

# Containment Systems



 **GEDCO**

Industrial Equipment & Design Company

*...a world of experience in powder handling*

## Gloveboxes and Other Containment Systems

IEDCO has partnered with **Isolation Systems, Inc. (ISI)** to provide a variety of containment solutions to the Pharmaceutical and Chemical Industries.

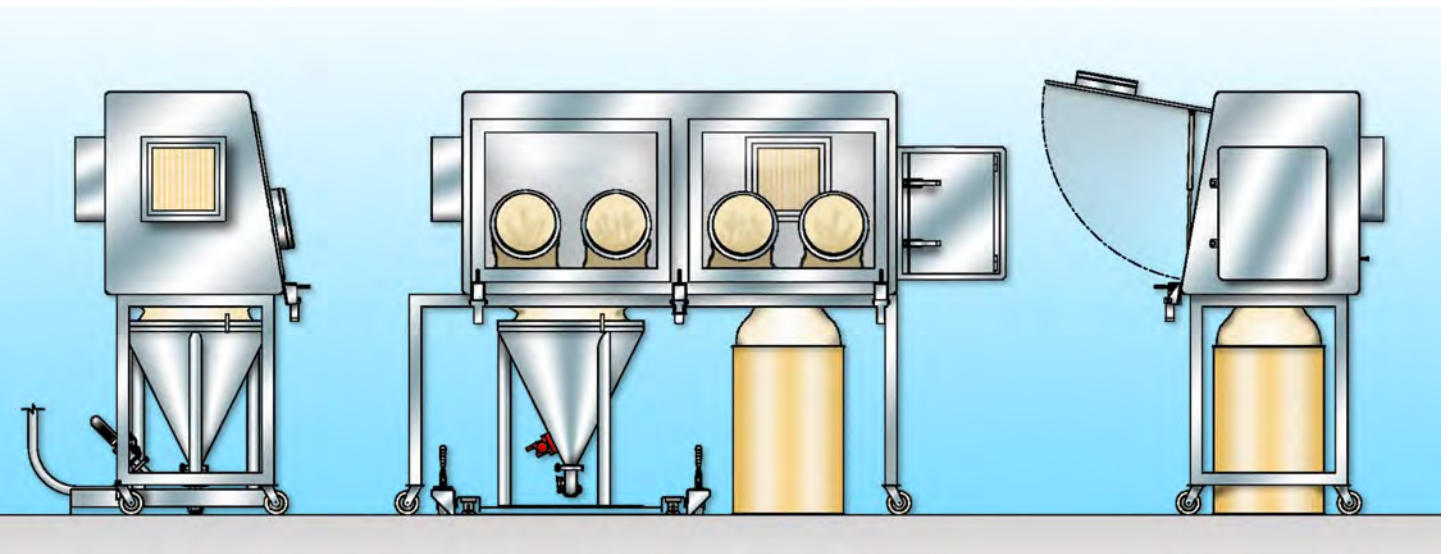
Our combined engineering and design capabilities have been brought to bear to solve the most complex clean process equipment design requirements and performance specifications.

We design, engineer, and manufacture complete lines of both standard and custom built airborne contamination control, containment, and extraction systems. Working with ISI, we can assure the highest level of protection and safety for both personnel and product.

Isolation Systems Inc. brings over 30 years of experience to bear in the design and development of clean process specific engineered, airborne contamination control and containment systems.

All containment systems are fabricated exclusively in 304 or 316L stainless steel or mild steel that is electrostatic coated with bonderized polyurethane.

IEDCO is dedicated to providing the full spectrum of airborne contamination control, containment and extraction technologies, services and products to meet the ever expanding needs of our customers.





# Containment Systems



## IEDCO Glovebox Isolators

IEDCO Glovebox Isolators allow for contained handling of powders, tablets, and other products, all while protecting both the operator and the material. Isolators can be designed for both positive and negative pressure operation and are rigorously tested to meet all conformance standards.



# Containment Systems



## Custom Containment Systems

Every project is unique, so every solution is equally unique. IEDCO's systems solution approach allows us to create custom solutions to your specific containment challenges.

By learning your complete process, we can seamlessly integrate a fully contained powder handling/transfer system into it.

For example, the system shown here required a fully contained drum discharging system to accurately fill bulk bags. IEDCO designed a Column Drum Tilter that allowed operators to open and empty the drum contents within a fully contained glovebox isolator. The powder was discharged to a sealed-system bulk bag filler, which included a scale system for accurate batching of the material.

No matter the challenge, IEDCO can design and supply the containment solution to your powder handling challenges.



## Containment & Extraction Booths



We can supply Containment & Extraction Booths and Enclosures that provide the highest levels of operator protection. These systems provide a safe operator breathing zone for both powder containment and fume extraction applications within a controlled environment.

Booths are available in re-circulating or single-pass configurations with double- or triple-integrated filtration systems.





# Containment Systems



## Containment Caps

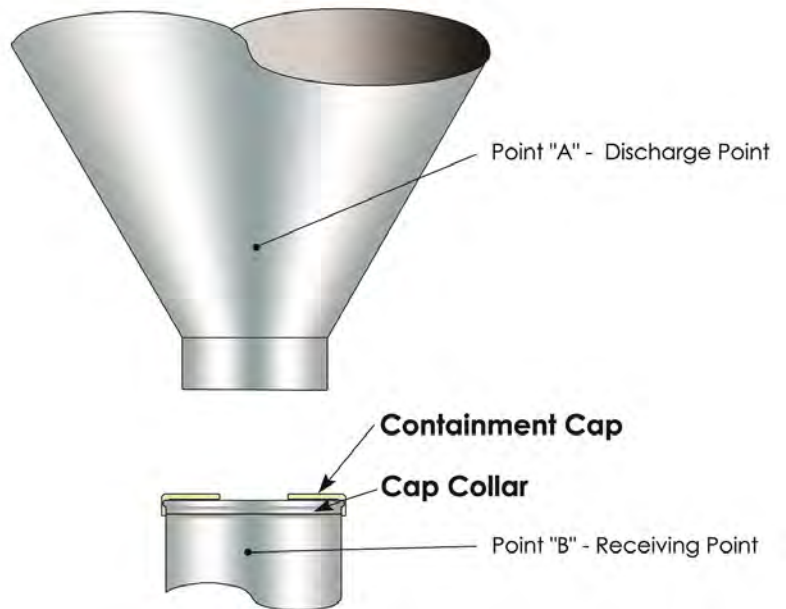
Containment Cap (or Dust Cap) is a silicone disk which snaps onto a metal collar and is integrated as a part of a chute, vessel or process. It is generally used to transfer a powder from "Point A" to "Point B" with full containment of dust during the transfer. Typically, the discharge point or the receiving point is portable. The cap is part of the receiving point.



An undersized hole is cut in the top of the cap to allow mating with a metal spigot, which is part of the discharge point. When mated with the undersized hole in the silicone cap, a tight, friction fit between the two points is achieved. The result is full dust containment when product is permitted to flow from "Point A" to "Point B".

If a scale system is included on either side, the cap can also provide the necessary flex connection for accurate weighing. We manufacture these caps here in the USA and they are readily available as a stock item in our inventory.

## Principle of Operation



## Cap Specifications



Containment Caps are available in Four (4) sizes: 4" (120mm), 6" (170mm), 10" (250mm) and 12" (315mm).

All Containment Caps are FDA and USP Class VI compliant, and are "natural white" in color. Custom caps can be made to meet your special needs.

Caps can be made with other materials and colors can be provided under special order to meet any chemical compatibility concerns.

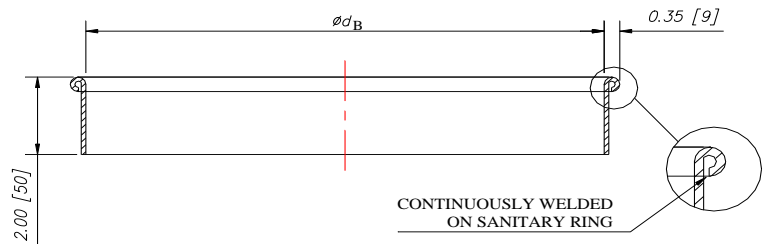
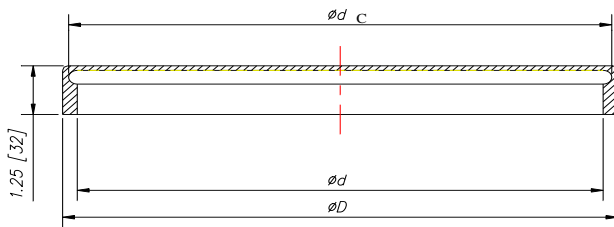
## Containment Collars

Containment Collars are butt weld fittings that can be integrated onto the receiving inlet to allow the proper fit of the Containment Cap. All collars are fabricated from 316 stainless steel and are available in either a standard or sanitary configuration.

The Containment Collar has a closed, sanitary bead ring around the entire periphery of the rolled top of the collar.



## Containment Cap & Collar Dimensions



**Containment Caps**

**Containment Collars**

Nominal Width	ØD	Ød <sub>c</sub>	Ød <sub>B</sub>	Ød
Ø120 mm	144 mm	129 mm	120 mm	122 mm
Ø170 mm	194 mm	179 mm	170 mm	172 mm
Ø250 mm	274 mm	259 mm	250 mm	252 mm
Ø315 mm	339 mm	324 mm	315 mm	317 mm

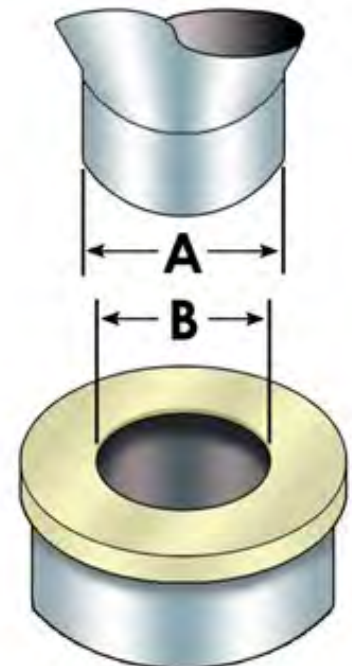
## Installation of Caps

The successful use of a containment cap is as good as its fit with the spigot to which it mates. If the hole cut in the cap is not perfectly round or its edges not smooth it will not seal well. If the hole is oversized it will not seal well. If it is undersized it may wear prematurely.

To optimize performance the hole must be cut properly.

To this end we have available an adjustable hole cutter with several surgically sharp blades and compass point-centering guard.

Spigot Diameter ØA	Hole Diameter ØB
50 mm	39 mm
100 mm	88 mm
150 mm	135 mm
200 mm	180 mm
260 mm	240 mm
300 mm	275 mm
2"	1 ½"
4"	3 ½"
6"	5 3/8"
8"	7 ¼"
10"	9 ¼"
12"	11"



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

