



# COMPUTERIZED BALLOON FORMING MACHINE

MODEL BFM-3310



## Description:

The Confluent Medical Technologies BFM-3310 Balloon Forming Machine is a computer-controlled system that expands upon a continued standard of excellence with ever-increasing capabilities and options. The BFM-3310 is a bench-top system designed to produce a variety of high-strength polymer balloons. The balloons are formed from precision extruded balloon tubing inside a beryllium copper mold. The BFM-3310 provides very accurate and repeatable control for processing high-quality balloons with tight tolerances in an extensive variety of sizes and shapes.

Next-generation machine simplifies setup and provides advanced programming options and controls

Capable of producing the most extensive range of balloons in diameters and lengths (0.5 to 50 mm x 0.5 to 250 mm)

Ability to produce many unique shapes (cylindrical, spherical, oval, conical, stepped, tapered and more)

Accurate and repeatable results to produce high-quality catheter balloons

## BFM-3310 Exclusive Features:

The BFM-3310 machine is setting industry standards and raising the bar for balloon-forming performance with an impressive list of new features.

- Next generation Programmable Logic Controller (PLC) expanding overall programming controls
  - Color LCD touchscreen display with tilt adjustment
  - Real-time control and centralized display for all functions and parameters
- Quick Release Brackets for rapid exchange of water jackets
- Convenient Ethernet and USB port access
- Exceptional storage capacity to support 100 balloon programs
- LAN communication
- Top panel access to circuit breakers and service panel access to pressure controller for easier calibration

### Tiered level security:

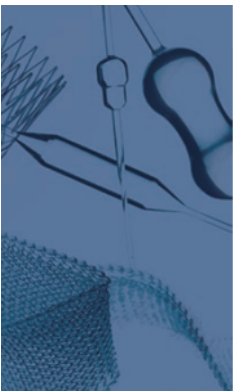
- **Top-level** access includes all balloon production parameters and limit settings for mid-level access
- **Mid-level** access sets balloon production parameters based on allowed limit settings
- **Low-level** access to preset balloon production parameters only
- Heater current and water tank temperature monitors with alarms to safeguard production yields
- Safety compartment for cooling circuit
- Programmable PID settings with auto-tune built-in for individual molds are now easily uploadable and downloadable to simplify setup and provide repeatable results

## Optional Features:

- Parison deionizer | Light curtain safety cover | Bar code scanner

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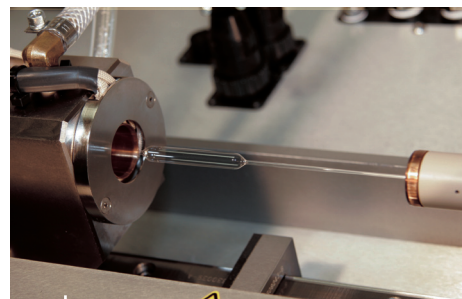


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## How It Works:

The Confluent Medical BFM-3310 uses a stretch blow mold process to stretch polymer-based tubing under pressure and at an elevated temperature in a biaxial fashion, both longitudinally and radially, while performing real-time balloon forming profiling. Temperature and pressure settings vary depending upon balloon diameter and material used. The formed balloon is cooled during the final forming process while still maintaining a high internal pressure to set the desired dimensions. The BFM-3310 is simple to program and provides the capability to customize and store balloon forming parameters for repeatable and consistent quality results.



- Precision Molds – Excellent thermal conductivity to guarantee uniform and fast heating and cooling for difficult-to-form balloons
- Water Jackets – Uniform and fast heating and cooling
- Axial Stretch Feature – Primary stretch generates uniform body wall thickness; secondary stretch thins cone and neck area
- Tubing Chucks and Clamps – Firm grip during the stretch portion of the cycle
- Pressure Control – Accurate control of gas pressure and flow into the balloon for optimal forming
- Quick Release Bracket – Simplifies water jacket installation and exchange

## Quick Release Bracket Standard Feature for BFM-3310



## SPECIFICATIONS

<b>Standard Model (110 V):</b>	Size range dependent on diameter and length (range of sizes based on water jacket availability)
	Diameter: 0.5 to 6 mm Length: 0.5 to 200 mm
	Diameter: 6.5 to 18 mm Length: 1 to 85 mm
	Diameter: 18 to 50 mm Length: 1 to 75 mm
	110 V, 60 Hz Up to 1,700 Watts
<b>High-Power Model (230 V):</b>	Full size range including larger diameter and high-pressure balloons Diameter: 0.5 to 50 mm Length: 0.5 to 250 mm Includes high-pressure mold close 230 V, 50 Hz/60 Hz Up to 3,300 Watts
<b>Dimensions:</b>	64" L x 22" W x 21" H 1,625 mm x 560 mm x 535 mm (23" H with safety cover) (585 mm with safety cover)
<b>Weight:</b>	~300 lbs (135 Kg)
<b>Materials:</b>	Nylon, PEBA <sup>®</sup> , polyurethane, PET, PE, polyamides, etc.
<b>Forming Pressure:</b>	Up to 1,000 psi (6.89 MPa) dry nitrogen
<b>Compressed Air:</b>	80 to 120 psi (0.55 to 0.83 MPa)

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