

Nordson Rhino® Bulk Unloaders



55-Gallon Bulk Unloader

5-Gallon Bulk Unloader

Durable bulk unloaders provide superior flow properties in dispensing high-viscosity adhesive and sealant materials.

Nordson Rhino bulk unloaders are designed to dispense high-viscosity, ambient-temperature adhesives and sealants for a variety of manufacturing applications.

The modular design of Nordson bulk unloaders allows for flexibility to accommodate changes in application

requirements. Air motors and pumps are interchangeable to allow easy system configuration. (See technical specifications for options.)

Large internal passages minimize flow resistance to increase pump efficiency. Shear heating within the pump is reduced, resulting in more consistent material viscosity and the prevention of material degradation.

Fast cycling of the mechanical air valve provides fast air motor change-over for uniform material output. The air valve is externally mounted for ease of service.

Because Rhino bulk unloaders have few internal parts, maintenance time

is reduced. The pumps can be disassembled with standard tools and the packing can be replaced without disassembly of the pump or removal of the air motor.

Nordson FastPack™ replacement packings are supplied in factory-assembled cartridges to ensure a proper pump shaft seal and to minimize downtime. The self-adjusting packing gland does not require maintenance and eliminates failures caused by over tightening. Different seal materials are available to accommodate a variety of application requirements.

Nordson bulk unloaders are factory assembled to keep installation time

Nordson Rhino Bulk Unloaders

to a minimum. All air-management components, including filter, regulator and lubricator are provided as standard items.

Features and Benefits

■ **Designed specifically for demanding manufacturing environments.** Durable components and ease of maintenance provide maximum operating time.

■ **No internal seals** for easy maintenance.

■ **Packing cartridge** is factory adjusted to assure a proper seal and easy replacement.



Packing cartridge being removed with a packing wrench. Self-adjusting FastPack™ replacement packings are easy to replace and do not require maintenance.

■ **Large internal passageways** minimize resistance to flow, increasing pump efficiency and reducing generation of shear heat.

■ **Few internal parts** provide ease of maintenance. Pump can be disassembled with a standard wrench and screwdriver.

■ **Modular product line** provides flexibility if the process or material changes. Air motors, pumps and follower plates are interchangeable.

■ **Factory assembled** for fast installation. All air-management components including filter, regulator and lubricator are included as standard items. Shipped ready to operate.

■ **Mechanical air valve** provides fast air motor changeover.

■ **Optional automatic changeover system** for uninterrupted production.

Optional Accessories

- Container sizes:
 - 5-gallon (20 liter)
11.25 inch (286 mm), 280 mm,
305 mm pail diameters
 - 55-gallon (200 liter)
22.5 inch (584 mm), drum diameter
 - 300-gallon (1150 liter)
42.5 inch (1079.5 mm),
drum diameter, I.D.
- Follower plate seals (TEFLON® Encapsulated – pail unloader only)
- Low/empty drum light towers
- Drum or pail hold down kits
- Caster kit (pail unloader only)
- Pneumatic changeover package (includes automatic pump shut off)
- System depressurization feature (300-gallon system)
- Filter package



Optional automatic changeover system package. 300-gallon configuration shown.

Bulk Unloader Accessories

Nordson delivers total systems capability with a complete line of equipment for ambient temperature, air and airless material application:

- Pumps and bulk unloaders
- Heated and unheated hoses
- Automatic and manual guns
- Temperature conditioning systems
- System control and diagnostics

From individual components to complete application systems, you can rely on Nordson to meet your specific requirements.

Design and Engineering Assistance

Nordson can engineer a total dispensing system, including pumps, dispensing modules, hoses and custom-designed header systems. Working with your material and automation suppliers, we can supply the most efficient system for your application.

Dispensing Modules

Pro-Flo® Dispensing Modules

Pro-Flo dispensing modules adjust material flow to robot velocity. Ideal for sealer deck, hem flange and other applications.

Auto-Flo™ Dispensing Modules

Designed with a large ball-and-seat, the Auto-Flo dispensing module is capable of handling pressures up to 5,000 psi. Recommended for dispensing high-viscosity materials in a uniform bead or kiss.

CE 20 Dispensing Module

Durable, high pressure/high flow design with tapered needle and seat provides better flow control and cleaner cut-off at higher pressures. Recommended for dispensing extremely viscous materials, including urethanes and weldable/expandable sealants up to 3,000,000 cps.

Controlled Pressure (CP) Gun

The CP Gun combines a precision mastic regulator with the reliability of an Auto-Flo dispensing module, providing flexibility to dispense adhesives in extrude, stream or swirl patterns. Ideal for use in dispensing applications where closely controlled deposition is required.

Extrusion Hand Gun

Simple, rugged design delivers trouble-free operation for manual extrusion of high-viscosity materials. Manually-operated.

Material Delivery Hoses

Hose Diameters:

Buna N core with Neoprene rubber cover: 3/8, 1/2, 5/8, 3/4, 1, 1-1/4 and 1-1/2 inches

Teflon core with stainless steel braid cover: 3/8, 1/2, 5/8, 3/4, 1, 1-1/4 and 1-1/2 inches

Hose Lengths:

4, 6, 8, 10, 12, 16, 20, 24 and 30-foot lengths

Maximum Working Pressure:

5000 PSI

Check Valve

The check valve assists in providing consistent material output by preventing the back flow of material into the pump.

Technical Specifications

Bulk Unloaders

System Type:

Ram (elevator) mounted, dual action reciprocating piston pump.

Two pumps per unit on 300-gallon unloaders.

Air Consumption:

200 SCFM maximum (depending on cycle rate)

Supply Air Pressure:

5- and 55-gallon units
 70-100 PSI (482-689 kPa)

300-gallon units:

60-100 PSI (413-689 kPa)

Physical Dimensions

Height:

5-gallon unloaders

Elevator Down: 56 inches (142 cm)**

Elevator Up: 79 inches (368.3 cm)**

55-gallon unloaders

Elevator Down: 62 inches (157 cm)

Elevator Up: 103 inches (262 cm)

300-gallon unloaders

Elevator Down: 89 inches (226.06 cm)

Elevator Up: 145 inches (368.3 cm)

Depth:

5-gallon unloaders

23 inches (58 cm)

55-gallon unloaders

26 inches (66 cm)

300-gallon unloaders

52.25 inches (132.7 cm)

Width:

5-gallon unloaders

27 inches (69 cm)

55-gallon unloaders

42 inches (107 cm)

300-gallon unloaders

80 inches (203.2 cm)

Weight (approximate):

5-gallon unloaders

408 pounds (185 kg)

55-gallon unloaders

790 pounds (359 kg)

300-gallon unloaders

3,300 pounds (1,497 kg)

Baseplate Mounting Holes (on center):

5-gallon unloaders

Depth: 22-3/4 inches (58 cm)

Width: 20-1/4 inches (51 cm)

55-gallon unloaders

Depth: 23 inches (58.42 cm)

Width: 39 inches (99.06 cm)

300-gallon unloaders

Depth: 49.25 inches (125.1 cm)

Width: 60 inches (152.4 cm)

Teflon is a registered trademark of E.I. DuPont de Nemours & Co.



Rhino Bulk Unloader Selection Guide

Ratio	Air Motor Size	Volumetric Displacement	Maximum Output
20:1	10 inch	17 in ³ /stroke	2.3 gallons/min. (8.7 liters/min.)*
24:1	7 inch	8 in ³ /stroke	1.1 gallons/min. (4.2 liters/min.)*
48:1	10 inch	8 in ³ /stroke	1.1 gallons/min. (4.2 liters/min.)*
65:1	10 inch	5.8 in ³ /stroke	.75 gallons/min. (2.8 liters/min.)*
81:1	13 inch	8 in ³ /stroke	1.1 gallons/min. (4.2 liters/min.)*

*Output dependent on material viscosity, temperature, fillers and system configuration.
 **Add six inches to height dimension for units with optional casters.

Nordson reserves the right to make design changes to products and components to improve their function. These changes may occur between catalog printings.