Fully automated fluid dispensing platform for Potting, Thermal Interface Material (TIM), Gasketing and Sealing applications

Features and Benefits

- Single component (1K) bulk dispensing
- Integrated controls for two-component (2K) Metering Systems
- Fluidmove® Software, user programmable dispense geometries
- Mass Flow Calibration (patented) by optional large capacity weight scale
- Automatic XYZ Needle Calibration by optional sensor
- Camera system for programming and fiducial recognition
- Stainless steel surface design for easy cleaning
- Supports the routing of bulk fluid supply hoses

The Helios™ SD-960 Series is developed by combining Nordson ASYMTEK’s 30+ years expertise in micro-dispensing with the bulk and 1 and 2 component dispensing experience of other Nordson divisions, resulting in a complete process solution for medium to large volume dispensing applications in Electronics Assembly.

The platform offers solutions to a range of single- and two-component applications including Potting, Sealing, Gasketing, and Structural Adhesives. The system supports highly abrasive Thermal Interface Materials (TIMs), silicones, epoxies, and grease.

Equipped with Nordson ASYMTEK dispense valves or fully integrated Nordson SEALANT metering systems, the SD-960 can be customized to meet specific customer requirements. Options such as time-pressure valves, closed-loop process control, and servo-controlled positive displacement systems are available, allowing the user to tailor the system to their dispensing requirements for single and/or two component materials.

The Mass Flow Calibration (MFC) option, found in other Nordson ASYMTEK dispensing systems, ensures dispense volumes remain within defined process limits through weight-controlled dispensing and automatic calibration.

Dispensing drops of adhesives, thermal interface material or silicone beads to large potting applications in final product assembly, the SD-960 can handle it all!

From initial process development through full scale production, you are supported by our experienced worldwide engineering, applications development and technical service network.
### Motion System

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Closed-loop servo motors with encoders</td>
</tr>
<tr>
<td>X-travel</td>
<td>500 mm</td>
</tr>
<tr>
<td>Y-travel</td>
<td>525 mm</td>
</tr>
<tr>
<td>X-Y Velocity</td>
<td>Up to 1000 mm/s (39.4 in./s)</td>
</tr>
<tr>
<td>X-Y Acceleration</td>
<td>Up to 1 g peak with S-curve jerk control</td>
</tr>
<tr>
<td>Z-Axis Velocity</td>
<td>Up to 250 mm/s (10 in/s)</td>
</tr>
<tr>
<td>Z-Axis Resolution</td>
<td>0.010 mm. (0.0004 in.)</td>
</tr>
<tr>
<td>X-Y Resolution</td>
<td>0.025 mm. (0.001 in.)</td>
</tr>
</tbody>
</table>

### Dispense Area

Note: The dispense area is dependent upon system options and configuration. Up to 500 x 440 mm without indexing.

### Fluid Delivery Method

The Fluid Delivery Method depends on the application requirements. A wide range of single and 2-component valves, as well as metering systems and bulk fluid supplies are available.

### Conveyor

Note: The conveyor specifications are dependent upon what conveyor system is configured.

**Example: Double wide Chain Conveyor configuration**

Motor driven width adjustment: 35 to 475 mm (1.4 to 18.7 in.)

Payload: 7 kg (15 lbs.)

### Computer and Software

- **Computer:** Laptop computer
- **User environment:** Fluidmove® software
- **Operating system:** Windows® 7 software

### System footprint

1000 mm width x 1329 mm depth (39.3 x 52.3 in.)

*Computer keyboard/monitor occupy additional 527 mm (20.7 in.) in the front.*

*Lower door requires 855 mm (33.7 in.) clearance to open in the front.*

*Recommended clearance behind the machine depends on fluid supply configuration.*

Contact Nordson ASYMTEK for specifics.

### Facilities Requirements

- **Air supply:** 620 kPa (90 psi. 6.2 Bar)
- **Main power:** 200/240 VAC, 50/60 Hz
- **Noise:** Peak ≤ 76.0 dBA; Average ≤ 70.7 dBA
- **Standards compliance:** SMEMA, CE

### Standard Features for SD-960

- Door interlock controls
- Stainless steel interior
- Pattern Recognition System (camera) including lighting
- Computer arm adjustable in height
- Low pressure sensor
- Large purge station
- Chain conveyor
- Light beacon with audible alarm

### Featured Options for SD-960

- Weight scale for Mass Flow Calibration and dispense weight check
- Bar code recognition system, 1D or 2D
- Non-Contact Laser Height Measurement
- Dual-simultaneous applicator capability
- Dual-toggle applicator capability
- Low fluid sensor
- XYZ needle calibration sensor
- Bulk feed hose enclosure (top hat)
- Custom AOI hardware and software

Additional options are available.

Contact Nordson ASYMTEK for further information.

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The optional Laser Height Sensor allows for automatic substrate height calibration.

The optional XYZ Needle Calibration sensor eliminates the need for operators to manually re-calibrate the positioning system after changing the needle or mixer.

The SD-960 is fully supported by Nordson ASYMTEK's exclusive Fluidmove® software, providing dispense programing control within a familiar Windows environment. The software package allows the user to freely program their dispense geometries and features like dispensed dot recognition and multi-location height measurements.
Helios™ SD-960 Series Dimensions

Dimensions are in millimeters. Specifications and dimensions subject to change. Contact Nordson ASYMTEK for more detailed drawings if required.

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