

## EQUIPMENT OVERVIEW

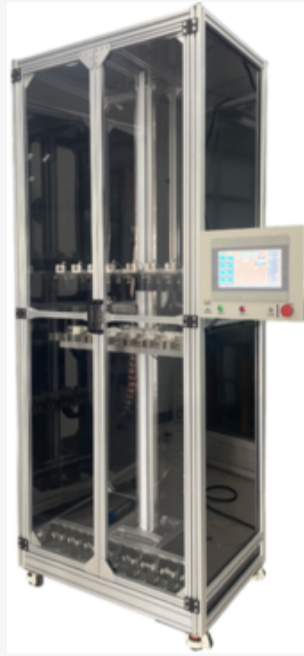


Figure 1 CLS3000 Catheter Laminator

Different from all other laminators, CLS3000 uses fan to provide air for the hot air nozzles. This eliminates one of the major sources of temperature instability caused by compressed air pressure surge. At the same time, this also eliminates the large volume requirements for compressed air in the clean room. With separate motor driving the upper and lower mounting racks, CLS3000 also allows the user to change the position of the mounting racks with a push of joystick. In addition, the heating racks is allowed to be programmed to move in any direction. The number of steps in a recipe is changed from 5 steps to 30 steps. Same as CLS2000, the heating rack is retractable, allowing true step temperature change. All these have made CLS3000 a more functional, more reliable, and more efficient reflow machine for braided catheter manufacturing.

## FEATURES

### Heating Rack

- Use fan to provide air for nozzles, eliminating temperature instability caused by compressed air pressure surge.
- Open slot heating nozzle, temperature and air flow are controlled independently.
- Special air flow channel design for uniform and stable hot air distribution
- Retractable heating rack allow true stepwise temperature change and fast sample loading/unloading

### Mounting Racks

- Motorized upper and lower mounting rack, adjust position with joystick
- Max catheter diameter 10mm
- Open jaw chuck design, allow fast loading/unloading
- Air driven tension control in lower mounting rack

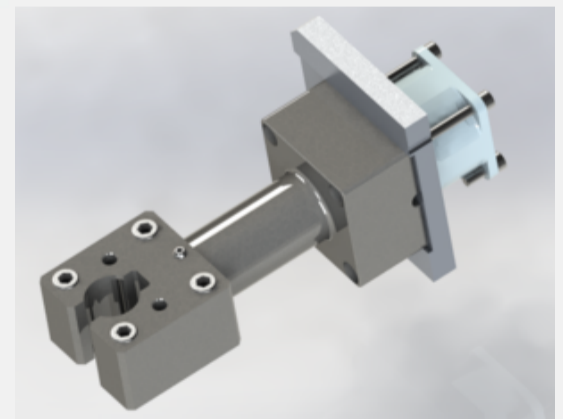


Figure 2 Axial fan type heating nozzle

## Motion System

- 3 motor design, each rack has its own motor
- Timing belt provides quiet and smooth motion
- Closed loop motor control guarantees precise position control
- Motor brake guarantee hardware safety when power is off
- Max move speed 100 mm/s

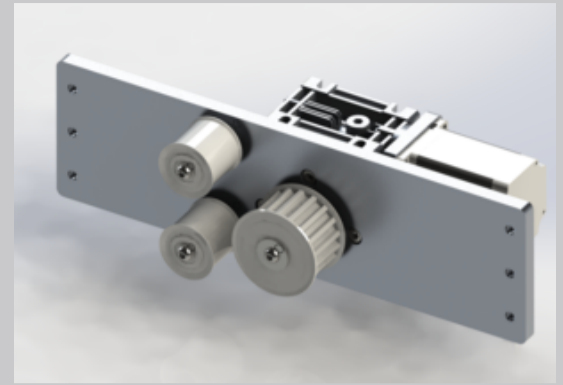


Figure 3 Motor drive assembly

## Programming Interface

- 10" touch screen HMI, support English and Chinese
- Serial programming, allow 30 steps in each recipe
- HMI can save 1000 recipes
- Every step can have a different temperature, moving speed, and distance
- Allow start from any position, allow move in any direction
- In-time parameter validation making sure the recipe is valid
- Dual START buttons prevent accidental start
- Joystick control for manual position change

## TECHNICAL SPECIFICATION

Item	Parameter
Standard size of equipment	L1280mm (including side screen 360mm) W630mm H2330mm
The nozzle heats to the highest temperature	400°C
Processing pipe length	Standard machine:1750mm (support customization)
Heating bracket operating speed range	0-100mm/s
Range of pipe diameters can be machined	0-10mm
Number of tubes that can be processed	Four, Eight
Requirements for connecting to the main power supply	380VAC 16A (three-phase five core)
Maximum power	< 6Kw
The number of steps can be edited	Up to 30 steps

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