



Tyre Retreading Machinery

*a division of
Marangoni Meccanica*



CONSTRUCTOR 2000



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CONSTRUCTOR 2000

The "Constructor 2000" is a semi-automatic builder, developed for the cold retreading industry and designed to apply pre-cured tread strips on truck, bus and light transport vehicle tyre casings.

The machine is able to process the following operations in an automatic mode:

- Inflation and alignment of the tyre on the hydraulically expanded chuck.
- Measurement of buffed circumference to allow the automatic pre-selection of all parameters (with option laser measuring device).
- If available, application and stitching of the pre-calendered cushion gum (semi-automatic operation).
- Alignment of the tread strip and correct positioning on the tyre.
- Tension control of the strip during the application on the tyre.

- Calculation of the splice up to a maximum stretching of 3%.
- Radial stitching of the tread with possible intermediate dwell on the shoulders.
- Tyre deflation at end of cycle.

The control interface between machine and operator is handled through a touch screen which guides the operator through the various production steps on the machine.

The functions carried out by the operator are:

- Loading and unloading of the tyre on the chuck.
- Loading the precured tread strip cut to length on the conveyor.
- If cushion gum applicator is available, preparation of the material, final cut of the precalendered cushion gum, removal of the polyethylene backing.
- Final stapling of the tread edges.

MAIN FEATURES

- Servo assisted Cushion gum application (optional) & Centering unit
- Radial hydraulic stitching unit
- Hydraulically expandable chuck unit
- Precured Tread pattern positioned onto the roller conveyor to avoid contamination
- Touchscreen operator panel
- Possibility of online technical assistance
- 1 chuck included 19,5" - 22,5" x 230 mm
- Circumference measuring device (optional)

TECHNICAL DATA

CONSTRUCTOR 2000

Max. diameter of the tyre	1260 mm
Min. diameter of the tyre	600 mm
Max. width of the tread	450 mm
Minimum width of the tread	150 mm
Minimum diameter of the bead	15"
Maximum diameter of the bead	24,5"
Total installed power	10 kW
Power supply voltage	400/460 V
Auxiliary voltage	24Vdc / 10 Vdc / 230 Vca
Supply frequency	50/60 Hz
Air supply pressure	8 bar
Average productivity*	8 tyres/hour (315/80R22,5)

* Cycle without integrated cushion gum application. The average productivity depends also on the operator experience and skill.

OVERALL DIMENSIONS AND WEIGHT

CONSTRUCTOR 2000

Width	1400 mm
Height (from floor)	2210 mm
Length	6100 mm
Weight	2500 kg

Example layout of CONSTRUCTOR 2000

