Universal docking system for material handling

Easy handling

Dust-free discharging

Protection of product and operators

Easy to clean

Preferred applications

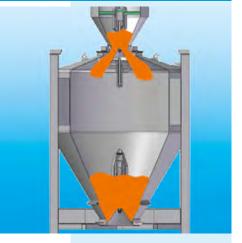
Gravity-fed, contamination-free product transfer from containers to downstream receptacles. The system is self-centring and therefore tolerates inaccurate positioning which often occurs with manual lifting devices for example. Its low-level design allows systems to be constructed in rooms with low ceilings. As dust is prevented from accumulating, zone definition or ATEX is either not required at all or can be classified at a lower

level. The top priority is to prevent the environment, that is workplaces and staff, from being contaminated with active or otherwise problematic substances. Particularly appropriate for use everywhere where contamination must be prevented and high hygiene standards met.

Special advantages

- · Universally usable design
- Prevents contamination
- Protection of product and operators
- Automatic container handling
- Easy to disassemble and clean
- · Suitable for pharmaceuticals

THE INNOVATION





Design

A system of tensioned rings at the inlet and outlet of the receptacle makes the docking system flexible enough to be fitted to the available containers. If this new docking system is used within automatic recipe mixing systems with dosing and weighing processes, appropriate compensators must be provided at the inlet and the outlet.



How it works

Positioning



The BATCHTAINER® should be moved under the docking position either manually with a lifting device or automatically with mobile scales or a automatic guided vehicle and positioned precisely.

Docking



After the BATCHTAINER® has been positioned under the docking point, this is lowered or the container is automatically lifted. This allows the outlet cone on the docking device and the inlet cone of the container to interlock.

Filling



Using compressed air, the outlet cone of the container above presses the spring-loaded closure of the BATCHTAINER® down.
This opens the inlet of the BATCHTAINER® and the bulk material is discharged into it.

Docking / discharge



After filling, the upper docking unit is raised, which seals the closure taper in the container again. The BATCHTAINER® can then be moved to a discharge station.

Compressed air is used to open the outlet cone and the product is discharged for subsequent processing. Intermittent opening allows the flow of the product from the container to be regulated.

Easy to clean



All commercially available containers can be equipped with this type of quick release closure on the container inlet and similarly on the outlet discharge unit. This design is particularly advantageous as the product does not come into contact with

any contaminated surfaces. The quick release connectors on both the inlet and discharge units on the container make them easy to disassemble for thorough cleaning.

Container handling



This new docking design allows the construction of fully automatic container systems such as those used in the pharmaceuticals industry with central weighing for carrier and active ingredients for formula preparartion . The docking, detaching and closing processes on the container are fully automatic.

