



Tyre Retreading Machinery

*a division of
Marangoni Meccanica*



AUTOCLAVE VT



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AUTOCLAVE VT

The Autoclaves VT are autoclaves fitted with an airtight and pressure resistant chamber and with insulating materials which allow the tyre casing to be hot air vulcanised to the precured tread (strips or ring) with a 'double envelope'.

The autoclaves are equipped both with connections for inflating tyres and with free exhaust for the envelope.

These machines are fitted with all the required devices to monitor and view the work cycle. The door is fitted with a manually controlled rotation bayonet lock.

The forced circulation of air is carried out by an electric fan.

MAIN FEATURES

- Diameter 1.500 mm (or alternatively 1600 mm)
- Electrical heating (alternatively steam or steam/electrical heating)
- Forced ventilation
- PLC programmable for vulcanisation cycle
- 15" colour touch-screen computer with software for control of the process
- Vacuum system with pump + tank
- Differential pressure system with overpressure unload valve
- Quick pressure unload system at cycle end
- Hooks for double envelopes + extensions and spacers
- Long individual connection + outside manifold with gauges and faucets
- On line connection for technical assistance
- Conforms to machine directive 2006-42-CE
- Curing cycle data storage system on usb support
- PED homologation (EU pressure equipment directive)

Optional

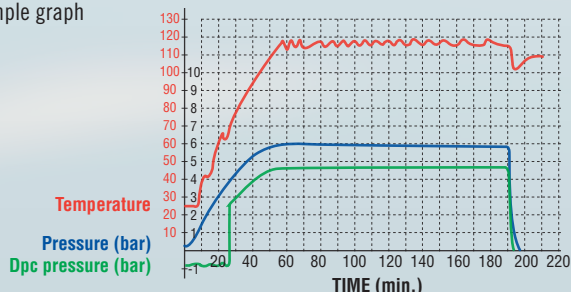
- Steam and steam/electrical heating
- Cooling system for electrical cabinet
- Internal diameter 1600 mm

OVERALL DIMENSIONS AND WEIGHT

| Autoclave Model | VT/6 | VT/12 | VT/18 | VT/24 |
|---------------------------------------|----------------------|----------------------|-----------------------|-----------------------|
| Width | | | 2100 mm | |
| Height (from floor) * | | | 2400 mm | |
| Internal monorail height (from floor) | | | 2000 mm | |
| Length with open door | 4520 mm | 6900 mm | 9100 mm | 11300 mm |
| Length with closed door | 3450 mm | 5830 mm | 8030 mm | 10230 mm |
| Internal diameter | | | 1500 mm | |
| Weight | 3000 kg | 3700 kg | 4500 kg | 5200 kg |
| Volume | 4710 dm ³ | 7466 dm ³ | 11350 dm ³ | 16407 dm ³ |

* with monorail height 2000 mm.

Curing cycle example graph



Tyres are positioned by means of a single rail and tyre carrying trolleys.

Manual and automatic safety devices are applied on the machine as provided by inspection commissions.

Autoclave chambers may have different capacities; the autoclaves are built and tested in compliance with current legislation and approved by certified local authority.

As option, the autoclave can have steam or both steam/electrical heating, and can be offered with internal diameter of 1600 mm.

TECHNICAL DATA

| Autoclave model | VT/6 | VT/12 | VT/18 | VT/24 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Internal capacity | | | | |
| 12.00-20 or 315/80R22.5 | 6 | 12 | 18 | 24 |
| Number of connections | 8 | 16 | 24 | 28 |
| Number of std hooks for double envelope | 8 | 16 | 24 | 28 |
| Number of hooks extensions for SS tyre | 4 | 8 | 12 | 24 |
| Max tyre diameter | 1200 mm | | | |
| Electrical power: | | | | |
| Fan unit | 5,5 / 6,3 kW | | | |
| Vacuum pump | 0,75/0,9 kW | 1,1 / 1,3 kW | 1,25/1,5 kW | 1,85/2,2 kW |
| Resistive heaters | 3 x 8 kW | 6 x 8 kW | 6 x 12 kW | 8 x 12 kW |
| Total installed power ** | 32 kW | 56 kW | 80 kW | 105 kW |
| Power supply voltage | 400/460 V | | | |
| Supply frequency | 50/60 Hz | | | |
| Auxiliary voltage | 115Vac/24Vdc | | | |
| Current taken ** | 60 A | 100 A | 145 A | 160 A |
| Air supply pressure | Min 8 bar - Max 10 bar | | | |
| Air consumption approx. | 8100 nl/h | 12500 nl/h | 19000 nl/h | 28000 nl/h |
| Vulcanizing unit inflation pressure | 6 bar | | | |
| Steam consumption system (version with steam) | 15 kg/h | 23 kg/h | 36 kg/h | 52 kg/h |
| Max steam consumption (version with steam) | 40 kg/h | 55 kg/h | 100 kg/h | 140 kg/h |
| Pump | 25/30 m ³ /h | 40/48 m ³ /h | 50/60 m ³ /h | 70/84 m ³ /h |
| Working temperature | +10° C to +50° C | | | |

** refer to version with electrical heating.

Example layout of AUTOCLAVE VT with internal diameter 1500 mm

