

FoamMix[®] System



Foaming system produces closed-cell foam gaskets from flowable sealants.



The patented Nordson FoamMix system produces a homogenous foam material by mixing inert gas with typical flowable sealants. The gas expands to create a closed-cell foam as the material is manually or robotically applied to components.

The system processes and dispenses a variety of high-performance materials, including silicones, urethanes and plastisols at elevated or ambient temperatures. No chemicals are used in the foaming process so foamed sealants retain their basic physical properties, such as temperature and chemical resistance.

The gas content of the foamed material can be adjusted to control material durometer, compression set resistance and flexibility.

The FoamMix system allows precise robotic application with repeatable, controllable performance. Gaskets can be applied in seconds, greatly increasing productivity while reducing labor costs.

The control panel is designed for easy programming and operation with all major controls and diagnostic systems located on the front at eye level.

Features and Benefits

- **Designed for automated, form-in-place gasketing**, which greatly improves productivity and eliminates the need for die-cut and foam tape gaskets.
- **Processes and dispenses a variety of flowable sealants**, allowing flexibility in material selection.
- **Typically delivers 40-50 percent gas content of mixture**, providing economical material usage, faster cure time of materials and reduced gasket weight.
- **Enhances many mechanical properties** of the materials and provides more accurate control than chemical foam systems.



FoamMix System Control Features

The FoamMix system can be equipped to dispense materials at ambient or elevated temperatures. Control features include:

- Microprocessor-based control with EPROM-based software and non-volatile memory for all operator-programmed set points.
- Full system diagnostics activate automatic alarm and shutdown functions.
- Remote signal output for customer-ready functions for system ready, system fault and pump interlock.
- Two-level programming access codes lock out unauthorized set point changes.
- Display of system functions, including: mix ratio; material and gas flow rate; system pressures; system temperatures; motor speed and current; system operating mode; and diagnostic messages.
- Selectable Fahrenheit/Celsius PSI/Bar display.
- Sequential heater start-up capability.
- Seven-day clock, with selectable 12-hour/24-hour display, for automatic system activation.

Technical Specifications

Physical Dimensions

(L x W x H) 39 x 40 x 76 in. (99 x 102 x 193 cm)

Approximate Weight

(empty) 900 lbs. (410 kg)

Continuous Delivery Rate

Minimum	5 lb/hr (2.3 kg/hr) 2.5 in ³ /min (40 ccpm)
Maximum	100 lb/hr (45 kg/hr) 48 in ³ /min (780 ccpm)

Viscosity Range

1,000 to 1,000,000 cps

Density Reduction

0 to 80% (±5% accuracy)

Temperature Range

Cold System	Room Temperature
Warm System	90 to 275°F (32 to 135°C)
Hot System	250 to 375°F (121 to 177°C)
Accuracy	±2°F (1°C)

Electrical Service

Cold System (max)	15 amp
Warm System (max)	35 amp
Voltage	220-240 VAC, 50/60 Hz, 1/3Ø 380Y/220 VAC, 50 Hz, 3/1Ø

Gas Supply

Minimum Pressure	1500 psi (100 bar)
Maximum Pressure	3500 psi (240 bar)
Type/Grade	Nitrogen, dry grade

Air Supply (for oil system pump)

Minimum Pressure	80 psi (5.4 bar)
Maximum Pressure	120 psi (8.2 bar)

Hose/Gun Capacity

Hydraulic	Multiple hose/gun capability
External Heating Zones	12 available – all units

Ambient

Temperature	32 to 120°F (0 to 50°C)
Humidity	To 90% relative humidity (non-condensing)

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