

THE NEW TECHNOLOGY



Dustless Loading Systems

 **PEBCO[®]**



PEBCO® has been servicing the powder and bulk materials handling industry world-wide for over a quarter of a century. Through years of experience and service, PEBCO® has grown to world wide prominence with headquarters in the United States and representation throughout the world.

Seeking solutions to unique material handling problems, PEBCO®'s experience, versatility, and creativity have lead to the development of several patented products, features, and options for equipment used in the dry bulk solids handling industry.



PEBCO® DUSTLESS LOADING SPOUT

The PEBCO® Dustless Loading Spout (DLS) is available in many models and configurations engineered to withstand the rigors of harsh, daily industrial use. Each system is designed to minimize the emission of dust into the environment while loading dusty, free-flowing materials into a variety of containers and vehicles. Our DLS is designed with the dual function of discharging material onto stockpiles and for loading of dry bulk material into trucks, railcars, barges, and ships. Spouts can be engineered to be capable of handling from 200 CFM of material to in excess of 2,000 CFM. Unlike other spouts, which utilize a two cable system for lowering and raising of the chute, PEBCO® utilizes a three cable system providing for even chute lowering and raising, eliminating uneven travel and the



Spout with outlet skirt.

resulting conditions causing excessive wear to the cones and dust enclosure sleeve.

The motor and gearbox are located outside the spout frame providing easy access for service.

PEBCO® Quality Assurance

PEBCO® sets high standards for quality. Each product we manufacture is backed by our extensive guarantee, as well as our reputation built upon years of experience and service. PEBCO®'s certified on-staff welding inspectors live by objectivity; their only loyalty is to the production of quality products that withstand harsh environments. The welding of all materials - abrasion resistant steel, aluminum, mild steel, non-ferrous metals, stainless steel, and all alloys - are performed to AWS standards.



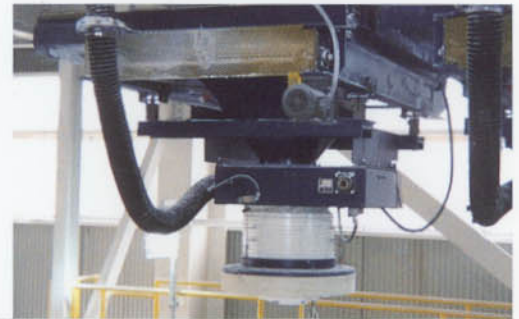
FEATURES AND OPTIONS

Material handling applications vary widely for loading operations, vessel configuration, and facility attributes. Because of these factors PEBCO® offers a variety of DLS configurations for the safe, fast, and efficient loading of dry bulk materials. PEBCO® engineers design the spout specifying materials of construction that meet requirements for the loading environment, material type, abrasion attributes, vehicle, and vessel configurations.

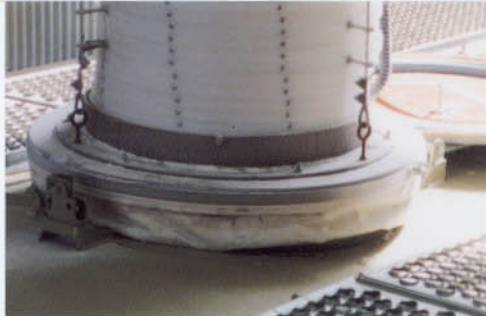
To meet the wide range of uses, PEBCO® offers optional equipment that can make the loading process even more efficient, thus saving time and money. In the design of our customers' systems, our engineers take into account all possible factors and suggest the options appropriate to the loading requirements. Listed are some of the options available.



Articulating Arm accepts materials from fluidized conveyor.



Spout Positioner used in the horizontal alignment of the chute.



Spout Hatch Adapter to envelope vessel opening for environmental protection.

OPTIONAL DLS FEATURES:

- Larger horsepower motor for extended chute lengths
- Articulating Arm for lateral positioning of the chute
- Spreader for even distribution of material
- Outlet Skirt to enhance dustless loading
- Stainless Steel Cabling for harsh environments
- Load Sensor for detecting product pile
- Auto-Raise/Lower for open loading/stacking
- Hatch Adapters for various size hatches on vehicles

SLEEVE MATERIALS:

- Hypalon: -40°F to +325°F
- Neoprene-Coated Nylon: -40°F to +250°F
- Silicone-Coated Fiberglass: -80°F to +500°F
- Vinyl-Coated Polyester: -10°F to +180°F

CONE MATERIALS:

- Type 304 Stainless Steel
- Type 316 Stainless Steel
- Urethane
- AR 240 BHN Steel
- AR 360 BHN Steel
- Polyethylene

DUST HOOD ENCLOSURES:

- Type 304 Stainless Steel
- Type 316 Stainless Steel
- Abrasion Resistant Steel

SLEEVE REINFORCEMENT RINGS

- Aluminum
- Stainless Steel
- UHMW

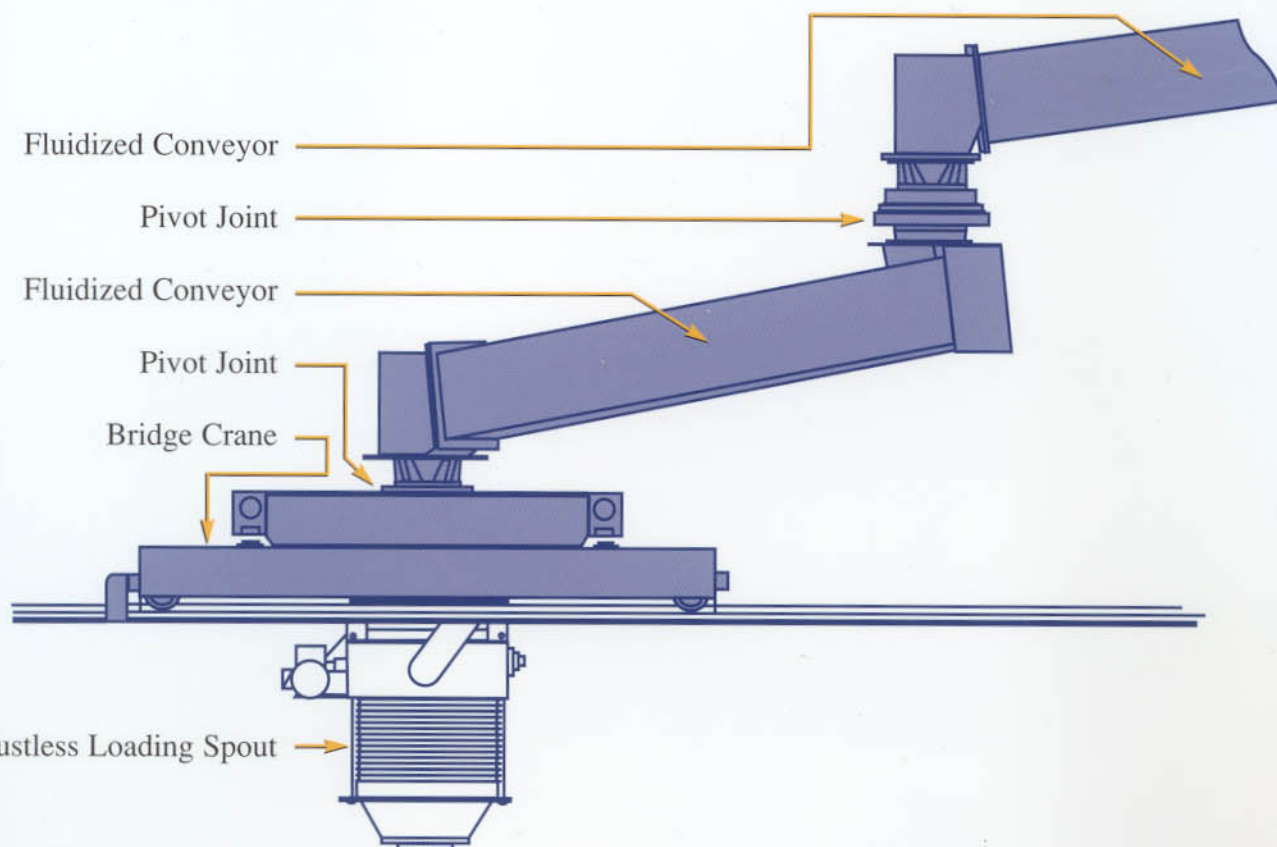
PEBCO® ARTICULATED LOADING SYSTEMS

PEBCO®'s DLS can be fitted to the PEBCO® Articulated Loading System to enhance the ease of loading vehicles. Because the system is dust tight, product can be loaded without effect to the atmosphere.

Product is typically conveyed to the system for loading through a fluidized bed, belt, drag, or screw conveyor. The articulated arm is fully maneuverable through the use of a series of sealed bearings that eliminate dust leakage to the atmosphere. The system can be mounted using a double bridge assembly, trolley assembly, or monorail beam depending upon the loading station structure used for vehicle loading.

Control of the articulated arm can be achieved remotely by the operator from a control room, or at the loading site by use of a pendant station. Within the system, product flow is controlled by use of a Flow Control Gate which feeds into the PEBCO® DLS.

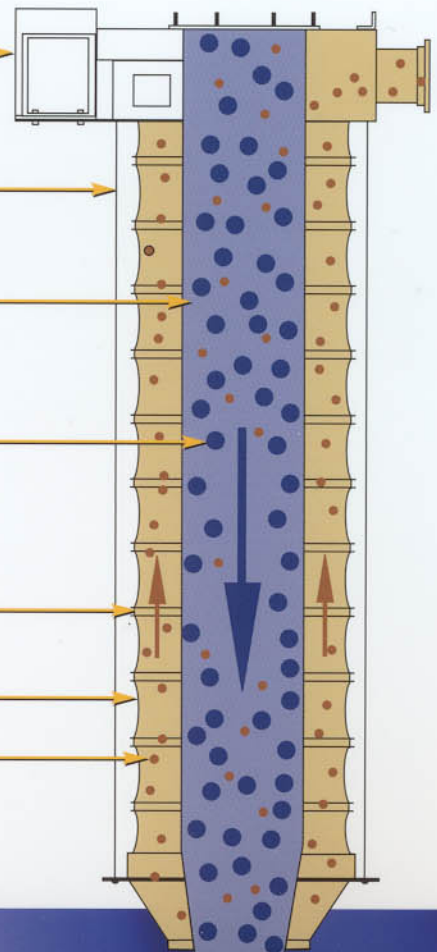
PEBCO®'s Articulated Loading System provides many benefits. The system can easily be positioned over each hatch of the vehicle to be loaded without moving the vehicle. The use of the PEBCO® Articulated Loading System reduces loading time and increases productivity. PEBCO® custom designs each system to fit the individual application.





PEBCO® offers a variety of materials for system configurations that meet, or exceed, our customer's application requirements. From a selection of sleeve materials to a variety of alloys for cone construction, the PEBCO® DLS features possible sleeve diameters from 24-inches to 100-inches, and travel from 2-feet to 100-feet. Our experienced design engineers can easily accommodate specialized engineering requirements to provide optimal performance, automation, efficiency, and durability for both open and enclosed loading applications.

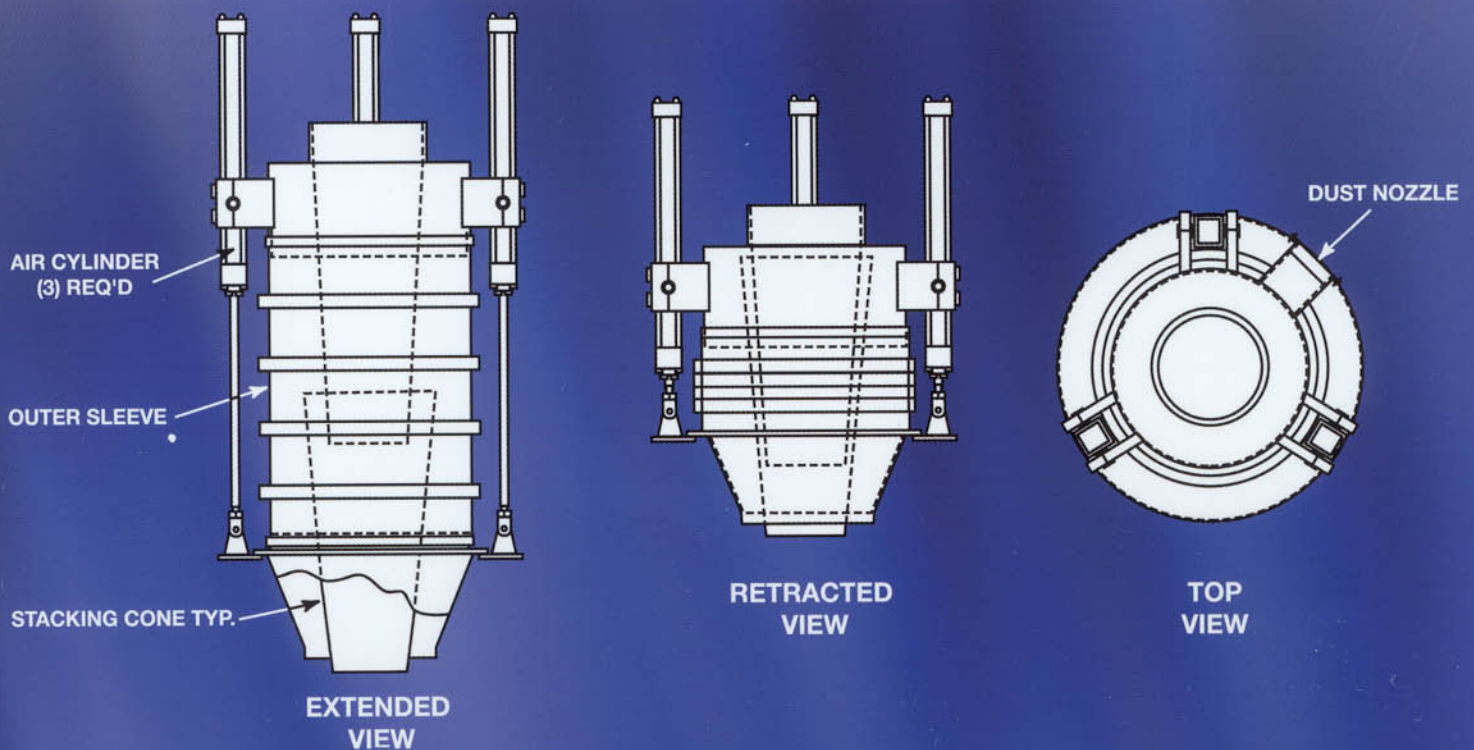
- Three-Phase Insulated Motor
- Three (3) Extension/Retraction Cables
- Internal Cones
- Dry Solids Material Particles
- Sleeve Reinforcement Rings
- Outer Dustless Sleeve
- Fugitive Dust



PEBCO® DRUM FILL SPOUT

In addition to the large DLS, PEBCO® offers systems specifically designed and engineered for the convenient loading of dry bulk materials into drums for storage and shipping.

PEBCO® can custom engineer the system's configuration to best suit the loading requirements. Systems typically feature an 8-inch diameter inlet for dispensing through a 6-inch outlet. Each system, supplied through an overhead source, is actuated by three pneumatic cylinders providing even travel from 6-inches to 2-feet. The PEBCO® Drum Fill Spout can be constructed of various materials matched to the loading requirements and to accommodate various drum sizes.



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