

BULK SOLIDS HANDLING

- PNEUMATIC SLIDING DAMPERS AND DIVERTERS
- CONTAINER LOADING SYSTEMS
- CHAIN AND SCREW CONVEYORS

PNEUMATIC CONVEYING

Pneumatic conveying is one of the most cost efficient and fast ways of transporting dry bulk solids from one place to another. It improves the functioning of many companies whose daily activity involves bulk materials processing.

Pneumating conveying is a process in which bulk materials are transported inside pipeline with the use of pressure differences created inside the pipeline. The process can be pushing (underpressure) or pulling (vaccum pressure) and the materials conveyed can be transferred to various places such as silos, hoppers, trucks, containers etc. - wherever a pipe can run.

Among the **main advantages of pneumatic conveying** is the fact that it does not take much space, the transport causes almost no harm to the conveyed material and closed pipelines mean no dust thus make housekeeping in your plant much easier.

PNEUMATIC SLIDING DAMPERS

Sliding dampers are devices driven by pneumatic motors, which are connected with compressed air system. The sliding dampers enable an instant and tight air cut-off inside the pipes they are installed on.

As standard, our sliding dampers are of category: II 2/3D Ex IIIC T85stC Gb, which confirms they can be installed on pipes with the explosion risk zones of 21 or 22 inside of them. They are **equipped with top quality electrical equipment** (motors, electro-valves), which are designed as standard for explosion risk zone 22. The steel sheets used for the production of sliding dampers are of 1,0 to 4,0 mm thickness - depending on the part of the device.

Available diameters [mm] :

80 / 100 / 120 / 125 / 140 / 150 / 160 / 180 / 200 / 225 / 250 / 300 / 250 / 275 / 300 / 315 / 350 / 400 / 450 / 500 / 550 / 600 / 630 / 650 / 700



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PNEUMATIC DIVERTERS

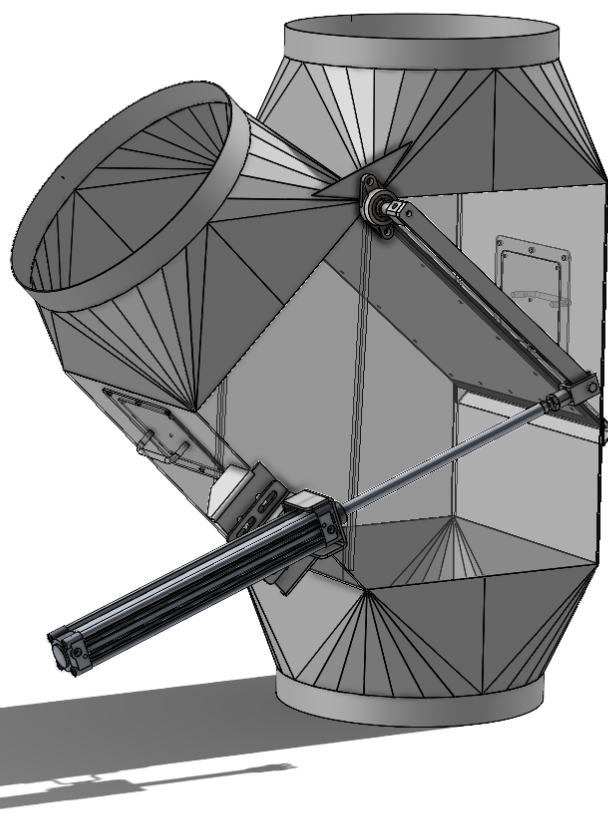
Pneumatic diverters enable automatic switch of transport from one pipeline to another. Our diverters designed by our engineers are characterized by precision of work and robust construction. They are made of 3 mm carbon steel, welded and painted).

We produce diverters of standard, basic sizes and angles but we also design and produce divertes for individual projects and needs - by changing dimensions, angles and flanges.

The construction of the diverters ensures perfect tightness of the flap and minimal maintenance. Pneumatic diverters require compressed air connection.



Diverters are delivered with mono- or bi-stable electrovalves and they are equipped with an inspection window.



CONTAINER LOADING SYSTEMS

DOCKING SYSTEM

The fully automatic container loading system designed by our engineers is a tight, dustfree system for bulk solids that saves your time and requires minimal maintenance.

The tightness of the system is ensured by the docking terminals – this solves the problem of dust release and possible composing of dust around the discharge/loading area.

The containers work as traditional cyclones and replacing a full container into an empty one requires no stops at the production. This solution lowers the costs and shortens the time of the entire operation.



**LOADING CONSTRUCTIONS
DESIGNED FOR
INDIVIDUAL NEEDS**

CONTAINER LOADING SYSTEMS

DIRECT LOADING SYSTEM

Another solution is a direct dump of bulk material into a container with the use of a screw conveyor. The rotating screw conveyor pushes the material into dump openings and evenly fills in the container with the waste material.

Additionally, in order to seal the system and avoid dust release, we recommend to **equip the container with a top cover**. In this case the dump openings are equipped with flexible hoses (sleeves) that are led into the container through the top cover. Thanks to this solution you avoid bothersome dust composition around the loading place.



CONTAINER LOADING SYSTEMS

TOP COVERS FOR CONTAINERS

Top covers for containers secure the stored material against weathering conditions and ensure dust-tightness during loading.

The top covers make the bulk solids discharge more efficient and housekeeping in your plant definitely easier and less time consuming.

The waste material is transported with the use of screw conveyor from e.g. a cyclone or a dust collector and discharged directly into a container with the use of elastic sleeves that are connected to the discharge openings of the screw conveyor casing.

Top covers are designed and produced on individual needs.



CONVEYORS

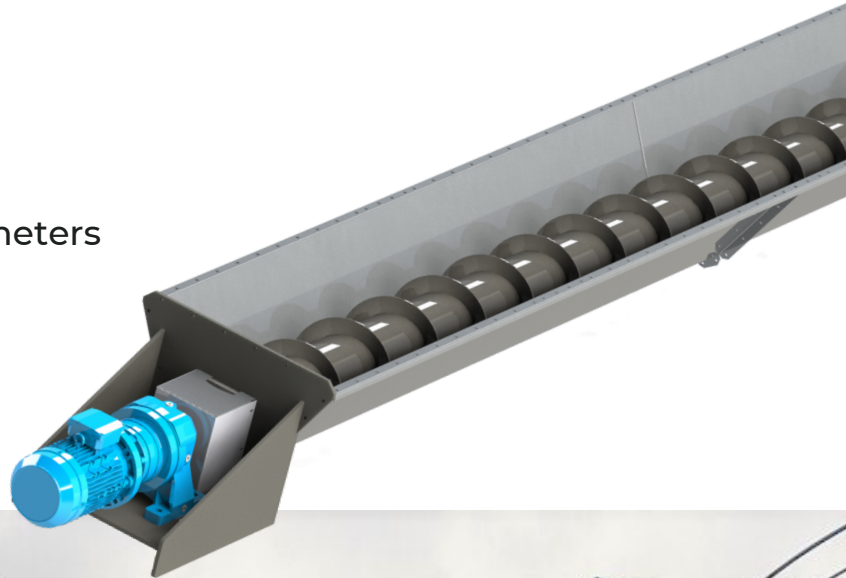
SCREW CONVEYORS

We offer open and closed screw conveyors.

The TSO-260 screw conveyors are of open type, they are located inside a dust collector in its lower part and are used for discharging the material out of the dust collector. These screw conveyors are an integral part of dust collectors.

The second type is the FTS-UO - closed conveyors, installed independently of a dedusting or a storing device and used for transporting material between one device to another.

- Standard working length - 8 meters
- Tailor made - up to 11 meters



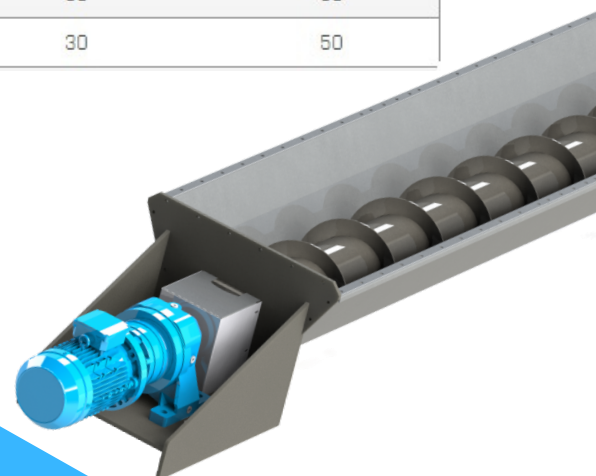
SCREW CONVEYORS

Open screw conveyors TSO-260

Model	Power installed [kW]	Working screw length [mm]	Rotational speed [rot/min.]	Efficiency [m3/h]
TSO-260/2	1,5	2720	ca. 21	20
TSO-260/3	1,5	4080	ca. 21	20
TSO-260/4	1,5	5440	ca. 21	20
TSO-260/5	2,2	6800	ca. 21	20
TSO-260/6	2,2	8160	ca. 21	20
TSO-260/7	3,0	9520	ca. 21	20
TSO-260/4+4	3,0	10880	ca. 21	20

Closed screw conveyors FTS-UO-250 i FTS-UO-350

Model	Power installed [kW]	Max working screw length [mm]	Max rotational speed [rot/min.]	Max efficiency [m3/h]
FTS-UO-250/2	4,0	2000	50	30
FTS-UO-250/3	4,0	3000	50	30
FTS-UO-250/4	4,0	4000	50	30
FTS-UO-250/5	4,0	5000	50	30
FTS-UO-250/6	4,0	6000	50	30
FTS-UO-250/7	4,0	7000	50	30
FTS-UO-250/8	4,0	8000	50	30
FTS-UO-250/9	4,0	9000	50	30
FTS-UO-350/2	7,5	2000	30	50
FTS-UO-350/3	7,5	3000	30	50
FTS-UO-350/4	7,5	4000	30	50
FTS-UO-350/5	7,5	5000	30	50
FTS-UO-350/6	7,5	6000	30	50
FTS-UO-350/7	7,5	7000	30	50
FTS-UO-350/8	7,5	8000	30	50



CONVEYORS

CHAIN CONVEYORS

Chain conveyors (also called Redler's conveyors after their inventor's name) are used for conveying bulk solids and are used in various branches of industry from food production (cereal, seeds, flours), animal feed, wood and plastic processing to heavy industry such as coal, cement or steel processing.

We design and produce chain conveyors to individual needs. First we gather all the necessary data, take the measurements on the place of installation and agree all the details with a Customer. So we can say that each of the chain conveyors we produce is truly tailor made.



PNEUMATIC CONVEYING OF BULK SOLIDS

- **pneumatic diverters**
- **pneumatic sliding dampers**
- **container loading systems**
- **screw conveyors**
- **chain conveyors**

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