



**Pilous**

Železná 9, 619 00 Brno, Czech Republic

Tel.: +420 543 25 20 10

e-mail: [wood@pilous.cz](mailto:wood@pilous.cz), [www.pilous.cz](http://www.pilous.cz)

## CTR 800 H



4920 x 35-40 x 0,9-1,1 mm



|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Max. log diameter                   | 830 mm                               |
| Max. opening between blade guides   | 750 mm                               |
| Min. blade height from support beam | 685 mm                               |
| Min. log height                     | 25 mm                                |
| Max. depth of cut                   | 450 mm                               |
| Max. log length (standard model)    | 4,5 m                                |
| Length track section                | 3 m                                  |
| Min. log length                     | 1,2 m                                |
| Saw blade motor                     | 7,5 (11, 15) kW                      |
| Horizontal feed motor               | 1,5 kW                               |
| Vertical feed motor                 | 0,55 kW                              |
| Hydraulic motor                     | 5,5 kW                               |
| Hydraulic oil                       | ISO 6743/4-HM, DIN 51 524 part 2-HLP |
| Sawblade                            | 4920 x 35 ÷ 40 x 0,9 ÷ 1,1 mm        |
| Weight (standard model)             | 1500 kg                              |
| Weight (track section)              | 250 kg                               |

**Nominal current of circuit breaker is minimally: 7,5 kW - 50 Ampere; 11 kW - 50 Ampere; 15 kW - 63 Ampere**

## DESCRIPTION

**Feed into the cut and back - motor-powered**

**Arm height adjustment - motor-powered**

**Control panel - stationary**

**Log handling - hydraulic**

Universal hydraulic sawmill which is, with its maximum cutting diameter of **830 mm**, suitable for most lumber.

Exceptionally robust construction of the machine and high-performance hydraulic equipment allow operation even under the most difficult operating conditions including non-stop operation. Many hydraulic accessories easily handle even large logs, significantly increase the productivity of the machine and save labour costs.

The machine is equipped with a measuring system in the basic version with simple intuitive operation on a large colour touch screen. The new generation of the operating system allows a choice of four cutting modes. It is possible to set the repetition of a constant or variable thickness of lumber.

It is also possible to choose between two methods of automatic arm exit after the cut, either to a fixed height or by the last measure with an adjustable allowance.

Simple and quick entry of board thickness from an editable library.

The new system guarantees fast and accurate automatic setting of the desired cutting thickness, thus avoiding human error when setting the cut manually. It greatly saves time and makes production more precise.

**The basic version is fitted with following hydraulic accessories:**

- Hydraulic clamp - 2x
- Tilting angle bar - 3x
- Pull-up log turner - 1x

Thanks to the unique modular design of CTR series the machine is fitted with many fitting points for hydraulic equipment. That allows large variability of its placement with regard to the total log length and specifics of the processed material.

A wide, exceptionally massive bridge of the sawmill arm and robust running sections ensure undisturbed operation when cutting and even at high running speeds. Professional execution of all main technical units, such as running wheels with their bearing system, sawmill arm construction, powering and feeding system, etc. ensure maximum service life and machine accuracy even under the most difficult operating conditions.

The central control panel is stationary and it's placed on the main running section. This allows convenient machine control from a single place with complete hydraulic accessories. The feed into the cut and back is driven by an electric motor with worm gearbox controlled by a frequency inverter. The travel speed can be changed simply by turning the potentiometer knob on the control panel. The end positions are secured against impact by automatic deceleration and stopping.

The massive sawmill arm is borne on adjustable hard-chromium rods (for moving up and down) which ensure absolute accuracy of sawmill arm movement and virtually unlimited service life, if the machine is lubricated regularly. The vertical movement of the arm is provided by double-sided synchronous chain transmission powered by an electric motor with worm gearbox.

The saw blade is guided in the cut by hardened and ground blade rollers. This system can be fully adjusted in all directions and it ensures the optimum position of blade rollers and the saw blade. On the guide bar additionally in combination with the hardmetal blade guiding. In order to ensure the accuracy of the cut the blade roller on the operator's side moves as close as possible to the workpiece. Simply operated massive bearing system. It can be motor-powered and controlled as a special accessorise from the control panel (Electrically controlled guide bar).

The arm is fitted with running wheels made of high-quality grey cast iron with accurate balancing against vibrations. The wheel has a groove along its circumference. The groove holds a replaceable rubber-textile flat belt which creates an optimum contact area between the wheel and the sawblade.

The sturdily mounted running wheel is powered through a V-belts by a professional electrical motor specially balanced against vibrations. The basic version of the machine is equipped with a powerful 7.5 kW motor. For even higher performance, for example, when cutting oversized logs or even when cutting very hard materials, especially with Stellite-tipped blades an 11 or 15 kW motor can be used.

The tensioning wheel system moves along a sturdy cast iron dovetail slide with screws and a bar for fine-tuning, which allows highly accurate adjustment without any free travel even in long-term machine operation.

The basis of the machine is formed by extremely stable running sections with reversible, adjustable, steel guidance of the arm bridge. Running sections are amply dimensioned for the indicated maximum diameters of processed logs and based on practice they count even with very tough operating conditions. Double sided guidance of a bridge on the running section combined with a powerful engine, enable fluent and fast shift (removal) of cut pieces when using the Board return arms. The log length is virtually unlimited, it only depends on the number of installed running extending sections. Running sections are fitted with massive, height-adjustable log-bearing beams, tilting angle bars, and log clamps.

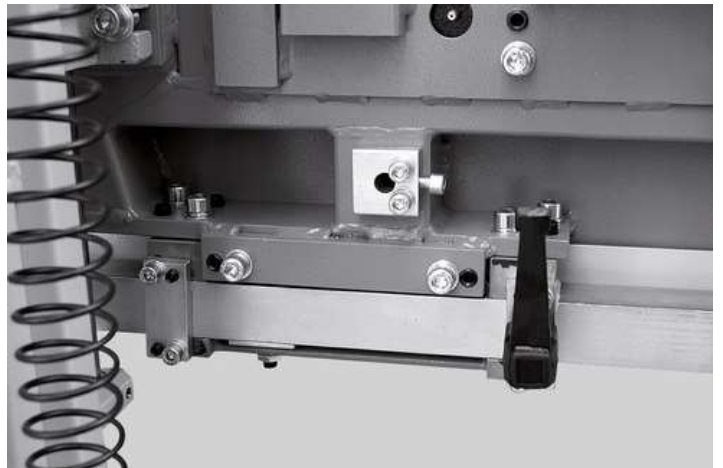
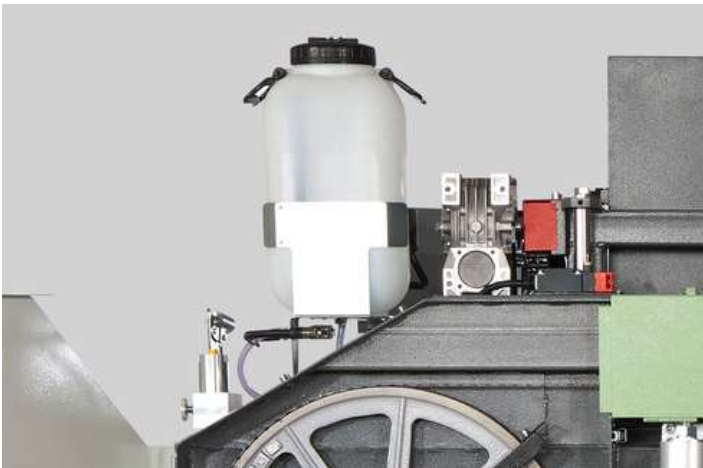
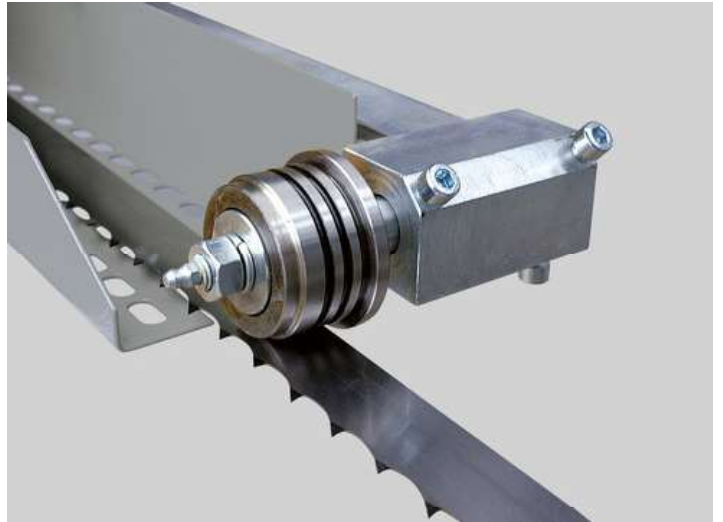
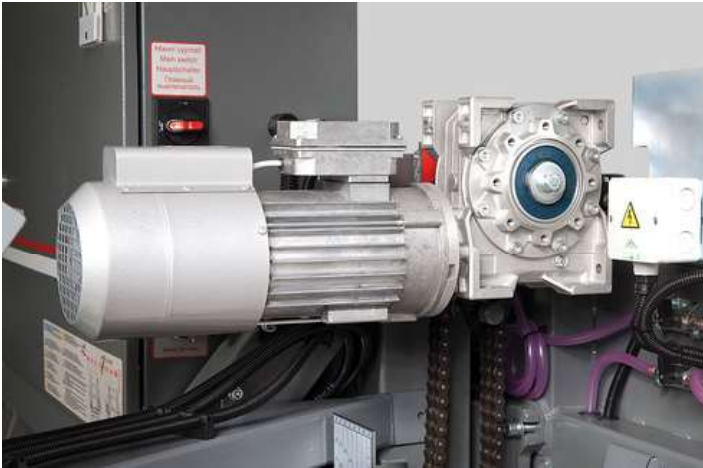
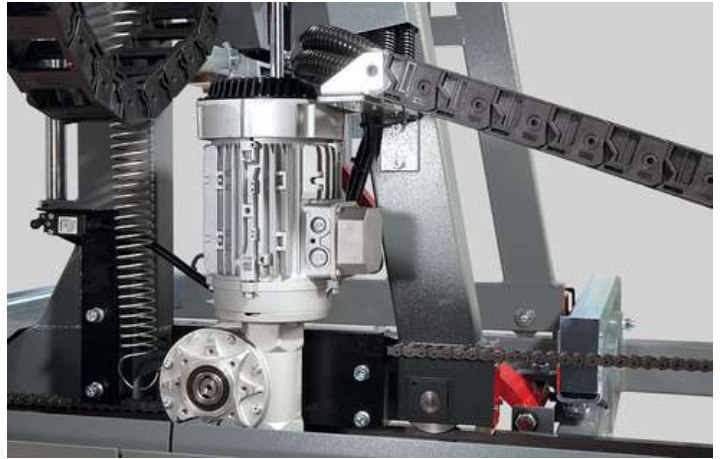
To increase the machine productivity is possible to install the Board return arm together with the Board slide, or the Incline belt conveyor XRB 800 which has been for space-saving purposes partially integrated into the basic machine frame. An electrically driven belt conveyor is intended for board transportation from the sawmill.

The CTR model series represents the latest trends in sawmill design, with special emphasis on maximum accuracy and long service life at minimum cost. The machines are designed in an original modular way, which allows easy replacement or adjustment of all main technical nodes and their individual parts. This significantly reduces maintenance costs in the long-term use of the machine and also reduces service times, thus reducing production downtime.

A wide range of accessories simplify and accelerate machine operation and influence its production. It is therefore possible to adapt the sawmill exactly according to the needs of the customer.

All pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

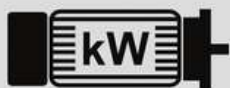
## PHOTOGALLERY





## ACCESSORIES

### ACCESSORIES – SPECIAL ACCESSORIES



**Main motor 11 kW**

#### **Main motor 11 kW**

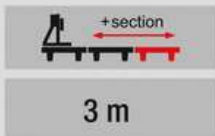
For even higher performance, for example, when cutting oversized logs or even when cutting very hard materials, especially with Stellite-tipped blades an 11 kW motor can be recommended.



**Main motor 15 kW**

#### **Main motor 15 kW**

For even higher performance, for example, when cutting oversized logs or even when cutting very hard materials, especially with Stellite-tipped blades 15 kW motor can be recommended.



**Extending section  
3m H**

#### **Extending section 3 m**

Include 1x Tilting angle bar  
Extending section is equipped with many points for installation of hydraulic equipment. That provides variability of placement with aspect of cutting material.



**Debarker 800**

#### **Debarker**

Debarker with hard metal tips is designed to remove dirt at points where the saw blade cuts into the log. The saw blade do not get blunt quickly. Frequent saw blade exchanges are reduced, the saw blade life, and the productivity of the machine increase.



**Hydraulic saw blade  
tensioner 800**

#### **Hydraulic saw blade tensioner**

Operated by a hydraulic hand pump with accurate pressure indication. The hydraulic saw blade tensioner is more accurate and convenient.



**Ammeter - blade  
load indicator**

#### **Ammeter - blade load indicator**

The ammeter scale shows the sawmill blade engine load during the cut. It is designed to simplify the selection of the feed speed; it also indicates the saw blade bluntness. A timely exchange of the saw blade increases the life-span and improves the cutting quality.



**Soft starter - smooth  
blade start-up**

#### **Soft starter - smooth blade start-up**

Electronic device enabling a smooth start-up of the saw blade motor. It prevents grid surges reducing mechanical stress of the whole machine.



**Electrically  
controlled guide bar  
800H**

#### **Electrically controlled guide bar**

Adjustment of sliding guide bar of the saw blade depending on the log diameter electrically controlled from the central control desk.



**Laser Sight**

#### **Laser Sight LAS**

Laser aiming is a very practical helper for axial alignment of the log before the cutting. The cutting level shows a line copying the path of the saw blade.



**Cant hook**

#### **Cant hook**

Serves as help with manipulation with logs on machine frame.



**START/STOP  
cooling system**

#### **START/STOP cooling system**

Integrated in the cooling system is an electromagnetic through-flow valve, which automatically opens when the saw blade is started and closes when the saw blade is stopped. It substantially lowers the coolant consumption and saves time needed for replenishment of coolant liquid.



**START/STOP  
pressure cooling  
system**

#### **START/STOP pressure cooling system**

The cooling system consists of a pressure pump in the coolant tank, flow control solenoid valve and two-way jets that spray the sawmill blade both from below and from above. Double-side cooling prevents undesirable stress in the saw band and adhesion of resin from underneath the sawmill blade and thus helps maintain stabler sawmill blade operation, more accurate cut and longer service life. Integrated in the cooling system is an electromagnetic through-flow valve, which automatically opens when the saw blade is started and closes when the saw blade is stopped. It substantially lowers the coolant consumption and saves time needed for replenishment of coolant liquid.



**ARCTIC**

#### **ARCTIC**

Version of the machine adapted for work in extremely cold operating temperatures reaching down to - 40 °C. Machine's switch board, control panel and digital measuring are fitted with heating elements. The heating is controlled through a thermostat. Frost-resistant lubricant. Band sawmills use frost-resistant hydraulic oil.



**LED lighting**

#### **LED lighting**

Good quality lightening of the workspace using two powerful LED strips mounted on a movable bridge.



**Grease Gun**

#### **Grease Gun**

For regular maintenance of the machine according to the lubrication plan. Metal grease gun for 400g tubes. Equipped with a flexible pressure hose.



**Synthetic Grease LV  
2-3**

#### **Synthetic Grease LV 2-3**

400g tube for the grease gun.

**ACCESSORIES – HYDRAULIC ACCESSORIES**



**Double-arm  
hydraulic log loader  
800**

**Double-arm hydraulic log loader**  
The hydraulic double-arm log loader allows safe and fast lifting of the log onto the loading area of the machine. The main frame of the machine is fitted with lifting attachments along its full length, which allow easy transport of individual holders according to the length of the loaded material. Each loader is controlled separately, which allows to lift easily even very tapered logs.



**Additional arm for  
log loader 1000**

**Additional arm for log loader**



**Pull-up log turner  
800**

**Pull-up log turner**  
One piece is always a part of the basic version of the machine and it is a vital multi-functional assembly, the most significant of all hydraulic accessories. It moves both in vertical and horizontal axis on strong hard chromium plated rods using two independently controlled hydraulic cylinders. It is used to clamp, turn and feed the material to tilting angle bars.



**Single-arm chain log  
turner**

**Single-arm chain log turner**  
Powerful chain turner is equipped with swinging arm. A chain powered by a hydromotor is mounted on it. The material is rotated against the tilting angle bars. When cutting long logs with frequent rotation, we recommend equip the machine with a pair of log turners, which significantly shortens the necessary handling times and thus increases the productivity of the machine.



**Log levelling fixed  
roller**

**Log levelling fixed roller**  
Lifts the log axis in horizontal position according to its taper or lifts the whole log above the loading area to allow easier handling.



**Log levelling  
passive roller 800**

**Log levelling passive roller**  
Lifts the log axis in horizontal position according to its taper or lifts the whole log above the loading area to allow easier handling. The robust rotary cylinder ensures simple feed of the log.



**Log levelling driven  
roller 800**

**Log levelling driven roller**  
It serves to lift the log axis into a horizontal position according to its conicity or lifting the entire log over the heading area and using a driven roller to compensate the horizontal displacement for its optimum lengthwise alignment on the machine bed. The horizontal feed roller is driven by a hydraulic motor.



**Hydraulic clamp 800**

**Hydraulic clamp**  
Hydraulic log clamp aligns themselves automatically according to the log diameter or can be locked in the desired position. They are also used for one-side material clamping against Tilting angle bars. All clamps are controlled by a single controller.



**Board return arms  
1300**

#### **Board return arms**

During the back feed of the saw blade arm after the cut the side stops help feed the cut material towards the control panel, allowing very simple collection of the material. From this point the material can be fed onto follow-up belt or roller conveyors.



**Board mechanical  
slide**

#### **Board mechanical slide**

The mechanical allow setting in accordance to the cutting plane. It is used to slide the fed material onto the follow-up belt or roller conveyors.



**Board hydraulic  
slide 1000**

#### **Board hydraulic slide**

The hydraulics allow setting in accordance to the cutting plane. It is used to slide the fed material onto the follow-up belt or roller conveyors.



**Hydraulic lever**

#### **Hydraulic lever**

The additional lever of the hydraulic distributor enables the connection and control of additional hydraulic accessories.

### **ACCESSORIES – CONSUMABLE PARTS**



**Blade Roller Kit VK  
35**

#### **Blade Roller Kit VK 35**

Hardened roller, bearings, and shaft designed for a sawmill blade 35 mm.



**Blade Roller Kit VK  
40**

#### **Blade Roller Kit VK 40**

Hardened roller, bearings, and shaft designed for a sawmill blade 40 mm.

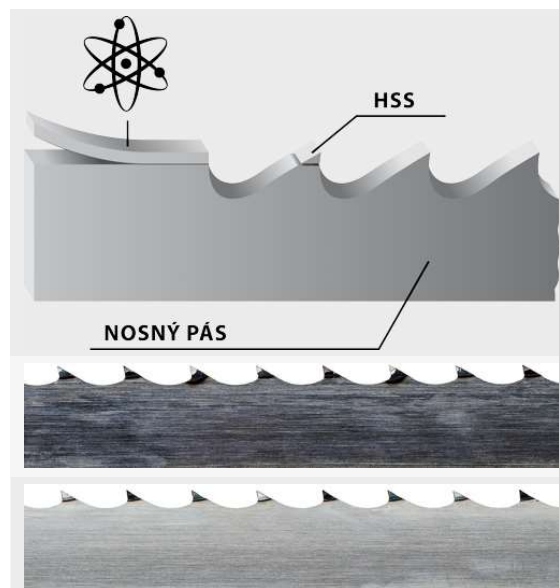


**Wheel Flat Belt GPK  
1885**

#### **Flat running wheel belt GPK 1885**



- The original sawmill blades PILOUS MAXwood are available in a variety of types which enables you to process any kind of wood.
- The wide product range not only offers more affordable sawmill blades for low-volume cutting, but includes also sawmill blades for fully professional cutting and utmost performance.
- The foundation of all sawmill blades are top-quality German materials and precise workmanship. The quality of the sawmill blades is carefully monitored. All sawmill blades correspond to the strict ISO 9001 norm.
- We have added to our portfolio also an original Munkfors sawmill blade made by the world's leading manufacturer Uddeholm from Sweden.
- Pilous sawmill blades are used in dozens of countries around the world. Any wood you cut, the company Pilous will recommend you a sawmill blade that will fit your needs.



## BiMetal

Sawmill blade with tool steel teeth - completely eliminates the need to sharpen the sawmill blade as well as frequent blade replacement. Use: soft, hard to extremely hard wood.

## HSS

Bearing blade

## Stellite

Sawmill blade with teeth made of Stellite. Tooth setting is completely unnecessary. Use: soft, hard to extremely hard wood.

## Carbon spring steel

The most common sawmill blade for optimum price/performance ratio. Use: soft and hard wood.



Be careful when unpacking welded sawmill blades. They are in a shipping container in tensioned condition. Remove the sawmill blade cover only after fitting it onto the machine.