

# MURZAN

## DRUM UNLOADING SYSTEM



**The Murzan DUS-50 is the ultimate solution for emptying the most viscous materials from 55-gallon drums or containers of any shape. When used in applications that no pump alone could handle, the system empties the containers quickly and cleanly without adding any pressure to the product or the container. The system meets FDA standards for approved materials and USDA guidelines. In fact, the PI 50 series Murzan pump, integral to the DUS-50, holds a USDA equipment acceptance certificate, is manufactured to meet general 3-A standards, and is available as EHEDG certified.**

## Construction

The Murzan DUS-50 system utilizes a T-316L stainless steel, sanitary Double-Suction Murzan Diaphragm pump. This pump is mounted on a food grade stainless steel plate and is fitted with a food grade scraper ring which cleans the inside of the drum or container as it is emptied. A frame constructed of T-304 stainless steel supports the pump and base.

The system is equipped with two air cylinders that lift the pump and base out of the drum or container once it is empty. At the end of the stainless steel roller feed conveyor, there is a bi-directional roller that aligns the drum. The system has capacity for two drums. Sanitary casters are installed for portability to allow use in different unloading areas. A Nema 4X stainless steel Control Panel is supplied with this unit.

## Operation

The operation of the system is very simple. With the drum in place, the compressed air in the bottom of the air cylinders is released, and the pump is lowered into the drum. The pump and base plate will float on the surface of the product. As the product is pumped out of the container, the pump and base plate travel down into the drum wiping the wall of the drum. Once the drum is empty, air is directed back into the bottom of the air cylinders and the pump is lifted out.

## Capacity

Capacities up to 60 gallons per minute may be achieved, depending on the specific gravity, viscosity, consistency of the product, and the total dynamic head (TDH) of the application.

## Advantages of the Murzan DUS-50

- Empties 55-gallon drums of the heaviest and most viscous products, such as 33° Brix tomato paste, in less than 3 minutes, without adding water.
- Unloads drums with liners or aseptic bags.
- Provides completely sanitary, hands-off method of drum unloading.
- Simultaneously meters or weighs product during unloading, if desired.
- Fully portable.
- Is designed for CIP capability.
- Drum self-centering.
- Eliminates the use of heavy suction wands and hoses.

## Applications

### Food

- Tomato paste
- Peanut Butter
- Chocolate Fudge
- Cream Cheese
- Lecithin
- Fruit Filling
- Raw Honey
- Corn Syrup
- Shortening
- Jams & Jellies
- Cookie Filling
- Almond Paste
- Raisin Paste
- Soup Base (Bone Stock)
- Eggnog Concentrate

### Cosmetic

- Facial Creams
- Toothpaste

- Gels
- Mascara Base
- Perfumes and Fragrances
- Skin Creams
- Suntan Lotion Base

### Pharmaceuticals

- Lanolin
- Vaseline
- Ointments
- Magnesium Hydroxide
- Petrolatum (Petroleum Jellies)
- Pharmaceutical Compounds
- Any product (non-self-leveling) you must scoop from the drum for unloading.

**For more information or to inquire about a customized system, contact the factory or your local Murzan distributor.**

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