

RAILCAR UNLOADING SYSTEM

Coast Equipment's railcar unloading system is a vacuum/pressure system designed to quickly and economically unload railcars to silos or other containers. The system consists of a vacuum blower that pulls the plastic pellets from the railcar into a filter receiver. The filter receiver removes any dust and foreign material from the plastic pellets and then drops the material into the airlock. The airlock evens out the flow of the material in the lines allowing the pressure blower to effectively blow the material through the airlock dispensing it into the silo or container.

Blower Packages

Coast Equipment provides a wide range of blower packages for pneumatic conveying systems. Our blower packages are available for pressure or vacuum applications and use a positive displacement (PD) blower. All standard blower packages consist of a quality PD blower mounted on a heavy-duty base frame. Also included is a discharge silencer, quality motor, adjustable motor base, an air intake filter/silence, a v-belt drive

Vacuum Blower Package

Standard Features:

- Rotary positive displacement blower
- 25 to 50 HP
- TEFC enclosure
- 230/460 volt, 3 phase 60 Hz motor
- V-belt drive, drive guard, adjustable motor base, expansion joints, and vacuum relief valve
- Factory assembled on a base frame
- Inline filter with pressure differential gauge
- Discharge silencer
- Vacuum switch
- Vacuum gauge



the lines allowing the pressure blower to effectively blow the material through the airlock dispensing it into the silo or container. We provide complete installation services, which can include start-up and training of your system. Call us at 302-337-3778 or email us at sales@coastequipment.com for assistance in intelligently designing your railcar unloading system, at a sensible price.

package including an OSHA drive guard, interconnecting piping with outlet flexible connection, pressure or vacuum gauge and a back check valve. Standard PD blower packages are available for pressures up to 15 PSIG and vacuum up to 12" HG. They are engineered to suit your individual application requirements.

Pressure Blower Package

Standard Features:

- Rotary positive displacement blower
- 25 to 75 HP
- TEFC enclosure
- 230/460 volt, 3 phase 60 cycle motor
- V-belt drive, drive guard, adjustable motor base, air intake filter, and pressure relief valve
- Factory assembled on a base frame
- Pressure gauge
- Back check valve
- Expansion joints at discharge
- Discharge silencer
- Intake silencer



- **Blending** • **Conveying** • **Drying**
- **Feeding** • **Grinding** • **Material Storage**
- **Tubing and Fittings** • **Installation**





Vacuum Filter Receiver

Our filter is designed for pneumatic conveying systems that operate at higher pressure levels, either vacuum or pressure. These filters are available in bottom, side and top bag removal designs. They operate with a "pulse-jet" continuous, row by row cleaning action, which cleans the filter bags with bursts of compressed air. The venturis located above each filter bag which cause the bags to flex and the accumulated dust particles become dislodged from the filter bags and fall into the hopper.

Standard Features:

- Clean air plenum with mounting flange at tube sheet
- P.E. air outlet
- Internal air piping
- Compressed air header
- Venturi and bag clips
- Mild steel bag cages
- Stainless steel bag clamps
- Air valves
- Adjustable timer
- 16 oz. singed polyester Dacron filter bags
- Timer and solenoid valves are NEMA 4 enclosure
- 12 gauge bag housing flanged to plenum
- Hinged access side door with captive handles
- Differential pressure gauge kit included
- 60° hopper
- Support brackets
- Radial air inlet
- Flanged product discharge
- Rotary level indicator in hopper, NEMA 4 enclosure
- Filter designed for 12" Hg
- Structural steel legs



Rotary Airlock

The airlock allows maximum product flow while maintaining an optimal air seal.

Standard features:

- Cast iron housing and end plates
- Fabricated 8 vane mild steel rotor
- Outboard bearings with shaft seals
- Fixed edge rotor tips
- Inlet shear protector
- Discharge adaptor to match tubing size
- TEFC right angle motor and roller chain drive assembly with guard and motor completely factory assembled
- Final RPM to match system
- Stainless steel housing and rotor optional
- Fixed edge rotor tips
- Inlet shear protector, mild steel construction



Control Panel

Standard Features:

- NEMA 12 enclosure wall mounted
- 200A fused disc. Switch
- Starter for vacuum blower with vacuum breaker
- Starter for pressure blower
- Starter for rotary valve
- Fill timer
- Unload timer
- High level lights
- Silo selector switch
- Start/stop buttons
- Lot of terminal blocks and nameplates
- Set of electrical drawings

Accessories:

- Railcar Adaptor Kit is designed to fit most railcars with pneumatic outlet tubes. The adaptor allows for quick connection from the railcar to the manifold inlet. Available for 2" – 6" outlets.
- Railcar Unloading Nozzle Filter is aluminum construction with replaceable dry-tape filter
- Railcar Unloading Tubing and Fittings Kit which includes:



Tubing



Flex hose



Couplings



Wyes



Laterals



Elbows

Installation:

Installation services are available for all new and existing railcar unloading systems. Our experienced, non-union craftsmen can perform complete installation for blending, conveying, drying, feeding, grinding, and material storage. Services are available throughout the United States, Mexico and Canada.