

Trimming machine

tt200

MARTINENGHI srl



Trimming machine TT200

...the producer's benchmark



The TT200 machine - for cutting tube ends to length, for threading and butting of nozzle and for brushing the shoulder of aluminium collapsible tubes - has been designed and manufactured to guarantee very high quality, simplicity and reliability.

By means of the loading/unloading systems and the electronic digital synchronization the machine may be easily inserted in any existing type of line.

The tube handling systems have been designed to obtain maximum precision and reliability at high production rates.

Size changes operations are reduced and simplified.

The TT200 machine includes all the features necessary to make it a trusted and reliable partner to the producer for its high standards and quality.

Machine layout

The processing stations are placed on the machine upper part to allow easier access for adjustment operations. Transmission movement to the mechanical parts is performed by means of high-speed toothed belts and screw-wheel reduction gears on each device; the indexing gear is placed on the internal part of the machine head; the alternating movements are carried out by means of cam devices.

Loading and unloading system

The loading conveyor is equipped with fixed baskets with non-sticking coating surface; the unloading conveyor is fitted with rods; the loading and unloading drums are manufactured in aluminium, treated with non-sticking coating; a specific drum is foreseen for each single tube diameter; change of drums is made easy by means of a system which allows the operator to perform from the front of the machine.

Cutting turret

The cutting turret is composed of a structure supporting the tool-holder and is axially moved by a cam; the cutting length is adjustable by means of a handwheel with a dimension visualizer; it is possible to remove the tool-holder from the machine thanks to a quick connection device placed on the cutting turret.

Threading unit

The unit carries out nozzle threading through rolling operations, by means of two hardened and ground threading rollers. The manufacture of the unit allows axial roller positioning without modifying the remaining unit adjustments.

Butting unit

It is composed of 2 front tool-holder units working on 2 different and consecutive stations. The carriage is mounted on linear roller guides and is driven by a cam.

Brushing unit

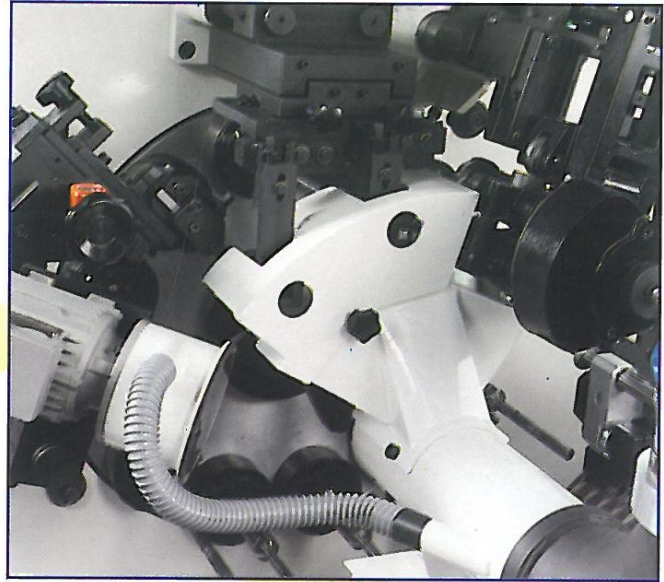
The brushing operation is carried out by means of a rotating brush made of steel bristles and driven by an asynchronous motor; the brush is directly fixed onto the motor shaft.

Mandrels

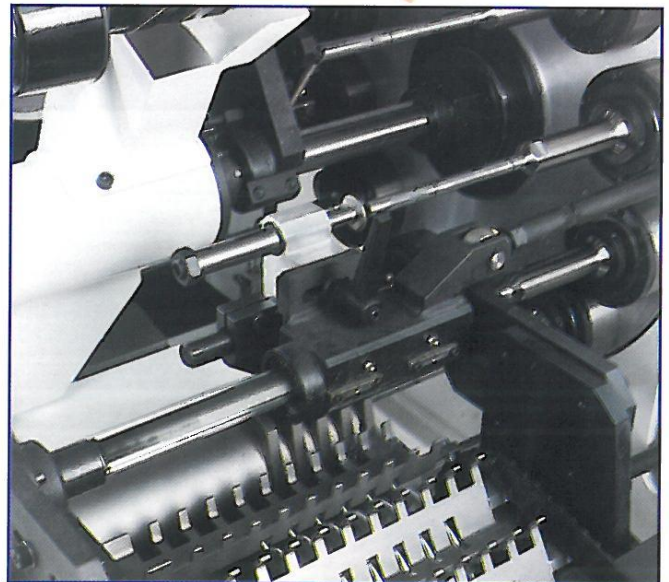
The machine operates with 12 mandrels; expansion pliers hold back the tubes on the mandrel; the pliers expansion is obtained through a shaped track which acts directly on the mandrels; track lubrication is assured by means of an automatic system; an automatic coupling device allows quick size change.

Automation control

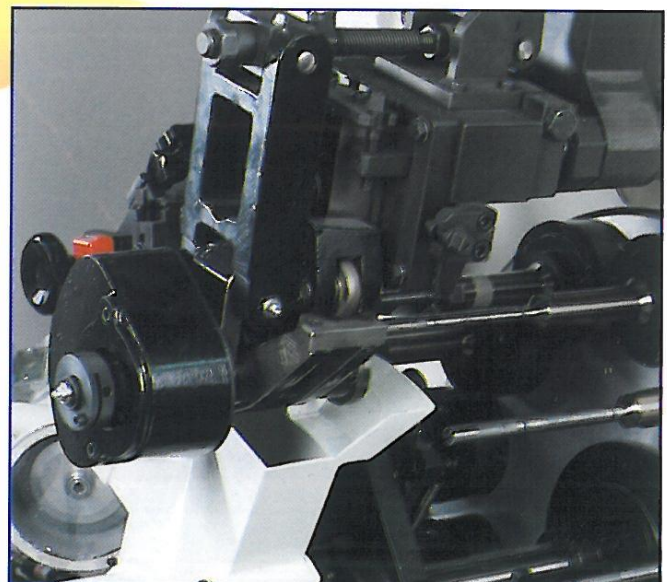
Machine control is obtained by means of a PLC and an electronic cam system; the machine is driven by a three-phase asynchronous motor, adjusted by an inverter. The machine is electronically synchronized with the preceding machine by means of an electronic synchronization system; the control units are placed in a special cubicle; the plant is made according to CEI international standards and IEC regulations; the machine controls are placed in an operating interface board, hanging on the sound-proof cabin.



tools group



loading unit



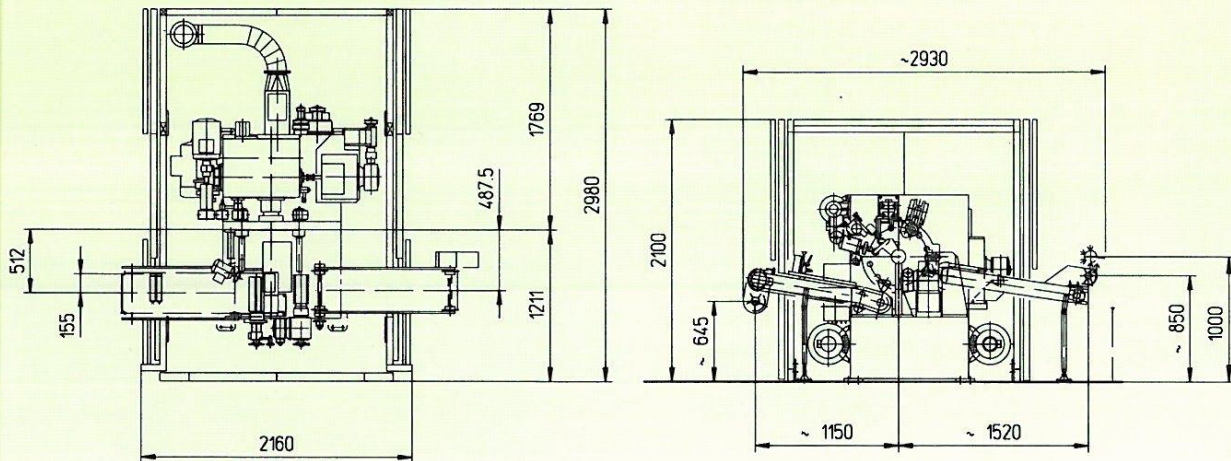
threading unit

Technical Features

· Tube diameter (min.)	13,5 mm
· Tube diameter (max.)	40 mm
· Tube length (min.)	60 mm
· Tube length (max.)	210 mm
· Production rate adjustable up to	200 pcs/min
· Mandrel number	12
· Installed power	18 KW
· Air consumption	40 Nm ³ /h
· Length	2980 mm
· Width	2930 mm
· Height	2100 mm
· Weight	5000 Kg

Additional devices

- butting scrap exhauster with collection bag
- cyclone cutting scrap exhauster with collection tank
- tube length control system



Technical features and descriptions could be modified without notice



MARTINENGHI srl

Strada Provinciale 104 - 20060 Albignano d'Adda (MI) Italy - phone ++39-02-9583292/463 fax ++39-02-95838393
internet: www.martinenghi.com e-mail: martinenghi@martinenghi.com