needs and wishes of our end users. This results in a high score on the following essential aspects of our pipe beveling machines:

1. The high stability causes that the machine has excellent cutting abilities
2. The high stability causes that tool life will be longer
3. The high stability causes higher accuracy on the dimensions of the fusion edge
4. The good cutting abilities in combination with the developed tooling causes that installed power is used very effectively
5. All above results in high machining capacity and thus short machining time.
6. With the self-centering clamp and the easily adjustable tools, the adjustment time is very short
7. Maintenance on the machine is little, which means low maintenance costs

8. Our machines are modular build and can be equipped simply with extra options.

Doing business with the manufacturer

If you do business with Copier, you are doing business with the inventors and builders of your machine. That means you have direct access to our know-how and can rely on us if you have any questions or problems. Doing business directly with the builder naturally also means you pay the lowest price.

Special requirements?

We would be more than happy to help you out!

Does a machine from our range not fully meet your requirements? Perhaps your work processes are slightly different or maybe you have your own ideas? The engineers at Copier love these challenges. We will be delighted to surprise you with a design that fully meets your wishes.



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