

Modular discharge station for big bags allows configuration to meet individual requirements

**Cost-efficient,
modular principle**

**Reliable handling
of big bags**

**Rapid, dust-tight
connections**

**Discharge aids
for difficult
bulk materials**

Preferred applications

Flexible bulk materials receptacles such as big bags have become firmly established for handling powders in a variety of branches. They have clear advantages over sacks when it comes to transporting and storing bulk materials. They are environmentally friendly, require less operating staff and storage space and reduce costs for transport and processes.

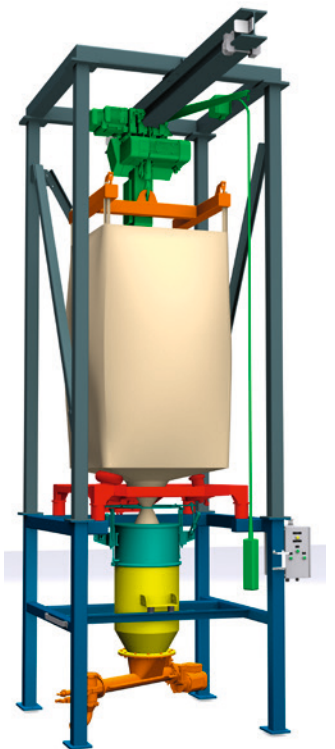
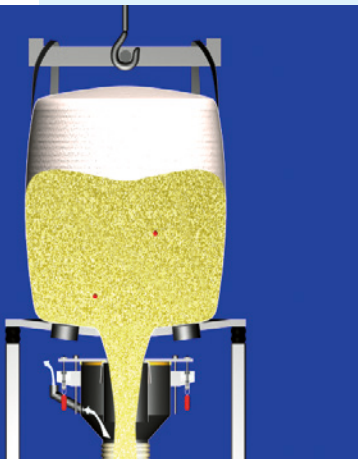
Apart from free-flowing bulk materials, poor-flowing products can also be discharged reliably using appropriate discharge aids.

Special advantages

- Modular system allows configuration to meet individual requirements, making it cost-effective
- Reliable discharge of bulk materials into closed production systems with little generation of dust
- Convenient lifting of big bags from pallets to the big bag discharge station
- Low-dust connections thanks to the big bag docking system
- With the option of vibrating discharge aids and/or massager devices for poor-flowing bulk materials

- Suitable for various sizes and types of big bags
- Easy to use thanks to ergonomic design
- Also suitable for big bags with liners

THE INNOVATION



Modular: cost-efficient and flexible

AZO big bag discharge stations make it possible to discharge big bags with little generation of dust and to feed products reliably into the closed production plant. To improve efficiency and reduce costs even further, AZO has developed a modular concept for a big bag discharge station. The required components such as frame, traverse, chain hoist, discharging aids, big bag

docking system, buffer bin and discharging unit can be chosen from a "construction set", depending on the requirements. The entire discharge station can be configured to suit needs without outlay for design, which has a very positive effect on the price and delivery time. They are comparable with equipment from series production, however the modular station covers a much

broader range of uses than a standard model, which makes it very flexible. Modular technology makes it possible to adapt the stations in use to changing production conditions with minimum outlay.

Modular big bag discharge station 1600 x 1600 mm

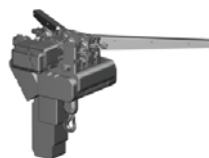
Upper frame with traverse and chain hoist



standard upper frame



upper frame for low overall heights



1000 kg and 2000 kg chain hoist;
lubrication: mineral oil or food-grade oil

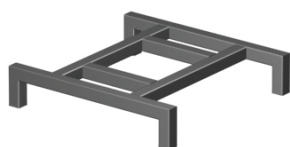


1000 kg and 2000 kg traverse

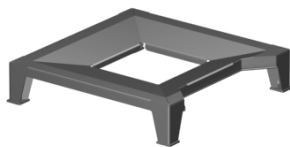


1000 kg and 2000 kg traverse for low overall heights

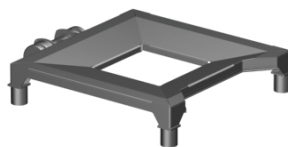
Support platforms



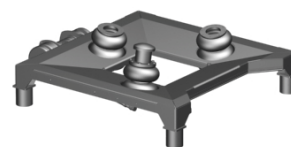
standard support frame for easy-flowing bulk materials



support platform improves discharge properties



support platform with vibrating discharge aid for non-free-flowing bulk materials



support platform with massager device for especially difficult, non-free-flowing bulk materials, with optional vibrating discharge aid

Connection systems



hopper for dust-free, granular bulk materials



bag clamp for bulk materials that generate little dust

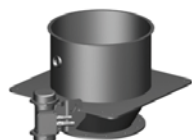


big bag connection systems for powdered bulk materials



big bag connection system with inflatable seal for bulk materials that generate a high level of dust

Hopper



Ø 500 mm hopper
volume: 85 - 110 litres
with/without vibrating discharge aid



Ø 800 mm hopper
volume: 100 - 350 litres
with/without vibrating discharge aid



Ø 1100 mm hopper
volume: 350 - 750 litres
with/without vibrating discharge aid

Lower frame



Lower frame without stage
height: 1480 mm

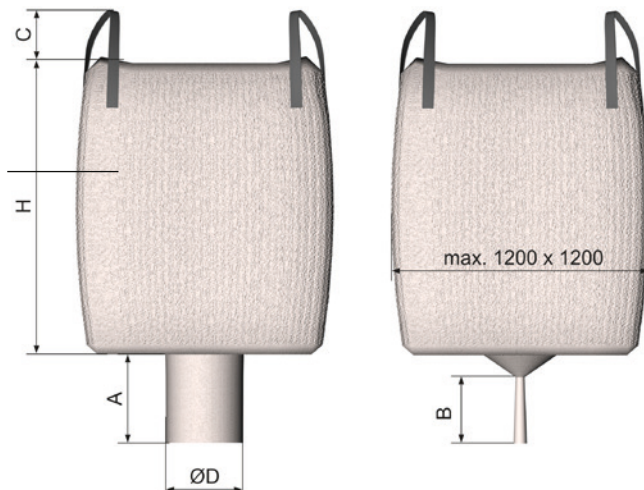


Lower frame with one stage
height: 1730 mm



Lower frame with two stages
height: 1980 mm

A 3D perspective view of the mechanical testing machine frame. The frame is a tall, rectangular structure with four vertical legs. It features a top horizontal beam and a lower horizontal beam. A diagonal cross-brace is visible on the left side. A large, dark, cylindrical component, likely the motor or actuator, is mounted on the lower beam. Two dimension lines are shown: one on the left side indicating the 'Total height' from the base to the top, and another on the left side indicating the 'Height of lower frame' from the base to the lower beam.



		Girder, hanging		
Big bag height [mm]		1500	1750	2000
Height of lower frame [mm]	1480	4870	5120	5370
	1730	5120	5370	5620
	1980	5370	5620	5870
Overall heights are decreased by 290 mm for plants where the height has been optimised				

Height of lower frame (mm)	Hopper diameter [mm]	Outlet diameter [mm]			
		205 for AL ¹⁾ 200	305 to DFS ²⁾ 100 / AK ³⁾ 300	305 to DFS ²⁾ 140	500 to AT ⁴⁾ 500
1.480	500	-	85 L	-	-
	800	-	-	-	200 L
1.730	500	100 L	130 L	110 L	-
	800	-	200 L	100 L	350 L
1.980	1.100	350 L	500 L	350 L	750 L

1) Rotary valve
 2) Dosing screw
 3) Butterfly valve
 4) Pick up cone

Load-bearing capacity	1000 kg or 2000 kg																			
Design:	<p>frame: mild steel, epoxy-coated alternatively: chromium-nickel steel 1.4301</p> <p>parts in immediate contact with products: chromium-nickel steel 1.4301 Choice of surface finishes A2-1 to A2-4 L4-2 to L4-3 (refer to AZO's surface finishes)</p>																			
Weight:	1050- 1700 kg (without big bag)																			
Protection class:	IP 54																			
Nominal voltage:	400 V / 50 Hz																			
Control voltage:	24 V																			
Connected load:	1,76 kW																			
Noise level:	< 70 dB (A)																			
Seismic zone	Calculation according to EN1998-1:2010 in Germany, Belgium, France and Italy unrestricted																			
Use for:	<p>big bags, max. 1200x1200 mm with heights of H = 1500 mm, 1750 mm, 2000 mm with outlet connectors:</p> <table border="1"> <thead> <tr> <th>outlet-Ø D [mm]</th><th>outlet length min. A [mm]</th><th>fastened length min. B [mm]</th><th>standard loop length C [mm]</th></tr> </thead> <tbody> <tr> <td>330- 380</td><td>550</td><td>400</td><td>300</td></tr> <tr> <td>380- 500</td><td>600</td><td>450</td><td>300</td></tr> <tr> <td>500- 600</td><td>650</td><td>500</td><td>300</td></tr> </tbody> </table>				outlet-Ø D [mm]	outlet length min. A [mm]	fastened length min. B [mm]	standard loop length C [mm]	330- 380	550	400	300	380- 500	600	450	300	500- 600	650	500	300
outlet-Ø D [mm]	outlet length min. A [mm]	fastened length min. B [mm]	standard loop length C [mm]																	
330- 380	550	400	300																	
380- 500	600	450	300																	
500- 600	650	500	300																	
Big bag weight max:	<p>1960 kg for station with load capacity 2000 kg 960 kg for station with load capacity 1000 kg</p>																			

Modular discharge station for big bags



modular discharge station for big bags with mounted dosing screw (not part of the modular system)



Support hopper with vibrating discharge aid and massager device



Big bag connection systems for powdered bulk materials



Big bag connection system with Ø 500 hopper with mounted dosing screw (not part of the modular system)