RETRAX 6005

CUSHION GUM EXTRUDER SYSTEM

TECHNICAL DESCRIPTION

Cushion Gum Extruder for pre-cured treads.

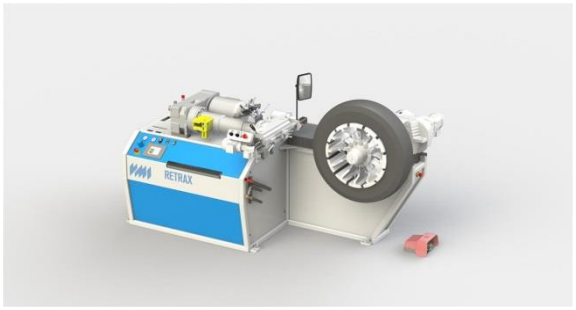
- Computer controlled / Simple / Robust / Effective
- Saves cushion gum costs by using single size of feed strip
- Save cement spraying costs with correctly formulated cushion gum
- Save labor costs by automatic skive filling
- Optional: Stitching unit
- Optional: Automatic tread applicator

1. Application

The RETRAX type 6005 system extrudes a cushion gum layer and smears it directly onto the buffed tire casing in one rotation of the casing and simultaneously fills skive holes (buzz-outs).

The buffed tire casing is to be placed on the expendable rim and hub, is brought under pressure and moved towards the RETRAX extruder head. A skilled operator needs to attend the process. After cushion gum layer application the tire can be directly removed and be further processed on a next station for tread application or the pre-cured tread can be manually or automatically applied whilst the tire is still on the RETRAX 6005 hub.

The adjustable hub speed, enables get the optimum in output for all tire sizes. This unit is provided with a display for user friendly operation.

Version 1  ➢ Automatic Cushion gum application	➢
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2. Performance Data

RETRAX 6005	Version 1			
Cushion Gum Application	Automatic			
Precured Tread Application	N.A.			
Stitching	N.A.			
Output range per 8 hour shift:	135 to 180 tires			
Floor to floor cycle time:	140 sec			

The presented performance data are indicative approximate values and depending on tire size, cushion gum, skive volume and tread design. For smaller tire size the output can be higher. Please note that for larger tires the output can go down to 60% of the above mentioned figures because of higher cycle times.

3. Technical Data

Required feed strip size:	50 x 8 mm
Min casing diameter:	600 mm, buffed
Max casing diameter:	1370 mm, with tread applied
Extruded width:	140 to 420 mm
Extruded width with wings:	140 to 380 mm
Max tire weight:	140 Kg

4. Dimensions and Weight

Retrax 6005	Main Dimension (L x W x H)	Weight	Connecting power
Version 1	2837 x 1692 x 1570 mm	1450 Kg	23 kW

Mains Supply:	400 V, AC, +/- 5%, 3 ph, 50 Hz 460 V, AC, +/- 5%, 3 ph, 60 Hz (USA)
Compressed air:	8 to 10 bar, filtered and oil-free
Water supply:	Clean water, ½". Max 25 °C; no chlorine, no distilled or ionized water , PH value 7-8
System colors:	Machine base Grey RAL 7035 Accents Blue RAL 5015

The system consists of the following modules:

4.1. Extruder Builder RETRAX

- MCTD 60 extruder with single speed 33 RPM, 5,5 kW AC drive;
  Throughput max. 50 Kg /h depending on cushion gum;
- 12-segment expanding hub;
- Allen Bradley PLC;
- Allen Bradley screen control panel.in the frame;
- Feed strip alarm.

4.2. Temperature Control Unit (TCU)

The unit controls the temperature through a water circuit passing successively the head, barrel en screw. The unit is integrated in the machine frame and is to be connected to a clean water supply or cold water circuit for cooling and to keep the water quantity in the unit on the right level. In case no clean water of maximum 25°C is available, option 5.1 is strongly recommended.

4.3. Shoulder shaping

Included is one (1) set of standard blind covers, for simple pre-cure tread. An alternative customer specific geometry can be agreed upon. For optional wingformers refer to section 5.4.

5. Options

5.1. Refrigeration unit (Chiller)

Refrigeration unit with closed cold water circuit to cool the TCU(s) and to keep the water level in the TCU(s) on the right level. In case no clean water circuit/supply of maximum 25°C to the TCU(s) can be assured, this option is strongly recommended. Due to the larger tank capacity, the regular topping up with clean and pretreated water can be done at a low level warning. The refrigeration unit is placed next to the machine.

5.2. Temperature control unit

Additional temperature control unit for a separate temperature zone for the head. For sensitive cushion gum compounds it can be desirable or necessary to split the temperature control of the temperature control of the head from the barrel. The second unit is placed next to the machine.

5.3. Air-conditioning

Air-conditioned electrical cabinet for ambient temperatures above 35 °C.

5.4. Wingformers

Extra set of wingformers, angled or contoured for building of shoulder run-out on the casing. Choice of various VMI standard geometries or an alternative customer specific geometry can be agreed upon.

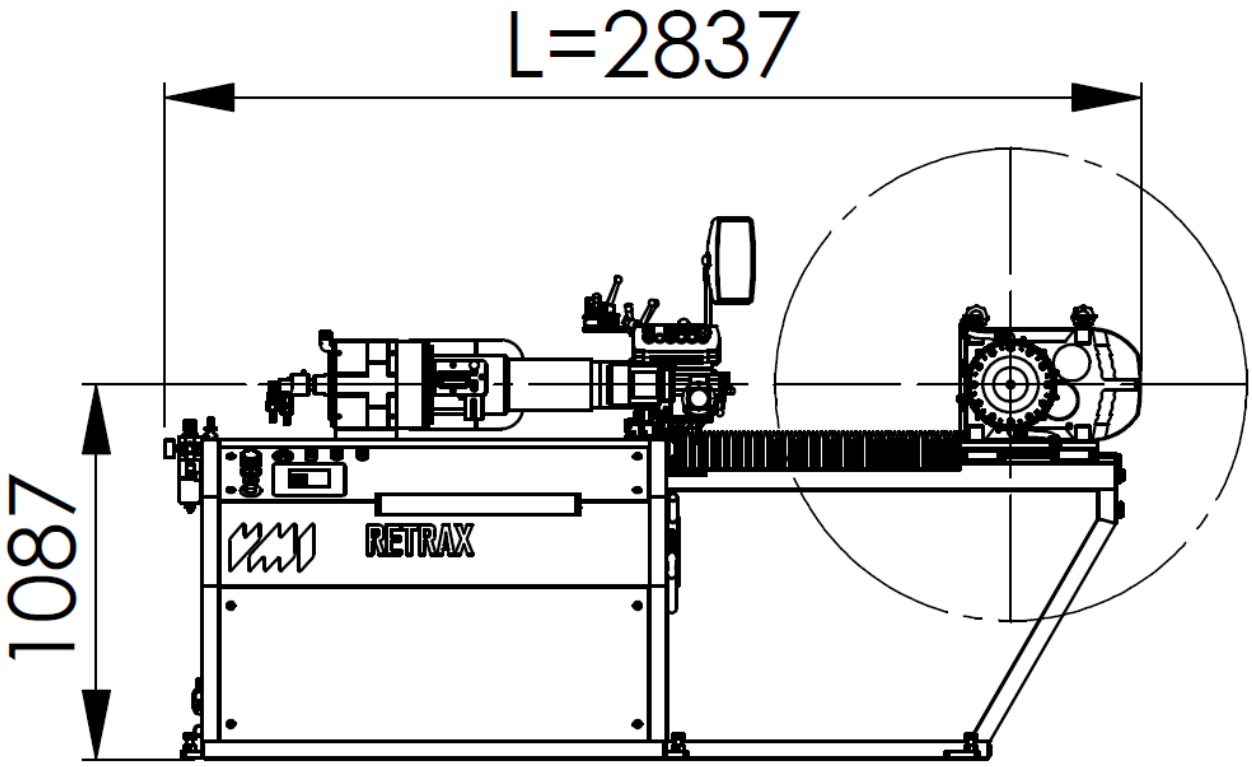
- Angle wingformers: for pre-cure tread with “wings”;
- Contour wingformers: for contoured pre-cure tread.

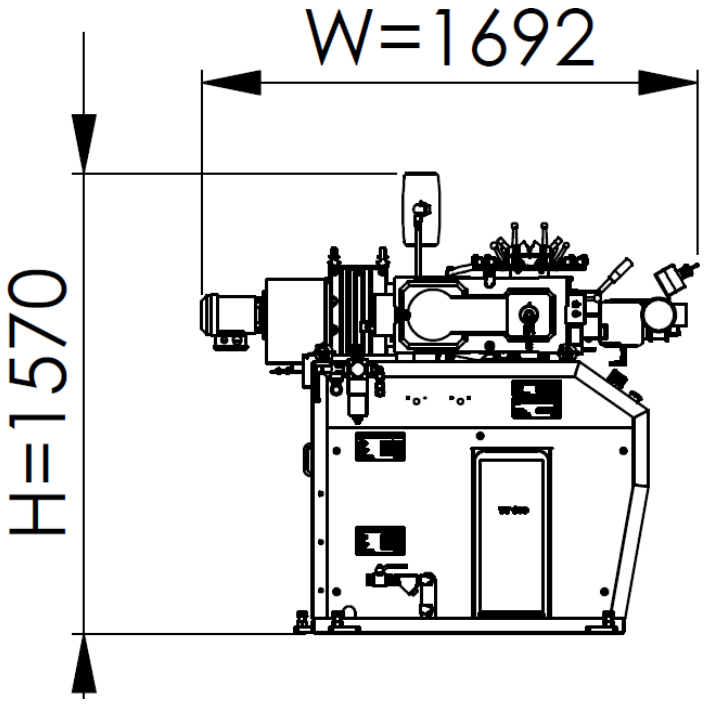
For additional information refer to the separate attachment “RETRAX wingformers”.

6. Technical Basis and Requirement at Customer

The system offered is subject to the following requirements unless otherwise specified:

- Ambient temperature range 5 °C to 35 °C;
- Relative humidity less than 80%;
- Altitude less than 1500 m;
- Dust and vibration free surroundings to European industry standards;
- All electrical, pneumatic and water supply and discharge lines to the equipment to be provided by customer;
- Foundation to industry norm.
- Technical execution to VMI technical and safety standards;
- VDE and CE safety standards are applied.





Front and Side view of RETRAX 6005 – Version 1
(Actual layout may slightly differ)