



# Metering, mixing & dispensing systems

For bonding, sealing, potting, casting, encapsulation, gasketing and more

*Performance by design*

**Nordson**  
SEALANT EQUIPMENT

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						Guangzhou	<b>South Korea</b>	
						Shanghai	Seongnam City	
						Suzhou	<b>Thailand</b>	
							Chonburi	

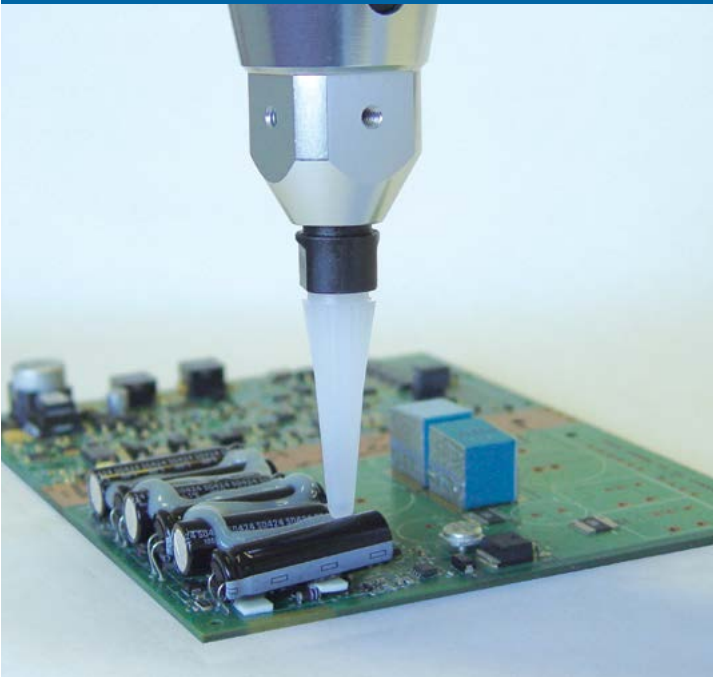
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# Applications

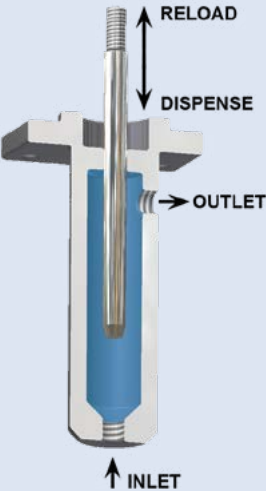
- Aerospace dispensing
- Automotive paint shop
- Appliance bonding
- Battery dispensing
- Construction dispensing
- Electronic potting
- Electronic bonding
- Filter molding
- Lighting gaskets
- Robot integration

For more information about Nordson Sealant Equipment's complete line of dispensing solutions, contact us at:

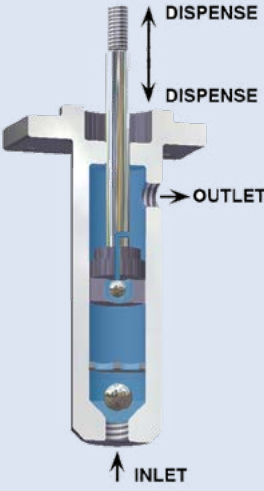
[sealantsales@nordson.com](mailto:sealantsales@nordson.com)  
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# Principles of meter design

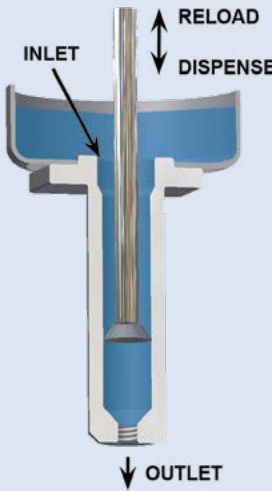
Positive rod displacement



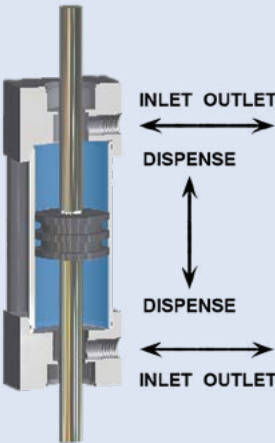
Double acting piston



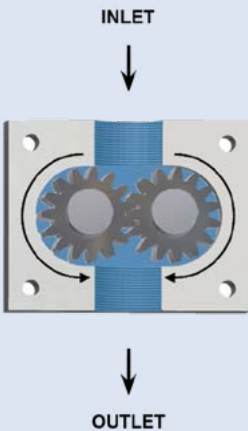
Piston cup metering



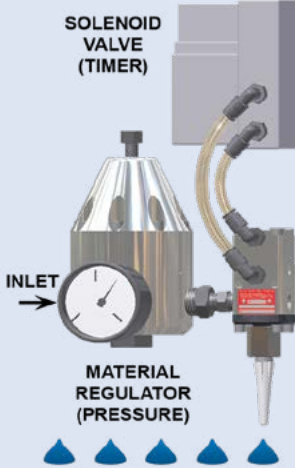
Reciprocating piston



Precision gear metering



Time and pressure



# 2-part metering & mixing systems

## Pro-Meter® V2K

### Compact benchtop 2-part dispensing system

With an innovative design and tough construction, it won't let you down when you need to get the job done, without compromising on quality or production speed, whatever you throw in the mix; whether it's abrasives or filled materials.

### Powered by positive rod precision

- **Massive on precision** – Positive rod displacement metering technology proportions materials to the exact volumetric ratio specified by manufacturers, time and time again.
- **Small on size** – This compact benchtop unit is one of the smallest around, allowing it to quickly get to work in virtually any workshop location.
- **Low on costs** – The costs of ownership are equally predictable. Not only does the unit come with one of the lowest price tags for this specification, but it also reduces stoppage time and maintenance for more metering at less expense.

### Precision + Performance = Pro-Meter V2K

- **Versatile feed system** – Easy gravity-fed loading of pourable materials – no pumps needed. A pressure feed option is also available for higher viscosity materials.
- **Advanced valve technology** – Snuf-Bak™ or No-Drip® valve options allow precision handling of both high and low viscosity materials.
- **Compact benchtop unit** – Measuring just 31" x 31" x 17" (788 x 788 x 432 mm), the compact unit is a true benchtop device that can quickly and easily be located where the work is required.



System specifications	
Metering principle	Positive rod displacement
Drive type	Pneumatic
Material delivery	Shot or bead
Shot size range	Up to 184 cc at 1:1 ratio
Ratio range	1:1 up to 20:1
Viscosity range	Liquid to viscous liquid
Supply type	Gravity feed or tank
Maximum flow rate	2 liters/min

[www.sealantequipment.com/V2K](http://www.sealantequipment.com/V2K)

# 2-part metering & mixing systems



## Pro-Meter 2K series. Precision. As standard.

- **Accurate** – Uses electronic pressure monitoring to ensure consistent process parameters part to part.
- **Flexible** – Shot size and flow rate adjustment available on demand using simple control panel.
- **Low maintenance** – Heavy duty packings and seals minimize wear and increase lifespan in tough manufacturing environments.
- **Durable** – Dispense abrasive or filled materials with no loss of accuracy.
- **Dependable** – Rods do not touch cylinder walls, reducing wear and downtime.

Model	H2K	A2K	D2K
Drive type	Air-over-oil	Servo	Dual servo
Metering principle	Positive rod displacement		
Applications	Potting	Potting or bead	
Viscosity range	Liquid to paste		
Ratio range	1:1 to 10:1		
Shot size range	Up to 221 cc at 1:1 ratio		
Fixed flow rate	■	–	–
Variable flow rate	–	■	■
Multiple shot output per cycle	–	■	■
Independent speed control of dissimilar materials	–	–	■
Up to 255 programmable dispense volumes	■	■	■

## Pro-Meter® H2K

### Air-over-oil drive meter system

- On-ratio – Power inlet and outlet valves eliminate material bypass and ensure ratio precision and consistency.
- Used to dispense an infinite dispense volume, using a totalizing program, where the meter dispenses multiple shots per stroke of the meter, until the dispense volume is achieved.

[www.sealantequipment.com/H2K](http://www.sealantequipment.com/H2K)

## Pro-Meter® A2K

### Single servo drive meter system

- On-ratio – Single servo motor driving two rods ensures materials are always moving together, creating the most accurate ratio repeatability.
- Enables dispensing of precision beads and precise dispense volumes; when dispensing a bead, the servo speed (flow rate of material) is correlated to the tool tip speed of the motion platform that presents the product.

[www.sealantequipment.com/A2K](http://www.sealantequipment.com/A2K)

## Pro-Meter® D2K

### Dual servo drive meter system

- Enables independent pre-pressure of both A and B side materials, allowing for the best mix of dissimilar materials. Features ability to simply make ratio changes by easily changing ratio demand in control panel.

[www.sealantequipment.com/D2K](http://www.sealantequipment.com/D2K)



## Micro-Meter® D2K

System specifications	
Metering principle	Positive rod displacement
Drive type	Dual servo
Material delivery	Shot or bead
Shot size range	0.10 to 25.00 cc
Ratio range	12:1
Viscosity range	Liquids and pastes (1 to 750,000 cps)

Offering extreme repeatability at high mix ratios and low dispense volumes, the Micro-Meter D2K provides individual control for A- and B-sides of the meter for potting, encapsulating, micro-dispensing, gasketing, bonding and composite filling.

[www.sealantequipment.com/mmd2k](http://www.sealantequipment.com/mmd2k)



## Micro-Meter® A2K

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Shot or bead
Shot size range	0.25 - 25.00 cc
Ratio range	10:1
Viscosity range	Liquid and pastes (1 to 350,000 cps)

Micro-Meter A2K provides variable flow mid dispense of shots or beads, allowing for perfect corners when potting, encapsulating, gasketing or bonding of even the most abrasive two-component materials.

[www.sealantequipment.com/mma2k](http://www.sealantequipment.com/mma2k)



## Micro-Meter® P2K

System specifications	
Metering principle	Positive rod displacement
Drive type	Pneumatic
Material delivery	Shot
Shot size range	0.50 - 25.00 cc
Ratio range	9:1
Viscosity range	Flowable liquids (1 to 200,000 cps)

The pneumatic actuator ensures consistent volumetric ratio for the Micro-Meter P2K. Up to three shot sizes can be programmed, making the P2K versatile for potting and encapsulating of two-component materials.

[www.sealantequipment.com/mmp2k](http://www.sealantequipment.com/mmp2k)



# 2-part metering & mixing systems



488 Meter series

System specifications	
Metering principle	Positive rod displacement
Drive type	Air-over-oil or servo
Material delivery	Shot or bead
Shot size range	Up to 1,359 cc (45.95 oz) at 1:1 ratio
Ratio range	1:1 Up to 10:1
Viscosity range	Liquid to paste
Supply type	Pump or tank

One of the highest capacity shot meters on the market, the 488 series is ideal for dispensing large volumes of abrasive materials where traditional continuous flow technology cannot be used.

[www.sealantequipment.com/sf488](http://www.sealantequipment.com/sf488)



7 Series

System specifications	
Metering principle	Balanced double acting piston
Drive type	Air drive
Material delivery	Shot or continuous flow
Shot size range	Minimum 100 cc (3.38 oz)
Ratio range	1:1 Up to 10:1
Viscosity range	Liquid
Supply type	Tank

A variable ratio continuous flow or shot dispensing meter ideal for low viscosity applications.

[www.sealantequipment.com/sf7](http://www.sealantequipment.com/sf7)



582 Meter series

System specifications	
Metering principle	Balanced double acting piston
Drive type	Air drive
Material delivery	Shot or continuous flow
Shot size range	Minimum 100 cc (3.38 oz)
Ratio range	1:1 Up to 10:1
Viscosity range	Liquid
Supply type	Tank

Ideal for the delivery of high volumes of low viscosity materials.

[www.sealantequipment.com/sf582](http://www.sealantequipment.com/sf582)



704 Meter series

System specifications	
Metering principle	Precision gear
Drive type	Dual servo or AC frequency motor
Material delivery	Shot or continuous flow
Shot size range	Minimum 3 cc (0.10 oz)
Ratio range	1:1 Up to 10:1
Viscosity range	Liquid to paste
Supply type	Pump or tank

Ideal for constant flow rate, continuous dispensing 2-part (2K / 2-component) applications, with a choice of control options, the 704 series uses precision gear metering technology.

[www.sealantequipment.com/sf704](http://www.sealantequipment.com/sf704)



Cartridge servo dispenser

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Bead
Flow rate	0.1 g/s minimum
Ratio range	NA
Viscosity range	Viscous liquid to heavy paste
Supply type	6 oz. and 12 oz. cartridges

Articulating cartridge holder opens to load and unload cartridges to supply material to the dispenser assembly. The integrated dispense valve eliminates dispense hoses and increases accuracy of bead and volume control. The servo drive provides accurate and consistent flow rates to a minimum of 0.1 g/s.

[www.sealantequipment.com/cartridgedispenser](http://www.sealantequipment.com/cartridgedispenser)



Angstrom meter

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Shot or bead
Shot size range	0.05 Cc (0.002 oz) to 1.2 cc (0.04 oz) at 1:1 ratios
Ratio range	1:1 Up to 10:1
Viscosity range	Viscous liquid to light paste
Supply type	Cartridge, pump or tank

Extreme precision meter mix dispense system for 2-part adhesives and sealants; dispense volumes are in the range of 0.05 cc (0.002 oz) up to 1.2 cc (0.04 oz) at 1:1 ratio. Bead sizes have been tested as small as 0.3 mm (0.011 in) in diameter at 10:1 ratio.

[www.sealantequipment.com/angstrommeter](http://www.sealantequipment.com/angstrommeter)

# 1-part metering systems



Micro-Meter® 1K

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Shot or bead
Shot size range	0.05 - 12.00 cc
Viscosity range	Liquids and pastes (1 - 350,000 cps)

Compact meter design, ideal for applications that require either high levels of repeatability or small dispense volumes for one-part (1k / one-component) materials.

[www.sealantequipment.com/mm1k](http://www.sealantequipment.com/mm1k)



305 Meter

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Shot or bead
Shot size range	Up to 110 cc (3.72 oz)
Viscosity range	Liquid to heavy paste
Supply type	Pump or tank

The Servo-Flo 305 is ideal for accurate and repeatable dispensing volumes of 1-part (1K / 1-component) materials up to 110 cc.

[www.sealantequipment.com/sf305](http://www.sealantequipment.com/sf305)



PAB3 Meter

System specifications	
Metering principle	Positive rod displacement
Drive type	Single servo
Material delivery	Bead
Shot size range	33 cc (1.16 oz) to 275 cc (9.30 oz)
Viscosity range	Liquid to heavy paste
Supply type	Pump or tank

The PAB3 is ideal for accurate and repeatable dispensing of large volumes of 1-part (1K / 1-component) materials, up to 275 cc (9.30 oz).

[www.sealantequipment.com/pab3](http://www.sealantequipment.com/pab3)



995 Meter Series

System specifications	
Metering principle	Precision gear
Drive type	Single servo
Material delivery	Bead
Shot size range	Minimum 1cc (0.03 oz)
Ratio range	1-part materials
Viscosity range	Liquid to paste
Supply type	Pump or tank

Ideal for constant flow rate, continuous dispensing or high volume dispensing of 1-part (1K / 1-component) applications.

[www.sealantequipment.com/sfgear](http://www.sealantequipment.com/sfgear)

# Dispensing valves

## Snuf-Bak™ valves

2-part (2K/2-component) valves

## Tip-Seal® valves

Static and rotary dynamic mixers

## Kiss™ valves

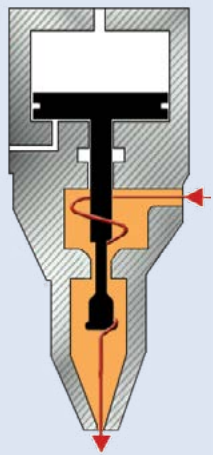
Fluid control valves, pressure regulators

## No-Drip® valves

Dispense nozzles, valve accessories



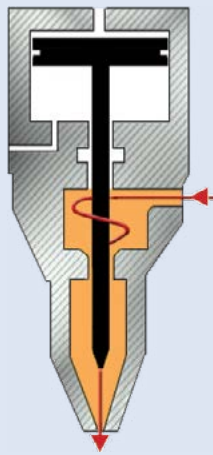
# Principles of valve design



## Snuf-Bak

Ideal for medium to high viscosity, non-level seeking materials and thixotropic or cohesive (stringy) materials for faster shut-off.

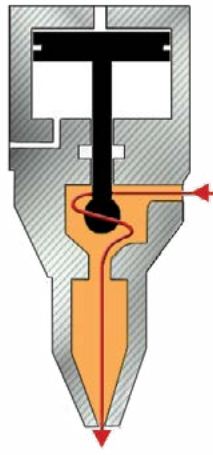
Accepts a wide variety of metal and plastic nozzles for extruding materials.



## Tip-Seal

Designed to shut-off material flow of low to high-viscosity materials creating a zero cavity seal at the tip of the nozzle.

A wide variety of tip orifices and tip lengths are available for high speed on-off and precision fluid control applications.

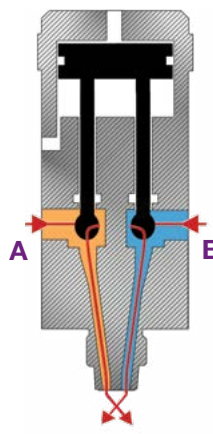


## No-Drip

Designed for low-viscosity, pourable materials, abrasive or filled materials and high flow applications. Often used for in-line fluid on/off flow control.

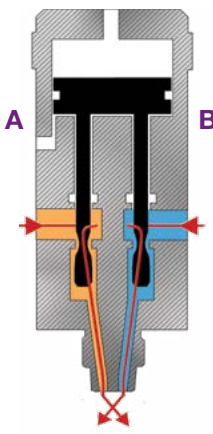
Accepts a wide variety of nozzles for extruding and spraying materials.

## 2-part mix valve



## No-Drip

Ideal for low viscosity 2-part materials.



## Snuf-Bak

Best for medium to high viscosity 2-part materials.

Mix at the nozzle applications



# Snuf-Bak™ dispensing valves



### 041 Series

- Ideal for 1 mm (0.04 in) - 3 mm (0.12 in) beads
- Compact, easy to mount
- Stainless steel wetted parts

System specifications (US / metric)	
Dry weight	1.55 lbs (0.7 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Viscous liquid to paste



### 127 Series

- Ideal for 2 mm (0.08 in) - 5 mm (0.2 in) beads
- Adjustable PTFE packings
- Available in a stainless steel version

System specifications (US / metric)	
Dry weight	1.54 lbs (0.7 kg)
Maximum inlet fluid pressure	3,500 PSI (241 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Viscous liquid to paste



### 727 Series

- Ideal for 2 mm (0.08 in) - 5 mm (0.2 in) beads
- Available in a square body for robotic mount
- Aluminum wetted parts

System specifications (US / metric)	
Dry weight	1.53 lbs (0.7 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Viscous liquid to paste



### 033 Series

- Ideal for beads greater than 3 mm
- Highest volume Snuf-Bak valve
- Designed for automated applications

System specifications (US / metric)	
Dry weight	3.1 lbs (1.4 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Viscous liquid to paste

# Tip-Seal® dispensing valves



### 245 Series

- Ultra compact design
- Tip-length configurable
- 0.06 in - 0.2 in orifice diameter options

System specifications (US / metric)	
Dry weight	1.0 Lb (0.45 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close with spring assist
Material delivery	Pump meter or tank
Viscosity range	Liquid to light paste



### 1051 Series

- Ideal for higher viscosity materials with high flow rates
- Available in aluminum and stainless steel wetted parts
- Up to a 0.125 in orifice

System specifications (US / metric)	
Dry weight	2.75 lbs (1.25 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Liquid to paste



### 035 Series

- Designed for robotic mounting
- Ideal for high flow rate and high pressure applications, up to a 0.19 in orifice
- Aluminum wetted parts

System specifications (US / metric)	
Dry weight	5.44 lbs (2.5 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Liquid to paste




# Kiss™ extrude, spray & stream valves



Kiss extrude, spray, & stream valves					
Item	Part number	Type	Description	Fluid body	Outlet
1	7425012	Extrude	With 1/4" NPT(f) adapter	Aluminum	1/4" NPT (f)
1	7426171	Extrude	With 1/4" NPT(f) adapter	Stainless steel	1/4" NPT (f)
1	7428824	Extrude	With mounting block	Aluminum	1/4" NPT (f)
1	7425139	Extrude	With stroke adjustment	Aluminum	1/4" NPT (f)
2	7425609	Spray	With nozzle collar & gasket	Aluminum	For flanged tip or nozzle
2	7425397	Spray	With locating flats & dowel	Aluminum	For flanged tip or nozzle
2	7425558	Spray	Without locator pin in seat housing	Aluminum	For flanged tip or nozzle
3	7425217	Spray	For reverse-a-clean	Aluminum	7/8-14 (m)
3	7425204	Spray	For reverse-a-clean	Stainless steel	7/8-14 (m)
4	7425427	Stream	With nozzle cap	Aluminum	For flanged tip or nozzle
5	7425534	Spray	3-port	Aluminum	For flanged tip or nozzle


# No-Drip® dispensing valves



### 108 Series

- Adjustable PTFE packings
- Designed for a wide range of chemical properties
- Available in a spring-assisted close version


System specifications (US / metric)	
Dry weight	1.46 lbs (0.66 kg)
Maximum inlet fluid pressure	3,500 PSI (241 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump meter or tank
Viscosity range	Liquid to paste



### 1021 Series

- Manual ball and seat design
- Ergonomic pistol grip handle
- Stainless steel and carbide construction

System specifications (US / metric)	
Dry weight	1.42 lbs (0.64 kg)
Maximum inlet fluid pressure	6,000 PSI (413 bar)
Minimum inlet air pressure	NA
Operation	Manual open/manual close
Material delivery	Pump meter or tank
Viscosity range	Liquid to paste



### 911 Series

- Dynamic seal design for ease of maintenance
- Available in a spring-assisted close version
- Designed for a wide range of chemical properties

System specifications (US / metric)	
Dry weight	1.45 lbs (0.66 kg)
Maximum inlet fluid pressure	4,000 PSI (275 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to paste

# 2-part dispensing valves



## 250 Series

- Adaptable to 7/8-9 or 7/8-14 type shrouds
- Available in all stainless steel parts
- Multiple seal configurations are available

System specifications (US / metric)	
Dry weight	3 lbs (1.4 kg)
Maximum inlet fluid pressure	3,500 PSI (241 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	All 2-part meter, mix & dispense systems
Viscosity range	Viscous liquid to paste



## 093 Series

- Ultra compact design
- Independently controlled fluid paths
- All stainless steel parts

System specifications (US / metric)	
Dry weight	1.4 lbs (0.7 kg)
Maximum inlet fluid pressure	3,500 PSI (241 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	All micro 2-part meter, mix & dispense systems
Viscosity range	Liquid to light paste



## 545 Series

- Designed for low-viscosity, pourable materials and high flow applications
- Adaptable to 7/8-9 or 7/8-14 type shrouds
- Available in a bayonette mixer version

System specifications (US / metric)	
Dry weight	3 lbs (1.4 kg)
Maximum inlet fluid pressure	3,500 PSI (241 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close with spring assist
Material delivery	All 2-part meter, mix & dispense systems
Viscosity range	Liquid to light paste



## 482 Series power mixer

- Ideal solution for dynamic mixing of 2-part (2K/2-component) materials
- Available in a servo-motor version
- Independent control valves to reduce or eliminate lead-lag dispensing issues

System specifications (US / metric)	
Dry weight	12 lbs (5.5 kg)
Maximum inlet fluid pressure	1900 PSI (131 bar)
Minimum inlet air pressure	60 PSI (4.14 bar)
Operation	Independent air open/air close with spring assist
Material delivery	All 2-part meter, mix & dispense systems
Viscosity range	Liquid to paste

# Disposable mixers

## Complete and thorough mixing for 2-part materials

Ideal for single-use fluid dispensing applications, the elements in these mixers are 180° helical twists alternating in either right or left-hand rotation. These alternating elements are joined so that their leading and trailing edges are mutually perpendicular.



## Series 162A



Part number	Mixing elements	Element dia. (in/mm)	Housing length (in/mm)	Outside diameter (in/mm)	Pressure limit (PSI/bar)
7701057	16	0.784 / 19.9	12.5 / 31.7	0.98 / 24.9	580 / 39
7701059	23	0.784 / 19.9	17.0 / 43.2	0.98 / 24.9	580 / 39
7701063	32	0.784 / 19.9	24.5 / 62.2	0.98 / 24.9	580 / 39
7701066	39	0.784 / 19.9	30.3 / 77.0	0.98 / 24.9	580 / 39
7701067	48	0.784 / 19.9	36.4 / 92.5	0.98 / 24.9	580 / 39

## Series 190



Part number	Mixing elements	Element dia. (in/mm)	Element length (in/mm)	Housing outlet	Retained volume (ml)
7701408	12	0.093 / 2.36	1.5 / 3.8	Luer slip	0.1
7701411	12	0.125 / 3.18	2.1 / 5.3	H tapered	0.2
7701416	24	0.125 / 3.18	3.4 / 8.6	H tapered	0.4
7701417	8	0.187 / 4.75	1.6 / 4.1	Full bore	0.4
7701424	16	0.187 / 4.75	3.4 / 8.6	Luer slip	0.9
7701436	16	0.187 / 4.75	3.4 / 8.6	H tapered	0.9
7701438	7	0.213 / 5.40	2.3 / 5.8	Luer slip	0.9
7701449	17	0.213 / 5.40	4.4 / 11.2	Stepped	1.9
7701453	21	0.213 / 5.40	5.3 / 13.5	Stepped	2.4
7701458	12	0.250 / 6.35	3.9 / 9.9	Luer slip	1.9
7701486	16	0.250 / 6.35	4.8 / 12.2	Stepped	2.5
7701487	20	0.250 / 6.35	5.9 / 15.0	Luer slip	3
7701488	20	0.250 / 6.35	5.9 / 15.0	Stepped	3
7701510	20	0.250 / 6.35	5.9 / 15.0	H tapered	3
7701507	20	0.250 / 6.35	5.3 / 13.5	Full bore	2.8

# Disposable mixers

## Series 160 spiral bell mixers



Part number	Mixing elements	Element dia. (in/mm)	Housing length (in/mm)	Outside dia. (in/mm)	Outlet tip orifice (in/mm)	Housing outlet	Pressure limit (PSI/bar)
7440276	8	0.189 / 4.80	2.62 / 6.65	0.300 / 7.62	0.07 / 1.78	Luer slip	500 / 34
7440277	8	0.189 / 4.80	2.62 / 6.65	0.300 / 7.62	0.07 / 1.78	Luer lock	500 / 34
7436788	16	0.189 / 4.80	3.90 / 9.91	0.300 / 7.62	0.07 / 1.78	Luer slip	500 / 34
7436776	24	0.189 / 4.80	5.18 / 13.16	0.300 / 7.62	0.07 / 1.78	Luer slip	500 / 34
7440278	24	0.189 / 4.80	5.18 / 13.16	0.300 / 7.62	0.07 / 1.78	Luer lock	500 / 34
7436777	32	0.189 / 4.80	6.48 / 16.46	0.300 / 7.62	0.07 / 1.78	Luer slip	500 / 34
7440279	32	0.189 / 4.80	6.48 / 16.46	0.300 / 7.62	0.07 / 1.78	Luer lock	500 / 34
7440280	48	0.189 / 4.80	9.04 / 22.96	0.300 / 7.62	0.07 / 1.78	Luer slip	500 / 34
7440281	48	0.189 / 4.80	9.04 / 22.96	0.300 / 7.62	0.07 / 1.78	Luer lock	500 / 34
7440282	8	0.248 / 6.30	3.56 / 9.04	0.370 / 9.40	0.09 / 2.29	Luer slip	360 / 25
7440283	8	0.248 / 6.30	3.56 / 9.04	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7440284	16	0.248 / 6.30	5.46 / 13.87	0.370 / 9.40	0.09 / 2.29	Luer slip	360 / 25
7440285	16	0.248 / 6.30	5.46 / 13.87	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7436774	24	0.248 / 6.30	7.46 / 18.95	0.370 / 9.40	0.09 / 2.29	Luer slip	360 / 25
7440286	24	0.248 / 6.30	7.46 / 18.95	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7440287	24	0.248 / 6.30	7.46 / 18.95	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7429810	32	0.248 / 6.30	9.49 / 24.10	0.370 / 9.40	0.09 / 2.29	Luer slip	360 / 25
7436775	32	0.248 / 6.30	9.49 / 24.10	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7440288	32	0.248 / 6.30	9.49 / 24.10	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7429611	48	0.248 / 6.30	13.14 / 33.38	0.370 / 9.40	0.09 / 2.29	Luer slip	360 / 25
7440289	48	0.248 / 6.30	13.14 / 33.38	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7440290	48	0.248 / 6.30	13.14 / 33.38	0.370 / 9.40	0.09 / 2.29	Luer lock	360 / 25
7440291	18	0.314 / 8.00	6.96 / 17.68	0.461 / 11.71	0.10 / 2.54	Stepped	330 / 23
7440292	18	0.314 / 8.00	6.96 / 17.68	0.461 / 11.71	0.10 / 2.54	Luer lock	330 / 23
7429813	24	0.314 / 8.00	8.84 / 22.45	0.461 / 11.71	0.10 / 2.54	Stepped	330 / 23
7440293	24	0.314 / 8.00	8.84 / 22.45	0.461 / 11.71	0.10 / 2.54	Luer lock	330 / 23

## Series 160 spiral bell mixers



Part number	Mixing elements	Element dia. (in/mm)	Housing length (in/mm)	Outside dia. (in/mm)	Outlet tip orifice (in/mm)	Housing outlet	Pressure limit (PSI/bar)
7429825	32	0.314 / 8.00	11.44 / 29.06	0.461 / 11.71	0.10 / 2.54	Stepped	330 / 23
7440295	32	0.314 / 8.00	11.44 / 29.06	0.461 / 11.71	0.10 / 2.54	Luer lock	330 / 23
7440296	12	0.366 / 9.30	5.48 / 13.92	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440297	12	0.366 / 9.30	5.48 / 13.92	0.510 / 12.95	0.12 / 3.05	Luer lock	300 / 21
7440298	18	0.366 / 9.30	7.28 / 18.49	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440299	18	0.366 / 9.30	7.28 / 18.49	0.510 / 12.95	0.12 / 3.05	Luer lock	300 / 21
7436780	24	0.366 / 9.30	9.15 / 23.24	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7436787	24	0.366 / 9.30	9.15 / 23.24	0.510 / 12.95	0.12 / 3.05	Luer lock	300 / 21
7429809	30	0.366 / 9.30	11.24 / 28.55	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440300	30	0.366 / 9.30	11.24 / 28.55	0.510 / 12.95	0.12 / 3.05	Luer lock	300 / 21
7429612	40	0.366 / 9.30	14.14 / 35.92	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440301	40	0.366 / 9.30	14.14 / 35.92	0.510 / 12.95	0.12 / 3.05	Luer lock	300 / 21
7429613	60	0.366 / 9.30	22.4 / 56.90	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440302	64	0.366 / 9.30	24.0 / 60.96	0.510 / 12.95	0.12 / 3.05	Stepped	300 / 21
7440303	12	0.497 / 12.65	6.71 / 17.04	0.660 / 16.76	0.18 / 4.57	Stepped	270 / 19
7440304	12	0.497 / 12.65	6.71 / 17.04	0.660 / 16.76	0.18 / 4.57	Luer lock	270 / 19
7440305	18	0.497 / 12.65	9.08 / 23.06	0.660 / 16.76	0.18 / 4.57	Stepped	270 / 19
7440306	18	0.497 / 12.65	9.08 / 23.06	0.660 / 16.76	0.18 / 4.57	Luer lock	270 / 19
7436772	24	0.497 / 12.65	11.60 / 29.46	0.660 / 16.76	0.18 / 4.57	Stepped	270 / 19
7436773	24	0.497 / 12.65	11.60 / 29.46	0.660 / 16.76	0.18 / 4.57	Luer lock	270 / 19
7429808	30	0.497 / 12.65	14.09 / 35.79	0.660 / 16.76	0.18 / 4.57	Stepped	270 / 19
7440307	30	0.497 / 12.65	14.09 / 35.79	0.660 / 16.76	0.18 / 4.57	Luer lock	270 / 19
7429614	36	0.497 / 12.65	16.63 / 42.24	0.660 / 16.76	0.18 / 4.57	Stepped	270 / 19
7440309	36	0.497 / 12.65	16.63 / 42.24	0.660 / 16.76	0.18 / 4.57	Luer lock	270 / 19



# Dispensing nozzles, valve accessories



Metal and compliant nozzles

Item	Part number	Inlet	Outlet	Length
1	7425325	1/4" NPT	1/4" OD	1"
2	7425389	7/8-14 UNF	7/16-14 UNC	6.03"
2	7425489	7/16-14 UNC	1.5 mm	1.88"
2	7426488	7/16-14 UNC	4.5 mm	1.88"

## Fluid control and valve accessories

Part number	Description
7425005	Check valve, 1/4" NPT (FBE), 4,000 PSI (275 bar), sst
7428594	Check valve, 1/4" NPT (FBE), 3-50 PSI (0.2-3.4 bar), sst
7429506	Check valve, 1/4" NPT (FBE), 50-150 PSI (3.4-10.3 bar), sst
7428593	Check valve, 1/4" NPT (FBE), 150-350 PSI (10.3-24 bar), sst
7428595	Check valve, 1/4" NPT (FBE), 350-600 PSI (24-41.3 bar), sst
7425624	Check valve, 1/2" NPT (FBE), 4,000 PSI (275 bar), cs
7425513	Check valve, 3/4" NPT (FBE), sst
7426952	Fluid pressure gauge, 600 PSI (41.3 bar)
7426946	Fluid pressure gauge, 1,000 PSI (68.9 bar)
7426948	Fluid pressure gauge, 3,000 PSI (206 bar)
7426950	Fluid pressure gauge, 5,000 PSI (344 bar)
7428416	Foot pedal, electric
7428419	Foot pedal, pneumatic, 3-way



Tips for 245 No-Drip valve  
and multi-function gun

Item	Part number	Type	Orifice
3	7426290	Ribbon	0.010" slot width
3	7425492	Ribbon	0.012" slot width
3	7425004	Ribbon	0.013" slot width
3	7427889	Ribbon	0.014" slot width
3	7425034	Ribbon	0.016" slot width
3	7427890	Ribbon	0.018" slot width
3	7425188	Ribbon	0.020" slot width
3	7425268	Ribbon	0.022" slot width
3	7427891	Ribbon	0.024" slot width
3	7425398	Ribbon	0.026" slot width
3	7426058	Ribbon	0.032" slot width
3	7426059	Ribbon	0.034" slot width
4	7428464	Spray	0.036" x 95° fan angle
4	7430718	Spray	0.023" x 25° fan angle
5	7428465 to 7428469	Stream	0.028" To 0.057" Dia.
6	7428481 to 7428484	Stream	0.020" To 0.063" Dia.



Plastic nozzles

Item	Part number	Inlet	Outlet	Length
7	7427882	1/4" NPT	0.06"	2.5"
8	7427883	1/4" NPT	0.12"	2.5"
9	7425203*	1/4" NPT	0.12"	2.5"
9	7425041*	1/4" NPT	0.06"	2.5"
10	7427884	1/4" NPT	0.03"	4"
11	7427885	1/4" NPT	0.06"	4"
12	7427881	1/4" NPT	0.09"	4"
13	7427848	1/4" NPT	0.12"	4"
14	7427869	1/4" NPT	0.06" x 0.5"	4"
15	7427847	1/4" NPT	1.75" wide	4"
16	7427849**	1/4" NPT	0.05" x 0.38"	5"
17	7427850**	1/4" NPT	0.12" x 0.75"	5.18"
18	7435883	1/4" NPT	0.12"	6"

\* Delrin material    \*\* Skive end

Needle nozzles

Item	Part number	Inlet	Outlet	Length
19	7426620	Static mixer	Luer-lock	0.88"
19	7426614	Static mixer	Luer-lock	0.88"
19	7426612	Static mixer	Luer-lock	0.88"
20	7426617	1/4" NPT	Luer-lock	1.3"
21	7433437	1/4" NPT	5/16-28(F)	0.75"
22	7426611	5/16"-28(m)	Luer-lock	0.88"
23	7427873	Luer-lock	0.06"	1.0"
24	7427854	Luer-lock	0.09"	1.0"
25	7427859	Luer-lock	0.09"	2.0"
26	7425055	1/4" NPT	0.09"	1.0"
27	7427858	1/4" NPT	0.09"	2.5"
28	7427860	Luer-lock	0.09"	6.0"

# Fluid control valves, pressure regulators

## 060 Series No-Drip fluid control valves

- Single ball and seat, air actuated fluid control valve for 1-part materials
- Available in aluminum or stainless steel
- Multiple seal configurations are available



System specifications (US / metric)	
Dry weight	4 lbs (1.8 kg)
Max. inlet fluid pressure	5,000 PSI (345 bar)
Min. inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to paste

## 396 Series

- Single ball and seat, piston actuated fluid control valve for 1-part materials
- All stainless steel construction
- Wear resistant seals and hardened components



System specifications (US / metric)	
Dry weight	6 lbs (2.7 kg)
Max. inlet fluid pressure	3,500 PSI (241 bar)
Min. inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to paste

## 003 Series volume metering valves

- Positive displacement meter valve automatically dispenses a small, precisely measured shot volume of material
- Dispense shot size 0.2 cc's to 2.0 cc's
- Available in all stainless steel construction



System specifications (US / metric)	
Dry weight	3 lbs (1.36 kg)
Max. inlet fluid pressure	600 PSI (41 bar)
Min. inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to light paste

## 087 Series No-Drip fluid control valves

- Stainless steel valve fluid body and hardened seat for high viscosity, high volume applications
- Unrestricted internal design allows for the free flow of high viscosity materials
- Multiple seal configurations are available

System specifications (US / metric)	
Dry weight	10.3 lbs (4.67 kg)
Max. inlet fluid pressure	5,000 PSI (345 bar)
Min. inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to paste



## 530 Series No-Drip fluid control valves

- Provides accurate material regulation when it is important to operate guns at lower fluid pressures
- Available in aluminum or stainless steel
- Wear resistant seals and hardened components

System specifications (US / metric)	
Dry weight	17.6 lbs (2.7 kg)
Max. inlet fluid pressure	5,000 PSI (345 bar)
Min. inlet air pressure	60 PSI (4.14 bar)
Operation	Air open/air close
Material delivery	Pump or tank
Viscosity range	Liquid to paste



# Material supply

## Rhino® bulk unloaders

5-gallon pail, 30-gallon and 55-gallon frame sizes are available for all models.



5-Gallon Rhino bulk unloader



55-Gallon Rhino bulk unloader



## Cartridge feed supply

Side-by-side; up to 20 oz. cartridges.



## Pressure / vacuum tanks

2-, 5-, 10-, 15-, and 30-gallon available.



## Flow control valves

Start / stop material flow.



## Material pressure regulators

3/8", 1/2" and 3/4" NPT ports.

# Valve series XYZ robot

## 3-axis tabletop automated dispensing system

Easy automation for precision dispensing with teach pendant programming.

Nordson Sealant Equipment's valve series automated dispensing system features a simple-to-use Teach Pendant for quick setup and easy programming.

### Precision. As standard.

- **Affordable** – Tabletop automated dispense system can simplify the steps needed to upgrade your process.
- **Accurate** – Precision motion control results in repeatable production quality.
- **Durable** – Robust construction provides movement stability at high speeds.
- **Dependable** – High payload range allows for greater manufacturing flexibility.
- **Reduce downtime** – Easy to use controls reduce set up time between production runs.

### Diversity to suit your application need

- **Advanced valve technology** – Snuf-Bak™ or No-Drip® valve options allow precision handling of both high and low viscosity materials.
- **3D applications** – XYZ three-dimensional motion control dispenses dots, lines, potting, filling, encapsulation, sealing, coating and more.
- **Simplified setup** – program yourself via simple-to-use Teach Pendant or file importation.



System specifications	
Maximum working area (X/Y/Z)	16" / 16" / 4" (400 / 400 / 100 mm)
Number of axes	3
Drive system	3-phase micro-stepping motor
Workpiece payload	21 lbs (10 kg)
Tool payload	17.7 lbs (8 kg)
Maximum speed (X/Y/Z)	31/13 in/s (800/320 mm/s)
Repeatability	+/- 0.008 mm/axis

Controls and interface	
Input/output	8 inputs/8 outputs
Memory capacity	1-99 programs
Data storage	USB
Drive method	PTP and CP
Power supply	Auto-switching, AC100-240V, 200W
Teach pendant	Included

# Meter series XYZ robot

## 3 Axis Tabletop Automated Dispensing System

Easy automation for precision dispensing with teach pendant programming.

By integrating automated dispensing, manufacturers experience faster cycle and batch times with reduced production and material costs.

### Precision. As standard.

- **High Payload** – Capacity enables full sized meters to be mounted directly to the gantry - providing greater shot accuracy with wide and difficult ratio materials.
- **Accurate** – Precision motion control and a hose-free valve mounting - direct to the meter - result in repeatable production quality, even for small shots (<0.5 cc) without sacrificing ratio or volume accuracy.
- **Flexible** – Large mounting area for auxiliary tools that complement the dispensing process – such as surface treatment and inspection devices.
- **Affordable** – Tabletop automated dispense system can simplify the steps needed to upgrade your process.
- **Durable** – Robust construction provides movement stability at high speeds.
- **Reduce Downtime** – Easy to use controls reduce set up time between production runs.
- **Compact, Easy Installation** – Robot mounted meter and valve system reduces complexity and total system footprint.



System specifications	
Maximum working area (X/Y/Z)	16 in / 16 in / 4 in (400 / 400 / 150 mm)
Number of axes	3
Drive system	Servo Driven Ballscrew
Maximum Tool payload	44 lbs (20 kg)
Maximum Part Payload	80 lbs (36 kg)
Maximum speed (X/Y/Z)	19.7 in/sec (500 mm/sec)
Maximum Speed Z Axis : with <30 lbs tool weight with 30-38 lbs tool weight with 39-44 lbs tool weight	8.6 in/sec (220 mm/sec) 7.87 in/sec (200 mm/sec) 7 in/sec (180 mm/sec)
Repeatability	+/- 0.01 mm

Controls and interface	
Input/Output	8 inputs / 8 outputs
Memory Capacity	1-99 programs
Data Storage	USB
Drive Method	PTP and CP
Power Supply	Auto-switching, AC100-240V, 200W
Teach Pendant	Included



# Control systems

For complete system monitoring and control of your dispensing system. The typical Nordson Sealant Equipment control package consists of the following components:

## Additional control components available

- Foot pedal start controls
- Timed shot control panels
- Pump crossover controls
- Material temperature controls
- Keypad interface panels
- Panel view color touch screen controls
- Advanced PC color touch screen control
- DeviceNet and equivalent communication



## PLC (programmable logic controller)

- Stores up to 255 shot or bead profiles

## HMI (human machine interface)

- 6" Color touchscreen



## System temperature controls

- Heat-cool water circulation
- Electric heated components



## Modular temperature controls

- Thermal electric heat-cool
- Heat exchangers and jackets

# Best-in-Class Manufacturing

Our team of application engineers design systems tailored to each customer's specific application requirements. These systems are manufactured and staged in our impressive Wixom, Michigan facility where we offer on-site validation and wet run-off services.





# Application Development and Training Center

A unique environment for customers to conduct testing, demonstrations, and training in state-of-the-art Nordson adhesive and sealant applications.



Launched in 2018, our Application Development and Training Center offers an array of amenities and space to reflect Nordson's investment in the continued growth of our cold materials dispensing and automotive assembly markets:

- **Four Fanuc robots**
- **Three customer labs:** aerospace, automotive, and general industry (with electric battery demonstration)
- **Customer Experience Center:** collaborative environment with meeting spaces and product showcases



## Equipment Showcase

Nordson's equipment capabilities are demonstrated, showcasing achievable speeds, flow rates, volumetric accuracies, and more.

- **Rhino Unloaders**
- **Pro-Meter S<sup>PLC</sup>**
- **Process Sentry PLC Controllers**
- **Dispense Valve Line:** Auto-Flo II, Zero-Cavity, Anti-Drool, CE20 Valve, 2K Valve
- **JetStream Automatic Cartridge Dispenser**

## Material Testing

Pumpability testing is available for any material, whether supplied directly by material suppliers or end users. Pumpability testing often involves observing the material's ability to flow through dispensing equipment at specific speeds and ensuring the equipment and/or material do not get damaged.

## Component Testing

Customers are encouraged to bring in their own components, and Nordson's qualified robot programmers can establish complex bead paths and identify potential application challenges before actual installation or programming on the assembly line.

## Equipment Training

Maintenance workers can get hands-on experience with new equipment before a line goes live, allowing a maintenance team to be up-to-date and well-prepared for system installation.



## Nordson expertise is always here when you need it

In highly competitive manufacturing markets, productivity is vital and performance is essential. That's why we apply both to everything we do, whether it's our products, expertise or outstanding customer service. We'll always be there to help maintain the new standards you've set, with expert local service and support delivered through our teams working across the globe.

This unique Nordson approach helps you reach new levels of production, while working more accurately, efficiently and competitively than ever. Precisely why manufacturers who demand quality, can rely on Nordson.

*Performance by design*

### Nordson SEALANT EQUIPMENT

Nordson Sealant Equipment  
Wixom, MI, USA

**Phone:** 248.412.7920

**Email:** [SealantSales@nordson.com](mailto:SealantSales@nordson.com)



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