

# 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

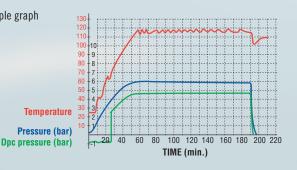
- Steam and steam/electrical heating
- Cooling system for electrical cabinet
- Internal diameter 1600 mm

# **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 <sup>3</sup>	7466 dm <sup>3</sup>	11350 dm <sup>3</sup>	16407 dm <sup>3</sup>		
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<sup>\*</sup> 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	ressure 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 <sup>3</sup> /h	40/48 m <sup>3</sup> /h	50/60 m <sup>3</sup> /h	70/84 m <sup>3</sup> /h			
Working temperature		$+10^{\circ}$ C to $+5$	50° C				

<sup>\*\*</sup> refer to version with electrical heating.

Example layout of AUTOCLAVE VT with internal diameter 1500 mm

