



The big bag unloading station is a dust-free solution for the rapid unloading of powders from big bags (FIBC) and large sacks. An electric hoist or overhead crane lifts the big bag to the discharge port; once the spout is guided into place, a pneumatic clamping device seals it automatically, and the material discharges by gravity along the pipe after the tie is released. A bag-massage device loosens caked material, which is fed evenly downstream by a screw through a buffer hopper. When unloading is complete, the operator re-ties the bag, releases the clamp and lifts out the empty bag.

Working Principle: The clamping cylinder rises, the bag discharge spout is drawn into the inner ring of the clamp, and the cylinder descends to compress and seal the spout with a sealing ring — no dust leaks during unloading. Material descends by gravity along the pipe; the bag-massage device loosens bridged material, which falls into the buffer hopper and is fed evenly by the screw to the designated equipment.

Key Features

- ◆ Integrated unit: lifting frame + big bag massage device + pneumatic clamping + buffer hopper + weighing + screw conveying
- ◆ Single-unit unloading capacity up to 2 tonnes; heavy-duty tubular frame structure, rugged and durable
- ◆ The base can be connected to a vacuum feeder line for lifting, or mounted directly on mixers, reactors, dissolving tanks and similar equipment
- ◆ Product-contact parts in 316L / 304L stainless steel; carbon steel powder-coated or all-stainless frame options
- ◆ Dust-free connection and complete emptying of big bags; dust is collected during bag changeover, preventing foreign matter from entering the material stream
- ◆ Optional lump breaker, flow-assisting agitator / vibration massage unit, dust collection and explosion-proof configuration; can be combined with a bag dump station into a joint system

Specifications

Model	Material	Power	Dust Collection	Dimensions (mm)
DBU-1	Stainless steel 304	—	No	Φ490×680
DBU-2	Carbon steel / SS 304	—	No	1600×1600×1480
DBU-3	Carbon steel / SS 304	3 kW	Yes	1800×1800×4800
DBU-4	Carbon steel / SS 304	5 kW	Yes	2000×2000×6000

Electric hoist lifting → Manual spout guiding → Pneumatic clamping → Tie release & unloading →

Bag massage loosening → Buffer hopper + screw conveying

◆ Please provide for selection: sling height, big bag height, spout diameter and height, and total weight. Options: vibrating platform (for cohesive materials), big bag massager (to break up compacted material), and an economical simple support frame.