

Precision Adhesive Dispensing for Automotive Assembly

Auto Tier I Application

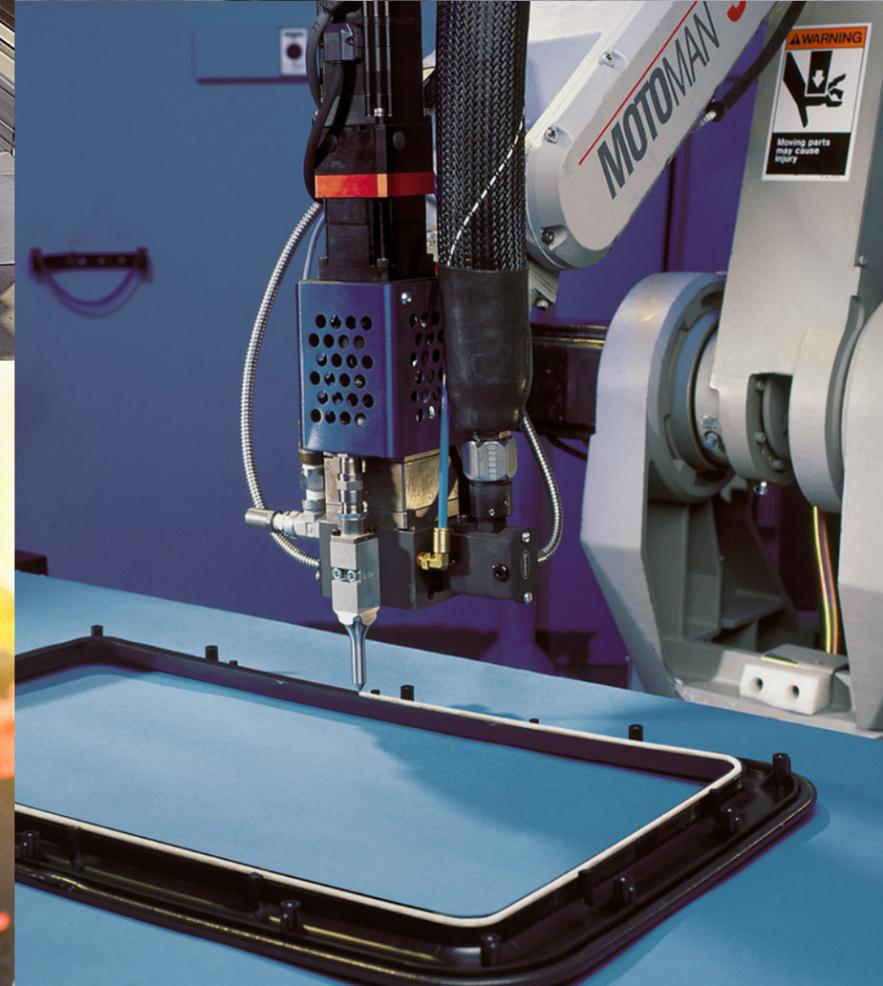
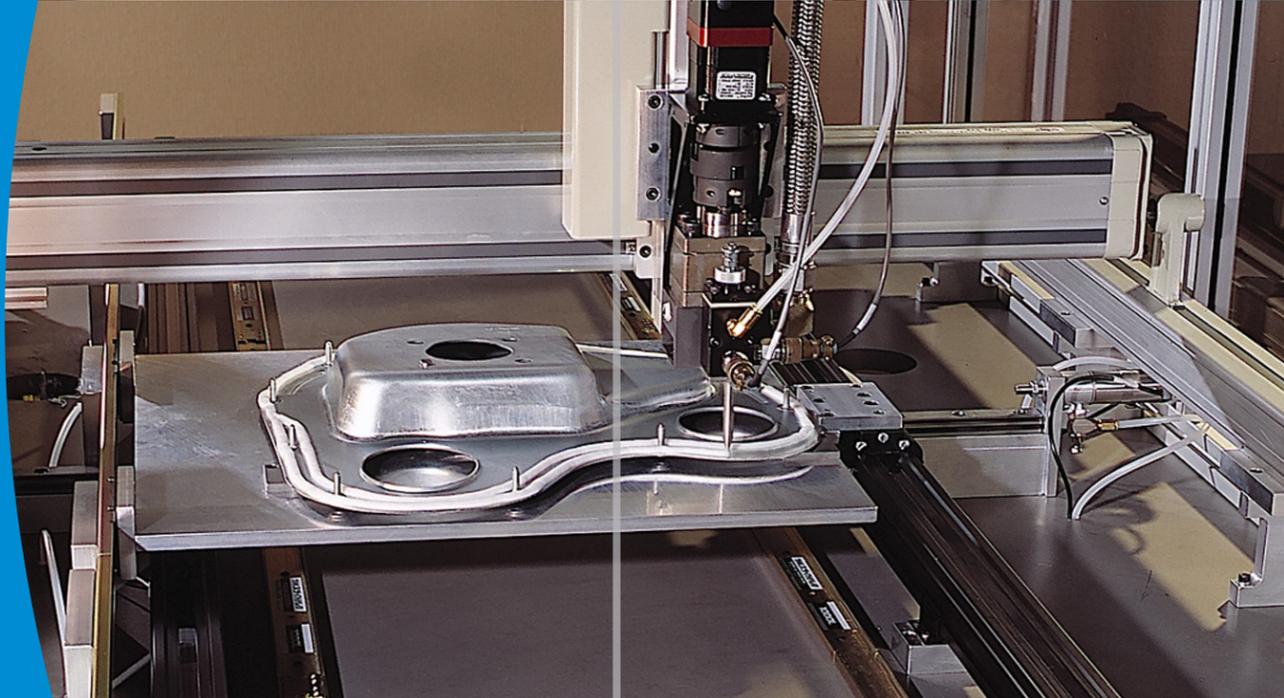
Improve quality and efficiency from bumper to bumper

Precision, Quality & Performance

At Nordson, we design innovative solutions for every aspect of automotive production. Our smart, automated technology handles high performance adhesives and sealants with care and precision.

Nordson systems help bond and fasten the materials that create impact-resistant bumpers. Our patented foam technology creates stronger, high-performance, weather strips. For window moldings and exterior trim, our foamed hot melt solutions keep products in place while sealing out moisture, air and wind noise. Nordson even has solutions to improve the life cycle of filters, using systems that provide permanent pleat separation.

Seating assembly – check. Seal duct work in the dash-done. Lighting assemblies – faster and easier. Steel-to-steel bonding – even more secure. And even small motor sealing in assemblies for windshield washers and wipers, power windows and antennas.



Inside or Outside – We Have You Covered

Nordson’s technology advances the art of automotive assembly. Our adhesive dispensing systems increase productivity, improve product quality, generate efficiency, and improve worker safety.



1

CAR LIGHT

- Headlamp assembly
- Taillight assembly
- Turn signal assembly
- High-position brake light assembly
- Daytime driving assembly lights



2

CAR SPEAKER

- Sound cone bonding
- Foam bonding
- Dust cap
- Elastic wave bonding



3

TIRE

- Safety tire
- Self-sealing tire



4

CARPET/LUGGAGE

- Carpet bonding
- Spare tire cover
- Fabric overlay



5

CAR DOOR

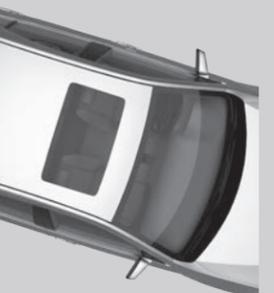
- Door trim fabric covering
- Door module bonding
- Waterproof membrane bonding
- Door/window seal
- Automotive tailgate parts bonding
- Door lock seal



6

CAR ROOF

- Sunroof frame bonding
- Sunroof sink plugging
- Ceiling edging
- Harness fixed
- Anti-vibration pad bonding
- Sound insulation cotton bonding
- Attachment bonding



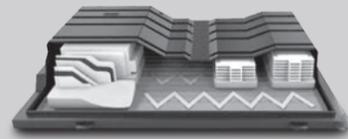
1



CAR DASHBOARD

Airbag cover
Glove box
Dashboard fabric covering
Display bonding
Pressure sensor

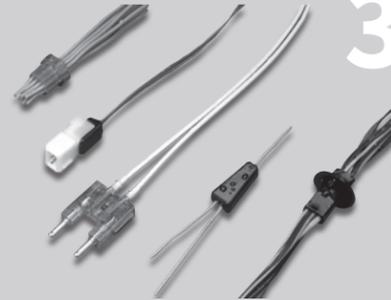
2



CAR BATTERY

Battery Cell Stacking
Double Side Edge Folding
Low Pressure Molding
Battery Pack 1K Foam Gasketing
1K Foam Cushion and Anti-collision
EMI Shield Bonding

3



VEHICLE ELECTRONICS

Low pressure injection
PCB potting
ECU package
PCB shielding

4



CAR SEAT

Seat back shell bonding
Fixing bracket bonding
Carpet back seat bonding
Heating element bonding

5



FILTER

Origami stereotypes
Center seam bonding
Filter paper composite
Oil filter end cover
Edge banding

6



CAR ACCESSORIES BONDING

Logo bonding
Spoiler bonding
Sun visor mirror bonding



Experts in E-Mobility

Our expertise in production solutions is powered by a dedication to innovation.

Nordson's automated systems have been revolutionizing automotive production lines for decades. And now we're doing the same for the battery manufacturing industry, by accelerating production with zero compromise on quality. The systems we deploy are purpose built to meet and exceed the demanding standards of the battery industry. With the most comprehensive range of dispense valves and meter mix solutions, our technology can be configured to meet the most demanding production specifications, however stringent.

From electric vehicles to energy storage, our specialists design a custom process from the ground up, to help make your production more predictable and controllable than ever. You can rely on the same product, finished to exactly the same standard, with minimum material waste or inconsistency. This is precisely the kind of technological advance that is precisely what battery manufacturers have been waiting for.



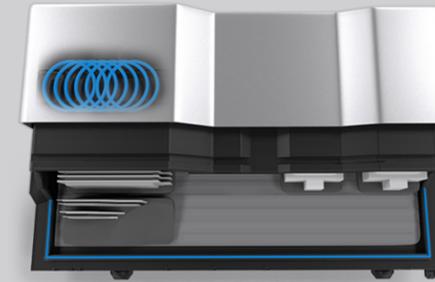
Double Side Edge Folding

- Precise edge-to-edge dimensions control
- Save space for cell power capacity
- Improve thermal conductivity on the sides
- Automated production, save cost



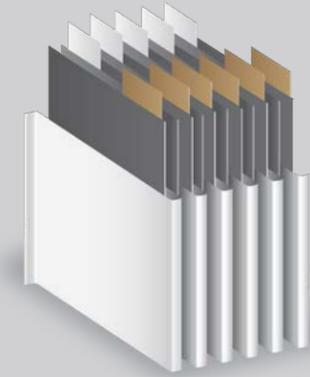
Battery Cell Stacking

- Automatic hot melt adhesive online spraying realtime process monitor to MES
- Save 90% cost vs tape
- Precise, clean and reliable process, no VOC emissions



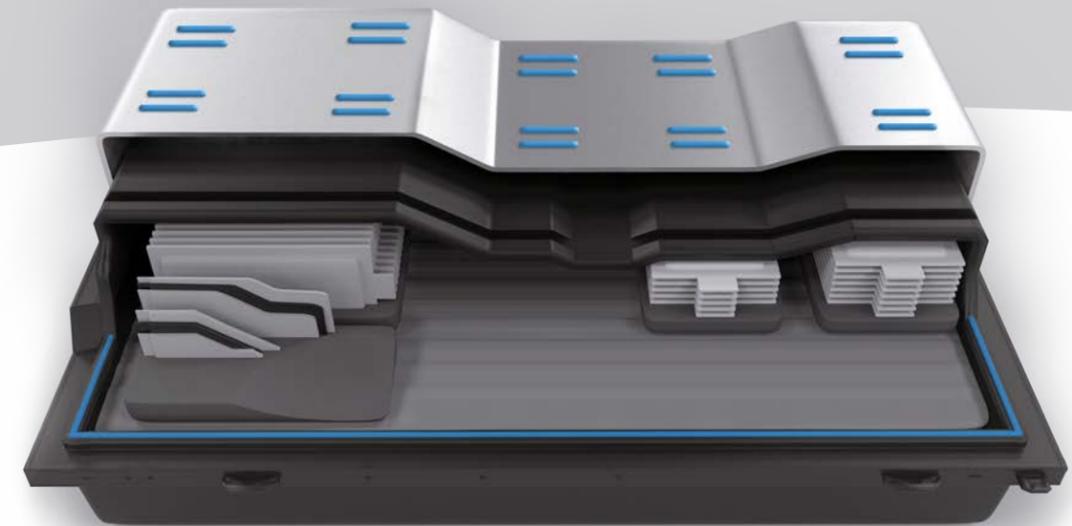
EMI Shield Bonding

- Fully automatic process, easy and clean
- Save cost, improve production efficiency
- Environmental protection, no VOC emissions



Innovations Inside Battery Cell

- Solutions to prevent internal short circuits and capacity loss
- Fully automatic and traceable processes
- Improve safety and life cycle



Battery Pack 1K Foam Gasketing

- Fully automatic versus manual application
- Enables waterproof, reopenable and serviceable pack
- Save cost, improve production efficiency



1K Foam Cushion and Anti-collision

- Fully automatic versus manual application
- Save costs versus foam pad

Application Location

- Battery Cell Stacking
- Double Side Edge Folding
- Low Pressure Molding
- Battery Pack 1K Foam Gasketing
- 1K Foam Cushion and Anti-collision
- EMI Shield Bonding

Nordson provides the total solution for EV battery application

Our Products

Nordson application systems handle a wide range of materials -- including the next generation, high-performance adhesives, sealants and mastics -- used to assemble, bond and seal transportation vehicles. Cost and production efficiencies can be realized with Nordson foaming technology and automated systems. Below is a selection of our newest products well suited for the automotive industry.

Monitor and verify with TruFlow™ Flex Controller

TruFlow™ Flex flow controllers enable flow monitoring, which allow manufacturers to reduce waste, boost product quality, and enhance production efficiency. TruFlow™ Flex allows users to accurately monitor or control up to two flow channels in real-time. It features an intuitive touch-screen interface with data logging and graphing for improved operational control.



Precise volumetric dispensing with Pro-Meter VDK Module

The Pro-Meter VDK dispensing module combines gear metering technology with compact size for unmatched precision & control in dispensing high-viscosity silicones, butyls, epoxies and hot melt materials. The module is designed for use in form-in-place gasketing, bonding and sealing operations. The wrist-mountable design minimizes the effects of pressure and viscosity changes. With the Pro-Meter VDK module, you achieve precision bead profiles, accurate shot weights and consistent gasket sizes, realizing potential material savings.



Complete connectivity with BBconn Cloud

Nordson products provide connectivity options to fully support your IoT and Industry 4.0 needs with Nordson's new BBconn Cloud. This new platform allows for full remote operation, advanced diagnostics, real-time oversight, the data and analytics needed for continuous improvement.



Optimize material usage with FoamMix® Flex

Nordson's 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. The foamed material can be applied with modules suited for both pressure-controlled and positive-displacement-controlled applicators.

FoamMix® Flex is suited for a wide variety of form-in-place gasketing applications in automotive manufacturing, eMobility, and other product assembly operations.



Ensure product quality with PureFlow™ Hoses

PureFlow™ hoses reduce the effects of adhesive and fluid degradation, such as charring, curing, discoloration and odor. PureFlow hoses have a substantially longer product life cycle due to their unique ability to keep fluid pure and the interior of the hose clean. Aramid insulation inside the hose maintains a consistent temperature, improving thermal efficiency and adhesive flow.



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[®] that includes:

- Locally-available service network
- TrueBlue[™] 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.

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