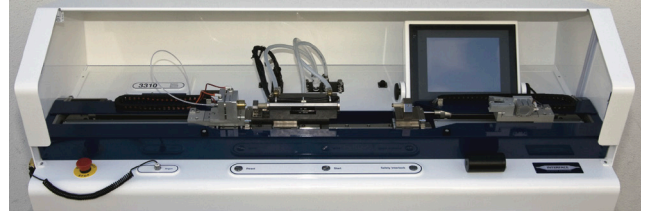




BFM-3310

COMPUTERIZED BALLOON FORMING MACHINE

The Interface Catheter Solutions 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.

KEY FEATURES

- Capable of producing the most extensive range of balloons in diameters and lengths (0.5 to 52 mm x 0.5 to 360 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:

- 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
- Storage capacity to support 100 balloon programs
- Ethernet and USB port access
- Top panel access to circuit breakers and service panel access to pressure controller for easier calibration
- Heater current and water tank temperature monitors with alarms to safeguard production yields
- 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
- 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

BFM-3310 SJ:

- Developed for super jumbo balloons 22.0mm diameter and larger with maximum balloon lengths up to 360mm
- Additional clamping force
- Additional pulling force up to 180 LBF Pull Force
- Stretch by force and distance
- Utilizes Interface standard molds, end plug, and high efficiency water jackets
- CE marked
- Available safety light curtain

BFM-3310 S:

- Developed for PTCA and some PTA balloons 1.0mm diameter up to 52mm diameter with maximum balloon lengths up to 360mm
- Standard clamping force
- Stretch by distance
- Windows based controller
- Utilizes Interface standard molds, end plug, and high efficiency water jackets
- CE marked
- Available safety light curtain

BFM-3310

COMPUTERIZED BALLOON FORMING MACHINE

TECHNICAL SPECIFICATION	BFM-3310
Standard Model (110 V)	<p>Size range dependent on diameter and length (range of sizes based on water jacket availability)</p> <p>Diameter: 0.5 to 6 mm Length: 0.5 to 360 mm</p> <p>Diameter: 6.5 to 18 mm Length: 1 to 85 mm</p> <p>Diameter: 18 to 52 mm Length: 1 to 75 mm</p> <p>110 V, 60 Hz Up to 1,700 Watts</p>
High-Power Model (230 V)	<p>Full size range including larger diameter and high-pressure balloons Diameter: 0.5 to 52 mm Length: 0.5 to 360 mm Includes high-pressure mold close 230 V, 50 Hz/60 Hz Up to 3,300 Watts</p>
Dimensions	<p>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)</p>
Weight	<p>~300 lbs (135 Kg)</p>
Materials	<p>Nylon, PEBAX®, polyurethane, PET, PE, polyamides, etc.</p>
Forming Pressure	<p>Up to 1,000 psi (6.89 MPa) dry nitrogen</p>
Compressed Air	<p>80 to 120 psi (0.55 to 0.83 MPa)</p>

VISION SYSTEM FEATURES

The Interface Catheter Solutions 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



Interface Catheter Solutions is proud to be an MMT company.

Medical Manufacturing Technologies (MMT) brings together applications expertise, technical solutions, and aftermarket support to revolutionize medical device manufacturing. [Learn more at mmt-inc.com](http://mmt-inc.com).