



# Nordson Total Filter Solution

Adhesive Dispensing for pleating, potting and bonding applications in Industrial and Consumer Filter Manufacturing

# Consistent, High-quality, and Cost-effective

Filters manufactured using accurate and consistent production equipment.

The need to produce consistent, quality filters as cost-effectively as possible is a constant challenge. Whether for applications such as residential water treatment, automobile oil, or industrial dust collection, filters must perform in their intended application and environment. To meet the performance specifications, filters must be manufactured using accurate and consistent production equipment.

Nordson adhesive dispensing equipment delivers precision and reliability and helps optimize material use in manual, semi-automated, or automated processes. As the media, frames, and housings used in filter manufacturing encompass various substrates, including plastics, metals, and paper, an array of dispensed materials is needed for a finished filter. Nordson's vast product family provides solutions for virtually any adhesive and sealant material and produces a broad range of solid or foamed patterns. Whether intermittent or continuous, contact or non-contact application, Nordson dispense technology has the solution for you.



# Filter Applications

## Air Filters

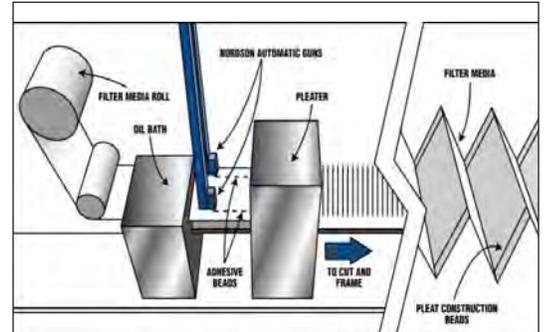
Air filters are critical in removing solid particulates such as dust, pollen, mold, and bacteria from the air. Nordson understands our customer's needs for precision, reliability, and cost savings in producing millions of filters each year. Nordson works with our customers each step to ensure our customer's goals are met and often exceeded.

### Edge seal pleating & stabilization

- Beads are applied toward the outside edge of the media to provide an air seal.
- Stabilization: A single or multiple beads are applied onto the top of the filter pack following the pleating process to stabilize the pleats.

### Filter edge band sealing

- Edge band is applied to seal the filter edges in continuous or intermittent application



## Hydraulic and Fluid Filters

The most essential part of every hydraulic system is the hydraulic fluid, and hydraulic filters are located at different parts of the hydraulic system, preventing the entry of contaminant particles into the system. Nordson knows how critical hydraulic filters are to their overall hydraulic system. Our customers depend on Nordson for the accuracy and consistency they desire.

### Applications

- End cap molding
- End cap bonding
- Side seam bonding

### Materials

- Several Adhesives replaces metal clips
- and other Material so that the
- Filters are recyclable – green filter





## Residential and Industrial Filters

Air filters and water filters within a home or industrial ventilation system block several irritating and harmful airborne and water source impurities such as pollen, animal dander, mold spores, viruses, and bacteria. Industrial water filters are equipment used to eradicate the impurities from water sources in industrial applications. Nordson understands the need for accuracy and consistency to produce HVAC filters, vacuum cleaner filters, water and beverage filters, and pool water filters in mass.

### Common residential and industrial filter applications are:

- Mini-pleating
- Pleat separation
- Pleat stabilization
- Seam sealing
- Frame bonding

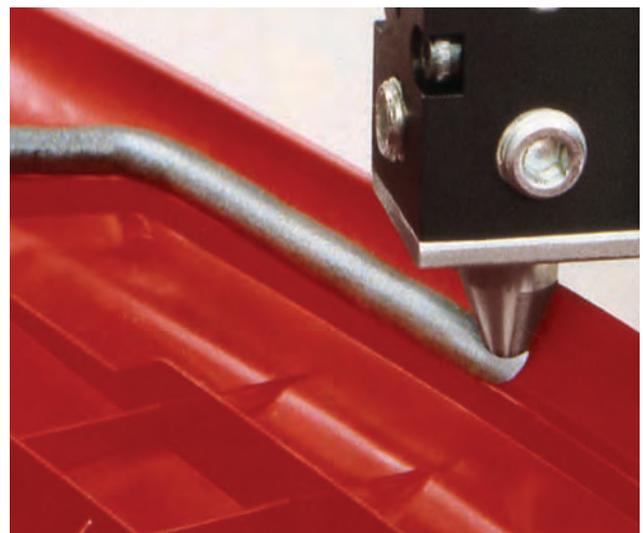


## Foamed Adhesive Advantage

Nordson foamed dispensing systems dramatically improve the performance of most hot melt adhesives by mixing them with inert gas, creating a homogenous solution. As the material is dispensed, the gas expands to create a closed-cell foam.

### Benefits of Foamed Adhesive:

- Increased open time
- Faster set time
- Increased bead volume
- Significant material savings



# Our Products

**Nordson application systems seamlessly integrate into the assembly of filters. Nordson systems are proven the world over to provide the consistency and accuracy our customers desire. Cost and production efficiencies are realized with Nordson foaming technology and automated systems. Below is a selection of our newest products well suited for the automotive industry.**

## Extruder Technology

Nordson EX Hot Melt Adhesive Extruders are designed for efficient operation while protecting material integrity. The closed systems preserve the material from ambient air to prevent degradation and development of char.



## FoamMix® Flex Dispensing System

The Nordson FoamMix® Flex dispensing system mixes a variety of reactive and non-reactive materials, either heated or ambient, with inert gas to create a homogeneous mixture. As the material is dispensed, the gas expands to create a closed-cell foam.



## VersaBlue® Tank Melters

VersaBlue melters precision gear metering and variable-speed drives bring maximum accuracy and flexibility to a world of demanding applications.



## Harmony™ Applicators

Harmony applicators support a family of applications ranging from continuous contact or spray to demanding ultra-high-speed intermittent applications.



## DuraBlue® II Melters

Nordson DuraBlue® II series melters are designed to deliver hot melt adhesive in support of low to mid-speed production. The metering spur-gear pumps with variable-speed AC motors and key-to-line functionality satisfies a wide range of manufacturing requirements.



*\*FoamMix Flex requires the need for high-pressure gas.*

### AG-900+S Modular Dispensing Applicator

The modular design of the AG-900+S dispensing applicator allows different assembly for various gasketing, sealing and bonding applications. The applicator module can be used independently or with combinations of regulators, actuators, and hose interfaces.

### EB 60 Flex Edge Banding Slot Applicator

The EB 60 Flex applicator uses volume compensation during coating width changes to eliminate squeeze-out and/or excess air, thereby making saleable product from the very first panel of a production run. The flexible system for edge banding applications supports various adhesives; a range of coating widths; and a variety of panel shapes.

### TruFlow™ Meter

TruFlow meters help improve production efficiency and product quality by enabling simple, cost-effective material flow measurement.

### FoamMelt® Dispensing System

FoamMelt systems use a patented process to foam hot melt adhesives for form-in-place gasketing applications, replacing expensive and labor-intensive die-cut and foam-tape gaskets.



# Our Promise

**Nordson Adhesive delivers precision dispensing technology to diverse markets to help manufacturers reduce material consumption, increase production efficiency, and enhance product strength and durability.**



#### Value Innovation

Nordson consistently creates customer value with innovative products, new technology and customer-driven projects.



#### Global

With global manufacturing, sales and service operation, Nordson is adept at supporting and collaborating with customers worldwide.



#### Business Scale

Nordson has extensive capabilities to deliver on customer promises.



#### Direct

Nordson Adhesive Systems has direct offices in over 30 countries with local application experts nearby to help.



## Worldwide Service and Support

Nordson helps protect your investment with exceptional people, programs and service to keep your equipment in peak operating condition. For your satisfaction, Nordson solutions are backed by a Package of Values<sup>®</sup> that includes:

- Locally-available service network
- TrueBlue<sup>™</sup> service & preventive maintenance plans
- Global service and distribution centers
- Repair and exchange programs

For more information, speak with your Nordson representative or contact your Nordson regional office.

### United States

Duluth, Georgia  
(800) 683-2314 **Phone**  
(866) 667-3329 **Fax**

### Canada

Markham, Ontario  
(800) 463-3200 **Phone**  
(905) 475-8821 **Fax**

### Europe

Erkrath, Germany  
(49) 211-9205-0 **Phone**  
(49) 211-254658 **Fax**

### Japan

Tokyo, Japan  
(81) 3-5762-2700 **Phone**  
(81) 3-5762-2701 **Fax**

### Asia/Australia/Latin America

Amherst, Ohio  
(440) 985-4797 **Phone**  
(440) 985-1096 **Fax**