

Intermediate Bulk Containers



Industrial Equipment & Design Company

IBC's

The most efficient way of handling powders within a plant/process is in Intermediate Bulk Containers or IBC's. The use of IBC's throughout a process offers numerous advantages that include:

- Maximum flexibility
- Batch integrity can be maintained
- High levels of containment
- Blending multiple ingredients can be accomplished without transfer
- Minimal handling with maximum ergonomic advantage
- No moving parts for low maintenance
- Low profile stack-ups can permit single floor process designs
- Usually more economical than mechanical transfer or other methods



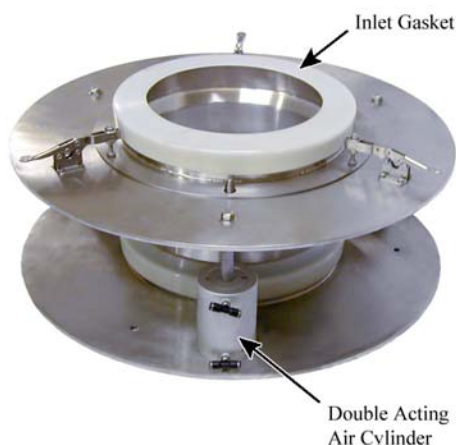
IEDCO offers a complete line of traditional "butterfly valve" type IBC's as well as IBC's can have its contents transferred via a vacuum conveyor. While we have based our standard designs around the use of a nominal 46" square footprint, we have designed several IBC's that fit our client's project specific requirements.

All containers can be fabricated from carbon steel, stainless steel, Hastelloy or virtually any exotic alloy that might be demanded by the chemical being handled. Standard configurations are available in polyethylene and custom molds can be built to meet any different requirements.

Discharge Valves

Our standard IBC's transition to a 10" diameter tri-clamp outlet. While we refer to them as "butterfly valve type", they can be configured with any kind of valve which might be more suitable, such as an iris valve, slide gate valve or even a split butterfly valve.

This type of IBC is usually used where the product can be choke fed into the process - the materials being handled are fairly free flowing and will completely discharge without mechanical assistance.



Discharge Stations

Discharge Stations are available for the IBC's and provide for proper location of the IBC during the discharge as well as for containment during the unloading operation. A variety of different control options are available to suit the application.

Discharge stations can be built on weigh frames or actual platform scales which, when married with the appropriate weigh instrument, can provide you with gravimetrically controlled discharge from your IBC.

Custom IBC's And Hoppers

We can design and furnish just about any size IBC or Hopper to fit any special requirement:

Lift Type:	Fork Lift, Pallet Jack, Castors and/or Lift Eyes
Capacity:	.5 cubic feet to 105 cubic feet
Shape:	Round, Square with large radius corners, Hexagonal
Valve Types:	Butterfly, Rotary, Tablet, Iris or Slide Gate (manual or pneumatic)
Materials:	Polyethylene, All Grades of Stainless Steel, Hastelloy, Mild Steel or As Required
Inlet/Outlet:	Custom designed to meet project requirements



IBC Wash Stations



All IBC's eventually need to be cleaned. To this end, we can build a wash station to clean the internal surfaces of the IBC. External surfaces are cleaned manually.

The operator simply pushes the IBC into the locator frame and manually locks it in place using the simple swing latch on the locator frame. Mounted to this base is a pneumatic lift supporting a "dummy lid" which has an inflatable seal. Mounted on the lid is a rotating wash head. This head has a flow rate of 18 to 24 gpm with a working pressure of 45 to 75 IBC outlet flange during the cleaning operation.

The cleaning operation can be a simple, manually operated, plain water system or an automated, CIP system. An automated, skid mounted system can be as simple or sophisticated as the customer's needs dictate. This system was skid mounted and completely automated throughout several wash and rinse cycles, each time with a different solution.

The entire operation was controlled by an Allen-Bradley PLC with touch-screen interface. A water temperature recorder was included along with multiple by-pass options.

Anatomy of an IEDCO IBC

