

AUTOMATED PRESSURE-TIME DISPENSING

Suitable for Low, Medium and High Viscosity Cyanoacrylates

Automated, pressure-time dispensing demands precision, speed and high-output, meaning it's important to choose the right adhesive for your equipment and application needs. Fortunately, Bostik's newest range of **Born2Bond™** Instant Adhesives overcome many of the performance and application limitations of existing solutions. Available in low, medium and high viscosity cyanoacrylates, our 1K products are ideal for use with automated dispensing equipment.

Born2Bond™ Ultra adhesives are fast-bonding, low-odor, low-blooming, instant adhesives with a range of viscosities, specially designed for bonding most substrates including plastics, rubbers and metals. The formulation consistency has been designed for high bond strength, even in places that are subject to flexing. Available in 500g bottles, **Born2Bond™ Ultra** adhesives are ideal for use with automatic dispensing equipment.





ADHESIVE DISPENSING SOLUTIONS

A Comprehensive Service

Not only do we supply you with the adhesives you need, our experts are also on hand to help with machinery calibration and to put you in touch with dispensing manufacturers.

Thanks to our partnerships with industry leaders in Europe, Asia and the Americas, we will be able to meet any of your application needs.



DISPENSING EQUIPMENT

Bostik

VALVES

Diaphragm valves such as Nordson EFD's 752V-UHSS valve are designed to prevent the introduction of air. Inside the valve, a diaphragm isolates the fluid chamber from the mechanical parts — protecting the internal components from air and adhesive contamination.

Additional features include:

- A UHMW Ultra High Molecular Weight polyethylene fluid body prevents CA from curing prematurely
- Very small dead volume, which reduces exposure of the adhesive to the ambient environment and reduces air entrapment
- Adjustable stroke control for better flow rate control of lowviscosity cyanoacrylates



The 752V-HL handheld dispense gun offers similar features as the 752V dispense valve, but is designed for manual applications of stripes or "by eye" deposit control.

Liquidyn® jetting valves provide a high-speed, non-contact dispensing solution for cyanoacrylates. Valves must be set up to dispense continuously with no pausing or stopping until it is time to replace the fluid or perform maintenance. A PTFE-coated nozzle is required.

VALVE CONTROLLERS

Valve controllers VM7100, VM8000, VM9000 feature a programmable time function. This allows for exact, repeatable output and easy purge capabilities when changing to a new bottle of adhesive. Controllers also simplify valve set up and allow for fast, on-the-fly adjustments to the dispensing parameters.



TANKS

Nordson EFD's 615 Series 1-liter tank accommodates approx. 1-pound 450-500g bottles of CAs.

This simplifies refilling and reduces handling. Top porting allows a user to feed fluid directly from a 1-pound bottle, so no pouring or cleaning of the reservoir is necessary. This creates a closed system that keeps air out of the process from start to finish.





BEST SYSTEMS FOR CA DISPENSING

MANUAL DISPENSING

A manual hand-lever valve

When using a hand-lever valve, the operator determines the amount of cyanoacrylate needed by looking at the deposit size as it is dispensed. Material is fed to the valve directly from a 1liter tank containing a 1-pound bottle of CA. The amount of adhesive dispensed is not metered by the system. The material is pumped with consistent pressure to deliver uniform deposits. Handheld valves are best for low-volume production and applications that require larger deposits or stripes.

A benchtop system with an air-powered fluid dispenser

In this system, an operator holds a syringe barrel and guides the dispense tip to the correct location, then presses the foot pedal or finger switch to release the fluid. This is a much more controlled dispensing method than squeeze bottles or hand-lever valves. The system is best for low- to medium-volume production and applications that require smaller, more precise deposits.

A benchtop system with a dispense valve, valve stand, and valve controller

In this system, an operator places the part or workpiece under the valve, which is fixed to a valve stand. The operator actuates the dispense valve, which is connected to the valve controller. This option is ideal for medium-volume production processes.

SEMI-AUTOMATED DISPENSING

A semi-automated system with a tabletop dispensing robot, dispense valve, and valve controller

In this system, the operator places a batch of parts on a fixture plate and presses the run button. The dispense valve is mounted to the dispensing robot. The valve controller is the interface between the robot actuation signal and the valve. With this system, the valve dispenses a controlled amount of CA in a pre-programmed pattern onto the workpiece. A dispensing robot can dispense CAs in complex patterns. This is the best option for higher volume production or applications that require extremely precise, repeatable deposit placement.

A semi-automated system with a tabletop dispensing robot, jet valve, and valve controller

As noted above, the operator places parts on a fixture plate and presses the run button. The valve is mounted to the robot and the controller actuates the valve. With jet valves there is no contact between the dispense nozzle and the workpiece. This allows for faster deposit placement on tough-to-reach or uneven surfaces and reduces the risk of part damage and contamination. Jet valves also dispense very small amounts at fast speeds with exceptional repeatability — providing even greater process control.

FULLY AUTOMATED DISPENSING

A fully automated system with parts that advance on a production line

In this system, parts placed on a conveyor or rotary table are detected by sensors and automatically receive a deposit of CA from the dispensing valve. The valve may be mounted on the line and controlled by a valve controller or PLC. It may also be mounted on an automated dispensing robot, which is programmed and controlled via a personal computer.



Wetted parts of the 752V hand-lever valve are made from UHMW polyethylene, making this an ideal choice for dispensing CAs in low-volume production processes.



The Ultimus II provides the most control when dispensing watery CAs.



For the most accurate placement of CAs use an automated dispensing system.



Install dispense valves in-line for high volume production.



SERVICE PRODUCTS





To ensure optimal performance of **Born2Bond**[™] adhesives, we provide a selection of easy-to-use ancillary products for effective surface preparation, faster curing and removal of cured product.

Born2Bond[™] Anaerobic Activator

is a solvent-based product that accelerates and supports anaerobic adhesive curing on passive metals like stainless steel, chromated metals and zinc. It can also accelerate cure speed in larger gaps and increase bonding strength.

Born2Bond[™] Pre-Bonding Cleaner

is suitable for cleaning of all kinds of substrates prior to bonding. Solvent-based and supplied in aerosol form, it will easily remove grease, oil, lubricants and other contaminants without leaving any residue. Born2Bond[™] Adhesive & Gasket Remover is easy to apply and creates a foam-like layer, softening old gaskets and cured adhesives for removal within 15 minutes.

FEATURES

- Fast-evaporating with no residue
- Can be used at low temperatures (<5°C)
- On-part lifetime of 30 days

FEATURES

- Fast evaporation
- No residues
- Suitable for multiple substrates including sensitive plastics

Metal and plastic parts, composite

materials, flanges, bolts, shafts.

TYPICAL APPLICATIONS

FEATURES

- Removes cured gaskets and adhesives within 15 minutes
- Minimal damage to flanges and surfaces
- Suitable for multiple substrates

TYPICAL APPLICATIONS

Stainless steel bolts and shafts, threadlocking, pipe sealing, gasketing, retaining.





TYPICAL APPLICATIONS

Cleaning of surfaces, flanges, gearboxes, metal housings, pumps.





TERMS & CONDITIONS

IMPORTANT – PLEASE READ BEFORE USING THIS GUIDE

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