



# HIGH PERFORMANCE EQUIPMENT FOR LARGE DIAMETER LOGS PROCESSING

Professional machines to process firewood







# TM - Cutting unit

For diameters up to 1200 mm

The wide availability of large diameter logs, not suitable to be processed by the sawmill industry, brought the company Pezzolato to develop a new equipment for high quality firewood by processing logs with diameters even larger than 1 meter.

This equipment is divided in: TM - CUTTING UNIT with a conveyor system to cut logs of any type.

The machine presents a large thickness (30 mm) feeding cradle which can support logs with a length of 6 meters (longer on demand) and a max. diameter of 120 cm.

The logs, by means of a rear pushing unit, are pushed onto the chain saw unit and blocked there before being cut by a hydraulic guillotine system. The chain saw unit, sliding vertically, is driven by an electric motor with a power up to 22 kW.

A step-measurement system allows the electronic setting of the cut logs length. After the cut, a tilting surface, hydraulically moved, skids the cut logs on the feeding chain of the second unit, TB - SPLITTING UNIT.





# TB - Splitting unit

TB - SPLITTING UNIT is equipped with an automatic vertical splitting system, able to process any type of logs, with a diameter range varying from 300 to 1200 mm and a heigth range varying from 250 to 500 mm.

This unit conceived to process large diameter logs has an adjustable pitch feeding and is driven by an electric motor 22 kW; the splitting power can be 40 or 50 tons.

The feeding chain is strong thanks to its closed links and has a length of 1600 mm (longer on demand).

By means of this chain, the cut logs pass through the action of the splitting wedge.

The dimensions of the output wood can be set electronically, from the minimal measure of  $70 \times 70$  mm to a maximum of  $150 \times 150$  mm.

TB 900 machine produces 18/20 bulk cubic meters per hour of cut logs with following size: 90 x 90 mm; 250 mm height.





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#### **EXTRAS AND CONFIGURATIONS**

For customizing your machine

#### **Control pulpit**

From the pulpit the operator can control all operations of the sawing unit and all associated operations such as loading, splitting and offloading, controlling the entire process.





#### **TB** - Splitting unit

- ✓ Electronic cut log measurement:
  - minimum size 70 x 70 m;
  - maximum size 150 x 150 mm.





#### **TB - Splitting unit wedge**

✓ Special splitting wedge for producing kindling can be swapped with the standard wedge.





#### TM - Cutting unit

- ✓ Wood clamping hydraulic guillotine with the sliding system on chromed bars.
- Chainsaw unit slides vertically over chrome bars with hydraulic cylinder and proportional control in relation to the log diameter.





## PLANT COMPLEMENTS

To complete the production line

#### Logs loader

Logs loader, electro-welded structure, hydraulically operated, with variable lengths according to the user's needs.

Depending on the type of wood to be processed, Pezzolato proposes the most suitable logs loader: in fact, it can be equipped with a variable number of chains depending on the length of the material to be handled and with a C-shaped log separating system , a thrust arm or steps with alternating movement, depending on the type of logs to be processed.





#### Cleaning system (screens)

Pezzolato systems can be equipped with a rotary screen for cleaning cut and split wooden logs.

The screen is made up of a cylindrical screen drum with longitudinal bars, angled at 5° and with a variable diameter of 1400 or 1800 mm.

This angle ensures that with no screw conveyor, and only using rotary movement, the material moves towards the discharge area after being perfectly screened. The screen is supplied with the parts needed to receive and unload the logs and is suitable for cleaning any quantity of material received in passing, or that may also be received from mechanical shovels. On request, the screen can be equipped with a hopper into which the material to be screened is poured.

A hydraulically-driven rubber belt under the hopper controls the movement of the material feeding the screening cylinder.

The whole machine works with adjustable-speed hydraulic motors. Furthermore, conveyor belts can be integrated for both the under-screen and the screen to move the material wherever needed.





#### Conveyor belt for loading processed wood

500 mm wide rubber conveyor belt (600 mm on request) and with length varying from 6 to 12 meters.

Full hydraulic operation.

The standard version comes with anti-fall flags, rudder, two fixed wheels and two smaller wheels for manual movement.

Configurations can be requested with manually adjustable wheels, center plate for attaching the belt to the floor with 45° left and right movement. In this case it is possible to have wheels that are hydraulically motorized.





#### **Cleaning system (cleaning rollers)**

Cleaning rollers, applied to the conveyor belts carrying cut and split material.

These separate the chips, bark and residual sawdust from the logs.





#### **Dust collector**

Cyclone dust collector: - powered by 4kW electric motor - complete with piece trap and "big-bag" type collection system.

Single dust collector: operated with 3 or 4kW electric motor, to remove sawdust from the machine.

#### **Palletizer**

Machine designed to pack cut and split wood to be transported on Euro pallets or packed on  $1\ m\ x\ 1\ m$  pallets.

Can be adapted to any type of conveyor belt. It has a hydraulic system for pallet handling that: Shakes the pallet to compact the wood inside the bag and stabilizes the contents - this aids extraction of the pallet's contents when the bag is ready for transport.

Volume: 150 x 225 cm Size of packed goods: 1.6 m<sup>3</sup>

It can be operated with an independent 3kW electric motor, from the hydraulics of the cutting-splitting machine it is connected to, from the hydraulics of the tractor or from the hydraulic system for shaking the pallet.





# TECHNICAL FEATURES

# ▶ TB - Splitting unit

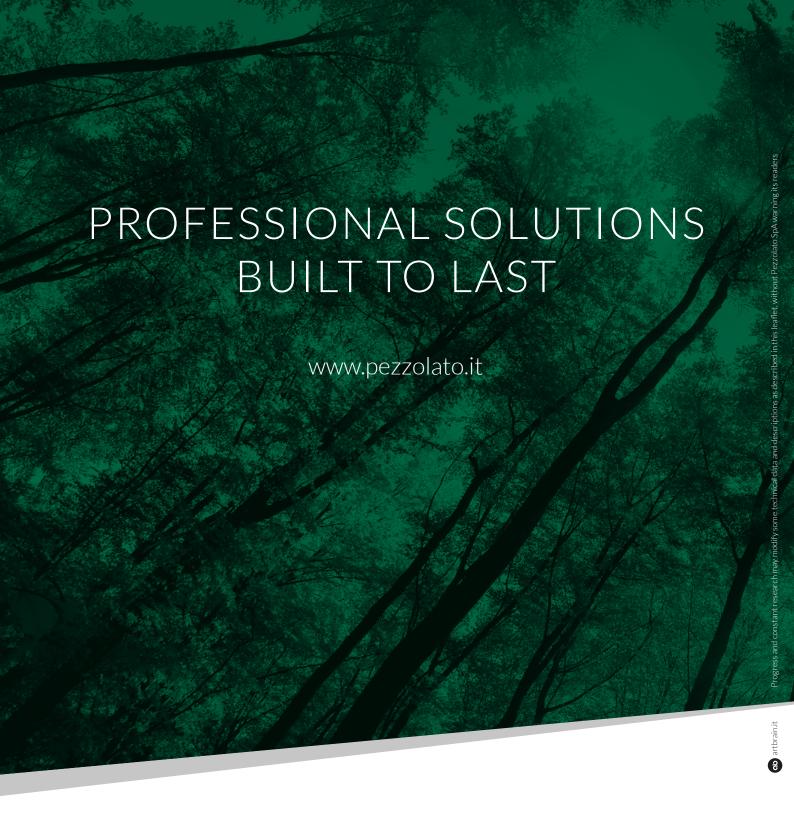
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Minimum log diameter:	mm	300
Maximum log diameter:	mm	900 (TB 900) - 1200 (TB 1200)
Electric engine power:	kW	22
Splitting force:	Ton	40 (TB 900) - 50 (TB 1200)
Cut logs length:	mm	da 250 a 500
Duty-cycles/minute (stroke 500 mm):		8 (TB 900) - 7 (TB 1200)
Cut logs minimum size:	mm	70×70
Cut logs maximum size:	mm	150 x 150
Kindling minimum size:	mm	20 x 20
TB 900 average production capacity in 8 hours working shift:	msr	150

### TM - Cutting unit

Maximum log diameter:	mm	1200
Chainsaw electric motor power:	kW	22,5
Ancillary services electric motor power:	kW	7.5
Chainsaw bar length:	mm	1600

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DEALER