

CONVEYING



FILLING + EMPTYING



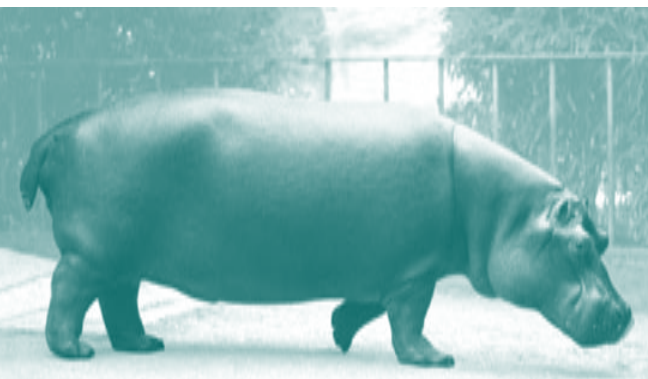
DOSING + MIXING



SYSTEMS + COMPONENTS



*EMDE FIBC
Discharge Stations*



Systematic Emptying

No matter how diverse FIBC sizes, product characteristics and customers needs may be, FIBC Discharge Stations can be designed accordingly. Based on a standardised basic solution, each system is created individually.

Versatile System Programme

EMDE manufactures four main types of FIBC Discharger. Each solution offers the optimum benefits for the relevant application. Your specific requirements will determine which system is right for you. The criteria by which the basic design is selected include

- product-specific characteristics: graining, flowing properties, apparent weight, agglomeration
- the number of units to be discharged per hour
- local conditions
- the size and design of the FIBCs

Design:

Steel, varnished

Stainless steel 1.4301 or 1.4571 (AISI 304 / 316 Ti)

Food and pharmaceutical finish

- ▶ **Bearing Frame in Robust, Warp-Resistant Welded Design**
- ▶ **Load Support for use with Crane or Fork Lift for Safe FIBC Handling**
- ▶ **Clean and Dust-Free Discharge via Suitable Docking Appliance**
- ▶ **Ergonomically Optimised Accessibility for Opening the Discharge Spout**



Explosion-Proof Design as per Directive 94/9/EC for Potentially Explosive Atmospheres where Dust or Gas is Present

- ▶ **Effective Discharging Aids to Support the Product Flow**
- ▶ **Optimised Design of the Feeding Hopper**
- ▶ **Potential to Connect to a Range of Different Conveying and Dosing Devices**
- ▶ **Solutions for Lifting and Depositing the FIBCs in Accordance with Local Circumstances**
- ▶ **Optimised Solutions for Different Sectors of Industry**

BE 1600 with kneading activation system and rotary valve

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Transferral of contents from FIBCs to IBCs

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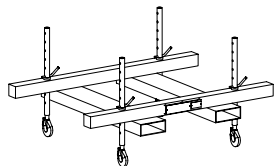
Load support for use with cranes with reorientation of the FIBC loops

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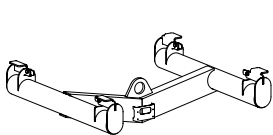


1 Load support

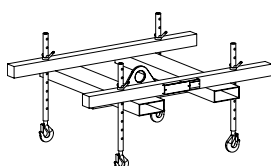
1.1 For use with fork lift



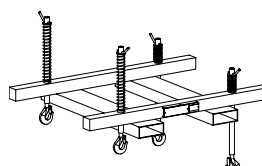
1.2 For use with crane



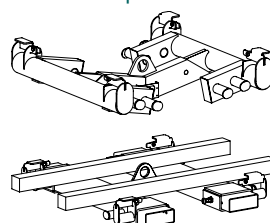
1.3 For use with fork lift and crane



1.4 With stretching device for the safety load hooks

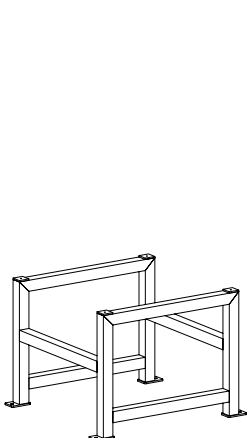


1.5 With reorientation of the FIBC loops

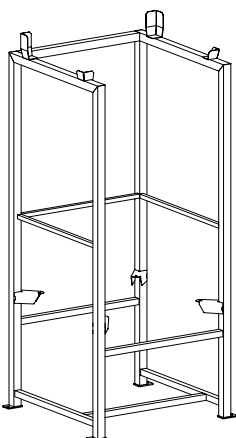


2 Frame

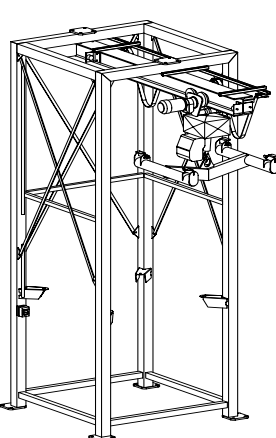
2.1 Frame for feeding hopper



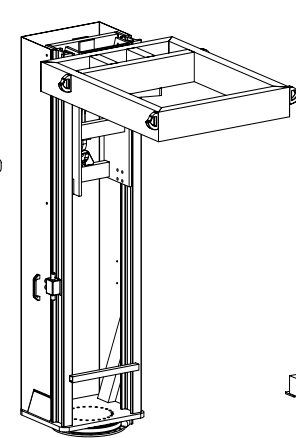
2.2 Carrying frame for fork lift operation



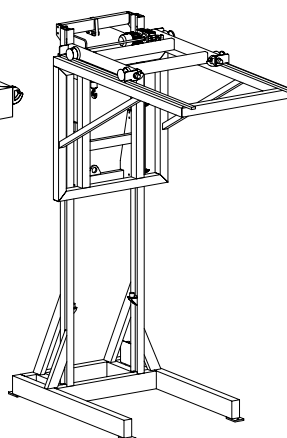
2.3 Carrying frame with integrated electric chain hoist



2.4 Lifting / swivelling column

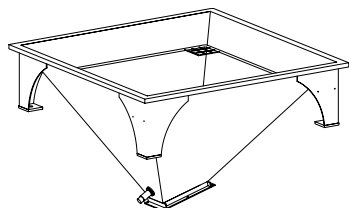


2.5 Lifting mast with movable carrying frame for FIBCs

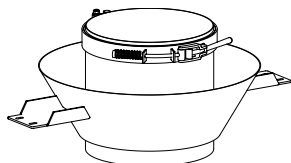


3 Discharge principle / type

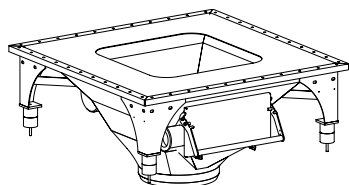
3.1 Feeding Hopper BE 1000



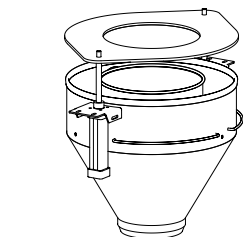
3.2 Docking Spout with Sack Clamp BE 1400



3.3 Feeding Hopper with Sealing Membrane BE 1500



3.4 Double Ring Connection System with Docking Plate BE 1600

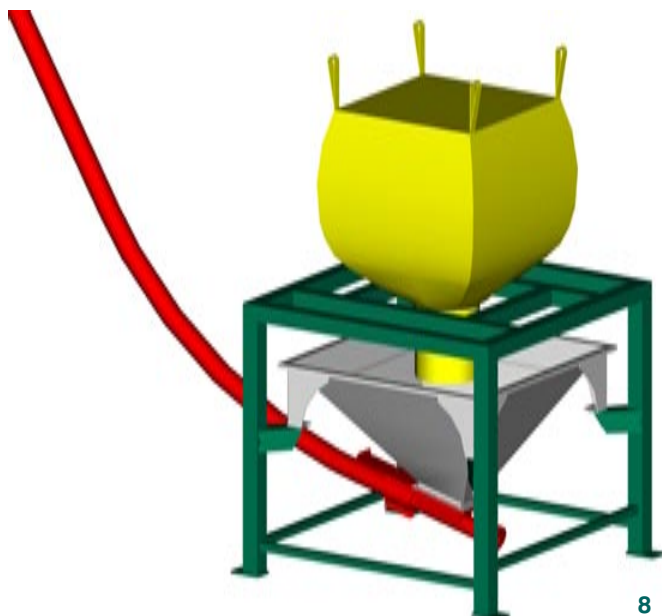


It is often the case that uncomplicated systems are able to serve their purpose and meet specifications in full. For dust-free products like plastics granules, open product handling is perfectly adequate.

This type represents a natural upgrading of the basic model. The FIBC outlet spout is connected to the docking spout with a manual sack clamp so as to be dust-tight.

BE 1000

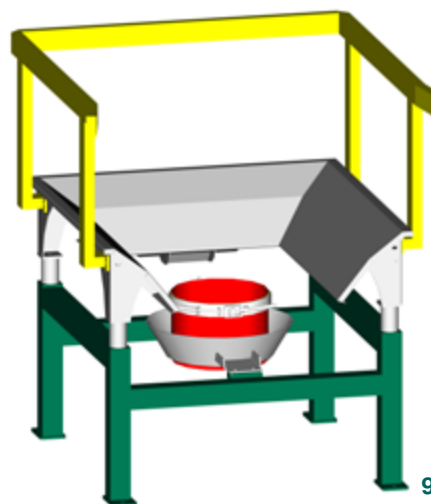
- ▶ *Stable, Warp-Resistant Rectangular Pipe-Frame*
- ▶ *Protection Provided while Opening the Discharge Hole by Safety Supporting Frame for the Bottom of the FIBC*
- ▶ *Feeding Hopper with Discharging Aids and further Additional Devices such as a Protective Grills or Lids*



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BE 1400

- ▶ *Dust-Tight Connection of the Outlet Spout to the Docking Spout*
- ▶ *Easy to Operate with Manual Snap-Buckle Sack Clamp*
- ▶ *Quick to Clean due to Minimal Contact Surfaces with the Product*
- ▶ *The FIBC Outlet Spout is Located Outside the Product Room*
- ▶ *Optional Connection via Inflation Grip*



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BE 1600 with bottom and side-walls kneading activation system

BE 1400 Docking Spout with dust collecting bowl

BE 1400 in pharmaceutical finish

Load support for use with crane with inliner clamp device



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Years of experience have taught us that many different FIBC sizes and outlet spouts exist. The rubber membrane between the FIBC bottom and the open feeding hopper makes discharging of all FIBC sizes and types a possibility.

The Universal Solution BE 1500

Carrying Frame:

BE 1500 S	Frame raised ready for positioning the fork lift load support
BE 1500 P	Frame with integrated electric chain hoist

Lifting Column:

BE 1500 HS	Lifting/swivelling column Drive with electric chain hoist Running on rim bearing
BE 1500 HT	Lifting column with telescoping or mobile FIBC carrying frame Drive with electric chain hoist

Feeding Hopper:

Shape of hopper is optimised for the basic size of the square FIBCs.

Sealing to the FIBC bottom with rubber membrane as dust guard.

Operation hole for opening the FIBC fastening with wide and tightly closing operation door. Quick and safe to lock with operation clamp.

Discharging Aids:

Activation of the FIBC bottom:
Side kneading activation system with pneumatic actuation incl. control.

Activation of the FIBC sides:
Side kneading activation system to break up strong agglomeration and product hardening in the FIBC.

Vibratory discharging aid with intermittent operation.

Activator in the outlet adapter upstream of the conveying or dosing appliance.

Fluidisation appliance.

Options:

Cross knife for picking FIBCs with closed bottoms.
Knife is replaceable.

Load support for use with crane or fork lift with take-up unit or liner clamping device.

Triple side rail, removable.

Pneumatically dedustable filter with dust recirculation into the feeding hopper.

Aspiration channel for dedusting the feeding opening.

BE 1500 with cartridge filter and dust recirculation

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Pneumatically actuated bottom kneading activation system

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Mobile discharge station with distributing screw

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The solution for the food, pharmaceutical and fine chemical industries, and for very light and dusty products.

Dust-Tight Docking System BE 1600

Connection:

Product collection cone with internal connection tube and aspiration spout.

Docking Plate:

Manually actuated, with stenter hooks
Lifting support with pneumatic springs

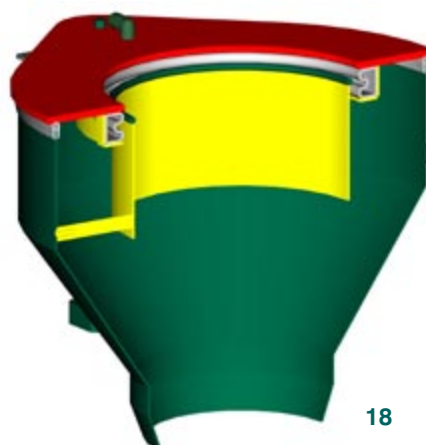
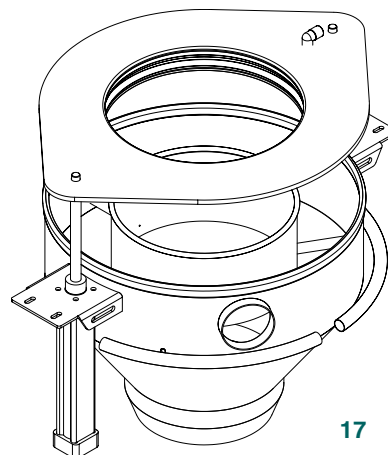
Pneumatically actuated with
2-hand safety control system

Options:

Pneumatically actuated stretching device for the outlet spout, assisting the product flow.

Docking plate with integrated inflatable grip for a dust-tight connection to the FIBC outlet spout.

Inliner pricking system with pneumatically actuated cross knife.



BE 1600 with lifting/swivelling column



Docking of the FIBC outlet spout with inflatable grip



Manually actuated docking plate with parallel operation

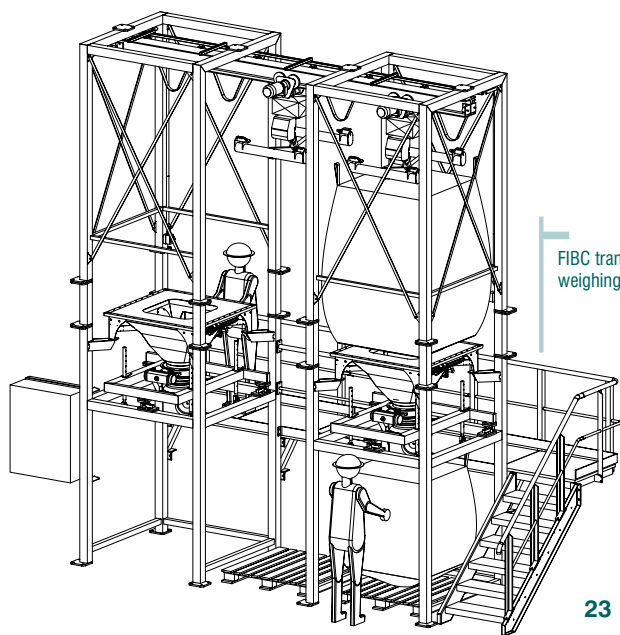


BE 1600 with lifting/swivelling column



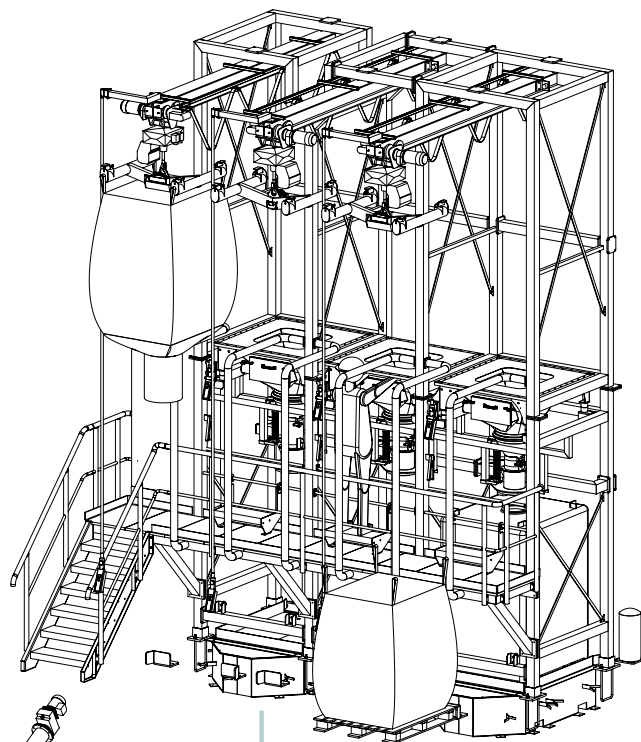


Coherent Complete Solutions



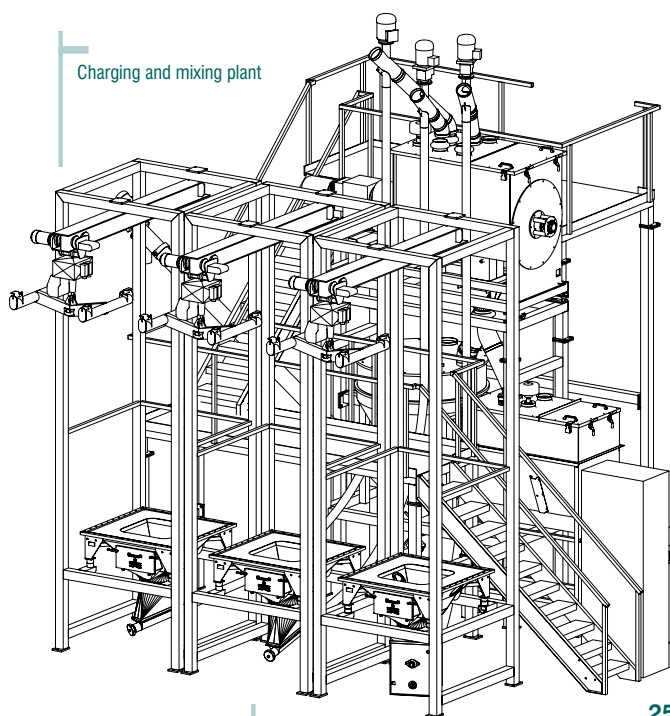
FIBC transfer station with frame weighing system

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FIBC transfer station for internal handling of bulk material in IBCs

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Charging and mixing plant

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Combined sack and FIBC Emptying Station

BE 1600 with stretching device and Lump Breaker

BE 1500 P with loss-in-weight feeding and EMDE-LIFT

Emptying and charging plant with screening machine and frame weighing system



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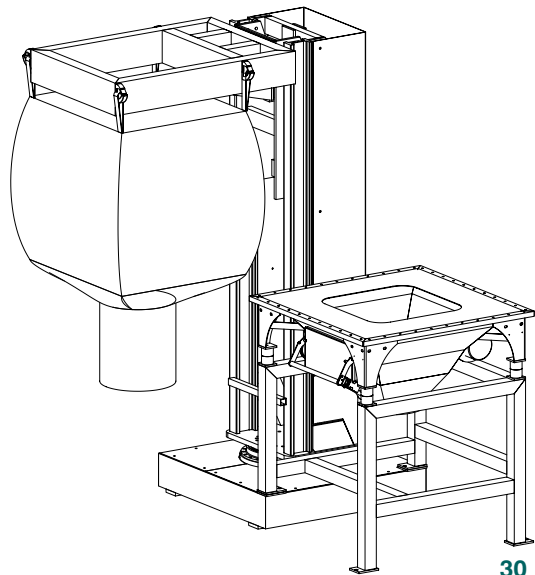


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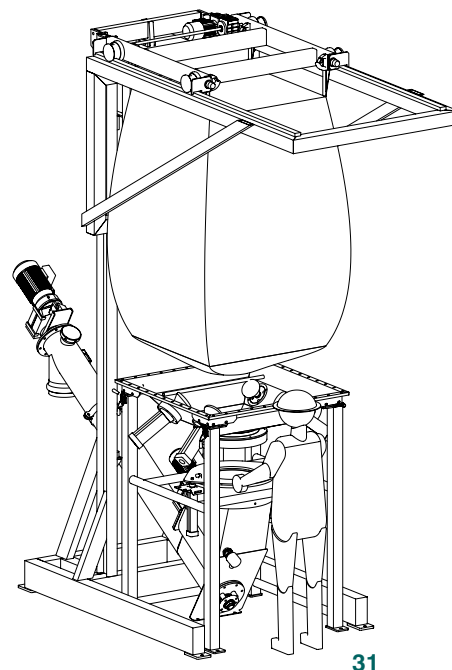
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Lifting Systems for Low Heights



- ▶ Full Use of Space
- ▶ Compact System with Integrated Lift Drive
- ▶ FIBC Taken Either from Alongside or in Front of the Station

Carrying Capacity: Up to 1.5 t



The Complete Range



Conveying

EMDE Screw Conveyors
WUTRA Bucket Elevators
Flexible Screw Conveyors EMDE LIFT
EMDE Vibratory Conveying Troughs



Dosing and Mixing

EMDE Dosing Screws, volumetric and gravimetric
EMDE Dosing Troughs
EMDE Batch Mixers and Mixing Screws



Filling and Emptying

EMDE FIBC and IBC Systems
EMDE Sack Emptying Systems
EMDE Barrel Handling Systems
WUTRA Slide Valves
WUTRA Rotary Valves



Systems and Components

Multi-Components Dosing Systems,
Batching and Weighing Systems,
Empty Sack and FIBC Compactors,
Lump Breakers, Vibrating Trays,
Expansion Joints, Inflating Hoses

We will be happy to send you detailed information on request.



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