

### Leading through automation

Fully automatic work flows are indispensable to modern production. Besides high accuracy for positioning and repeatability, Extend series automatic saws offer simple, uncomplicated operation that allows even the smallest lot sizes to be run efficiently and completely automatically.

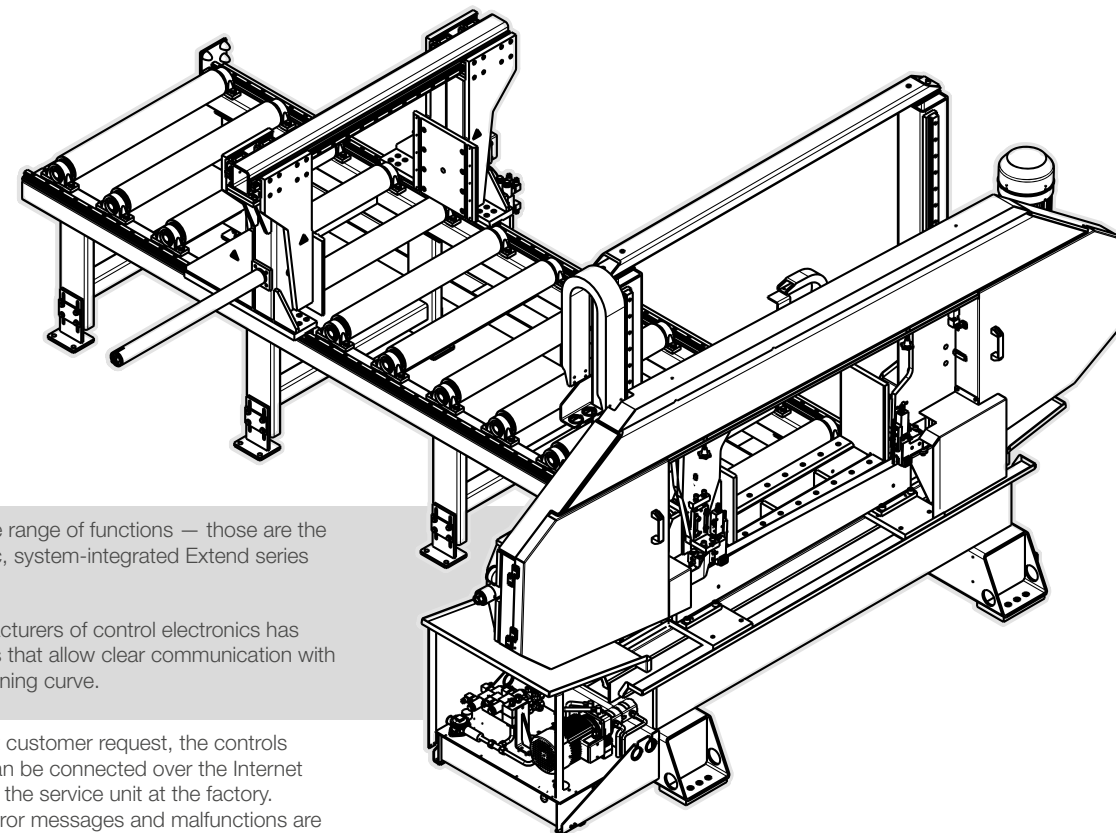


### Technical Parameters

Feed length	max. Cutting length	Positioning accuracy	Repetition accuracy	Processing speed
1500mm/3000mm	6500 mm	± 0,1 mm	± 0,1 mm	20 m./min



As standard modules, feed lengths of 1500 mm and 3000 mm are available. The feed is mounted on linear guides that are adjusted without play. It moves electrically over a gear rack and a pre-stressed sprocket and is positioned with a linear measuring system over the entire length of the feed.



### Futuristic control technology

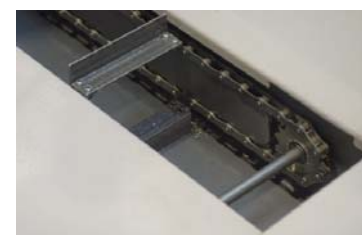
Clear, simple operation, without limiting the range of functions — those are the attributes of the controls used in automatic, system-integrated Extend series machines.

Close collaboration with renowned manufacturers of control electronics has given rise to innovative operational designs that allow clear communication with the operator and the shortest possible learning curve.



At customer request, the controls can be connected over the Internet to the service unit at the factory. Error messages and malfunctions are promptly evaluated and downtimes considerably reduced.

### Intelligent option for Customization



#### Swarf conveyor

A high-performance grabbing conveyor dimensioned to ensure a sufficient capacity for swarf disposal at the maximum cutting power.



#### Bundle clamping device

Cutting in layers and bundles increases productivity, i.e. the saw utilisation. The main vice and material feeding vice are equipped with vertical clamping units.



#### Clamping pressure regulation

A regulation screw is used to adjust the clamping pressure, and the maximum clamping force is shown on a manometer.



#### LaserLiner

The laser projects the exact path of the saw band on the material.



#### Bundle tensioning device

With an easily adjusted hydraulic cylinder, the bundle of material is tightened vertically..



#### Rinsing pistol for shavings

With its own efficient pump for rinsing accumulated shavings from support surfaces.



#### Micro-Spray-System

A micro-spray unit applies a lubricating film on tips of teeth and feedings of band-saw blades for ideal sawing of tubing and profiles.



#### 3. Cooling agent supply

For extra wide materials, a third coolant supply is installed. The coolant supply is flexible and may be adjusted individually to the material shape.



#### Tenzomat

A precise measuring tool for monitoring the saw band tension when applying new saw bands.



#### Connection parts

Suitable connection parts are available for the roll conveyor system of each machine version.



### securflex® Safety with the system

Personnel are the most valuable part of every business and must be protected in compliance with current safety criteria. The SECURFLEX safety system allows every device to be secured individually, depending on the environment and requirements. Besides grids, doors and maintenance elements, the system offers a laser light lock system ensuring extensive safety, especially in the area of material feeding and removal of the cutting line. The device securing is divided into individual safety circuits to prevent interruption of the operation of other sections.



EXTEND



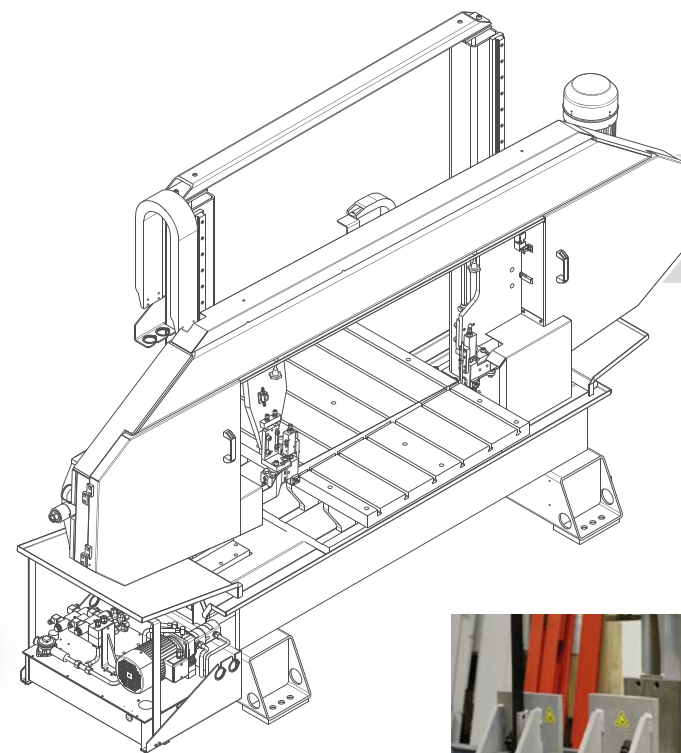
### A can-do basis for a machine series

The basic principle of the Extend series of large machines is increased production through customization of the machines to the needs of the customer.

Thanks to a modular design with numerous configuration possibilities, coupled with heavy, reliable design, there is an Extend machine for every need.

### Customization options

- Clamping devices
- Cutting sizes
- Shifting devices
- Saw band height
- Drive power
- Feed systems

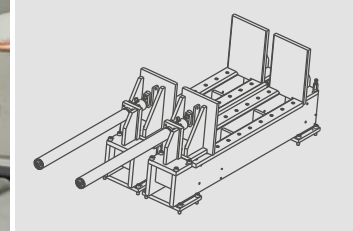


### Productivity through individual solutions

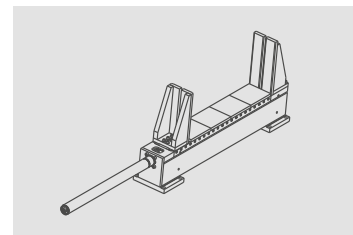
With the Extend series' many capabilities, adjusting the material tension on the work piece is no challenge at all. Individual clamping configurations can be put together from existing components without the cost of special designs.



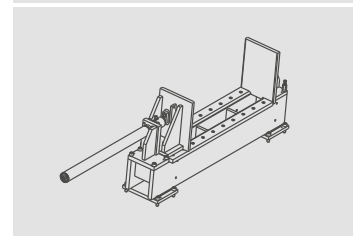
T-grooved clamping plate for free tensioning.



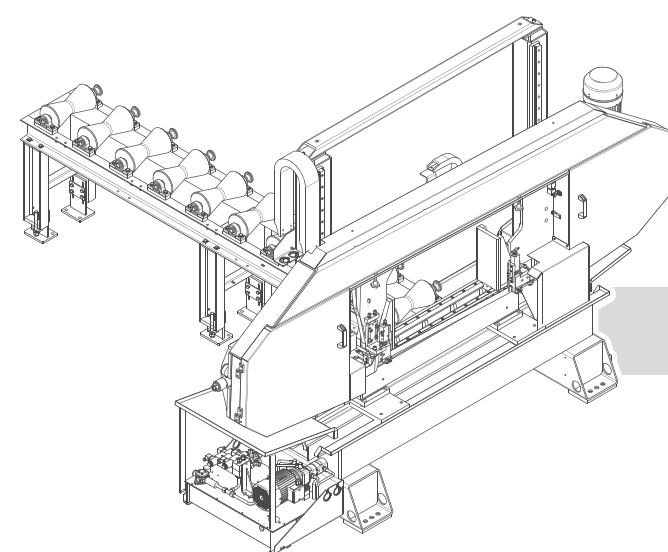
Double clamping device with a separately movable full-lift cylinder before and after the saw blade.



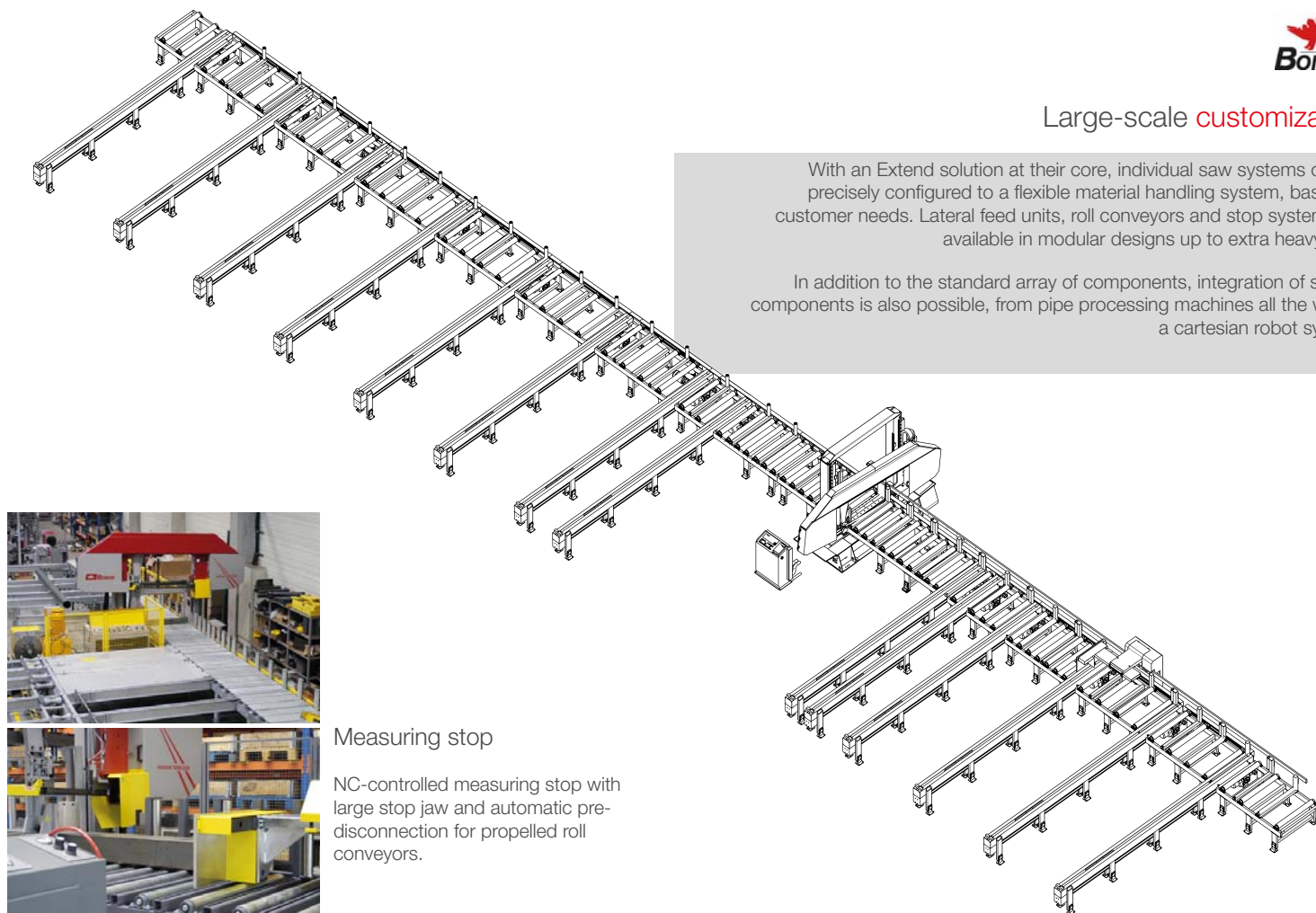
Divided clamping device with hardened inlays and a full-lift cylinder for tensioning before and after the saw blade.



Simple clamping device with hydraulic full-lift cylinder before the saw blade.



Centrally closing clamping device with prism roll conveyor



### Large-scale customization

With an Extend solution at their core, individual saw systems can be precisely configured to a flexible material handling system, based on customer needs. Lateral feed units, roll conveyors and stop systems are available in modular designs up to extra heavy duty.

In addition to the standard array of components, integration of special components is also possible, from pipe processing machines all the way to a cartesian robot system.



Measuring stop

NC-controlled measuring stop with large stop jaw and automatic pre-disconnection for propelled roll conveyors.



Pipe machining

Fully automatic stop for sawing pipes up to cutting lengths of 10m. and integrated hydraulic end expansion.



Roll conveyors

NC-controlled measuring stop with large stop jaw and automatic pre-disconnection for propelled roll conveyors.



### Incomparable flexibility at basic parameters

									Saw Band Size	Saw Band Speed	Driving engine Output	Weight
Extend 520	0°	520	700x520	700x520	520	400	400	700x520	6640x41x1,3mm	15-90 m/min	4 kW	5 100 kg
Extend 620	0°	620	800x620	620x620	620	400	400	800x620	7300x41x1,3mm	15-90 m/min	4 kW	5 500 kg
Extend 720	0°	720	900x720	900x720	720	550	550	900x720	8560x54x1,6mm	15-90 m/min	5,5 kW	6 000 kg
Extend 820	0°	820	1000x820	1000x820	820	550	550	1000x820	9280x54(67)x1,6mm	15-90 m/min	7,5 kW	7 500 kg
Extend 1120	0°	1120	1120x1120	-	1120	-	-	-	11120x67x1,6mm	15-90 m/min	11 kW	12 500 kg
Extend 1320	0°	1320	1320x1320	1320x1320	1320	700	700	1000x800	12150x67x1,6mm	15-90 m/min	11 kW	14 900 kg
Extend 1520	0°	1520	1520x1520	-	1520	-	-	-	11760x67x1,6mm	15-90 m/min	11 kW	
Extend 1820	0°	1820	2020x1820	-	1820	-	-	-	11200x80x1,6mm	15-90 m/min	18,5 kW	17 500 kg
Extend 2020	0°	2020	2020x2020	-	2020	-	-	-	13200x80x1,6mm	15-90 m/min	18,5 kW	17 500 kg

### Full equipment is standard



Extend machines offer an incomparable range of basic standard equipment.



Highly precise carbide saw band guides, with acute sensors for automatic adjustment of cutting pressure on both guide arms, guarantee precise saw cuts and the longest possible blade life.



The simple, clear interface on the freely positionable control panel is equipped with a lighted, multi-line display and gives the operator status reports in plain text.



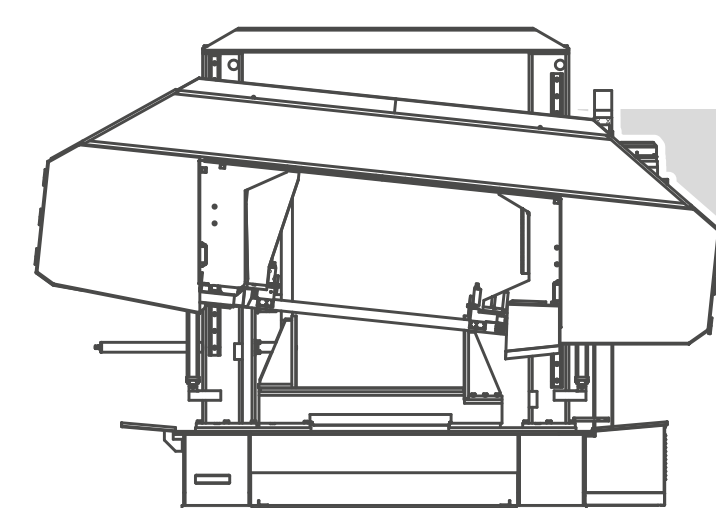
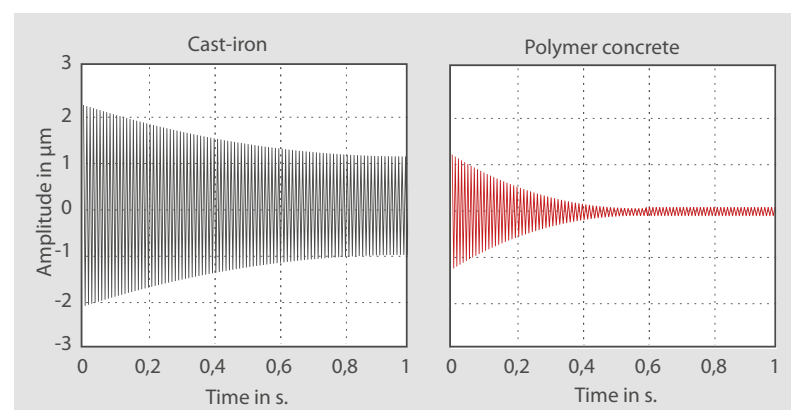
Inconspicuous but innovative details round out the Extend series' standard equipment. These include a custom-adjustable material removal slide and a hydraulic band tension display.

### Polymer concrete – reduced vibrations

Low-vibration saw cuts mean precision and long life. Polymer concrete offers the ideal damping characteristics for use in saw machines.

On all Extend machines, the support, saw frames and columns are filled with a specially developed polymer concrete mixture.

Coupled with pre-stressed, play-free, generously dimensioned linear guides, polymer concrete technology provides virtually vibration-free saw cuts with high cutting performance far above 100 cm<sup>2</sup> per minute with M42 bimetal saw bands.



### Tailor-made from the series

The ideal slope setting of the saw frame to the horizontal clamping surface depends on the shape of the material, and on the designated sawing process. The Extend series' machine design allows this parameter to be set individually.

#### 0° Slope

For processing solid material and as a standard when using sliding tables with swivelling saw band guides for horizontal cuts

#### 2° Slope

For universal use of the saw machine, an ideal compromise between the 0° and 6° slopes.

#### 6° Slope

When profiles and carriers are separated, the cutting channel in the horizontal area of the material is held for a very short time. It is thus possible to use a finer saw band, and this considerably improves the cutting feed and precision.

