

Drum Handling Systems



**IEDCO**

Industrial Equipment & Design Company

...a world of experience in powder handling

Drum Handling Systems



If you make something from powders, it usually means that one or more of your basic ingredients comes to you in drums or you need to fill drums - either of which may involve a multitude of different sizes.

This means that you are faced with the following issues:

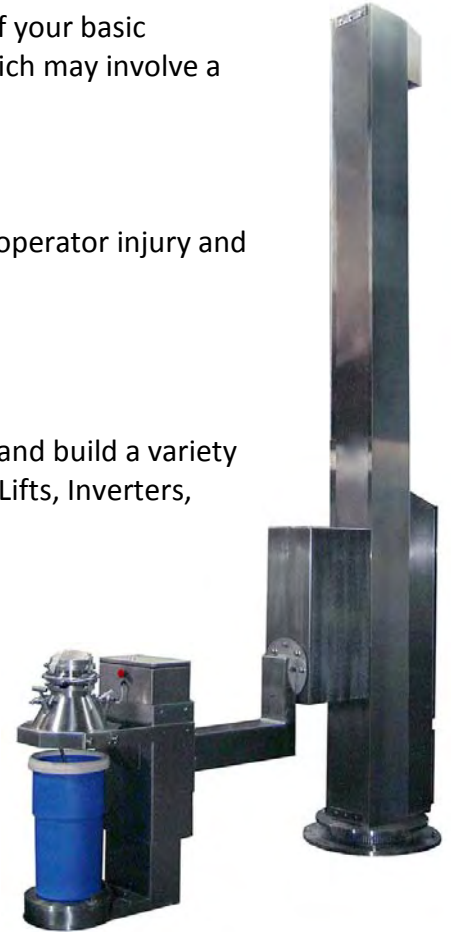
- The ergonomics of the lifting and handling of the drums to minimize operator injury and maximize efficiency
- The emptying or filling of drums accurately with full containment
- Getting the material to or from the drum reliably



To help you solve these issues, we custom design and build a variety of drum handling equipment which include Drum Lifts, Inverters, Tilters, and Drum Filling Systems.

We are particularly proud of our Column Lift Drum Inverter Systems, which can lift, invert, slew, and dock a drum into a specific unloading position reliably, repeatedly, and accurately.

We are particularly proud of our Post Lift Drum Handling System, which can lift, invert, rotate, and dock a drum into a specific unloading position reliably and accurately.



Drum Filling Equipment

Whether it's a Continuous Liner Drum Fill System or an accurate Weigh Batching System, IEDCO can design a drum filling system that fulfills the specifications of your project. Using a variety of drum fill heads, we can custom design a system that can fill virtually any size drum. IEDCO's drum fill equipment can be stationary or portable.



Drum Fill Heads

Each drum filling system we provide requires some means to allow us to fill drums accurately and in a fully contained manner.

Although we can use inflatable seals or continuous liners, our specialized drum fill head most often fulfills this job. Its weight and underlying gasket seal tight against virtually any drum opening.

Using pneumatic cylinders to engage and release the lid once settled, along with a flexible connection to ensure contained product flow, this design allows us to fill drums accurately without interfering with the scale system.

Drum Handling Systems



IEDCO Drum Filling Systems

Over the past 25 years, IEDCO has provided a wide range of drum filling systems to our many clients. From simple continuous liner drum fill systems to complex drum batching systems, we've done it all.

Each system designed around the same basic principles: **containment, reliability, accuracy, safety and ergonomics.**

Here are just a few examples of the variety of drum filling challenges we have solved for our clients.



Drum Handling Systems



IEDCO Drum Lift & Inverter

The **IEDCO Drum Lift & Inverter** can receive, lift, invert, and swivel a drum in order to dock it to a process for unloading. The unit can be designed to be stationarily mounted on a level floor or it can be free standing without top support.

The Column Lift is completely electrically powered and designed to lift, invert, and swivel. The completely electric design makes the machine more reliable, trouble-free and smoother operating than either hydraulic or pneumatically powered units.

The “lift and seal” drum clamping system is pneumatically powered and, when fit with custom designed drum spacers, can allow for use with multiple sizes of drums or similar containers.

The drum discharge cone can be fit with a variety of product flow-inducing components: pneumatic vibrators, fluidizing aeration discs, a bridge-breaker system, and even a compact mill (as shown in the photo to the right), as well as either a butterfly or rotary valve discharge device.

The discharge cone is also clamped into place, allowing for easy removal (without tools) and cleaning.



Portable Drum Lift & Inverters



Along with our stationary drum lift and inverter, we can also supply portable models. These units are custom designed to meet your specific requirements including lift height, drum size, environmental constraints, and required footprint.

Our Portable Drum Lift & Inverter can be completely pneumatic, electric, or a combination of both. All controls are integrated into the body of the unit, therefore only an air and/or electrical source is required.

Motor functions (lifting or inverting) can either be powered or manual.



Drum Handling Systems



Drum Spacers



Versatility is one of the most important characteristics of any new equipment investment, which is why our Drum Handling Systems are designed for use with a variety of different drum sizes.



To accomplish this, we supply Drum Spacers that easily integrate with our equipment (specifically our Drum Lift & Inverters) that will allow you to use multiple sized containers during your drum discharging process.

IEDCO Drum Spacers are custom designed to suit your specific drums and can be manufactured out of hygienic stainless steel or high density plastic.

In combination with appropriate programming in our controls system, discharging drums of different sizes is seamless, quick, and easy.

IEDCO Drum Conditioner



A major concern when dealing with drums is the solidification of the material inside over time. For many powders, solidification is a serious issue that is caused by either its natural characteristics or by time or environmental influence.

In any case, trying to break down the block of material inside drums can be a challenging and frustrating endeavor.

The IEDCO Drum Conditioner was designed to solve the issue of powder solidification in

metal drums. Utilizing rollers, impact vibrators, and pneumatic cylinders, the IEDCO Drum Conditioner easily breaks down compacted material into more manageable pieces for introduction into your process.

The IEDCO Drum Conditioner can also be designed for use in both hazardous and non-hazardous environments.



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Portable Drum Tilters & Inverters

Designed to discharge drums into smaller containers or low level chuteworks, IEDCO Portable Drum Tilters and Inverters are designed for easy maneuvering throughout the plant.



Units can typically handle up to a 250 pound drum and are manually loaded using an ergonomically designed Drum Dolly or similar.

Custom designed to fulfill your project specifications, our Portable Drum Tilters and Inverters can include a “lift and seal” drum clamping system (like our column lift drum inverters), especially if contained product transfer is required.

If containment is not an issue, a simple Drum Discharge Chute is provided, which allows for simple, open flow transfer of powdered product to your receiving vessel.



Custom Designs

Supplying the right solution for most drum handling challenges is rarely “one size fits all.” That’s why everything we do is custom designed to meet your specific needs. Whether it’s a variety of drums sizes or dealing with difficult powders, IEDCO is able to supply you with a personalized system to make your next project successful. Here are just a few examples:



Portable Drum Tilter to interface with custom portable screener (with fully contained product transfer)



Custom Drum Tilter to handle multiple sized drums within a specially designed downflow booth to handle hazardous materials in a safe and ergonomic fashion.



Drum Lift & Tilter integrated into a custom glovebox and bulk bag filling system for a fully contained transfer system.

Getting Powder & Tablets From Point "A" To Point "B" Is Our Only Business

