



EMDE-LIFT



Flexible Spiral Conveyor

Flexible spiral conveyors EMDE-LIFT have been used for many years in various industries. The innovative technique as well as the outstanding quality of the EMDE-LIFT has given us a leading position in the market. The advantages:

Closed system for dustfree and gentle conveying of fragile products

High conveying capacity with a small cross section and low motor power

Energy-saving

EMDE-LIFT – The Economic Conveyor

In principle the EMDE-LIFT is working dustfree because it is an enclosed mechanical conveyor system. It uses no air for conveying and requires no filters. The dust tight design ensures clean and safe conveying of your products at low investment and service costs.

EMDE-LIFT's flexible installation is advantageous in existing plants as well as in new systems. The EMDE-LIFT saves space which can be used for additional components.

Transport of dry powders of all sorts

Large range of applications

Conveying distances of up to 40 m with one conveyor

Conveying capacities between 0.2 - 20 m³/h

Conveyor pipe diameter from 30 to 100 mm.

Easy to maintain

Easily integrated with existing machines

Easy cleaning

Flameproof design according to European and international standards

Design for CIP-cleaning

Pressure- and vacuum-tight as well as explosion-proof

EMDE-LIFT MDB 90 charging a reactor



4

Two EMDE-LIFT MDB 80 conveying sugar



5

EMDE-LIFT MDB 70 dosing filler for glue



6



1 Drive with torque reserve for safe start-up

2 Discharge section for universal connection

Perfect technique and performance

3 Neither filter nor rotary valve at the outlet

4 Cross-section and material of the conveyor spiral are matched to suit the product to be conveyed

5 Flexible conveying pipe adapts to suit the space available

6 Optimised product feed at the inlet

7 Cleaning opening for rapid emptying

Safety Options

- Totally closed system
- Level indicator
- Monitoring of motor power
- Safety switch at all cleaning and inspection doors
- Revolution encoder

EMKOM expansion joints between the outlet of EMDE-LIFT and a weighing hopper

Inlet with revolution encoder

Motor and spiral with quick clamps for easy cleaning



Chemical Industry:

Feeding of reactors; Discharging of mixers and packing machines; Packing into Big Bags, casks and sacks; Complete systems with multiproduct dosing
Dosing of additives ...

Products:

baryte, bentonite, borax, calcite, cellulose, ceramics, French chalk, metaloxides, mica, resin, salicilic acid, soda ash, sulfamic acid, zinc stearate ...

EMDE-LIFT in Practice

Applications in Plastics Technology:

Conveying from bins, containers, FIBCs, sack-dischargers as well as from weighing containers to process; Machines for reworking; Mixing and simultaneous conveying; Conveying of regrind from a granulator; Packing of granules and powder ...

Products:

additives, colours, fibres, filling materials, flame retardant, foil flakes, granules, pellets, powder, PVC-dry-blend, rubber granules, shellac, stabilizers ...

Applications in Environmental Technology:

Conveying and dosing of water conditioning chemicals; Charging and discharging of filter aids; Addition of reactants and precipitants; Discharging of ash incl. mixing- and wetting devices; Discharging of bins
Filling of containers and Big Bags; Dewatering of sewage; Discharging of filter dust ...

Products:

activated carbon, adsorber, cellulose fibres, filter aid, filter dust, gypsum, lime, metal slurry, precipitants, sodium carbonate, wood dust ...

EMDE-LIFT at a moveable cleaning plant for soil

Multi component mixing and dosing system with EMDE-LIFT MDS 40

explosion-proof EMDE-LIFT MDB 80



11



12



13

Foodstuff Industry:

Conveying, dosing and blending; Discharging of bins, containers and Big Bags; Filling of Big Bags
Complete system for blending; Conveying to packing machines; Recycling of breakages and oversize particles ...

Products:

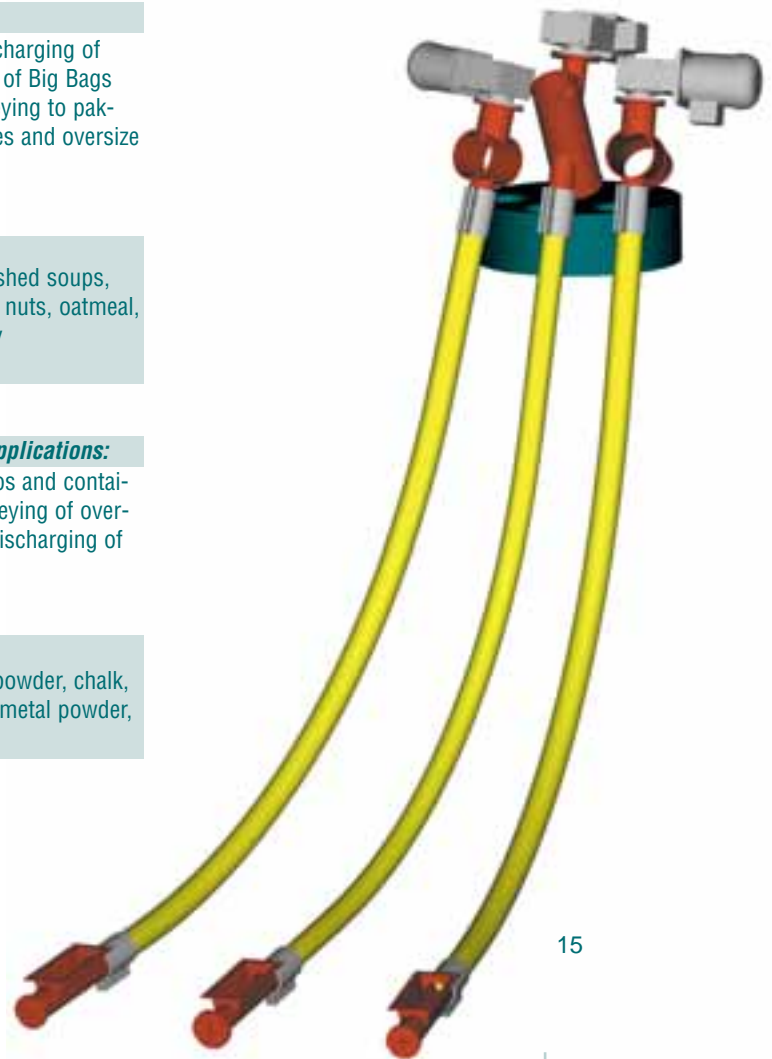
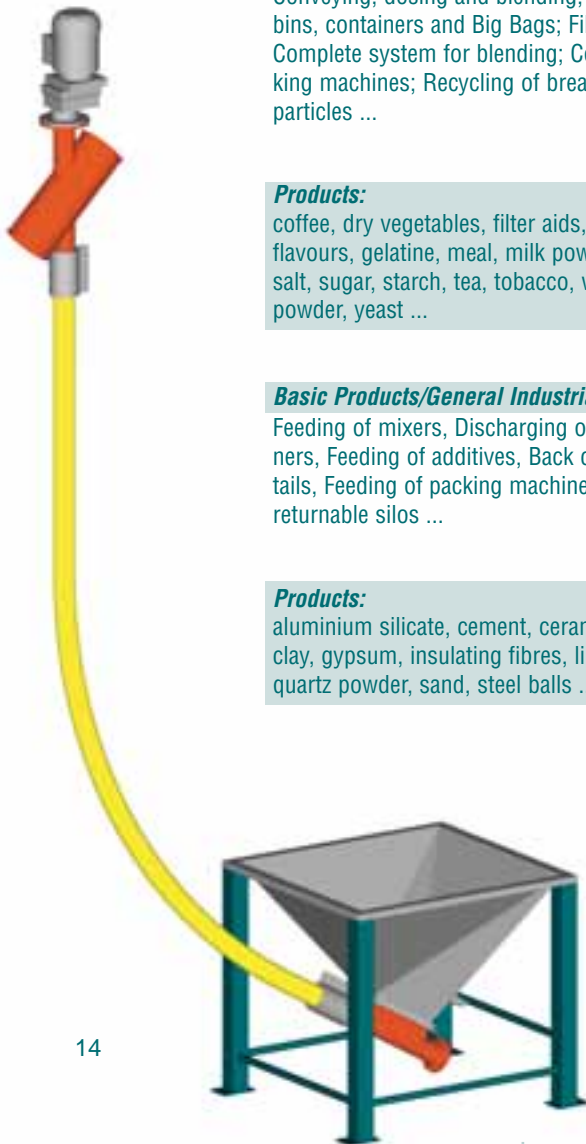
coffee, dry vegetables, filter aids, finished soups, flavours, gelatine, meal, milk powder, nuts, oatmeal, salt, sugar, starch, tea, tobacco, whey powder, yeast ...

Basic Products/General Industrial Applications:

Feeding of mixers, Discharging of silos and containers, Feeding of additives, Back conveying of over-tails, Feeding of packing machines, Discharging of returnable silos ...

Products:

aluminium silicate, cement, ceramic powder, chalk, clay, gypsum, insulating fibres, lime, metal powder, quartz powder, sand, steel balls ...



15

EMDE dosing system for liquorice mixture. Dosing and transport with EMDE-LIFT

Dosing of alloys in a steel works with five EMDE-LIFT
MDB 90 und MDB 70

EMDE-LIFT for limestone



16



17



18

The great variety of products requires the exact engineering of the EMDE-LIFT to get a safe and efficient conveyor.

EMDE offers optimised conveyors in various sizes and materials for each product. Our experienced engineers will be pleased to advise you and we have a test equipment at your disposal. Why not make an appointment right away!

The correct conveyor spiral for each product

Materials:

Spiral: High tensile spring steel and stainless spring steel

Conveyor Pipe:

plastic materials: flexible polyamide hose for general use, food grade semi rigid version, metal hose with plastic liner of various qualities for highest reliability of operation

metal: semi rigid version with steel- or stainless steel-tube with prefabricated bends

without conveying pipe: to install into existing containers or troughs

Conveyor Spirals of the EMDE-LIFT

Flat Ribbon Spiral

MDB	smallest bending radius [m]	max. grain size [mm]	max. conveying rate [m³/h]
50	1,5	3	2,0
70	1,9	4	5,0
80	2,2	6	10,0
90	2,2	10	12,0
100	2,5	10	20,0

Application: High capacity, Poor flowing powders
Long conveying distances

Round Wire Spiral

MDS	smallest bending radius [m]	max. grain size [mm]	max. conveying rate [m³/h]
30	1,0	2	0,2
40/40 S	1,3	3	0,5
50	1,5	4	1,5
65	1,9	8	4,0
75	2,2	9	8,0
85	2,5	15	10,0

Application: Coarse granules, Gentle conveying,
Low cost version

Square Spiral

MDK	smallest bending radius [m]	max. grain size [mm]	max. conveying rate [m³/h]
65	1,9	1	2,5

Application: Difficult powders, Cohesive products,
Especially suitable for lime, chalk and similar powdered materials



19



20



21



	size		rectangular inlet						inlet with activator				circular inlet					
			model 1			model 2			model 3				model 4					
	Ø D3	min.R	E1	E2	H1	H2	E1	E2	H1	H2	E1	E2	Ø D1	E1	E2	H1	H2	
MDS 30	34	1,0 m	270	338	60	116	-	-	-	-	328	287	100	190	238	150	213	
MDS 40	48	1,3 m	270	338	60	123	-	-	-	-	328	287	100	190	238	150	213	
MDS 50 / MDB 50	60	1,5 m	270	338	60	129	390	458	60	129	328	287	150	215	263	110	173	
MDS 65																		
MDB 70 / MDK 65	80	1,9 m	270	338	60	149	390	458	60	149	339	287	200	240	288	155	234	
MDS 75 / MDB 80	89	2,2 m	270	338	70	154	390	458	70	154	339	287	200	240	288	155	239	
MDS 85 / MDB 90	102	2,2 m	270	338	70	160	390	458	70	160	339	287	200	240	288	155	239	
MDB 100	108	2,5 m	270	338	70	166	390	458	70	166	350	287	200	240	288	155	246	

7

Accessories:

EMDE offers extensive accessories to integrate the EMDE-LIFT in plants and to ease cleaning and maintenance:

- Structural steel engineering
- Diverter valves
- Chutes
- Activators
- Shut-off valves
- Dust control systems

Service

On request our engineers install and start up the flexible screw conveyor EMDE-LIFT. For regular inspections our experienced specialists are to your disposal.

Research and Development:

The EMDE-LIFT is being continuously developed to be the leader in this technology. Design and engineering take into consideration the latest scientific findings. EMDE cooperates with well-known scientific institutes in projects for new conveying systems.

The Complete Range of EMDE and EMDE WUTRA

**Conveying**

WUTRA Bucket Elevators
Flexible Screw Conveyors
EMDE-LIFT
WUTRA Trough and Tubular Screw Conveyors

**Filling and Emptying**

EMDE FIBC Discharger
EMDE FIBC Filling Station
EMDE Sack Emptying Systems
EMDE IBC Dischargers

**Dosing and Mixing**

EMDE Dosing Screw
EMDE Double-Screw Mixer
WUTRA Paddle Screw Mixer

**Systems and Components**

EMDE System Engineering
EMDE Lump Breaker
EMDE Bin Discharger
EMDE Empty Bag Compactor
EMDE Big-Bag Compactor
EMKOM Expansion Joints
WUTRA Shut-off Slide Valve

Please ask for detailed information.



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