

## EQUIPMENT OVERVIEW

SBF1000V4 Balloon Former and Tube Necker integrates the function of tube necking and balloon forming. It uses hot air heating and cold air cooling, eliminating the bulky and expensive water jacket. The machine features our patent pending high-efficiency and high stability fan driven heating nozzles. Paired heating/cooling nozzles make temperature around the mold uniform. It adopts the same three section mold design commonly used with other type of balloon forming machines, with the difference that the mold does not have to be embedded in the water jacket. Instead, it can be mounted and removed from the mold clamps freely and with ease. Due to its flexible clamping system design, the SBF1000V4 can blow balloons up to 400 mm long and more than 25 mm in diameter without having to purchase any additional fixtures other than making the mold. These advanced design and technologies made the SBF1000V4 not only highly efficient, but also exceptionally affordable.

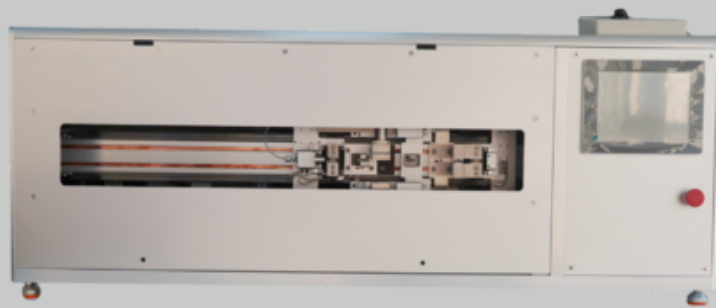
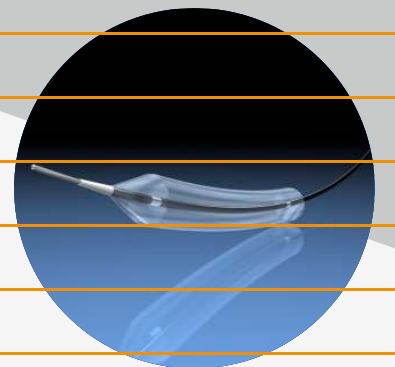


Figure 1 SBF1000V4 Balloon Former and Tube Necker

## PARAMETERS

Parameters	Spec
Max heating nozzle travel distance	>450mm
Max balloon length	>350mm
Max balloon diameter	25mm (up to 40 by changing heating/cooling nozzles)
Heating rate inside mold	5 °C/S
Single side clamp travel distance	400mm
Max clamp moving speed	>200mm/s
Max tension force	200N
Mold clamping force	>1200N
Blowing pressure	Up to 5.5Mpa
Compressed air	0.65-0.8 MP
Dimension	L165cm x D40cm x H60cm
Net weight	100 KG
Input Power	220VAC, <5KW



# FEATURES

## Heating/Cooling System

- Convection hot air heating, refrigerated cold air cooling
- Paired nozzles for uniform heating/cooling performance
- Dynamic heating/cooling range up to 450mm
- PWM fan for hot air nozzle ensure programmable and stable air flow
- Modular Heating/cooling system can have up to three pairs
- Localized heating to allow balloon cone/leg thinning

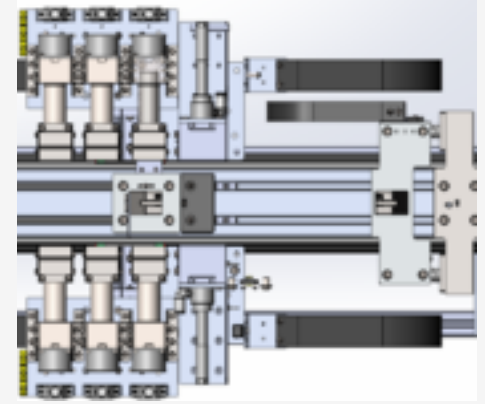


Figure 2 Convective Heating / Cooling System

## Mold System

- Use traditional three section design
- Adjustable mold clamp system for any mold length (up to 450mm long)
- High clamping force with dual cylinder design
- Sensors to detect mold presence and mold close/open status

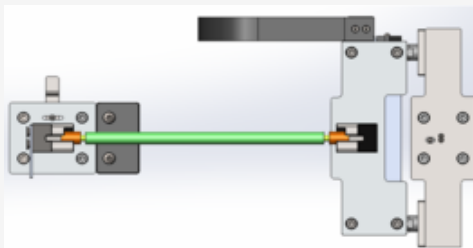


Figure 3 Mold System

## Motion System

- Adjustable tube clamp travel distance
- Timing belt driven for smooth and quiet motion
- Moving speed up to 200mm/s

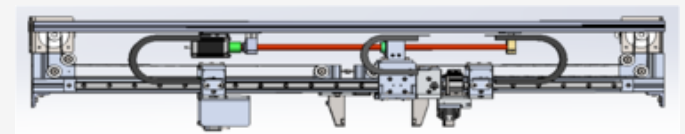


Figure 4 Multi Motor System on the Same Track

## Control System

- 10" touch screen HMI, support both English and Chinese language
- User friendly recipe system
- Support both template driven and free style recipes
- Mold database allowing association of balloon blowing and necking recipe to a balloon (mold)

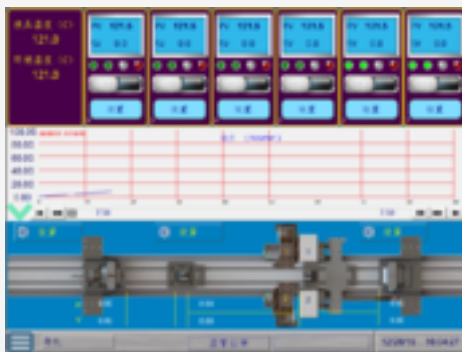


Figure 5 Main Interface of Control System



Figure 6 Main Interface of Extender



Figure 7 Blowing Program Interface

Innova Design, Inc .

Tel: (001) 858-535-9389 (US)

(0086) 0371-60986806 18603720011 15603712688 (China)

Web: [www.innovadesign.com](http://www.innovadesign.com)

E-mail: [info@innovadesigninc.com](mailto:info@innovadesigninc.com)(US) [info@zbamed.com](mailto:info@zbamed.com) (China)

Add: 13230 Evening Creek Dr. S, Suite 216, San Diego, CA 92128, USA