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## BALE BREAKER AND OPENERS





**Automatic Bale Plucker** is used to **mechanically strip fibres** from pressed bales and automatically drop the fibre on to the feed table of the opening machinery at the beginning of spinning lines.

This system also provides a good first blending operation of the fibres.

**Mainly composed of a metal bridge moving on rails** which gives vertical movement to the plucker head.

The different functions of taking, discharging and cleaning are controlled by a computerised digital panel with touch-screen.

**Photo electric sensor beams provide complete protection against accident in line with European legislation relating to Health & Safety.**

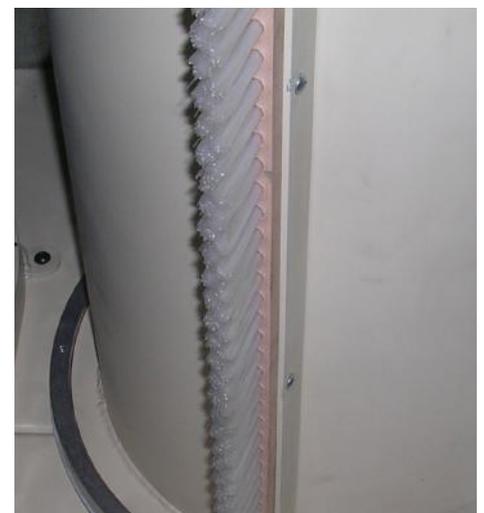


# BALE PLUCKER





- **Bale breakers, types AB and ABR for the opening of bales and other compressed agglomerates of textile fibres, in working-width of mm.1000 to 4000**, consisting of an **horizontal feed table in two sections** which enable an initial breaking of the layers, a **vertical spiked lattice conveyor**, an **opening-batching cylinder with adjustable pitch** and a **stripper**. It can be used in various sectors of the textile industry, from the opening of greasy wool bales to blend preparation departments, the feeding of carding-machines, the preliminary phase of staple fibre dyeing or the opening of dyeing cakes for conveyance to dryers;
- The supporting structures of these machines consists of **heavy steel ribbed panels**. This characteristic enables the construction of various models, according to the individual requirements of the fibre material to be processed;
- Length and inclination of the spiked belt, types of pins and laths, diameters and adjustments of opening and stripping rollers are all variables which are taken into consideration and selected according to the fibres to be processed;
- **The spiked lattice conveyors can vary from the type** which characterises our Exclusive technology for bin emptiers with laths in **flexible vulcanised PVC** on the surface of the belt which are very strong and easy to clean to the more classical types with laths on the reverse in **multi-layered wood**;
- The bale breakers can be used either **individually or in a line of different machines** to discharge the fibre material onto a single conveyor and to dose the exact percentages of the different components for the preparation of blends;
- The first section of the horizontal lattice, can be so large as to create an important storage for bales to be opened.

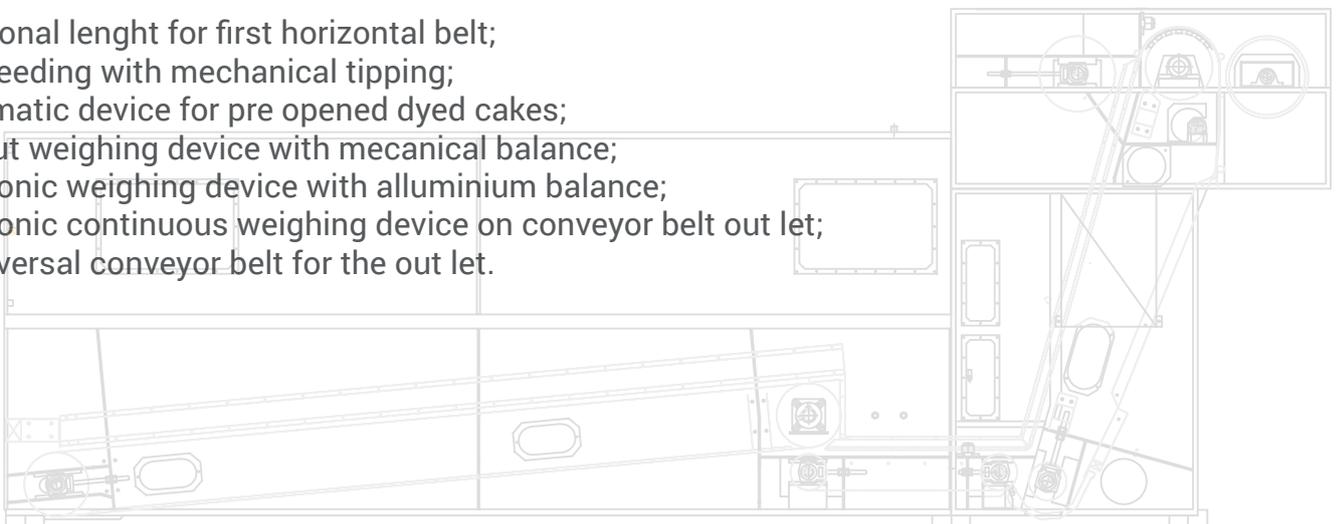


# BALE OPENER



## ● **OPTIONALS:**

- Additional length for first horizontal belt;
- Bale feeding with mechanical tipping;
- Pneumatic device for pre opened dyed cakes;
- Out put weighing device with mecanical balance;
- Electronic weighing device with alluminium balance;
- Electronic continuous weighing device on conveyor belt out let;
- Transversal conveyor belt for the out let.



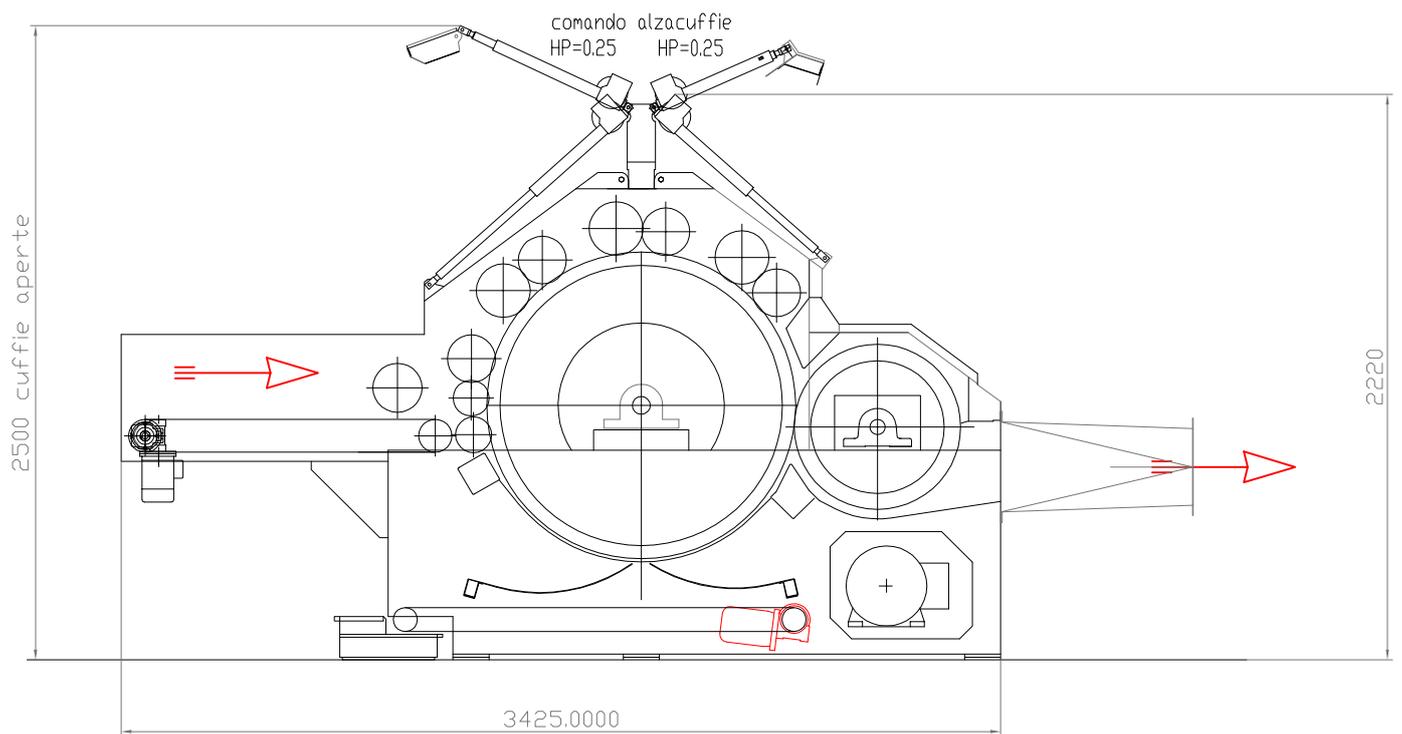


The machine is basically equipped with a **large main cylinder, 3 pairs of workers and strippers and one pair of feed rollers and at the end a large diameter doffer helps to strip the fibre from the doffer.** The fibres are fed to the machine by a horizontal belt on to which any pneumatic system can deliver the fibres from previous processes.

At the exit a large diameter pinned doffer with rubber laths takes the fibre through a galvanised trumpet and onwards pneumatically. **Completely constructed in steel plate the machine has each pin individually screwed in order to allow the replacement of every pin individually.**



# CARDING WILLOW

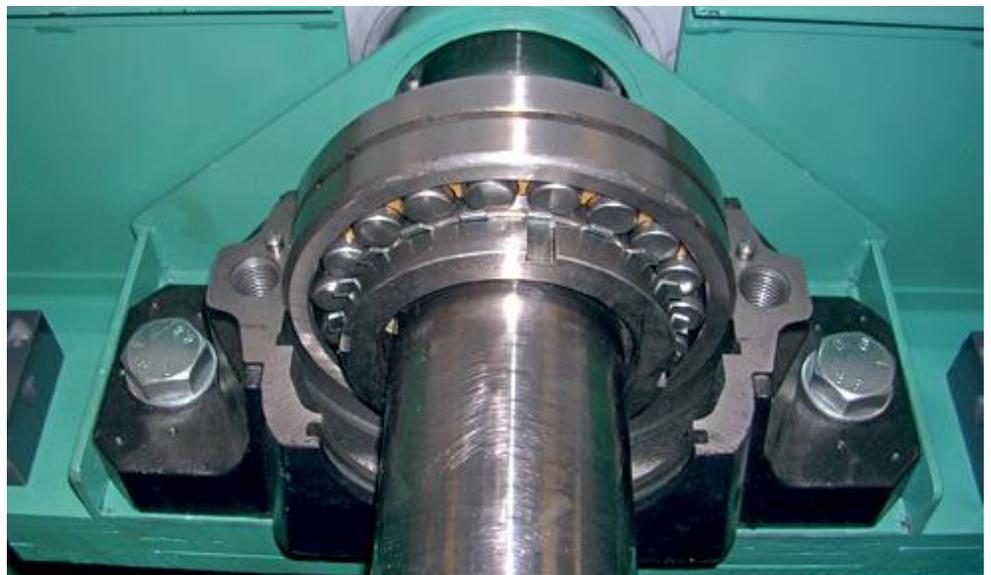
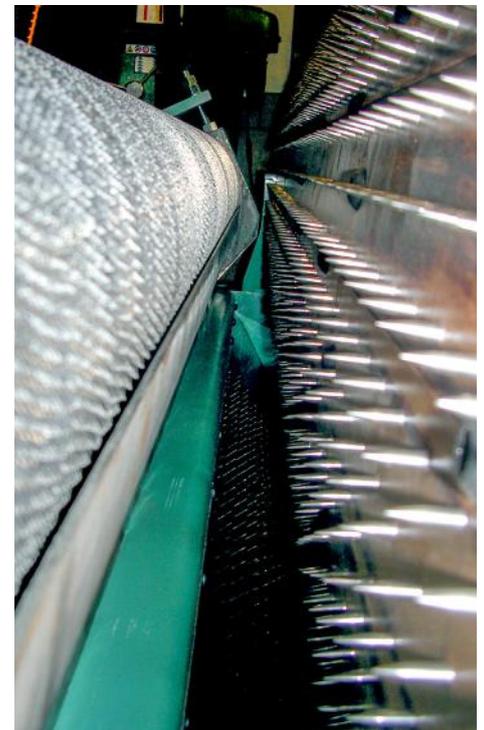




# FIBER OPENERS

We have realised different types of openers with different characteristics according to the needs of our customers and the fibres to be processed. Different models:

- **Mixing Picker** with feed cylinder and inclined pins on the main cylinder;
- **Fine Opener** with clothed feed cylinders and main drum clothed with 5mm pins.



**Vertical opener machine** allows to obtain a deep spread out of fibers and it is commonly used as final opening process before sending the material to the card. **Good results in opening is guaranteed by the vertical silo filling system** that includes a preopening cylinder and immediately after a forwarding to the below opener through a vertical thickening column that ensures a constant density on entering cylinder.

**The machine is compact as it grows vertically, so it occupies a small space** and it is perfect for opening medium and short kind of fibres.

Mainly used in the preparation lines for non wovens –thermal bonded- or needlepointed fabrics that contains different kind of fiber components.

Main opening drum is usually covered by **steel pins fixed on wood staves, with different gaps** depending on characteristics of fibre to work.



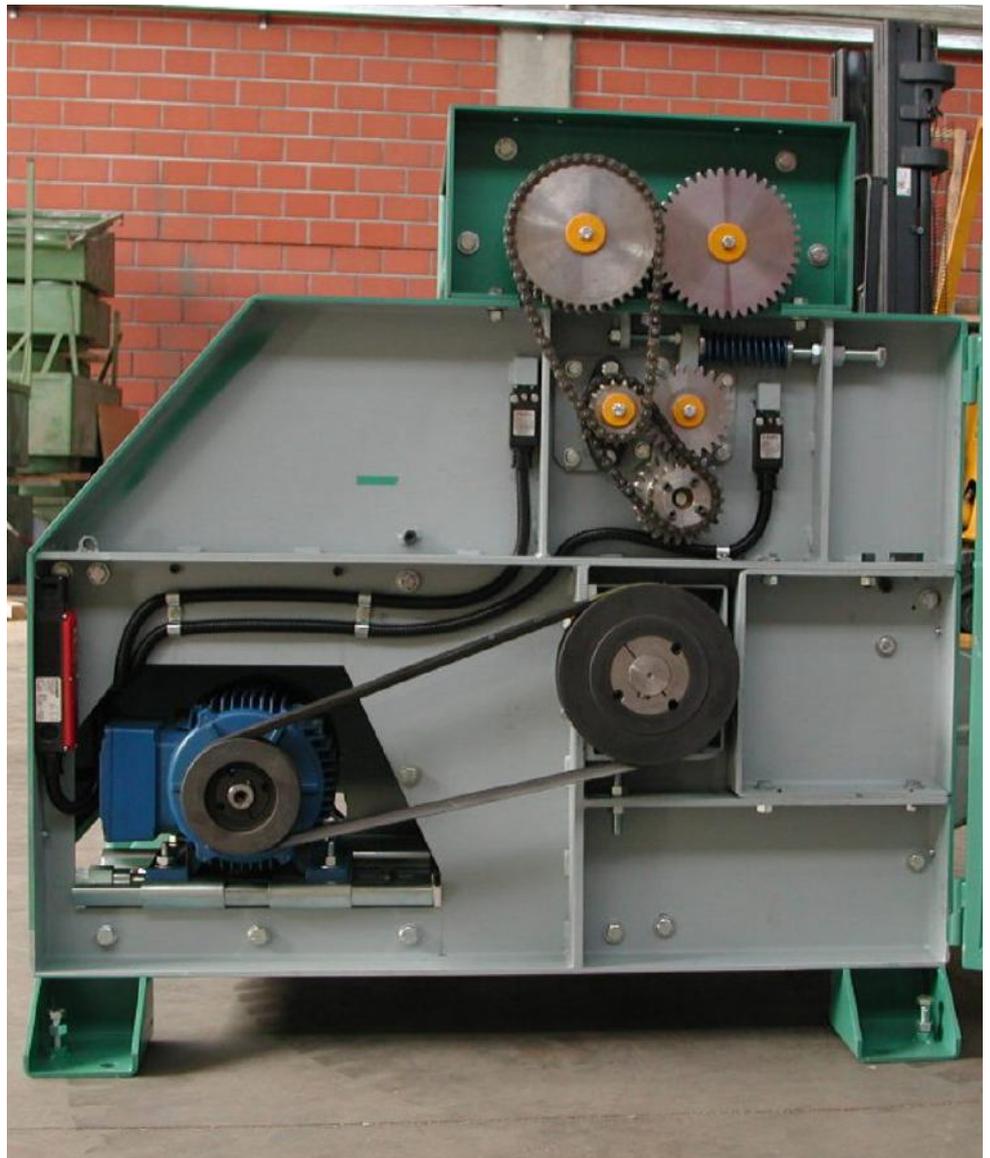


**SMALL OPENER MODELAF 500 S** is supplied with an opening cylinder which is totally covered with steel pins, **dynamically balanced and assembled on adjustable supports with ball bearings**. This machine is suitable for opening soft wastes such as condenser bobbin waste which can be recycled either during or after carding.

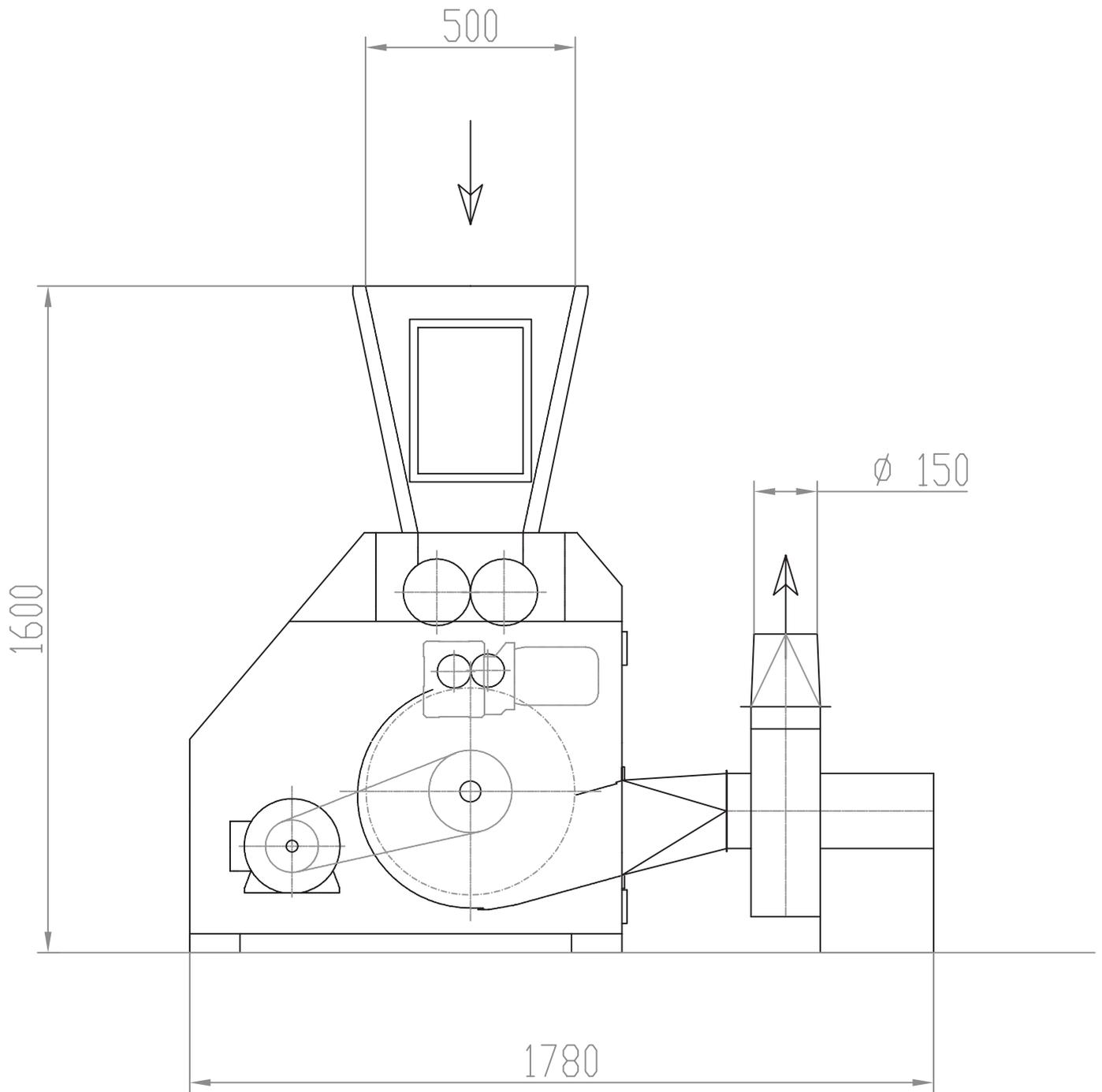
**There are fluted feed rollers at the entrance, assembled on oscillating supports** which together with the main cylinder can be fed by a reserve silo feed tower.

**Separate inverter controlled motors are provided for the feed rollers and main cylinder**. The guards can be removed easily when access to the internal components is required for cleaning. **The machine has an auto control security system with double circuit**.

The working width of the machine is 500 mm.



# SMALL OPENER



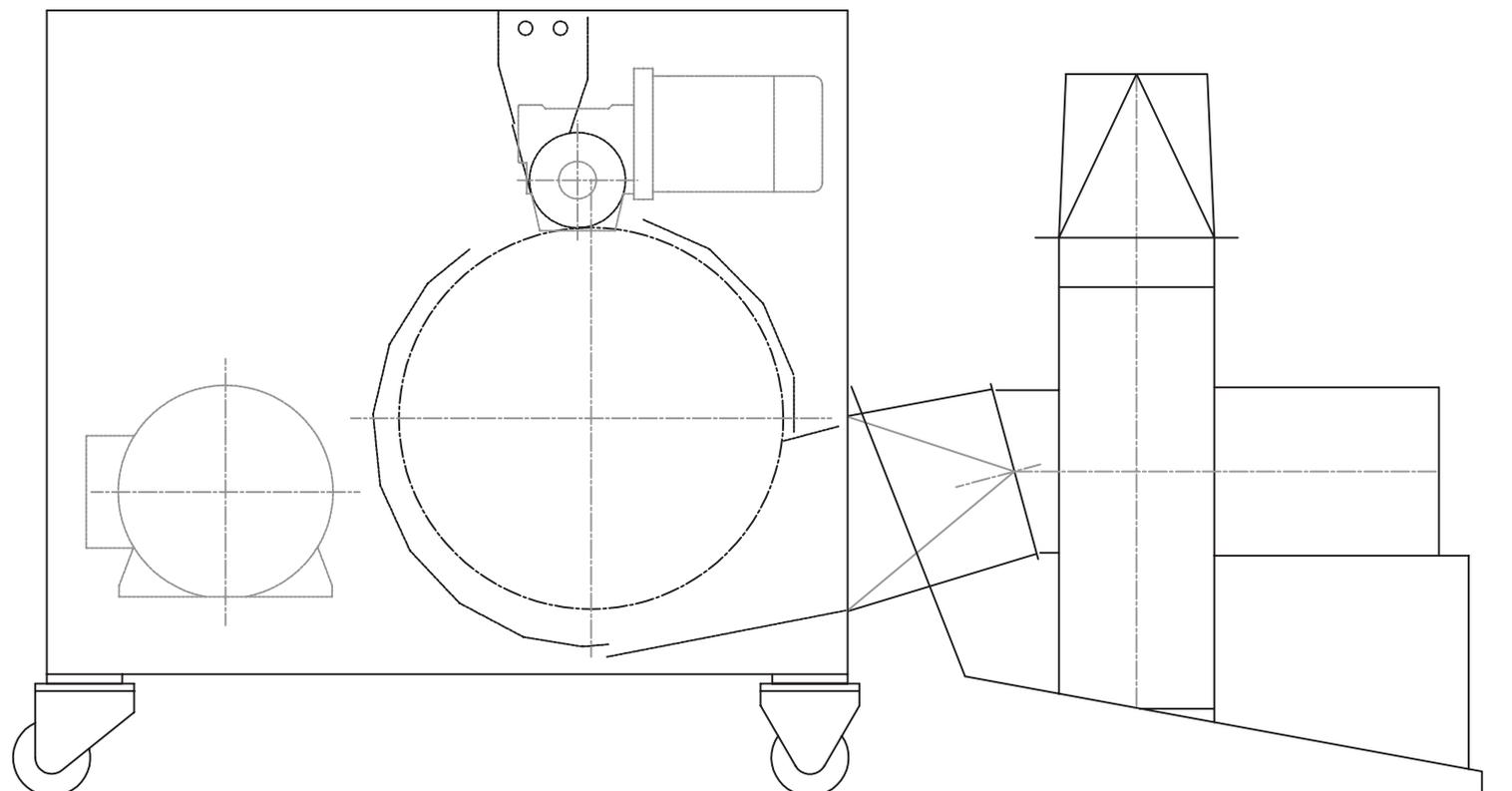


**EDGE TRIM OPENER AC 300** with opening cylinder totally covered with **steel pins, dynamically balanced and assembled on adjustable supports with ball bearings.**

This machine is suitable for opening soft wastes such as condenser bobbin waste which can be recycled either during or after carding.

**Separate inverter controller motors are provided for the feed roller and main cylinder.** The guards can be removed easily when access to the internal component is required for cleaning.

The machine has an **auto control security system with double circuit.** At the exit the fibre can be conveyed pneumatically to the next process.



# TRIM OPENER





**STEP CLEANER** for opening, **beating, cleaning and de-dusting of scoured wool fibres** (or cotton).

It comprises a group of 3 main beating drums with welded steel pins with an external diameter of **800 mm** rotating at **300 rpm** featuring an independently driven screw conveyor in the bottom which is provided to remove all dust and vegetable matter which has been separated from the fibres.

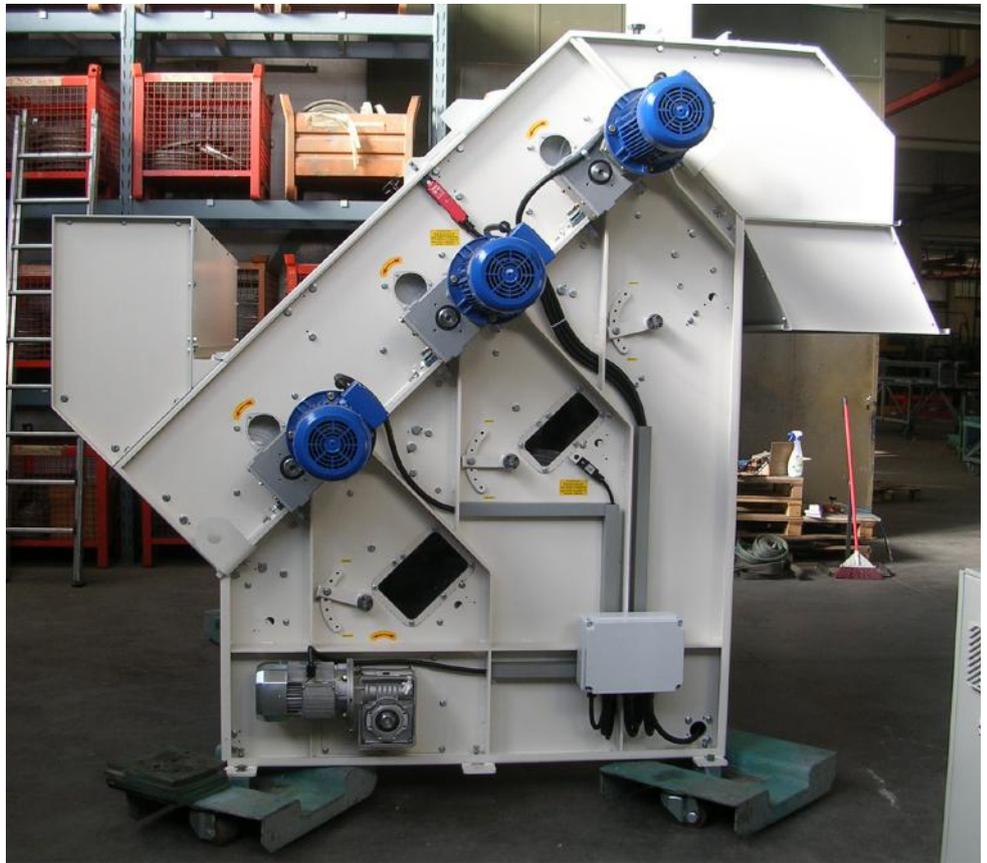
The screens provided in the basic execution are in perforated steel plate.

**All of the upper covers can be opened to allow easy access for cleaning.**

Clean fibre is taken from the machine by pneumatic transport. Safety switches are provided which allow the safe running of the machine in production or when cleaning.

**Optional: An adjustable screen can be provided made from triangular steel profiles and sprocket which adjusts the gap for the dust removal.**

Automatic cleaning of screen with compressed air nozzles.



# STEP CLEANER



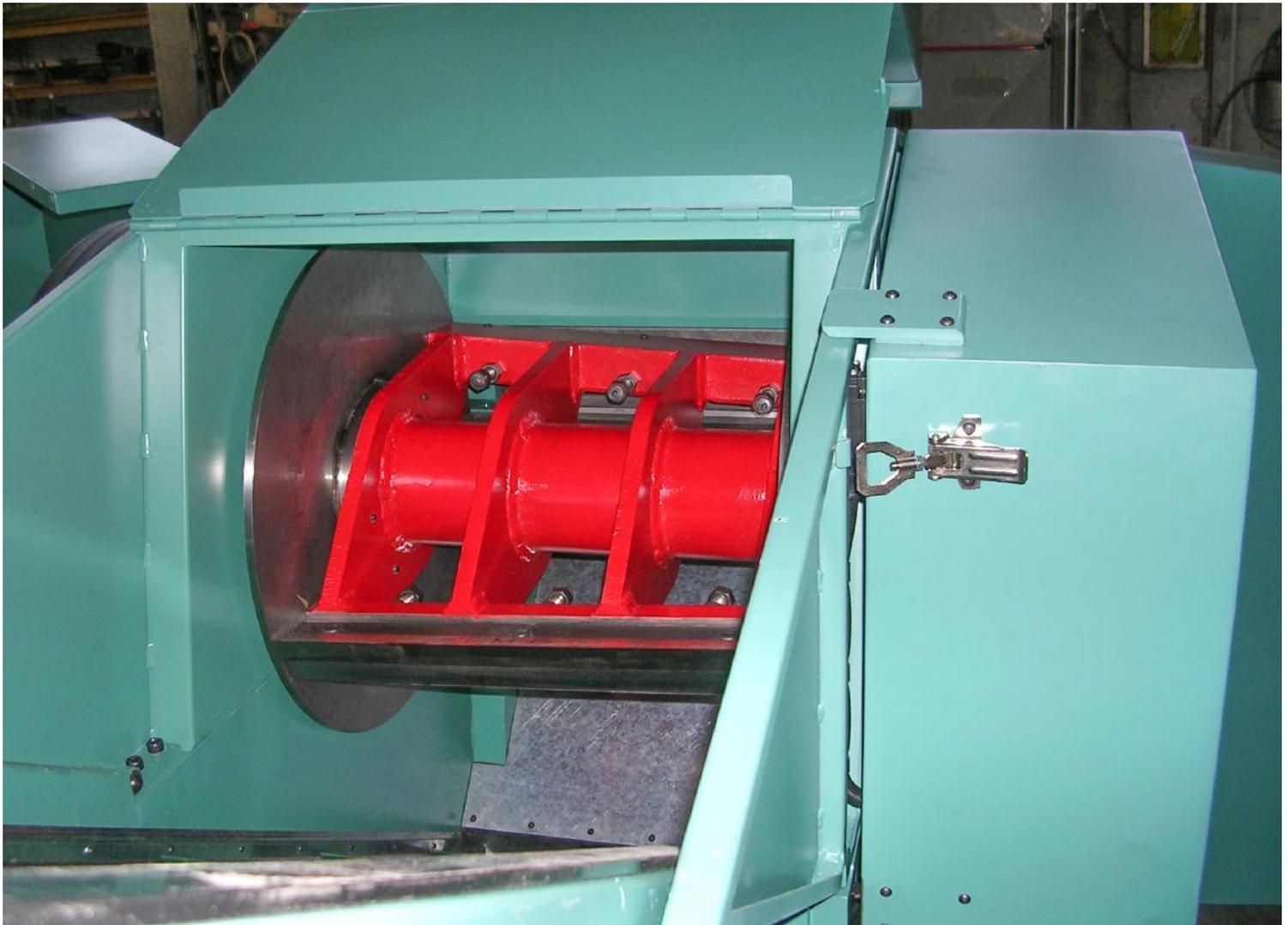
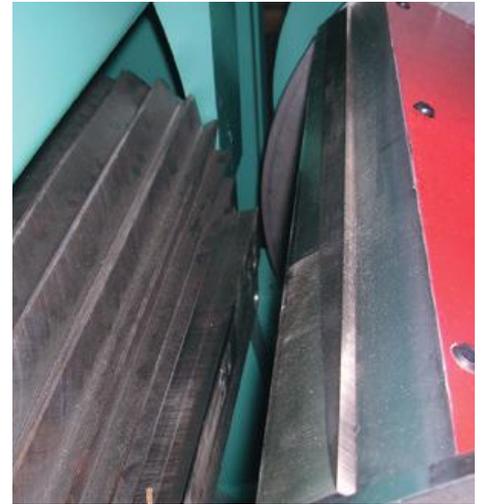


**CUTTING MACHINE TG 500** is for cutting long staple textile fibres or yarns and rags in different sizes or any other type of soft and hard wastes.

The machine comprises a main drum carrying two blades on opposite sides and is reinforced and protected with roller bearings. The feed table to the machine is PVC canvas and there is one feed cylinder to ensure even feeding together with a fixed blade located on a solid structure.

At the exit the cut materials are conveyed by a mechanical inclined belt. **Drives to the feed section and the main drum are by independent motors and gear boxes.**

The machine is completely guarded for safety and the guards can be removed for safe access inside the machine for cleaning purposes.



# ROTARY CUTTING MACHINE



**The rotating blades are helicoidally shaped which ensures a perfect cut on the entire 500 mm width and also distributes the cutting load over the length of the blades.**

**The blades are easily adjustable to ensure the perfect and accurate cutting point whilst at the same time they allow easy access for replacement purposes.**



