



Big Bag Handling

Integrated systems for filling, emptying and disposing of Big Bags



Big Bag filling stations

Big Bag emptying stations

Big Bag empty bag compactor

Conveying and dosing technology

Customised solutions for safe and convenient filling, emptying and conveying.

- > Sturdy system technology
- > Safe & dust-free working
- > Discharge support
- > Vibratory tables for product compaction
- > Explosion protection (ATEX)
- > Process automation
- > Autonomous control and weighing
- > Conveying and dosing equipment

Complete solutions from a single source

We will also assist you beyond
system integration



Reliable material supply from the Big Bag

Fill, transport, empty – and then fill again.

Big Bags make the material flow of bulk materials efficient and safe.

To ensure that the Big Bags can be filled and emptied safely, cleanly and in a time-saving manner, custom solutions are required that perfectly match the downstream production facilities of industrial companies.

That is exactly where we at IB Verfahrenstechnik excel. The filling and emptying stations have a modular design, are individually adaptable and can be easily integrated into existing material flow systems. The solutions are also designed for maximum availability, durability and product safety.

The people behind IB Verfahrenstechnik are a team of experienced engineers and technicians with a passion for bulk materials. We have several decades of experience in conveying technology and have always valued personal contact with our customers right from the very outset – with the aim of designing tailor-made technology from a modular system. The registered office of IB Verfahrens- und Anlagentechnik GmbH & Co. KG is Lage-Heiden in the East Westphalia-Lippe technology belt. If you would like to know more about bulk solids technology and the conveying technology solutions from IB Verfahrens- und Anlagentechnik: please call or write to us.

Big Bag filling stations – What comes out, must first go in

To ensure tailor-made installation, we configure our Big Bag filling stations individually to the functional requirements and spatial conditions of our customers. This way, the suitable racks, the necessary weighing equipment, suitable vibrators, loop suspensions or filling nozzles can be combined in the best possible way in size and shape. For flexible use, the filling station can also be combined with rollers.

- 1 Frame**
sturdy, made of steel or stainless steel

- 2 Universal connection**
to existing systems

- 3 Filling nozzle**
with torque bag clamp and dedusting

- 4 Loop hanger**
height adjustable with safety load hook

- 5 Pallet scale**
with high-quality industrial load cells and
weighing electronics (calibratable)



Features of Big Bag emptying stations

- > Modular design for a high degree of customisation
- > Weighing terminals for automatic and non-automatic weighing
- > Efficient and user-friendly Big Bag changing
- > Integration into the production environment
- > Control engineering and system integration
- > Design in steel and stainless steel
- > ATEX version
- > FDA in compliance with (EC) regulation 1935/2004
- > Low-dust filling
- > Inliner inflation device
- > Automatic switch-off
- > Operating platforms

Universal filling of any type of Big Bag

Filling nozzle with inflatable sleeve for quick and comfortable connection of the Big Bag.
Options: integration or connection to on-site dedusting of the displaced air, level indicator (MAX), Big Bag inflator, individual interfaces to existing systems (standard flanges, Jacob pipe, etc.).



Vacuum conveyor for simple and fast filling



Filling nozzle with inflatable sleeve for fast and low-dust docking of the Big Bag



Robust filling hopper for filling with wheel loader

Weighing

Vertical or suspended weighing with high-quality industrial load cells and weighing control, also calibratable.



Vertical weighing frame without loss of height



Hanging weighing with locating mandrels



Control box with weighing terminal

Further options

Depending on the local conditions and requirements, the height can be adjusted manually, pneumatically or electrically.



Manual or electrical height adjustment with lifting spindle



Pneumatic height adjustment



Electric chain hoist



Vibratory/shaking table



Automatic loop notching



A variety of dosing equipment

Big Bag emptying stations – ergonomic, practical, safe

As a conveying technology specialist for bulk materials, we design solutions individually geared to the needs of our customers. The emptying stations for all types of Big Bags and bulk materials are designed in such a way that they can be seamlessly integrated into the production environment both mechanically and in terms of control technology.

- 1 Upper frame**
with electric chain hoist and trolley

- 2 Middle frame**
for Big Bags of all heights

- 3 Unit frame**
for accommodating the components, with access protection and light barrier if necessary

- 4 Discharge support**
automatic fill level controlled lifting of the Big Bag

- 5 Emptying nozzle**
with outlet hose stretching device

- 6 Cellular wheel sluice and suction feed**
for connection to existing infrastructure



Features of Big Bag emptying stations

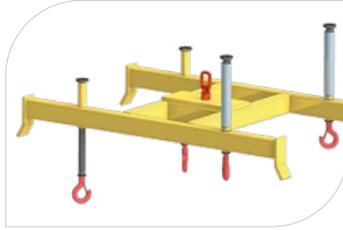
- > Modular design for a high degree of customisation
- > Efficient and user-friendly Big Bag changing
- > Low-dust emptying
- > Evacuation of emptied Big Bags
- > Integration into the production environment
- > Control engineering and system integration
- > Design in steel and stainless steel
- > ATEX version
- > FDA-compliant and in compliance with the regulation (EC) 1935/2004
- > Various components for optimising outflow
- > Special versions possible
- > Pneumatic and mechanical product conveyance
- > Wear protection for abrasive products

Big Bag Handling with forklift or crane

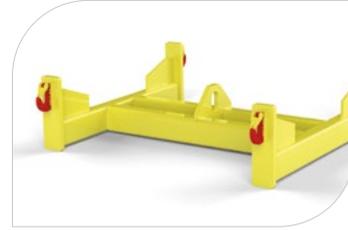
When transporting Big Bags with forklift trucks or crane systems, the appropriate lifting equipment is an essential part of a coherent overall solution. This also includes special conditions such as use in explosion-proof areas with the appropriate ATEX approval of our technology.



Upper frame with receptacle for forklift cross beam



Cross beam with spring retensioning



Cross beam with loop shortening

Emptying devices

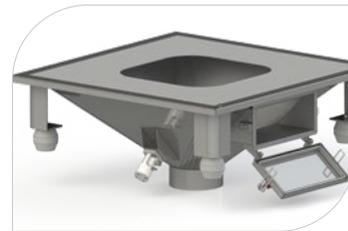
IB Verfahrens- und Anlagentechnik offers suitable emptying systems for the safe, ergonomic, low-dust and precisely controllable insertion of products into the manufacturing process.



Emptying nozzle with clamping cover



Emptying nozzle with inflatable sleeve



Emptying hopper with/without cutter blade and vibratory motor

Further options

For optimum emptying of poorly flowing bulk material. Milling device for lifting the Big Bag bottom, stretching device for the discharge hose, vibrators and product fluidisation.



Milling device to assist discharge



Adaptable emptying nozzle DN200 to 800



Re-closing of Big Bags



Stretching the outlet hose



Industrial weighing technology



Product feed



Screw conveyor



Conveying line

Outlet closing clamp – Coarse dosing of Big Bags, partial emptying and re-closing

With our OSC, we are paving the way for combining all the advantages of large-volume product feeding with basic dosing options. In addition, the bag can be re-closed after the desired amount of bulk material has been removed. The pneumatically driven outlet closing clamp works steplessly and closes the sack very easily and ergonomically.

- 1 Closure shear construction**
pneumatically operated, steplessly and synchronously adjustable
- 2 Pressure regulator**
manually adjustable, for setting individual closing forces
- 3 Compressed air hose and coupling**
delivery includes 5 m compressed air hose and coupling 1/2"



Features of the outlet closing clamp

- > Simple handling
- > For hoses from Ø 200 to 500 mm
- > Portable aluminium version (15–17 kg)
- > Cable hanger for comfortable working
- > ATEX version
- > Simple and safe operation (Plug & play)
- > Each position of the shears can be statically fixed
- > Rental devices
- > Stationary version for installation in stainless steel discharge station

Big Bag compactor – Big bags made small

Our compactor turns used empty Big Bags into small bags, which can be disposed of in a space-saving and handy manner. The machine pushes the used Big Bags compacted into a Big Bag, which in turn offers all the advantages of this large packaging for cost-effective disposal. Inside the empty bag compactor, a screw mechanism ensures that the air is quickly released from Big Bags and other packaging materials or waste – and this is largely dust-free for the outside world. The machine itself is a compact design and consequently requires little space.



Screw housing 1
made of steel/stainless steel

Flap with contact switch 2
for automatic switch-off and dedusting

Screw drive 3
4 kW gear motor

Control box 4
for simple handling

Rollers 5
with holding brake

Connection 6
to on-site dedusting or with integrated filter

Connection nozzle 7
with loop suspension, bag buckle and tamper guard

Features of Big Bag compactors

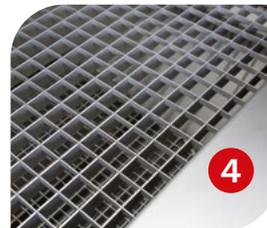
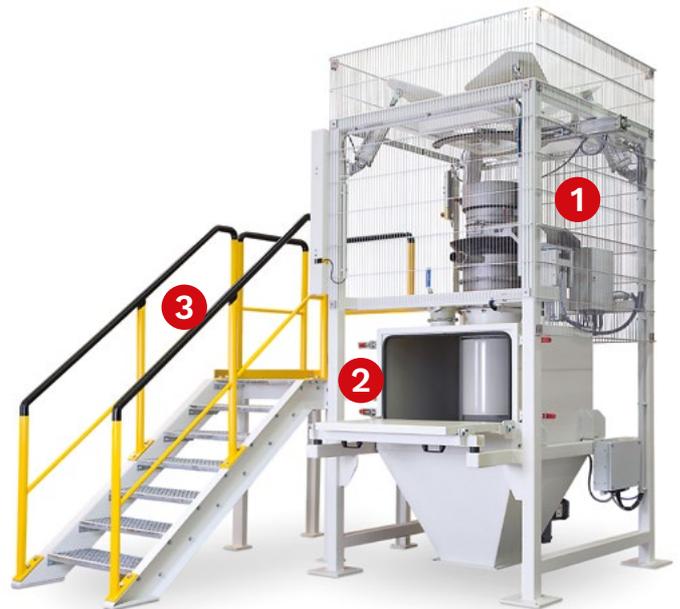
- > Low-dust disposal in Big Bag, foil sleeve or barrel
- > About 10 to 15 empty Big Bags fit into one Big Bag (1m³)
- > Design in steel and stainless steel
- > ATEX version
- > Rental devices
- > Simple and safe operation (Plug & play)
- > Mobile
- > Integrated or on-site dedusting
- > Autonomous operation (Plug & play)
- > Special versions possible

Big Bag emptying stations with combined bag emptying

Well combined – our solution for emptying Big Bags and bagged goods

The best of both worlds: to achieve this, we combine our high-performance emptying stations for Big Bags with efficient handling for bagged goods. The unit has a compact design and offers everything needed to move bulk materials efficiently and safely into the downstream production processes. With our solution it makes no difference whether raw materials are delivered in large quantities in Big Bags – or in smaller quantities as bagged goods.

- 1 Big Bag emptying unit**
no compromises
- 2 Bag feed**
lockable and can be used as a base plate
- 3 Working platforms**
for safe and comfortable work
- 4 Removable support grid**
for depositing the bags
- 5 Loosening stirrer**
for guaranteed product discharge from the hopper



Features of Big Bag emptying stations with combined bag emptying

- > Flexible and modular construction
- > Discharge support
- > Weighing (also calibratable)
- > ATEX version
- > A variety of conveying equipment
- > Control and regulating technology
- > Customer-specific solutions
- > Steel and stainless steel

The very best for your Big Bag handling

We build good machines and complete systems for supplying material in bulk from Big Bags. You can also expect us to design solutions from a modular construction kit that perfectly match your production and intralogistics needs. As a result, we are your system partner for the entire bulk material handling process. Beyond the technology itself, what counts most is the know-how of our employees. We combine this in services for planning, conception and seamless system integration right into the automation technology of our customers.



Any questions?
We will be happy to help

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Anlagentechnik**

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Systemized bulk handling.

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Design: kopfstand-web.de | cover image: @kitsana pankhuanoi, istock.com

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