

Millennium Cyclone

Low Pressure Pump Cart (by Garlock)

Description

Millennium Cyclone low pressure adhesive pump cart is a bulk delivery system specifically designed to dispense two component 1 : 1 ratio low viscosity polyurethane adhesives. These adhesives are widely used to adhere rigid insulation and coverboards to structural roof decks as well as to adhere fleecebacked single-ply membranes in both new roofing and recover applications. The Cyclone includes 1 applicator nozzle and 35 feet of hose.

Start Up

Make sure the manifold valves are in the OFF mode and motor is turned off.

1. Insert adhesive bladder labeled Part 1 into the tray labeled Part 1. Apply small amount of non-lithium grease to female end of quick connect coupling. Attach quick connect fitting on bladder to the Part 1 pump inlet hose.
2. Insert adhesive bladder labeled Part 2 into the tray labeled Part 2. Apply small amount of non-lithium grease to female end of quick connect coupling. Attach quick connect fitting on bladder to the Part 2 pump inlet hose.
3. With the manifold in the OFF mode, flip power switch to "on".
4. Slowly open manifold valves, motor will start automatically. Let a small amount of material flow out into a waste container to ensure that an equal amount of material is coming out of each manifold port.
5. Shut off manifold valves, motor will stop automatically when shut-off pressure is reached.
6. Wipe threaded portion of manifold clean with rag, apply non-lithium grease to threaded portion of manifold.
7. Attach static mixing nozzle to applicator manifold using retaining nut or one piece mixing nozzle. Ensure that it is completely seated and then begin applying adhesive.
8. Apply adhesive directly to the substrate as recommended by the product manufacturer.

Surface Preparation

All work surfaces should be clean, dry, and free of dirt, dust, debris, oils, loose and/or embedded gravel, un-adhered coatings, deteriorated membrane and other contaminants that may result in a surface that is not sound or is uneven. In recover applications Millennium Surface Treatment or Millennium Universal Primer may be required. Contact Royal's Technical Service Department for more information.



Features

Lightweight / Portable
Clean, contained delivery system
Quick and easy application
Solid core tires
Adjustable gun assembly
Dual pump system
Single aperture

Benefits

Easy to maneuver
Applicator and hoses stay clean and free flowing, low maintenance
Perfect for large congested rooftops
Prevents flat tires
Ergonomic design
Reduces risk of catastrophic pump failure / lowers maintenance cost
Easy connections

Safety

Protective equipment such as safety glasses and protective gloves must be worn when operating or servicing the Millennium Cyclone pump cart.

The Millennium Cyclone pump cart runs on 110 volt 60Hz AC current. Use a grounded power cord that is in good condition, rated for outdoor use, and a minimum of 14- gauge construction. Servicing electrical components should only be done by trained personnel and only after disconnecting power to the equipment. **CAUTION:** The electrical circuitry is not of explosion proof design and should not be used in any environment requiring such a design.

The Millennium Cyclone pump cart operates with pressure. The applicator should never be pointed toward people. The gun should never be actuated when the outlet tip is blocked or restricted by cured adhesive or any object.

Consult product label and Safety Data Sheet (SDS) for necessary safety precautions.

CAUTION: All statements and technical information in this document are based on tests or data that Royal believes is reliable. However, Royal does not warrant or guarantee the accuracy or completeness of this information. The user has sole knowledge and control of factors that can affect the performance of Royal's products in the user's intended application. It is the user's responsibility to conduct tests to determine the compatibility of Royal's product with the design, structure, and materials of the user's end product and the suitability of Royal's product for the user's method of application and intended use. The user assumes all risk and liability arising out of such use.

Shut Down and Extended Breaks

1. Close manifold valves.
2. Turn off power.
3. Remove static mixing tip and retaining nut (if needed) and discard.
4. Relieve any pressure in hoses by opening and closing applicator valves.
5. Pump a non-lithium grease into both grease fittings on the gun manifold until it flows out of the tip. Install grease into the part 1 (A) grease fitting first.

CAUTION: Remove static mixing nozzle during any pause in application or operation. Do not allow pressure to build up in the static mixing nozzle. If static mixing nozzle remains on applicator manifold, material can react and harden in the manifold and possibly the ends of the hoses. During removal and attachment of static mixing nozzles, a wrench may be necessary for removal. Clean manifold threads and re-grease frequently.

Machine Storage

Long term storage (30 days +) will require that the pump system and hoses are flushed with Millennium Cyclone System Solution. (Refer to Millennium Cyclone System Solution Product Information Sheet and Technical Bulletin for detailed instructions). After extended storage the gravity feed supply lines and quick connects may need to be replaced.

Material can be allowed to stand in the machine for short periods of time, however, it is very important that Part 1 not be exposed to air or moisture to prevent crystallization.

Material should be run through the pump and hoses every three to four weeks when the pump is not in use. Cyclone System Solution can be run through the pump for this purpose.



Code #0106-0514



Material Packaging and Coverage

Millennium PG-1 Fleeceback Membrane Adhesive and Low Viscosity Insulation Adhesive kit:

Part 1 (A) - 5 gallon (18.9L) Box : PG-IA5B-A01

Part 2 (B) - 5 gallon (18.9L) Box : PG-IA5B-B01

Part 1 (A) and Part 2 (B) (complete kit) mixed through the Millennium Cyclone low pressure pump cart will produce approximately 2,000 to 2,500 sq. ft. (186m² - 232m²) when properly mixed and applied over a semi-smooth substrate. Coverage estimates indicate total square feet of insulation attachment per 10 gallon kit. Larger beads may be required for rough surfaces or fleeceback membrane adhesive applications. For fleeceback applications consult your waterproofing membrane manufacturer's guidelines. Rates are based on an application pattern of 4 ribbons, 1/2" - 3/4" (1.3cm - 1.9cm) wide, 12" (30cm) o.c. per 4' x 4' (1.2m x 1.2m) insulation board.

Millennium Cyclone can be used with any brand of 2-part urethane roofing adhesives and Cubitainer® packaging.

Limitations

- Do not apply adhesive to wet or damp surfaces.
- Not recommended for use with insulation boards larger than 4' x 4' (1.2m x 1.2m).
- Do not use warped or curled insulation boards. All insulation boards must lay flat upon the roof surface.
- Pump grade adhesives are designed for application temperatures of 40°F and above.

WARRANTY: Royal Adhesives and Sealants warrants its products to conform to Royal's specifications at the time of sale when tested according to Royal standards. If a product is proven to be defective when tested according to Royal standards, Royal will, at its option, refund the purchase price or replace or repair the defective product. THIS LIMITED WARRANTY IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY AGAINST ROYAL ADHESIVES AND SEALANTS AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall Royal be liable for any special, incidental, consequential, or punitive damages arising out of any claims whether based on negligence, contract, warranty, strict liability or otherwise.