

Decompressing Big Bag Station



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The Decompressing Big Bag Station (DBBS) is an advanced system engineered to condition big bags by mechanically breaking up compacted material, making the emptying process significantly easier.

Hydraulic cylinders apply controlled force to crush hardened contents safely and precisely without damaging the bag.

A key feature of the station is its liftable, rotating table, which ensures ergonomic handling and stable positioning of the big bag throughout the process.

Compatible with all types of powders, the DBBS can be integrated across a wide range of industries and production environments.

By improving material flow and reducing the risk of blockages, it supports continuous, efficient operation of downstream conveying systems.

Design

Construction material: 1.4301 (304), 1.0037 (1015) Painted RAL 5015, custom color on request.

Application range

- Big bags of various sizes
- Big bag weight: up to 2000 kg
- Recommended filling level: up to 70%
- Adaptable to non-standard bags and pallet dimensions

Key Benefits

- **Enables a stable material flow in downstream discharging operation**
No bridging, no blockages, no surprises
- **Effective lump breakdown**
High decompression force with controlled, gentle action
- **Big bag protection**
Careful conditioning without damaging the bag
- **Fully automated operation**
Minimal operator intervention required
- **Maximum safety level**
Comprehensive integrated safety system
- **Flexible configuration**
One station – multiple products

Core Technologies

The DBBS integrates several technologies that work together to deliver a powerful, reliable, and repeatable decompression performance.

Side Massage System

Its three-zone system - upper, middle, and lower sections - applies force exactly where it is needed, generating up to 80 kN of pressing power with uniform force distribution across the entire bag. This ensures efficient loosening of hard lumps and compacted blocks while maintaining the integrity of the packaging.

Scissor Lift

The scissor lift is equipped with a 90° indexed **rotating table**, offering up to five precise working positions. The independently constructed lift provides stable handling and accurate positioning, enabling consistent and repeatable conditioning cycles.

Industrial Hydraulics

The system is driven by robust hydraulics designed for continuous, high-load operation. Double-acting cylinders ensure smooth, controlled movement, while the hydraulic power unit, rated up to 180 bar, delivers the strength and reliability required for demanding industrial environments.

Operator safety

Safety is built into every aspect of the DBBS. Light curtains, safety bumpers, and side panels create a secure working zone, while a dedicated service mode ensures safe maintenance procedures. The station operates safely in fully automatic mode, minimizing risk and maximizing protection.

Process Control

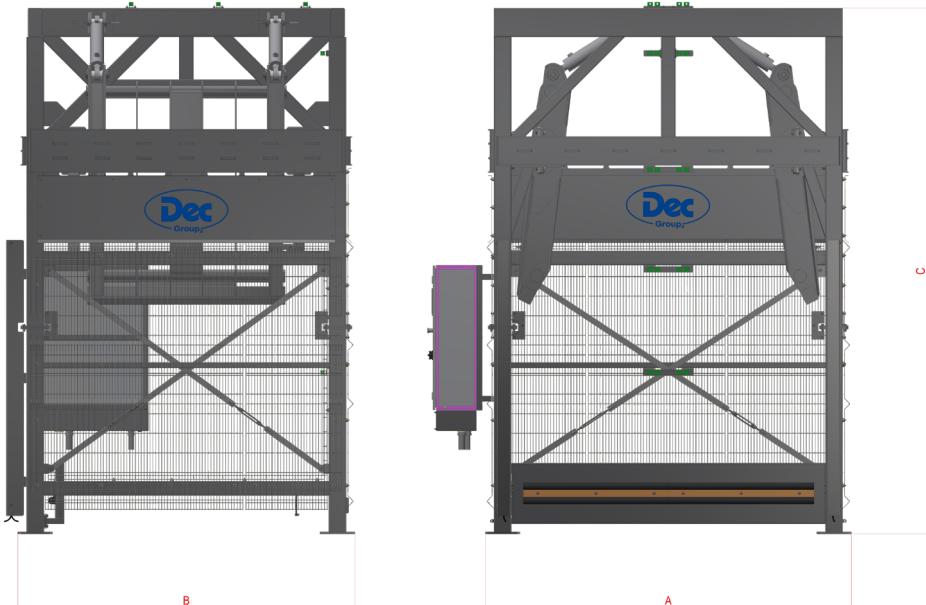
The entire process is intuitive and efficient. A user-friendly HMI provides access to fully automatic operation, pre-set process recipes, and all key parameters. Operators can quickly configure or adjust the system, ensuring fast and safe Big Bag replacement and seamless integration into daily workflows.

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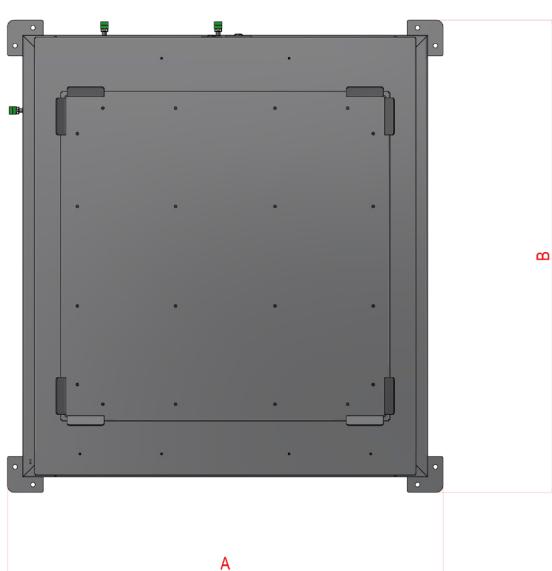
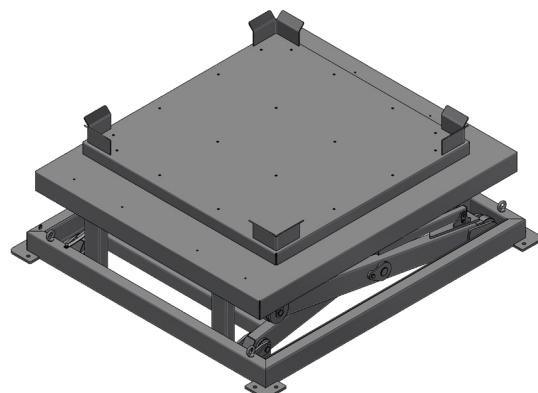


Basic overall dimensions of the station:

A	2520 mm
B	2320 mm
C	3625 mm



Scissor lift with rotating table:



A	1710 mm
B	1850 mm
C	600 mm
D	720 mm