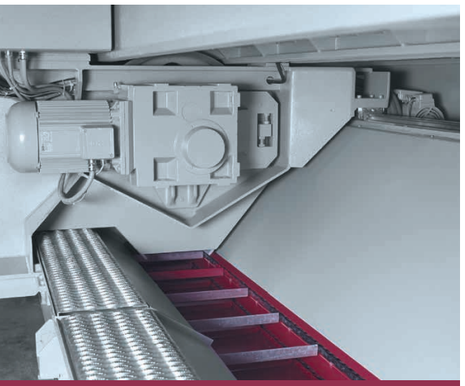
BEHRINGER

Plate and Block Bandsaws

LPS-T / LPS semi-automatic machines / LPS automatic machines

LPS series plate and block bandsaws: precision for perfect longitudinal cuts

A comprehensive machine program for economical production of solid ingots and plates.



Servo feeding system

Greater output through constant chip load

The BEHRINGER servo feeding system ensures constant chip removal and makes better use of the capabilities of modern bandsaw blades.

The rapid response of the servo feeding system to the sensors for the cutting pressure regulation systematically prevents overloading and premature wear of the bandsaw blades.

- Higher cutting performance
- Longer blade life
- Low-vibration cuts
- Constant chip removal

Vertical performance
Whether you need to cut from a block, cut several plates in position or carry out notching work – you will find the right machine for your needs in BEHRINGER's LPS series of plate and block bandsaws. From the compact LPS-T vertical bandsawing machine with moveable material support table for separating large residual pieces and notching work, the most robust block bandsaws through to fully automatic sawing cells for trimming and automatic sawing of sheets and plates.

The operating concept with vertical arrangement of the bandsaw blade means that users are guaranteed flexibility when setting up the workpiece and precision when sawing long plates.

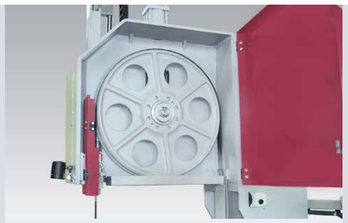
For every requirement
Thanks to the use of bi-metal or carbide bandsaw blades, all grades of material, from aluminium to the most difficult-to-machine materials, such as Inconel or titanium, can be cut with high cutting performance.

The LPS plate and block bandsaws from BEHRINGER offer efficient solutions for all applications. They have proven success in the steel trade and in steelmaking industries as well as in toolbuilding and mould making.

BEHRINGER LPS20-120-6

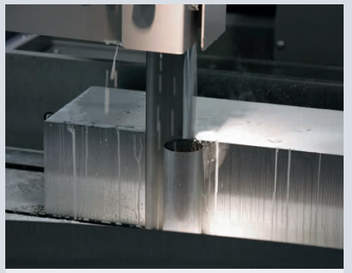
Quick bandsaw blade change

Quick and easy – tool-free bandsaw blade changes mean set-up times are almost non-existent. Just a few simple steps are all that is needed to change the bandsaw blade.



Blade-guiding parts made of grey cast iron

Blade-guiding parts made by BEHRINGER ensure vibration dampening directly at the cutting point, thereby increasing tool life. Cast in our own foundry using decades of experience.



Unsurpassed precision

The high cutting accuracy, quiet running and long blade life are all down to the special torsion resistant design of the saw frame. In comparison to plate and block bandsaw machines from other manufacturers, the force for the saw feed is applied directly beneath the cutting point, which results in feed movements that are considerably more accurate.

Perfect blade guidance and chip removal

The hydraulically pre-tensioned carbide band guides with damping rollers are arranged close to the cutting point. The upper blade guide is designed to be adjustable for different plate thicknesses. This ensures that the bandsaw blade is always guided close to the cutting point by the blade guides. The driven duplex chip brushes actively clean the blade and prevent chips from being drawn into the cutting channel. The brushes are automatically adjusted to the saw blade and ensure consistent cleaning performance. The benefit resulting in longer blade life and lower brush wear.

Intelligent control

Powerful, clear and intuitive operation – the new BT65 touch control will revolutionize work with the BEHRINGER sawing machines. It provides all the key parameters at a glance and forms the basis for numerous convenience functions such as our Auto-Feed-Control which calculates the cutting values based on the selected material and dynamically adapts them to the sawing process.

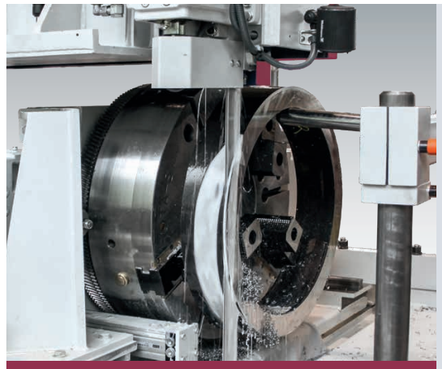
LPS-T vertical bandsawing machine

The compact vertical bandsawing machine – ideal for tool making and sample cuts.

As flexible as your needs
With its moveable support table, the easy-to-use LPS-T vertical bandsawing machine is the all-rounder when it comes to sawing small, compact parts and short sections – i.e. those typically needed in toolmaking. Sample cuts and notching work on difficult-to-machine material are also part of its repertoire. What is more: due to the compact dimensions the LPS-T can also be set up in areas with limited space.

Precision and speed
The LPS-T ensures precision, speedy operation, even for difficult-to-cut materials, thanks to its robust construction and vibration-damping grey cast iron components.

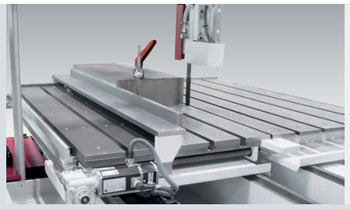
BEHRINGER LPS-T



A special solution: the ring saw

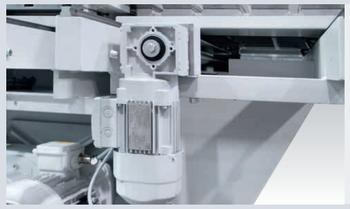
The ring saw, based on the LPS-T, enables forged rings to be cut, for manufacturing roller bearings, for example. Very narrow tolerances are achieved by rotating the workpiece during sawing. The machine is extremely easy to set up thanks to the chuck used.

- **Higher cutting performance**
- **Longer blade life**
- **Low-vibration cut**
- **Constant chip removal**



NC measuring unit

The LPS-T can be equipped with an optional NC-controlled measuring unit. The cutting depth is digitally pre-programmed in the control system. When placing down the material to be cut, it can be easily aligned with the measuring device and then securely clamped. This considerably speeds up the setup process.



Positioning and control

The table is positioned and the saw feed controlled via servo drive with ball screw spindle together with the sensitive BEHRINGER cutting pressure regulation.

PLC control system

The control panel can be flexibly pivoted. Infinitely variable adjustment of all sawing parameters, such as cutting speed and feed, in the clear touch control system. The cutting length can also be digitally pre-programmed for notching work.

Chip conveyor

A generously sized chip conveyor with integrated coolant tank is located under the saw unit, directly in the chip flow direction. Any chips and coolant are collected here and separated. The conveyor can be moved out of the machine frame for cleaning and maintenance.

Technical Data LPS-T

Model		LPS-T
Cutting height	[mm]	600
Cutting width	[mm]	620
Cutting length	[mm]	1.270
Saw feed rate	[mm/min]	1 - 200
Rapid positioning speed	[mm/min]	1.800
Saw drive	[kW]	4
Blade speed	[m/min]	17 - 120

Typ		LPS-T
Saw blade dimensions	[mm]	5730 x 41 (54) x 1,3
Max. table load	[kg]	2.000
Material support height	[mm]	1.150
Length	[mm]	2.900
Width	[mm]	2.750
Height	[mm]	3.120
Weight	[kg]	3.200

The “small” semi-automatic machines: Compact machines for flexible applications

The most economical combination of high cutting capacity and easy material handling

As flexible as your needs
The compact 2-wheel block and plate bandsaws from BEHRINGER are robust, offer flexible use, and are space-saving. Excellent access makes setup significantly easier. All workpieces are within reach on the table. There is no need to climb onto the table to set up the machine.

Big on performance
Despite their compact size, the 2-wheel block and plate bandsaws are as powerful as the “big” ones. The standard servo feeding system, the stable saw frame and the high-torque drives offer the ultimate in machining performance and cutting accuracy.

Application-specific table versions

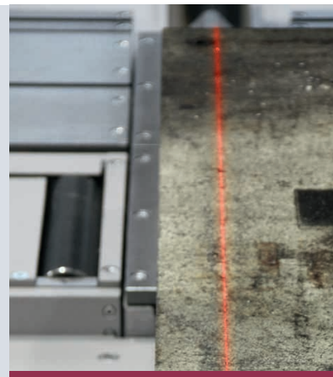
Unique modular construction for more individuality

LPS bandsaws can be adapted to suit your exact requirements. The material support table has a modular construction and can be equipped with a variety of the following items with a spacing pattern of 250 mm

- Cover plates
- Roller conveyor segments which can be raised
- Openings for crane loading with chain or forklift loading
- Measurement and clamping deices
- Clamping magnets

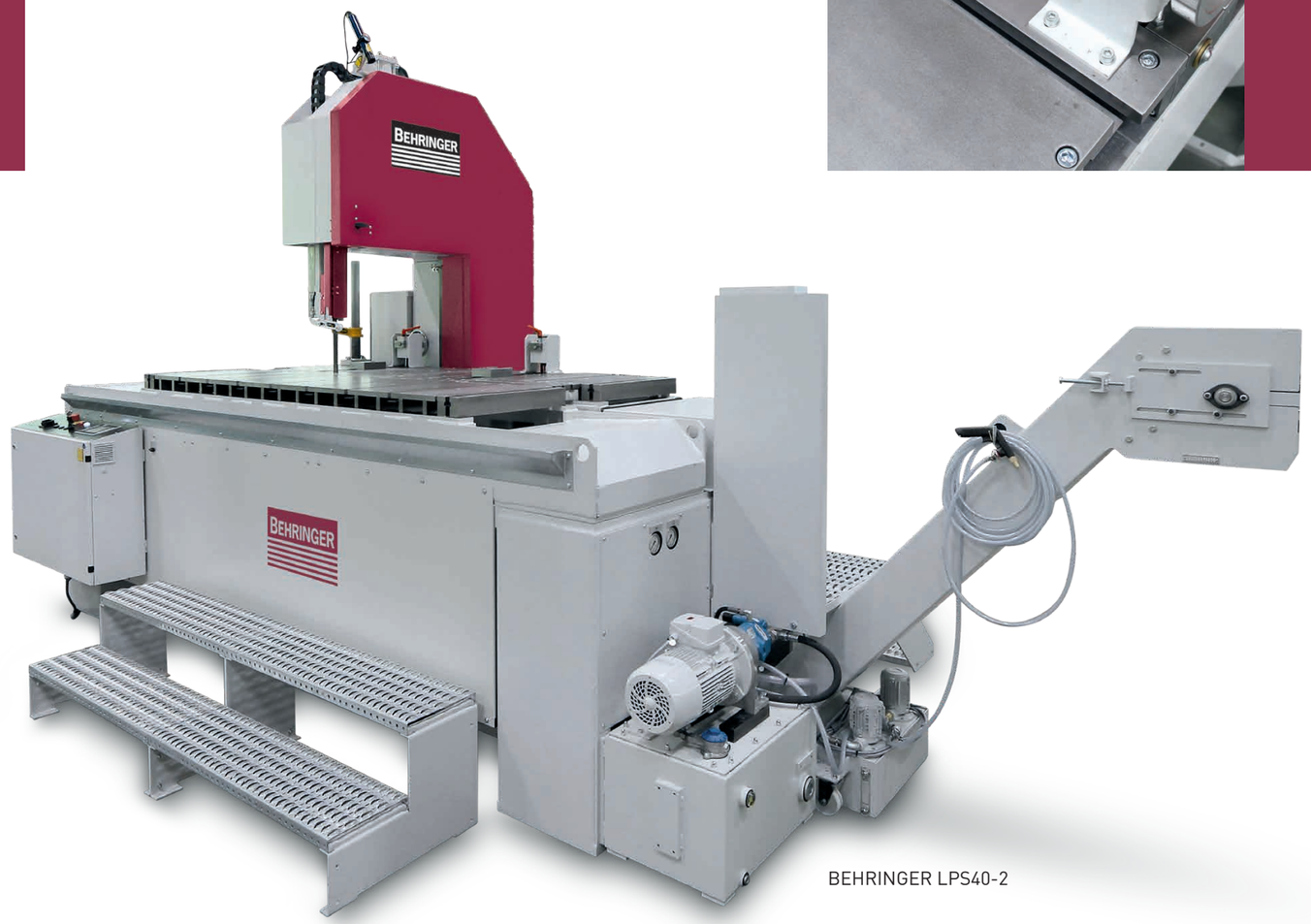
Effective chip disposal

If you want to carry out high-performance machining, you also need to think about the chip disposal. BEHRINGER LPS bandsaws offer a solution that is as powerful as it is convenient. A generously sized chip conveyor with integrated coolant tank is located under the saw unit, directly in the chip flow direction. Any chips and coolant are collected here and separated. The conveyor is equipped with rollers and can be moved out of the machine frame for cleaning and maintenance. A highly efficient chip brushing system cleans any chips that have adhered to the bandsaw blade. The brushes are self-adjusting and clean adhered chips out of the gullet.



Optional line laser

An optional line laser is available which acts as a guiding line when aligning the workpiece.



BEHRINGER LPS40-2

Technical data for semi-automatic machines (2-wheel)

Model		LPS40-2	LPS40-3	LPS40-4	LPS40-6	LPS60-2	LPS60-3	LPS60-4
Cutting height	[mm]	400	400	400	400	600	600	600
Cutting width	[mm]	680	680	680	680	680	680	680
Cutting length	[mm]	2.000	3.000	4.000	6.000	2.000	3.000	4.000
Saw drive	[kW]	5,5	5,5	5,5	5,5	5,5	5,5	5,5
Blade speed	[m/min]	17-120	17-120	17-120	17-120	17-120	17-120	17-120
Saw blade dimensions	[mm]	5.400 x 41 x 1,3	5.400 x 41 x 1,3	5.400 x 41 x 1,3	5.800 x 41 x 1,3	5.800 x 54 x 1,3	5.800 x 54 x 1,3	5.800 x 54 x 1,3
Material support height	[mm]	1.385	1.385	1.385	1.585	1.385	1.385	1.385
Inner table:								
Support area	[mm]	680 x 2.000	680 x 3.000	680 x 4.000	680 x 6.000	680 x 2.000	680 x 3.000	680 x 4.000
Max. table load	[kg]	5.000	6.500	7.500	10.000	6.500	8.500	10.000
Outside table:								
Support area	[mm]	680 x 2.000	680 x 3.000	680 x 4.000	680 x 6.000	680 x 2.000	680 x 3.000	680 x 4.000
Max. table load	[kg]	6.000	8.000	9.500	12.000	8.000	10.000	12.000
Dimensions:								
Length	[mm]	4.450	5.450	6.450	8.450	4.450	5.450	6.450
Width	[mm]	2.350	2.350	2.350	2.350	2.350	2.350	2.350
Height	[mm]	2.870	2.870	2.870	3.070	3.070	3.070	3.070
Weight	[kg]	8.000	9.000	10.000	13.100	8.100	9.100	10.100

The semi-automatic machine: Sophisticated technology for more performance

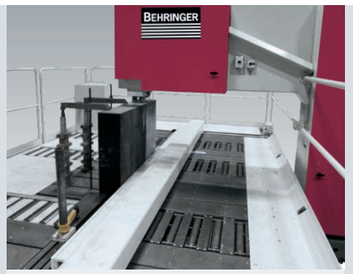
Impressive. Flexibility and cutting performance in a single machine.

A carefully designed machine concept
The longitudinal cutting method is a typical feature of the plate and block bandsaws from BEHRINGER. The workpiece remains firmly clamped to the material table while the saw unit moves. These machines impress with their flexibility and cutting performance and are ideal for sawing squares and machining allowance-based cutting of all block and plate sizes and thicknesses.

Simply robust
The robust construction with movable saw frame is durable thanks to the use of solid components. Table loads of up to 13 t on the inner table and 14 t on the outer table enable even heavier blocks to be machined. Cutting widths of up to 2,000 mm are accommodated thanks to the large working range of the saw frame and the blade guide via 3 running wheels.

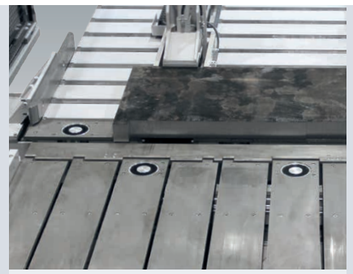
Lifting roller conveyor segments

Handling aid for large plates and the heaviest workpieces. The hydraulic lifting roller conveyor segments with drive make set up easy. These can be arranged on the inner table and on the outer table.



NC measuring unit

The large block and plate saws can be equipped with an extremely robust NC measuring unit. The cutting depth is digitally pre-programmed in the control system. When placing down the material to be cut, it can be easily aligned with the measuring device and then securely clamped. In this way, the measuring device guarantees accurate finished parts.



Magnetic clamping device

It is advisable to use a magnetic clamping device to clamp small workpieces. The holding magnets are hydraulically raised during setup, so that even deformed plates can be securely held in place.

Technical data for semi-automatic machines (3-wheel machines)

Model		LPS40-120-3 /4	LPS20-120-6	LPS80-120-3 /4	LPS60-120-6	LPS120-120-3 /4	LPS100-120-6
Cutting height	[mm]	400	200	800	600	1.200	1.000
Cutting width	[mm]	1.200	1.200	1.200	1.200	1.200	1.200
Cutting length	[mm]	3.000 / 4.000	6.000	3.000 / 4.000	6.000	3.000 / 4.000	6.000
Saw drive	[kW]	5,5	5,5	7,5	7,5	7,5	7,5
Blade speed	[m/min]	17-120	17-120	17-120	17-120	17-120	17-120
Saw blade dimensions	[mm]	7.200 x 41 x 1,3	7.200 x 41 x 1,3	7.750 x 54 x 1,6	7.750 x 54 x 1,6	8.400 x 54 x 1,6	8.400 x 54 x 1,6
Material support height	[mm]	1.385	1.585	1.385	1.585	1.385	1.585
Inner table:							
Support area	[mm]	1.200 x 3.000 / 1.200 x 4.000	1.200 x 6.000	1.200 x 3.000 / 1.200 x 4.000	1.200 x 6.000	1.200 x 3.000 / 1.200 x 4.000	1.200 x 6.000
Max. table load	[kg]	13.000	13.000	13.000	13.000	13.000	13.000
Outside table:							
Support area	[mm]	680 x 3.000 / 680 x 4.000	680 x 6.000	680 x 3.000 / 680 x 4.000	680 x 6.000	680 x 3.000 / 680 x 4.000	680 x 6.000
Max. table load	[kg]	10.000 / 14.000	14.000	10.000 / 14.000	14.000	10.000 / 14.000	14.000
Dimensions:							
Length	[mm]	6.750 / 7.750	9.750	6.750 / 7.750	8.750	6.750 / 7.750	9.750
Width	[mm]	3.600	3.600	3.600	3.600	3.600	3.600
Height	[mm]	3.450	3.450	3.850	3.520	4.250	4.250
Weight	[kg]	14.500 / 17.500	22.000	14.800 / 17.800	22.300	15.100 / 18.100	22.600

Model		LPS40-160-3 /4	LPS20-160-6	LPS80-160-3 /4	LPS60-160-6	LPS120-160-3 /4	LPS100-160-6
Cutting height	[mm]	400	200	800	600	1.200	1.000
Cutting width	[mm]	1.600	1.600	1.600	1.600	1.600	1.600
Cutting length	[mm]	3.000 / 4.000	6.000	3.000 / 4.000	6.000	3.000 / 4.000	6.000
Saw drive	[kW]	5,5	5,5	7,5	7,5	7,5	7,5
Blade speed	[m/min]	17-120	17-120	17-120	17-120	17-120	17-120
Saw blade dimensions	[mm]	8.260 x 41 x 1,3	8.260 x 41 x 1,3	8.400 x 54 x 1,6	8.400 x 54 x 1,6	9.400 x 54 x 1,6	9.400 x 54 x 1,6
Material support height	[mm]	1.385	1.585	1.385	1.585	1.385	1.585
Inner table:							
Support area	[mm]	1.600 x 3.000 1.600 x 4.000	1.600 x 6.000	1.600 x 3.000 / 1.600 x 4.000	1.600 x 6.000	1.600 x 3.000 / 1.600 x 4.000	1.600 x 6000
Max. table load	[kg]	13.000	13.000	13.000	13.000	13.000	13.000
Outside table:							
Support area	[mm]	680 x 3.000 / 680 x 4.000	680 x 6.000	680 x 3.000 / 680 x 4.000	680 x 6.000	680 x 3.000 / 680 x 4.000	680 x 6.000
Max. table load	[kg]	10.000 / 14.000	14.000	10.000 / 14.000	14.000	10.000 / 14.000	14.000
Dimensions:							
Length	[mm]	6.750 / 7.750	9.750	6.750 / 7.750	9.750	6.750 / 7.750	9.750
Width	[mm]	4.000	4.000	4.000	4.000	4.000	4.000
Height	[mm]	3.450	3.450	3.850	3.850	4.250	4.250
Weight	[kg]	15.500 / 19.500	25.500	16.000 / 20.000	26.000	16.500 / 20.500	26.500

Larger machines on request.

LPS automatic machines: An intelligent solution for the steel trade

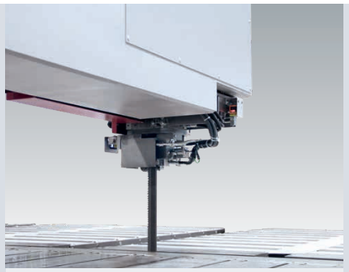
BEHRINGER's solution for fully-automatic plate cutting.

A powerful performer
The perfect combination of a stable base frame, moveable saw unit, moveable material grippers, a stable support table and unique PC control make the automatic vertical bandsawing machines from BEHRINGER the specialists in cutting hard-to-machine solid material.

Automatic sawing – longitudinal and/or crosswise
Automatic longitudinal cutting of plates or combined longitudinal and crosswise cutting with optional blade guide that can be rotated by 90° enable extremely efficient, low-personnel operation. There is no need for manual rotation of the plates. These are positioned automatically by means of servomotor-driven feed grippers.

The advantages at a glance

- High degree of automation
  - Reduced set-up time
  - Increased crane availability
  - Advantageous when sawing smaller batch sizes
  - Fully-automatic order processing
- Production of customer-specific dimensions
- Advantages when purchasing larger plates
- Optimization functions can be selected according to:
  - Cutting time
  - Waste (residual optimization)



Rotatable blade guide

The LPS automatic machines can be supplied with a blade guide that can be rotated by 90°. This enables the machine to be used for automatic longitudinal and crosswise cutting of plates.

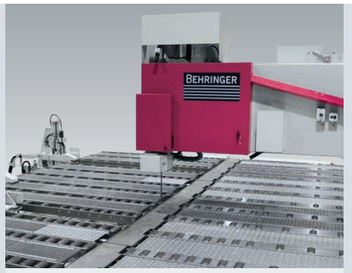
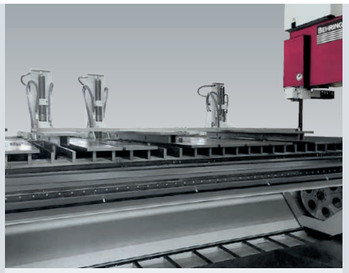


Table version with rollers on the inner table

The inner table can be supplied either with a closed table support or with rollers to make handling of large plates easier.

System control / plate editor

Benefit from intuitive system control with touchscreen. The jobs are entered into the plate editor and clearly displayed in the working area. The raw plate dimensions are measured fully automatically through standard plate contour detection.



Forklift loading

Hydraulic lifting devices can be added for loading the LPS automatic machines with a forklift truck. When extended, the fork rakes can be driven under the material. The material is then placed gently on the material table.

BEHRINGER LPS25-200-6A

Technical data for LPS automatic machines

Typ		LPS25-125-4A	LPS25-125-6A	LPS25-200-6A	LPS25-200-7A	LPS40-160-4A
Cutting height	[mm]	250	250	250	250	400
Cutting width	[mm]	1.250	1.250	2.000	2.000	1.600
Cutting length	[mm]	4.000	6.000	6.000	7.250	4.000
Saw drive	[kW]	5,5	5,5	5,5	5,5	5,5
Blade speed	[m/min]	17-120	17-120	17-120	17-120	17-120
Saw blade dimensions	[mm]	7.200 x 41 x 1,3	7.200 x 41 x 1,3	9.280 x 41 x 1,3	9280 x 41 x1,3	8.800 x 54 x 1,6
Material support height	[mm]	1.620	1.620	1.585	1.620	1.620
Inner table:						
Support area	[mm]	1.250 x 4.250	1.250 x 6.250	2.200 x 6.250	2.200 x 7.500	1.600 x 4.250
Max. table load	[kg]	7.500	10.000	10.000	10.000	7000
Outside table:						
Support area	[mm]	2.200 x 4.250	2.200 x 6.250	2.200 x 6.250	2.200 x 7.500	1.600 x 4.250
Max. table load	[kg]	10.000	15.000	15.000	15.000	7.000
Number of grippers		3	3	3	3	3
Hub Greifer	[mm]	2.250	2.250	2.250	2.250	1.600
Dimensions:						
Length	[mm]	7.150	9.750	10.250	11.500	8.250
Width	[mm]	5.550	5.550	7.500	7.500	7.000
Height	[mm]	3.600	3.600	3.600	3.600	3.850
Weight	[kg]	19.000	23.000	28.000	30.000	21.000

Larger machines on request.

BEHRINGER

The BEHRINGER range

- Straight-cutting bandsawing machines
- Mitre-cutting bandsawing machines
- Vertical bandsawing machines
- Large bandsawing machines
- Swing frame bandsawing machines
- Hacksaws
- Loading magazine and disposal equipment
- Complete system concepts

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