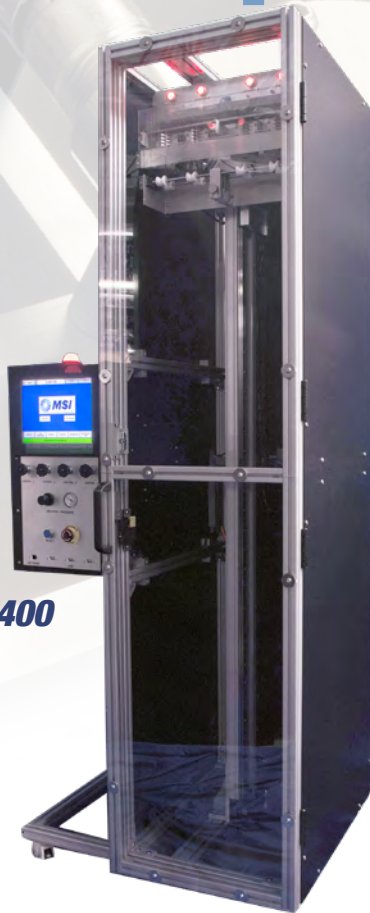


VL400/VL1000

Vertical Laminator

VL400



VL1000



VL400 / VL1000 Features

- **Process four (4) or ten (10) products simultaneously**
- **Adjustable height gripper rack for ergonomic product loading**
- **Microswirl 360 nozzle produce an even temperature distribution around product**
- **0-34Fr product grippers and optional centering guides**
- **175, 205 or 255cm travel**
- **HMI controlled temperature**
- **Polycarbonate safety door**
- **Optional tensioning system**
- **Optional barcode scanning**

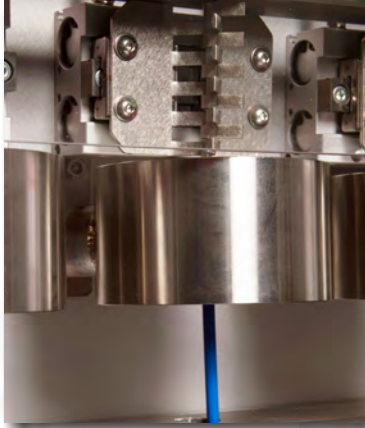
The MSI Vertical Laminator, VL1000 features our Microswirl 360° thermal nozzle that provides superior uniform heating characteristics and minimizes the incidence of hot or cold spots during the shrinking process versus flat or “C” nozzle technologies. We offer machines with four (4) or ten (10) high efficiency heating nozzles which maximize air flow to the product which allows for faster speed and maximum production throughput.

The touchscreen PC operator interface is designed for saving and retrieving numerous programmable parameter profiles. The machine is capable of 6 length and speed transitions within a single cycle and features tubing guides to ensure product centering within the heat zone and independent temperature control of each thermal nozzle. Universal grippers ensures a full range of products can be processed without need for tooling changes. The loading height can be adjusted so that each operator can load product at a comfortable height.

This machine is an ideal compliment to the SteegerUSA braiding and coiling machines as it is designed to uniformly laminate multi durometer tubing to create a braided catheter with extremely high yields and repeatable results.

VL400 / VL1000

Vertical Laminator



VL400 / VL1000 Equipment Specifications

- Available in 4 nozzle and 10 nozzle configuration.
- Microswirl 360 standard nozzle assembly, 1.5" L x 0.5" ID
- Automated gripper rack moves grippers to load and unload positions.
- Heater nozzles utilize expanded metal technology along with baffling to produce an even temperature distribution around the ID circumference.
- Heater controls: The heaters are controlled independently with the ability to run the machine with 1 to 10 heaters in operation. Flow meters have a built in flow control valve allowing accurate heater airflow control and monitoring.
- Universal grippers hold product diameters from 0-34Fr.
- Independent temperature and digital flow meters (SCFH) for each nozzle.
- Temperature displayed and controlled through HMI.
- Polycarbonate safety door.
- Heater assembly traversing is accomplished using a linear slide driven with a stepper motor.
- Touch screen PC controlled system.
- Software allows multiple traverse speed and distance relationships to be set.
- 6 stage recipe development.
- 1000 recipes can be stored for future product runs.
- Software alarm prevents a process from starting until the set point temperature has been reached.
- Temperature of each zone monitored independently and will indicate if temperature deviates outside of a set window (process will continue on remaining lanes not in an alarm state).
- Light tower process stage indicator
- Castering wheels with levelers.
- CE Marked.

System Options

- Adjustable centering guides
- Product holding trays
- Barcode scanning
- Tensioning System
- Cycle complete alarm

Temp Range	Ambient to 750°F (399°C)
Accuracy	(±) 5°F (2.78°C)
Compressed Air Requirements	100 psi at 13cf/min 1/2" Pneumatic tube (Filtered / Oil Free)
Power Requirements	4-up - 30A, 240V 10-up - 60A, 240V
Product Length	175, 205, 255cm machines available
Cleanroom Height requirement	Approximately 80cm taller than max product travel length
Product Diameter	0 - 34Fr
Heater Travel Speed	0 - 3.9 in/sec (0 - 100mm/sec)
General Warranty	1 Year

VL1000 Dimensions

- Shipping Weight: 1000 lbs (454kg)
- Machine Weight: 650 lbs (295kg)
- Overall Height: 109" (2768mm)
- Width: 60" (1524mm)
- Depth: 33" (838mm)
- Machine ships laying down

VL400 Dimensions

- Shipping Weight: 800 lbs (363kg)
- Machine Weight: 450 lbs (204kg)
- Overall Height: 109" (2768mm)
- Width: 37" (940mm)
- Depth: 33" (838mm)
- Machine ships laying down



MSI TUBE PROCESSING

+ 1 - 9 2 8 - 5 5 6 - 3 1 0 9