



Proven in use for
more than 30 years!

Log band saw



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GERMANY

We manufacture your
log band saw
at a
reasonable *price!*

www.zenz.de





Errors and omissions excepted.

All technical data and dimensions are provided without obligation.

At a

glance:

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THE roots of the *company*

Matthias Zenz, a direct ancestor of the current owner, bought the smithy in Lengmoos in 1857. Today's owner Christoph Zenz is the seventh generation to run the company.

In 2007, the company looked back on 150 years of history.

In addition to its activities as a blacksmith and agricultural machinery dealer, the Zenz company has always been involved in mechanical engineering.

For example, the great-grandfather of the current owner manufactured over 500 agricultural trailers. His grandfather Josef Zenz produced several agricultural devices, some of which were provided with utility model protection.

What is behind the names

Wimmer and Zenz?

The „blue“ saw has always been produced at the house of Zenz. The original version was designed by Bernhard Wimmer in 1996.

That is why the saw initially had the name „Wimmer“.

In cooperation with Zenz, the saw was constantly developed further.

Since Mr. Wimmer has not been involved in the development for many years, we decided to give our saw the name „ZENZ“.

Because „ZENZ“ offers the complete package for saw and saw blade care

- construction
- production
- distribution
- instruction
- spare parts
- service



The future is secured

In 2022 Josef Zenz handed over the company to his son Christoph Zenz.

Christoph and Josef Zenz now continue to run the company together as managing directors, with Josef Zenz now exclusively taking care of the log band saw sector.

Continuous further development

From 1990 to 1999 Zenz manufactured log band saws for a distribution company. From 1999 Zenz took over the production, sales and further development. Since this time, many innovations have been developed at

Zenz. The focus is on the production of stable, stationary and mobile log band saws. Especially special solutions, which ensure our customers the best working comfort and effectiveness, are our strength.

Service

... is very important to us. For this reason, we have a fully equipped service vehicle. In addition to the required tools, it also contains all common wear parts. Thus a complete service on site is possible.



Our *service* – guarantor *for* satisfied customers



Cast wheel grinding machine

With our specially developed cast wheel grinding machine, cast wheels can be ground at our facility in Lengmoos. Grinding is carried out by us with ball bearings and shafts installed. Ball bearings and seals do not have to be renewed. A real saving.



Saw blade care

Our customer service fitter is also a specialist in saw blade care. Since we have both our automatic sharpening machine and our roller bench on board, problems with the saw blades can be solved on site. Furthermore, our specialist can give you valuable tips.

Sharpening service

We can offer you a sharpening service with 25 years of experience. With the most modern machines, such as an automatic stelling machine, we can

deliver your saw blades again in a short time. A lively exchange of experience with our customers ensures optimal treatment of your saw blades.



Log band saw *from Zenz* - solution of all *problems!*

Our log band saws are designed for professional use.

Our customers include full-time sawyers and, above all, sawmills that use our log band saw as their main saw or as a heavy timber saw. From a simple standard saw to a complete saw line with log infeed and cut material removal, we design and produce a saw for you that is exactly tailored to your application.

Special designs and fully automatic systems are also possible.

Durability

All moving parts are equipped with wear bushings or plates. For you, this means that only these need to be replaced and no expensive machine parts. Many companies have been sawing with our log band saws for many years in continuous operation, i.e. approx. 8,000 hours per year and achieve a cutting capacity of up to 1,200 solid cubic meters per month.

Stability

There are no compromises for us here. Our base frame is welded. Our log band saws are designed from the ground up for the respective diameters. From the base frame with a standard stable beam to strong hydraulic components and a solid Zenz saw head with sufficiently large cast wheels and stable guides, all parts of the Zenz saw are matched to the respective passage.

Operational safety

We have succeeded in designing a precise, reliable log band saw without a lot of technical frippery. We use many standard parts in production and assembly. This means that spare parts can also be supplied on site. We have almost all spare parts in stock. These can be with you by overnight express the next morning. If you should need our help beyond that, our service is available to you at any time.

Practical orientation

Our design engineer Josef Schussmueller owns a Zenz log band saw himself and is therefore very practice-oriented.

*Log band saws
developed, designed and produced
by Zenz represent:*

Special equipment

Since the demands on log band saws are constantly growing and the operating conditions are becoming more and more diverse, we design our machines to meet individual customer requirements.

Blade care service

The best log band saw is of no use if the saw blades are not in good order. That is why we also offer a complete blade care service.

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Our customers - around the world-



Norway

This company is our representative in Norway. Jens Kristian Berglund works as a full-time sawyer with a mobile BN 110 S. Besides this activity he also sells forestry equipment.



Ethiopia

Our saws are also working in faraway Africa. Different types of wood are cut at two different locations. All work around the saw is done by hand. Therefore, many people are employed in these operations.



Sweden

Here, the saw operates on an old estate where farming, forestry, pig breeding and asparagus cultivation are also carried out. The property covers about 950 hectares, consisting of farmland and productive forest. In 2012, the owner bought a Zenz saw, which he uses to cut his own wood, but also offers contract cutting.



Romania

This company produces high quality chairs for hotels and restaurants. Since it has always been a problem to get the sawn wood for this in sufficient quality, the company decided to buy a Zenz saw type Z 160 S with full equipment. This includes all possible hydraulic components, brush, longitudinal and cross cutter and much more. Besides a PLC with Profiline control and full automation, we also supplied the complete mechanization. Log infeed and cuttings removal, both to the side and to the rear.



Mexico

This operation near Guadalajara was completely rebuilt. The core machine is a Zenz BN 110 S saw. This works with our remote system. This means that the cut material is pushed off when the saw head returns and is conveyed onto a roller conveyor with adjustable height. The operator has the option of pushing the material off to the right or left. It is then fed to the downstream machines via roller conveyors. The logs are fed hydraulically.



Tribale, Germany

„In 2001 I decided to venture into self-employment. Since I always enjoyed working with wood as a master carpenter, it was obvious to become active in this field. That’s why I bought a mobile saw from the Zenz company. Very soon the order books were full. After the work became more and more and also the customers more fastidious, it was 2006 at the time to acquire a more modern saw. On the

one hand, I had a more powerful and more extensive hydraulic system installed, and on the other hand, the saw was equipped with a luxury cabin. This cabin is hydraulically height-adjustable to ensure an optimal view of the log. Of course, it is also equipped with a heater to make working more comfortable even in bad weather and in winter. The diameters of the logs to be sawn by my customers became

larger and larger. That’s why in 2018 I bought the Z 140 type saw. The cutting width here is 125 cm. I was lucky to find an employee, so I kept my old saw (BN 110 S) and we now cut with two saws. One of them is mainly in my lumberyard, but more and more often we are mobile with both saws. I am very satisfied that I took the step into self-employment and chose Zenz saws from the very beginning.“



Solling-Holz, Germany

„We used to work with a narrow band saw and a gang saw. However, in order to achieve more clearance and cutting quality we switched to wide band technology. After making first contact with Zenz at Ligna 2019, we were subsequently able to visit several Zenz reference customers. We were convinced by the possibilities of the Zenz saw. The following winter, we built a new saw hall. Already in May 2020, the Z 160 S was assembled and put into operation. Whether construction timber, facade boards or knot-free larch boards for sauna bucket production: with the log band saw, we can now meet the most diverse customer requirements. Surface and sawing course are just right. The Z 160 S has a band saw width of 130 mm. Together with the large roller diameter of 1000 mm, this ensures high cutting quality and stability. For our special cutting requirements, the two longitudinal cutters help, which can slit the board material lengthwise, but also trim the material directly in the line. The machine is easy to operate and very flexible. This allowed the new employee to quickly familiarize himself with his tasks.“

"Back in 2004, I bought a mobile saw from the Zenz company and worked with it as a sideline to my farming. This saw was simply equipped and also had no cabin. After the orders in the contract cutting became more and more and also the diameters became bigger and bigger, I decided to buy a saw of the type Z 160 S. To make the outdoor work more comfortable, the saw is equipped with a luxury cabin with heating. The saw head is turned 90° for transport,

which significantly improves the visibility to the rear during transport. improved. Since the machine is only allowed to have an overall length of 12 m during road transport, the saw is equipped with a hydraulically folding extension. Hydraulic support feet facilitate and accelerate the setting up of the saw. A central lubricant pump ensures optimum lubrication of cast wheels, saw blade, carriage and lifting chains. The saw head stops automatically at the end



of the machine. I also had a length measuring system installed that measures each log. This eliminates the need for this work during contract cutting."



Rumpler, Germany



Schwarz, Germany

"I worked as a sideline with a narrow band saw and became a professional contract sawyer when I bought my first Zenz saw in 2001. In 2011, I was faced with the decision to do something completely different or have Zenz build me a "Zenz-Schwarz" saw. I decided on the latter. Many hours the designer and the

production manager of Zenz and I sat together to realize my wishes, almost all of which could be realized. The crane was especially important to me. When working in sawmills, I can get by without additional support personnel. For private customers, I can spare my back, even if there is no forklift or tractor front loader available. The

many years of experience of the Zenz company, which was also able to benefit from my experience, was very noticeable. In this context, many useful things have also emerged, which the Zenz company today installs as standard in the saw (e.g. overstroke) or offers as accessories (e.g. board safety device)."

BN 110 S

- our
allround-saw

The saws are constantly being further developed. All technical data as well as dimensions and weights are therefore non-binding and depend on the respective equipment. We reserve the right to make changes.

Technical data:

- passage: 110 x 130 cm
- drive motor: 22 kW, optional 26 kW
- hoist motor: 2,2 kW electric
- feed motor: 1,5 kW electric with frequency converter
- hydraulic power unit: 3,0 kW - 16 l/min - tank capacity 10 liter
- cast steel wheels: 850 mm diameter
- saw blade: 6000 x 100 x 1,1 millimeter
- weight: 3.000 to 5.000 kg - depending on equipment
- cutting length: any length
- saw kerf: 2 millimeter
- length: depending on cutting length
- width: 2,55 meter
- height (saw head on top): 2,58 meter (2,98 meter)



Log band saw BN 110 S

Our all-round saw, ideally suited for almost all applications. All other types were also designed on the basis of this machine. This saw was first delivered in 1996. This means more than 25 years of experience. Since then, we have continuously improved the saw ourselves and based on suggestions from our customers. This has resulted in an absolutely „practical“ machine. However, the basic design has remained unchanged to this day. Almost 400 customers have already been convinced of the performance and quality of this saw.

universally applicable
both **stationary**
as well as **mobile**



Without effort

Good accessibility enables removal of the cut material without effort

Sophisticated

The saw head is fed by a rope drive on both sides. The large dimensioned running wheels are protected in the frame.



Optimal function

Despite the large throughput, the saw head is very compact built. The pre-cutter is mounted very short, which ensures optimal function.



Ergonomic workplace

An ergonomically designed workplace ensures fatigue-free and effective working.

Z 140 S

- extensive
accessories

The saws are constantly being further developed. All technical data as well as dimensions and weights are therefore non-binding and depend on the respective equipment. We reserve the right to make changes.

Technical data:

- passage: 140 x 160 cm
- depth of cut: 45 centimeters (space above saw blade)
- drive motor: 26 kW
- hoist motor: 2,2 kW electric without ancillary transmission
- feed motor: 1,5 kW electric with frequency converter
- hydraulic power unit: 3,0 kW - 16 l/min - tank capacity 10 liter
for frame 1150 millimeter: 4,0 kW - 21 l/min
- cast steel wheels: 850 mm diameter
- saw blade: 6600 x 110 x 1,1 millimeter
- weight: 4.000 to 6.000 kg - depending on equipment
- cutting length: any length
- saw kerf: 2 millimeter
- length: depending on cutting length
- width: 2,90 meter
- height (saw head on top): 2,95 meter (3,35 meter)



Log band saw Z 140 S

The Z 140 S was developed on the basis of our proven BN 110 S. By widening the saw head, the passage could be increased by 30 cm.

The base frame and hydraulics are available in the identical design as for the BN 110 S as well as in a wider version.

stable
& mobile



Stable

The top guiding principle of the saws. Since only very wide logs are sawn here, we have also designed the base frame to be correspondingly strong. As with the BN 110 S and the Z 160 S, the proven double-T beam base frame with an additional continuous beam is used here.

The Z 140 S can be mounted on frames with a width of 820 mm or 1150 mm. The saw head also has a correspondingly stable design.

for
predominantly thick
wood

Also possible as mobile version

Due to a rotatable saw head it is also possible to use the saw mobile.

For weight reasons, however, an air brake is necessary. When transporting with a tractor, an overrun brake up to 40 kmph is possible.



Z 160 S - the power pack

The saws are constantly being further developed. All technical data as well as dimensions and weights are therefore non-binding and depend on the respective equipment. We reserve the right to make changes.

Technical data:

- passage: 140 x 160 cm
- depth of cut: 53 centimeters (space above saw blade)
- drive motor: 36 kW
- hoist motor: 2,2 kW electric without ancillary transmission
- feed motor: 1,5 kW electric with frequency converter
- hydraulic power unit: 4,0 kW - 21 l/min - tank capacity 10 liter
- cast steel wheels: 1.000 mm diameter
- saw blade: 7155 x 130 x 1,2 millimeter
- weight: 5.000 to 12.000 kg - depending on equipment
- cutting length: any length
- saw kerf: 2,5 millimeter
- length: depending on cutting length
- width: 3,07 meter
- height (saw head on top): 2,85 meter (2,95 meter)



Log band saw Z 160 S

With a roller diameter of 1000 mm and a saw blade of 130 mm width, this saw is ideally suited for the highest demands in the heavy timber sector.

The passage of 140 x 160 cm and a cutting width of 125 cm speak for themselves. The cutting depth (space above saw blade) of 53 cm leaves nothing to be desired.

with this **saw** (almost) *everything* is *possible*

You want to ...

- separate the cut material in the middle?
- brush off top and bottom?
- automatically push off?
- separate rind and boards?
- place boards again in different boxes?

- no problem



The **board** is too **wide** for you? *- no problem*



longitudinal cutter



trimming

You want to cut **trees standing up**?



- no problem

You want **more length**?

- no problem

< 21 meter

30 meter >



The *centerpiece* - the *saw head*

Saw head

The saw head is characterized by the following features: It is set at an angle, which results in a softer cut and higher cutting performance. The slanted saw head was first supplied by us in 1996. The saw blade runs on cast iron wheels made of a special low-wear material, with diameters of 850 mm or 1000 mm, each of which is supported by double cylindrical roller bearings of large dimensions. Compared to gray cast iron, cast steel is characterized by a much longer service life. The solid square or rectangular tubes are precisely guided on a total of 16 brass plates. It is also possible to saw smaller logs with less pressure without the saw blade running, which further increases the service life of the saw blade.



Running carriage

The carriage is very stable and reinforced with knotted tubes at the top. Lateral pressure rollers on the base frame prevent the saw head from rocking in the upper cutting area. The carriage runs below the log bed on large rollers. The advantage of this is that rollers do not interfere with the log bed. The internal rollers are protected from dirt. In addition, the carriage does not run on a separate frame, but on the same frame as the logs. This ensures an exact and dimensionally accurate cutting pattern.



Height adjustment

The height adjustment is made by a gear motor and two roller chains, so that the carriage is guided evenly. Two ball bearings with wear rings at a wide distance from each other ensure precise guidance of the vertical carriage. In addition, the vertical carriage is fixed laterally with large adjustable guide pins. This enables stress-free running of the saw blade and a long service life. This allows absolutely exact positioning via a joystick on the operator's stand. Almost all Zenz saws are now equipped with electronic positioning control.

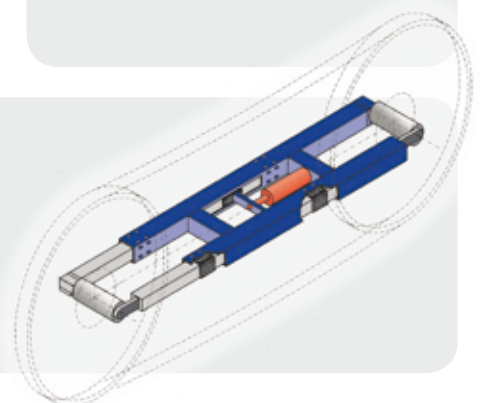


Feed

The feed is effected by a rope drive on both sides, which prevents jerking of the saw head during load changes. The stepless adjustment is achieved by using a frequency converter, the control is done by the same joystick as the one for the height adjustment. This means that the saw can be operated with one hand from a central operator station. For the feed, we offer some special features on request. Starting with the automatic feed and return over the foot switch up to the fully automatic.

Medium voltage

We have a real middle tension, which is not shifted upwards. This means that torsion due to oblique forces cannot occur at all. The tension is applied evenly on both sides via a frog.



Cast wheel care

The copper wipers are positioned so that sawdust immediately passes to the outside and does not fall onto the saw blade. Generously sized felt plates keep the cast wheel clean and distribute the lubricant evenly. Special baffles for the sawdust prevent turbulence. Thus, no sawdust remains in the guards. All copper wipers and felt pads operate by gravity. This prevents malfunctions in case of defective springs. The lubricant is automatically added by a solenoid valve when the main motor is started and can be precisely metered via a valve. A generously dimensioned reservoir saves frequent refilling. Pressure lubrication is also available on request.

Details
are important



Precutter

The roughing cutter removes a carbide-tipped circular saw blade to remove dirty bark and stones on the blade infeed side, thus considerably increasing the service life of the saw blade. It is attached directly to the main frame and has a short swivel arm, therefore it always maintains its exact position. The depth of cut can be adjusted for different types of wood. Spring suspension protects it from damage in case of incorrect operation. It is also possible to attach a precutter on the cutting side.

Control cabinet

The saw blade is driven by an electric brake motor. This has the advantage of being quiet, emission-free, durable and vibration-free. The large switch cabinet is easily accessible from the outside on mobile saws and yet protected on the base frame. A removable protective plate is available on request.



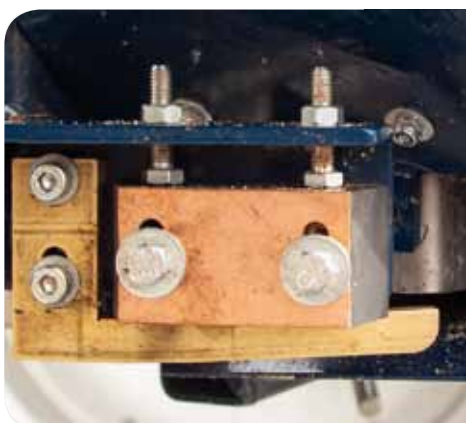
Board fuse

In case of tensioned wood, it may happen that the sawn timber shifts to the left side when coming out of the tree. To avoid this, a plank safety device can be installed. This is a hydraulically adjustable stop opposite the cutting side. This board safety device is particularly suitable for cutting roof battens.



Chip box

The chip box collects the sawdust and empties it after hydraulic operation at any place. With our PLC control, it is also possible to have automatic emptying.



Blade guide

The saw blade is precisely guided by two adjustable Chaco guides. The material of the blocks is very low-wear and has been used successfully in log band saws for decades. The guide itself is very stable and welded to the band guide arm, not bolted. This prevents the guide from becoming misaligned in the event of incorrect operation.

The band guide arm is guided on brass plates and tensioned with a prism, ensuring absolute precision of the guide.

A copper scraper serves as the first chip deflector. As a second chip deflector, another wear-free stainless steel scraper is mounted on the main frame. The blade guide adjustment is also available hydraulically.

Simple and comfortable operation

Easy and comfortable operation is important for the sawyer. This will result in higher performance. We offer several versions. The classic operation via a hand lever for the hydraulics and the joystick for the sawing operation. Since electric valves have the disadvantage that you cannot work sensitively enough with them, we developed our Profliner control together with hydraulic and electronic specialists a few years ago. Here we work exclusively with so-called „proportional valves“, which can be very finely dosed.



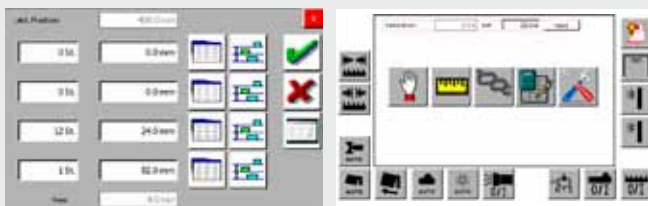
Zenz saw head control

With the joystick, the saw head of our log band saw can be moved in all four directions (forward-backward-up-down) by one-hand operation. We use a frequency converter for a stepless feed. This allows very fine control of the feed rate.



Positioning control

Almost all of our log band saws that we deliver are equipped with a positioning control for setting the desired cutting thickness. This works faster and more accurately than positioning the saw head by hand.



PLC

We use a control system with touch screen for our log band saws, which has proven itself for many years and can also be used in mobile applications without any problems. A mechanical ammeter is no longer required. All functions

are operated via the control. It is possible to store different measurements on demand, to store a customer memory and much more. The operator has all information on a central control panel. The control system can be set to the local language at the touch of a button.



Vertical support monitoring

If the vertical supports are higher than the saw blade, the feed is blocked to prevent cutting. A display on the screen informs the operator of this.



Fully automatic

Already in 2001, we equipped our log band saws with full automation. Especially for production companies, primarily for cutting lamellas, this increases productivity enormously. Furthermore, it is possible to get along with less operating personnel.



Swivel chair separately

PLC and joystick mounted on the armrests - (only in combination with PLC)

Automatic feed control

We first used this in our log band saws in 2001. With the automatic feed control, the feed speed is controlled by current consumption of the main motor.

Modem for remote maintenance

Especially with the individual equipment of the control systems, it may be necessary to make adjustments.

This can be done by installing a modem from the factory.

Thus, changes can be made quickly and at low cost.



Reverse via foot switch

Another instrument to make the operator's work easier and to increase performance is the return via a foot switch. After a cut has been completed and the saw head of the log band saw has been moved upwards, the operator can initiate the return motion via a foot switch. This leaves both hands free to deal with other things, such as programming a new dimension. Sensors in the frame are used to slow down the saw carriage and then also stop it. Hard hitting of the saw head against the stops is prevented.



Automatic chip box emptying

For many reasons, the operator may forget to empty the chip box. This results in the sawdust contaminating the cast wheels, which then leads to tooth scoring.

To prevent this, an automatic emptying system can be installed. The chip box is then automatically emptied at a point desired by the operator. The number of emptying cycles can also be set by the operator.

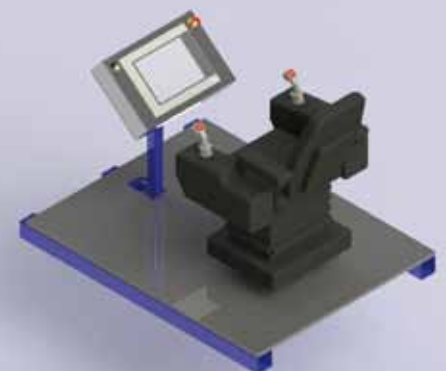
Profiline

- a completely revised
operating concept

The operating comfort of this saw is at the highest level, as is otherwise only known from large sawmills. Two joysticks, to which the operator can flexibly assign the various functions according to his requirements, enable optimum and thus efficient work sequences. By using proportional valves in the hydraulics, we achieve high speed in the movements and are still very sensitive at the decisive moment, so that high-quality cuttings can be handled with care.

- The hydraulic valves are located directly on the consumer. This enables a fast and direct response of the functions, even under extreme conditions.
- The hydraulic lines are optimized in cross-section, so all movements function at optimum speed with the lowest possible losses.
- The hydraulic pump only runs on demand. This results in energy savings of up to 50% on the hydraulics.
- A frequency converter controls the motor of the hydraulic pump and thus provides the optimum flow rate for all functions.
- All functions are freely programmable, so they can be individually adapted to the operator. If desired, several different (operator-specific) joystick assignments can be stored.
- The currently active joystick assignment is shown on the 15" display.
- Log handling or sawing operation can be carried out ergonomically via the same joysticks by simply switching over.

the
ADVANTAGES
of the **new**
control system



The right *widht*
for *every*
purpose

Base frame

Here we make no compromises. We manufacture our base frame exclusively with a continuous and solid beam. The base frame consists of a double-T beam and the saw carriage runs protected inside the double-T beam. Thus the log supports and the running rail of the saw carriage are together on one frame and an exact cut is guaranteed.

Stainless steel shafts on the solid cross beams prevent chips and bark from lying on the frame and prevent blue discoloration of oak. The base frame is made to any length according to the customer's requirements.



Electric box protection

Especially when working in other plants and loading with a forklift truck, it can happen that due to carelessness the electrical box is damaged. To prevent this, there is the possibility to mount a solid protection, which can be attached quickly and without tools.



Optimal accessibility

The beam is not laterally offset. As a result, the helper is closer to the log during board removal and can remove the cut material much more easily. It is also possible to move the energy chain to the other side, thus the helper is directly at the log.



Base frame 820

Our standard base frame with a support width of 820 mm can be installed on saw heads BN 110 S – Z 140 S.



Base frame 1150

In addition to the standard base frame with a support width of 820 mm, we can offer you a base frame with a support width of 1150 mm for the Z 140 S and Z 160 S. The corresponding hydraulic components are of course included. Of course, the associated hydraulic components are correspondingly wide and stable.



Mobile version

Due to the massive beam of the base frame, there is no need for tedious alignment of the saw. Eight mechanical screw supports ensure a stable hold, even if the ground is not ideal.

Also *mobile*
usable

Running axle

If it is necessary to move a stationary saw repeatedly within the company, we can offer a running axle with quick-release axles. The quick-release axles can be easily removed before operation and thus do not interfere with the workflow.



Extension

Since the year 2000, we have offered the possibility of a folding extension for the mobile version, which can be swiveled mechanically or hydraulically. The advantage is that the drive cables do not have to be changed and the set-up time is reduced. Of course, plug-in extensions are also offered.



Hydraulic support legs

On request, hydraulic support legs are available, which make the saw even faster to set up.



Air brake

Due to the stability of our saw and the wide range of equipment options, it is becoming more and more common for the Zenz saw to weigh over 3.5 tons. Therefore the installation of an air brake system is necessary.



Seat

It is possible to mount a simple seat or a comfort seat with armrest on the saw.



Drawbar

A height-adjustable drawbar is also available on request.

Hydraulics

Our hydraulics consist of proven components. The hydraulic cylinders have standard dimensions. Thus, sealing kits can also be procured on site. We use a special oil. This has a very high viscosity range. This means that even working at very low or high temperatures is no problem.



Hydraulic power unit

In the hydraulic power unit developed by us, all components such as drive motor, hydraulic pump, filter and tank are housed and thus protected. The hydraulic motor with 4 kW is a low-speed motor. This ensures a long service life of the pump. Our hydraulic pump does not have an aluminum housing, as is usually the case, but a cast housing that can withstand peak pressures of over 300 bar. Once again, operational reliability and durability were our top priorities.



Log turner

This allows the log to be both turned and clamped. Thanks to its solid construction, it can withstand even extreme loads. The lifting cylinder is internal and thus protected from damage. Replaceable wear bushings or plates are mounted on all moving parts. The log turner is mounted on a central crosshead and not laterally on the main frame. This protects the base frame. A heavier version with guide rollers is also available for the 1150 mm wide frame.



Log lifters

They are mounted on a solid shaft and are made in one piece without welds. A special design allows the installation of a double-acting cylinder. This eliminates the need for failure-prone return springs and ensures trouble-free rapid lowering even in extremely cold conditions. Removable lifting arms are also possible. This means that the lifting arms can also be offset for different timber lengths. The advantage of this method is that only the lifting arm and not the complete log lifter with support foot and cylinder has to be moved.

Vertical supports

They are necessary when setting up the lumber at right angles and as a stop. With a wall thickness of 8 mm, they can withstand even the greatest loads. They move in interchangeable guides made of special plastic. The angle of the vertical supports is adjustable. An integrated roller facilitates the turning of large logs. In conjunction with our PLC, the vertical supports can be protected against cutting in (vertical support monitoring).



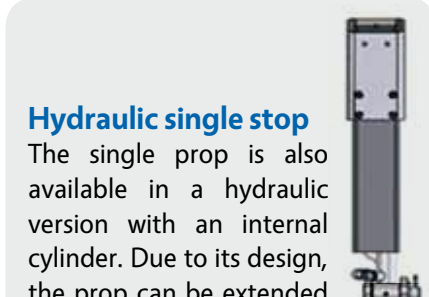
Claw protection

In order to protect the cut material, there are protective jaws. These can be mounted quickly and easily with a screw.



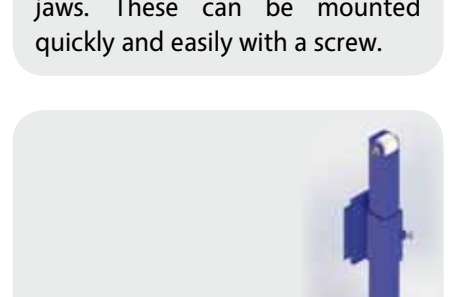
Ejector

Our ejectors are used to eject the finished product sideways. An additionally attached bracket, which extends over the main frame, ensures that the cut goods can be transported away without any problems. These are usually used in conjunction with our flap frame.



Hydraulic single stop

The single prop is also available in a hydraulic version with an internal cylinder. Due to its design, the prop can be extended higher than the normal vertical props. In addition, a sharpened plate placed on the top allows the support to be fixed and aligned on the left side of the log.



Hand stop for short logs

For cutting very short logs, a hand vertical support can be used. This is then placed upwards by hand as required.



Log roller

Moves the log forwards or backwards. This is necessary to position the log so that it rests on as many supports as possible and the hydraulic components can be used optimally. Similarly, the log rollers are hydraulically adjustable in height and can also be used for log alignment. Often the log rollers are also used to transport the finished cut stock to the rear (e.g. onto a roller conveyor).



Level compensation with claws

These are necessary in any case. On the one hand, the individually controllable leveling slides are used to level the log. The claws can also be used to clamp the log and, if necessary, to pull it down, which is very important in the case of high-tension wood in order to produce dimensionally accurate sawn goods. The claws are mechanically adjustable to the level blade. Hydraulic height adjustment is also available on request.

Powerful *helpers* for every *purpose*



Claws mechanical

It is often the case that the frame is built for a long cutting length. Rarely, however, the complete cutting length is needed. Here we offer mechanical claws, which can be pulled down by an eccentric. This is also useful for mobile saws in the folding extension.

Roller - without drive

- hydraulic height adjustable

- mechanical height adjustable

- loose reversible



Claw protection for level compensation

To protect the cut material, there are protective jaws for the claws. These can be mounted quickly and easily without tools.



Log holding arm

Particularly with short logs that cannot be gripped with two rotators, there is a risk that they will roll back when rotated. Here our log holding arm (half moon) helps.



Chain turner

This is one of our own constructions and also protected by a patent. The advantage of our chain rotator is its triple function. Turning with the chain, turning with the claws and clamping the log. Each arm is independently adjustable in its position. Thus, it can be optimally adapted to each log. It is also possible to use the chain turner to eject the cut log.

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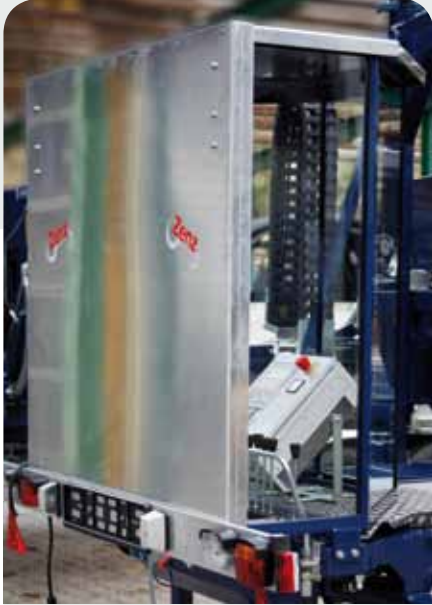
Chain turner with star

This is also a design from our company and the cheaper solution. Here, compared to the normal chain turner, the log is only turned with the chain. Due to the star at the end of the chain arm, it is not necessary to press the log against the vertical supports. Likewise, the star prevents the tree from rolling off the saw. This ensures optimal rotation, especially with large logs.

Additional equipment

Luxury cabin

This cabin is hydraulically height adjustable. This has the advantage that the sawyer does not have to stand up to have the kerf always at eye level. Completely enclosed with light, heating, sound and heat insulation, this cabin meets the highest demands. Integrated headlights and sunshade film are also available. The windshield wiper is installed as standard.



Weather protection cabin

For mobile saws, our weather protection cabins have proven their worth. These are very stable and do not have to be folded down for transport. The windows are made of safety glass and always remain clear. The saw does not get longer, because the closed lid closes with the machine end. In case of strong wind, the standard supplied tarpaulin can be hooked into the lid.

Another advantage is that the operator's eyes are protected from sawdust in headwinds. Likewise, the control system, joystick and control units are protected from both rain and vandalism.



Brush

In plants that take their cut material from the Zenz saw with vacuum lifters, it is

necessary to brush off the sawdust. This is also necessary for hardwood logs that are dried, otherwise the sawdust can cause stains. For this purpose we have developed a board brush that can be fed either by hand or automatically.



Handle heating

Cold hands are often a problem in winter. We can solve this by allowing warm hydraulic oil to flow through the control unit guard.



Hydraulic power unit on the carriage

An additional hydraulic unit with control valves on the Zenz saw head increases comfort. Since this is mounted directly on the saw head, there is no need to run hydraulic hoses in the energy chain. Each individual control unit is equipped with check valves. As a result, they are absolutely leak-proof. There is no need for a shut-off valve for the blade tension. Thus, all functions can be operated by a multifunction joystick: Saw head up – down, forward – back, positioning control, pre-cutter, hydraulic blade guide adjustment, board safety device.

Longitudinal and cross cutters

For users who cut a lot of thick wood, it may be necessary that the boards become too wide for the trimmer or for some other reason. This is where our longitudinal cutter comes in handy, allowing the boards to be split at any point. The longitudinal cutter can also be used as a cross cutter for cutting boards to length. To do this, it only has to be rotated by 90°. The PLC control ensures exact board length, which is done automatically.



The **perfect**
equipment
for **every** *purpose*



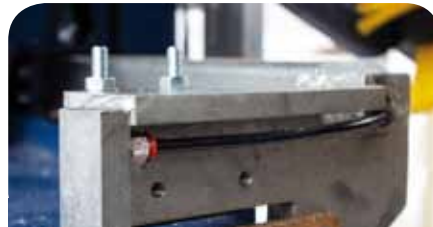
Lubricant pump

A lubricant pump instead of the normal lubrication has the advantage of eliminating

the need for drip oilers. The lubricant does not drip directly onto the cast wheel, but is distributed evenly over the entire width of the cast wheels by a felt, and also onto the outside of the saw blade. Furthermore, the rollers of the saw head are also lubricated. The dosage can be adjusted separately for each lubrication point.

Double longitudinal cutter

It is also possible to use 2 longitudinal cutters. The desired position and also the board width can be preselected at the operator's stand. This version is only possible for type Z 160 S.



Water lubrication

When sawing resinous wood such as larch, sawdust can sometimes stick to the tooth of the saw blade. As a result, a free cut is no longer possible and the saw blade runs. The saw blade and the cast wheels also become dirty, which can cause cracks. Water has always proven to be the best resin solvent. Spreading it over the entire width of the saw blade makes our water lubrication very effective. You can feed the water through a container or directly through a water tap. The PLC can be used to control whether the water lubrication should always be active when the saw blade is running, when it is moving back and forth, or only when sawing.

Vacuum holder

For customers who cut lamellas, we have designed a special saw bed with a vacuum holder for the log. This makes it possible to make the last cut at 8 mm (otherwise 24 mm). This vacuum holder is available in two versions. Once integrated in the Zenz saw frame or as a detachable unit.



Water lubrication with pump

For woods with a high and strongly adhesive resin content, normal admixing with water is not sufficient in some cases. For these cases we can offer you our water lubrication with pump. Here, the saw blade is sprayed with water by means of two nozzles (from below and above) by means of a pump. This makes it possible to loosen even stubborn resin adhesions.



Hydraulic blade guide adjustment

Particularly in the case of strong root starts, it is sometimes necessary to open the blade guide further at the end of the log. This can be done conveniently from the operator's stand.

Mechanization



Electric log feeder

For extremely heavy logs we recommend an electric log feeder. This is very stable and is driven by a gear motor. All drive wheels are connected by a shaft. Furthermore, the chain strands are also interconnected. The log feeder is operated from the saw.



Hydraulic log feeder

Individual chain strands with a standard length of 4.5 m bring the logs to the saw. There it is lifted onto the saw by the log lifters. The chain strands are driven by a hydraulic motor. Depending on the length of the logs, two or more feed conveyors can be used. An even pull is achieved by a flow divider. The log feeder is operated via the saw's control system.



Lateral sawn timber take-off

These take-offs can be used individually in any quantity and position. The take-off arm is swiveled to the saw and can pick up the cut material. A board retainer holds the cut material on the doffer. This board safety device serves as a board rest after the arm has been swiveled back. By mechanically folding down the take-off arms, this take-off can also be used as a wide deposit.



Remote system

With this system, the cut material is pushed off the log during the return trip. In order to compensate for the differences in height with each cut, we use a scissor table. This means that the roller table always automatically adjusts itself to saw blade height. Once the cut material has been picked up, the roller table lowers and the cut material can be transported on to the right or left. This system is often used in fully automatic operation.

The **perfect**
equipment
for **every** *purpose*



Roller conveyor with ejectors

Driven rollers transport the cut goods to the rear. A sensor in the rear stop activates the transverse chains. The cut goods are transported to the left or right.



Brush unit

Mainly for lamellas, but also for other boards, it is often necessary to brush them on both sides. A brush unit specially developed by us does this automatically on the way of the sawn timber from the saw to the roller table.



Lateral removal of sawn timber

After rind and side boards have been sawn, the sawyer folds down the flap frame. This is a continuous frame so that all lengths can be easily accommodated. Turning the log causes the cut stock to fall onto this frame. By lifting this frame, the cut stock is conveyed to various laydown options. This can be a normal deposit table, a roller conveyor loose or driven. It is also possible to subsequently mount a cross conveyor to obtain a larger buffer. This can be operated by the sawyer as well as by the operator who takes off the cut material.



Zenz - Sawing lines

Sawn timber take-off with cross conveyor

We manufactured a complete line for a pallet factory.

Since the customer had to cut almost exclusively large logs, we took as a basis a log band saw type Z 160 S with a wide base frame. Our heavy-duty log feeder ensures trouble-free feeding of the logs. After the log is cut, the operator can use our board remover to place the cut material on a cross conveyor from the operator's stand. This cross conveyor serves as a buffer.

For removal of the sawn timber by a forklift, the forklift operator can also operate the cross conveyor from the other side.



Cross-cut system

This customer produces short strips. The logs are lifted onto the saw by our log lifters as standard. After the rind and side board are cut, they are placed on the side of a roller conveyor by our trim removal system and fed to a trimmer. The main log is split into planks. These planks are completely turned by 90° with the log turner and can thus be sawn into slats. With the help of driven rollers the whole package is transported to the back and cut to length with a crosscut saw.

30 m cutting length with radio remote control

This customer produces plank floors from oak in room length. Since he is a lone worker and rarely has a helper, his main concern with the saw was to have only one man operating it. This is our largest and most technically sophisticated saw to date. A cutting width of 1.45 m and a length of 30 meters already give an idea of the dimensions in which we are moving here. The 30 meters were desired in order to be able to place several logs one after the other on the saw. The saw runs in fully automatic mode. After the first plank has been sawn, the sawyer can remove it from the log with a vacuum lifter attached to a gantry crane and stack it. Meanwhile, the saw continues to cut. This repeats from log to log and then starts over again. A brush ensures that the vacuum lifter works smoothly and the planks can be taken directly to the drying chamber.

Some highlights of the saw:

- Fully automatic
- Radio remote control combined with gantry crane.
- length 30 m
- cutting width 1.45 m
- laser indicates position of longitudinal cutters
- two longitudinal cutters on the saw head, adjustable among each other and laterally



Remote with scissor table

This saw has our so-called „remote system“. When the saw head returns, the previously cut board is pushed off. The following roller table is automatically adjusted to the saw blade height. Thus, the cut material can be pushed off the saw „straight“ at any time. During the next sawing operation, the roller conveyor positions itself downwards and the cut material (or slabs) can be pushed off either to the left or to the right. The operator’s cabin is positioned between the saw and the roller conveyor. This gives the saw operator a good overview of the saw and roller conveyor. In addition, the saw is equipped with a brush that removes the sawdust from the top of the cut material. Likewise, the saw is equipped with Profliner control and full automation. The additionally mounted longitudinal cutter can cut through wide boards at any point along their length for better further processing. A log feeder ensures an uninterrupted supply.



Remote with scissor table and brush unit

This company produces only lamellas. For him, the following combination is the most economical:

- Saw BN 110 S - „with remote system“
- Brush unit
- Roller table with scissor table and ejectors
- Roller conveyor with delivery table
- Fully automatic



Remote with conveyor belt

Our „remote system“ was also used here. Due to its special spatial conditions, we had to use an inclined conveyor belt here. The following roller conveyor had to be placed high. The lateral shear tables are positioned in each case in such a way that the operator only has to push the cut goods to the left or right. At the end, the pallet with the finished product must have a height of 120 cm.

Saw blade care

What good is the best machine if the tool is not in right condition?

Especially with the log band saw it is very important that the saw blades fit in all points, so that optimal performance is achieved and the saw blade has a long life. This saves real money.

Technical data

Sharpening machine and wet sharpening machine NSG 200 for band saw blades from

- width: 50 - 130 mm
- length: 5000 - 8000 mm
- thickness: 0,90 - 1,20 mm
- pitch: 15 - 45 mm
- breast angle: 0 – 25 °
- clearance angle: approx. 15 °
- Tooth form: R
- Feed rate: optional 70, 56, 47, 40 teeth per min (NSG 200 stepless)
- Other: feed pawl
return and blade support made of carbide
magnetic blade hold-down

All technical data and dimensions are non-binding. Subject to change without notice.



Sharpening

For the professional sawyer it is of great importance to have his own sharpening machine. We can offer you a dry sharpener and a wet sharpener. Unfortunately, very often people only pay attention to the price when purchasing. But with the automatic sharpening machine, absolute precision is required so that the grinding pattern is optimal. Experienced sawyers know that a lot can be broken here with a „cheap“ automatic sharpening machine.

As a result, the performance of the band saw is poor and the saw blades have a short service life. And very soon the price advantage of the less precise automatic sharpening machine is gone and becomes a real cost factor.



Wet sharpening machine NSG 200

We have designed the NSG 200 on the basis of the AHB type dry sharpening machine, which has proven itself for decades, in such a way that all operating elements are accessible both with the protective cover closed and with it open. The 200 mm grinding wheel is flanged directly onto the motor. This ensures smooth running and an excellent grinding pattern.

The grinding wheel speed and also the feed speed can be continuously selected via a frequency converter. Hardened blade holder, return guide and feed pawl as well as the magnetic blade hold-down devices ensure optimum guidance of the saw blade. For the control system, we have reverted to the cam control system already proven on the AHB.

Rollers

For others perhaps no topic
for us the No. 1 topic

For an
optimal cut

Technical Data:

- Blade lengths: 5 - 8 m
 - blade widths: up to 130 mm
- consisting of:
- plan bench: 1.90 m with frame
 - with anvil: 250 x 140 x 70 mm
 - precision rolling machine
 - movable crosswise to the plan bench
 - with device for rolling out sheet windings
 - 1 speed: approx. 9 meter per minute
 - 1 gear motor: 0,185 kW



Rolling

For an optimal cutting quality and a long lifetime of the saw blade it is absolutely necessary to check the tension in the saw blade again and again and to re-roll if necessary. We offer you a Zenz rolling machine for this purpose. The tension is checked on all saw blades that come to us for sharpening. Since we use only Uddeholm steel for our saw blades and the design of the Zenz saw allows the saw blades to run stress-free, it is possible to re-roll the saw blades several times. This significantly reduces the running blade costs. The saw blades are cheaper in the end, although the purchase price is higher.



Blade care service

We can offer you a sharpening service with almost 25 years of experience. All work around the saw blade can be done there.

- Sharpening
- Rolling
- Setting
- Upsetting
- Welding



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