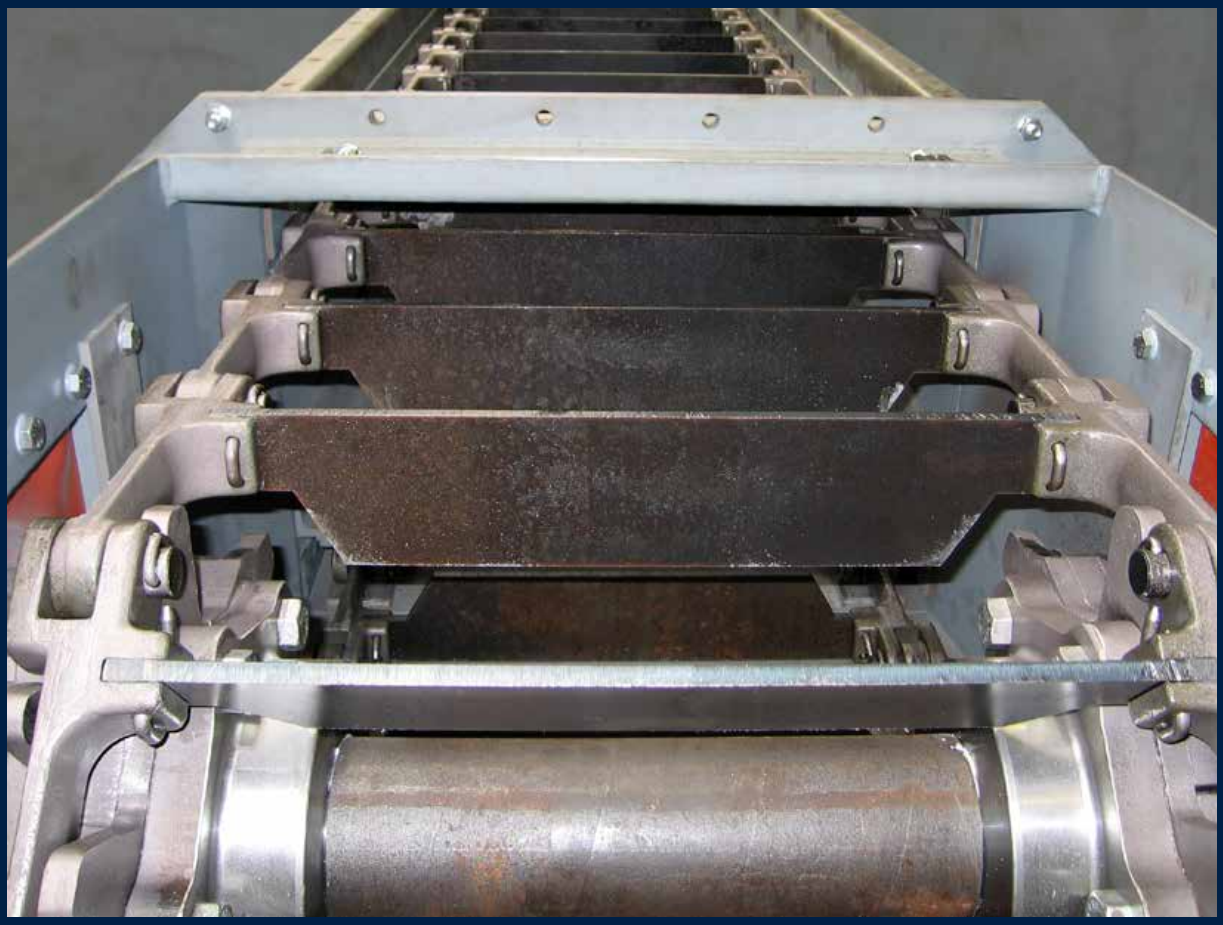
WE CONVEY QUALITY



Chain Conveyors

AUMUND

CONTENT

Chain Conveyors type LOUISE TKF

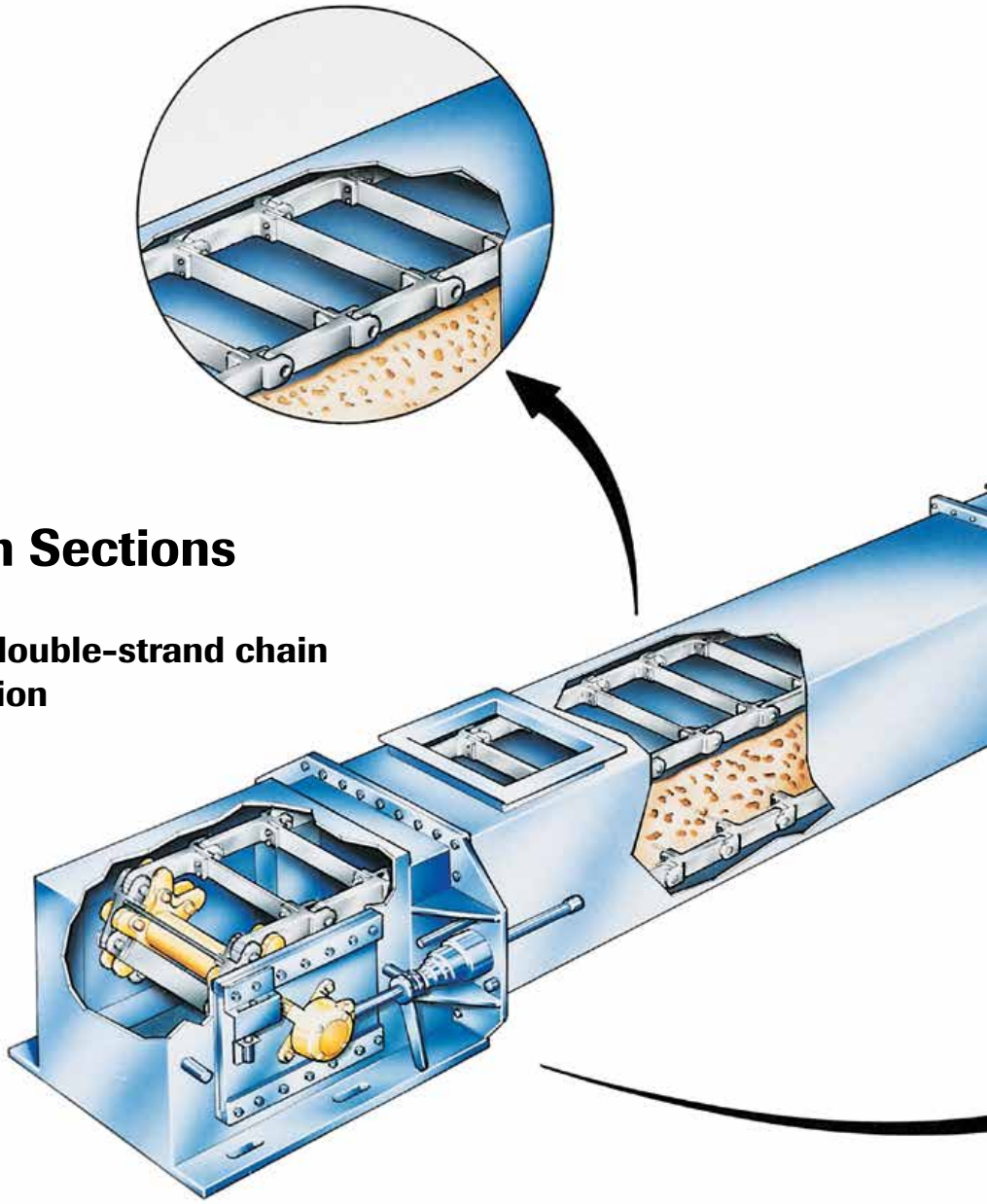
For conveying, distributing, and reclaiming powdery, coarse, fine grained, abrasive and moist buld materials such as:

- Natural and FGD-gypsum
- Blast furnace slag
- Limestone
- Burnt lime
- Clinker
- Raw meal
- Cement
- Filter dust
- Coal
- Ash
- Fertilizers
- Soda ash

Designed to suit the properties of the bulk material, the operating hour and the conditions of the surroundings, with the appropriate chain speed and chain width being of vital importance for the service life of the conveyor.

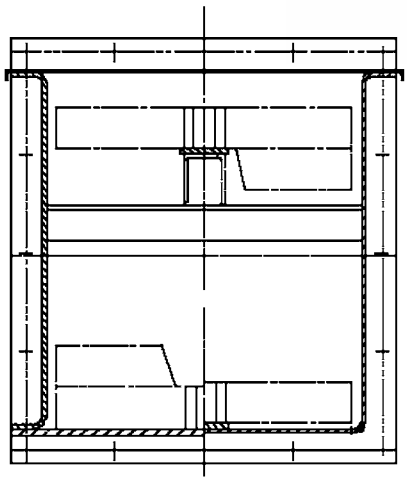
- Dust tight design
- No spillage
- Centre distance to 50 m
- Design with single or double strand chain
- Available in shock pressure proof design
- Low maintenance
- Long service life

Filter dust reclaim

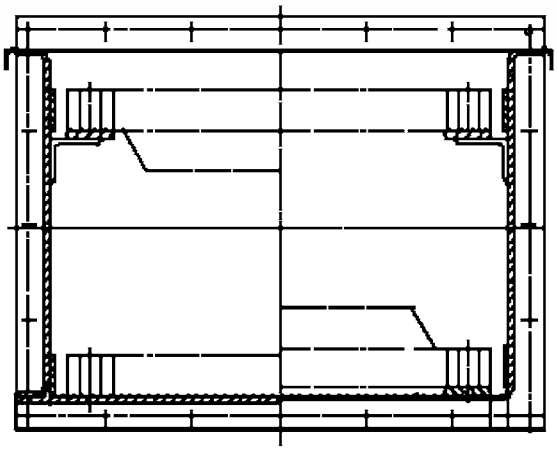


Selection of Trough Sections

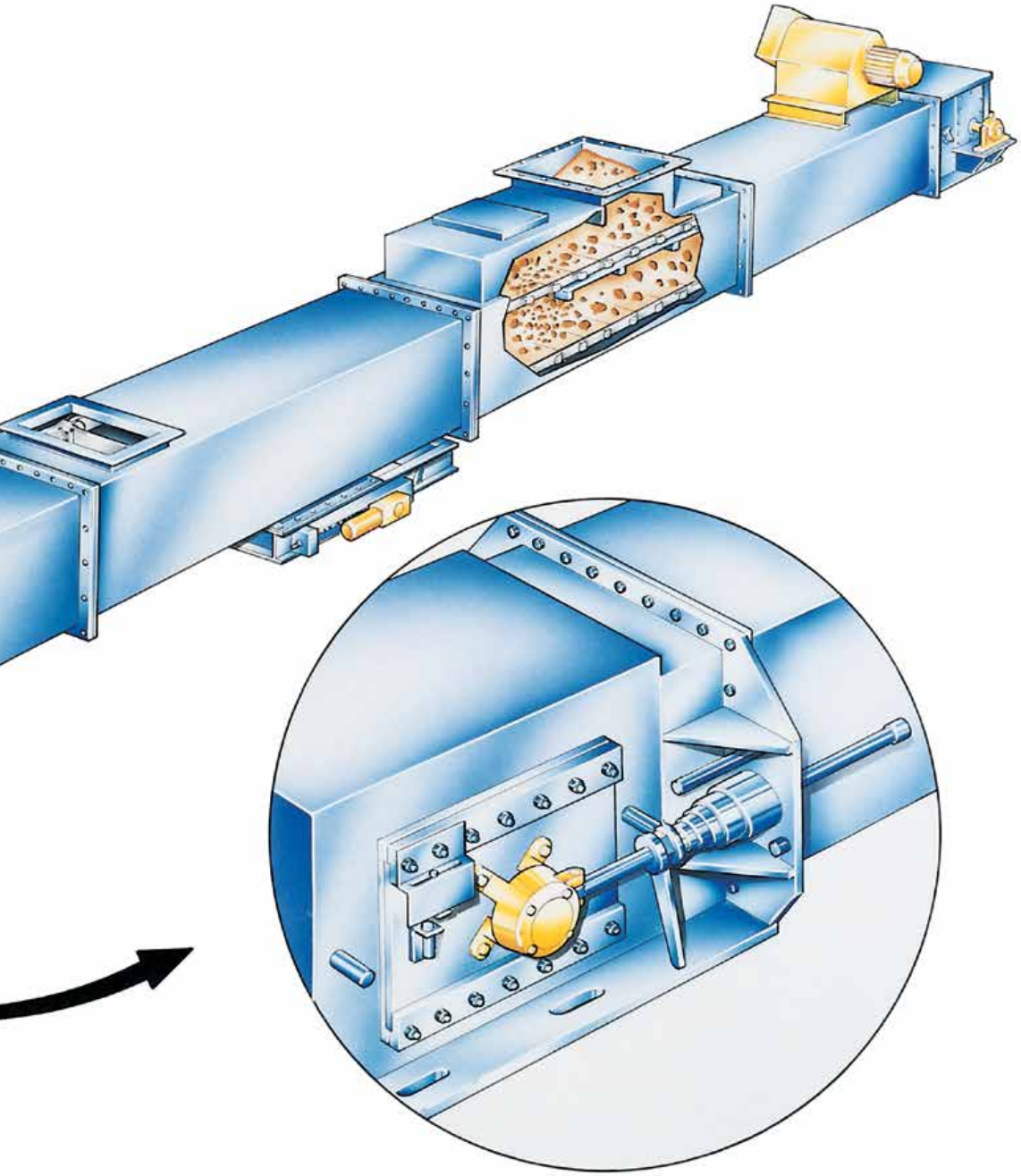
Available with single and double-strand chain depending on the application

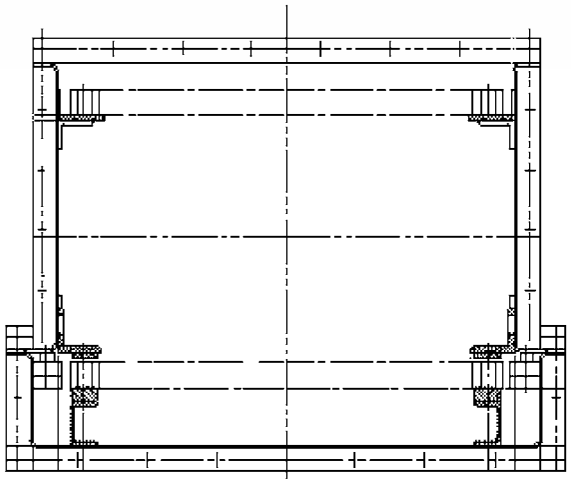


Single-strand chain with standard/oversized flights

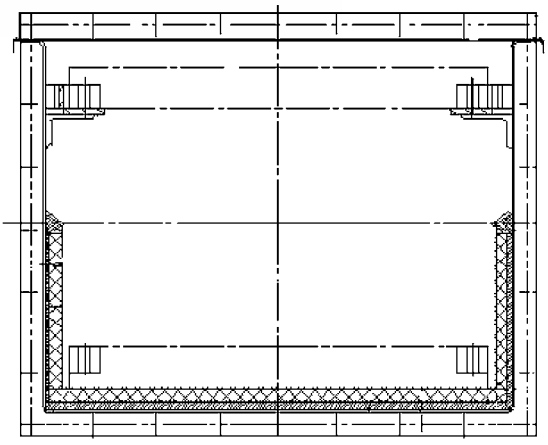


Double-strand chain with wear plates





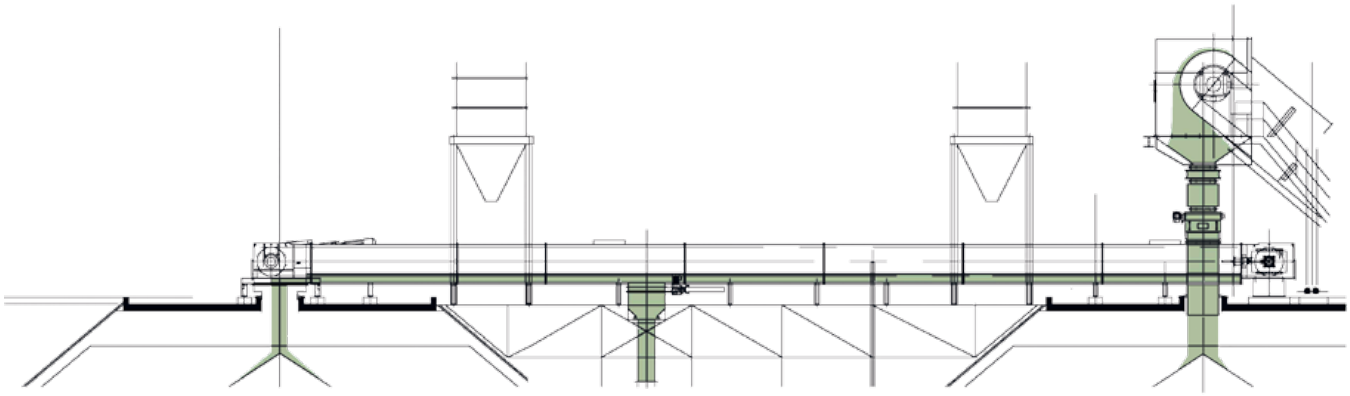
Section with material bed for clinker transport



Section with cast basalt lining

Distributing bulk materials into a battery of silos

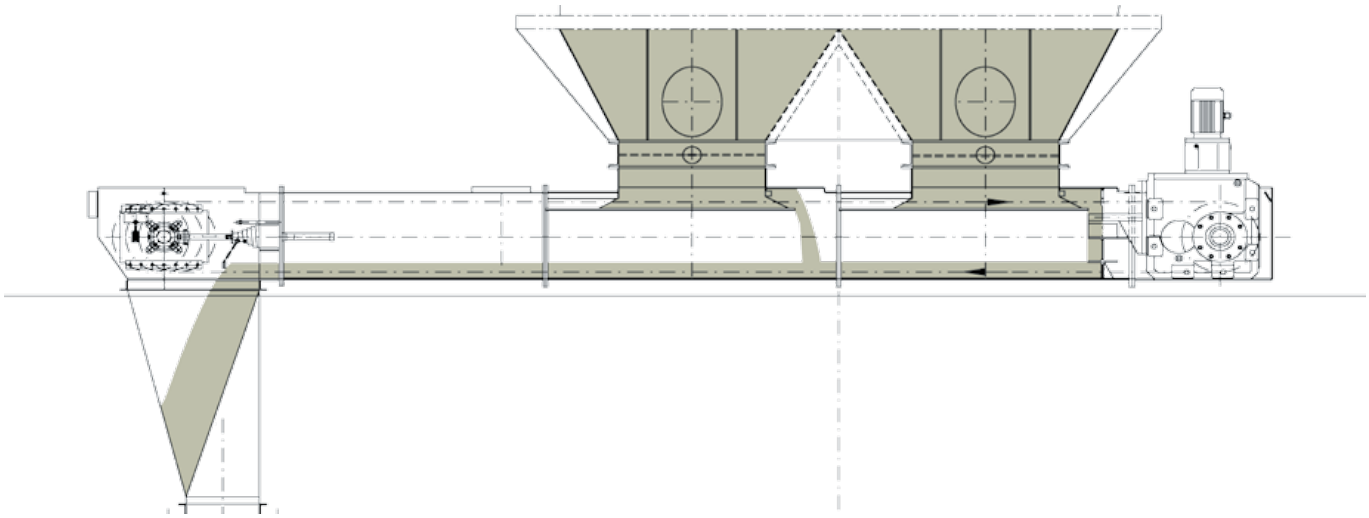
Applications



Distribution of various types of bulk materials

Chain Conveyors to convey and distribute bulk materials to different locations.

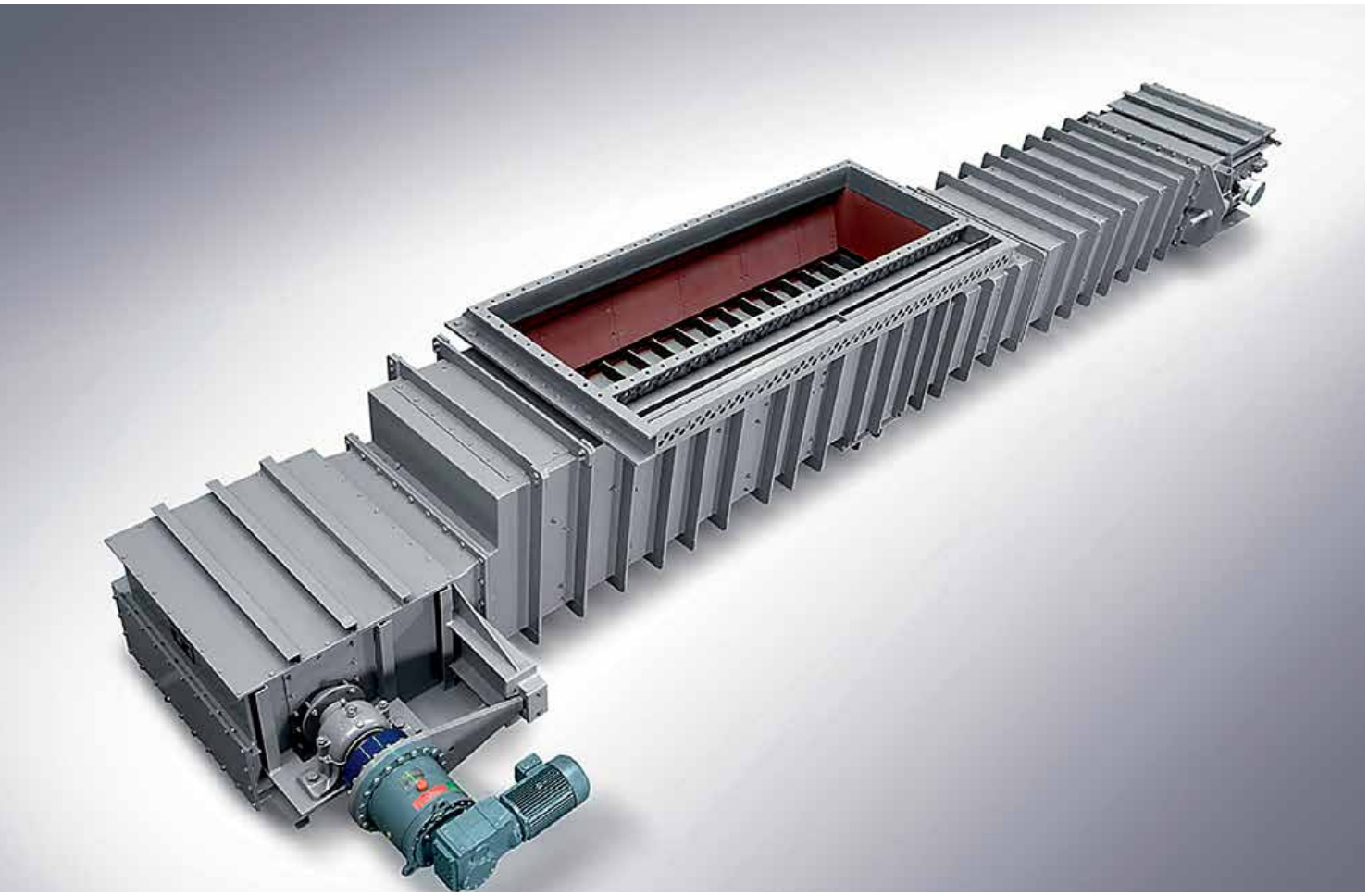
Controlled feeding of the chain conveyor is realized through one single feeding chute. The number of discharge openings varies in accordance with the plant requirements. All intermediate discharge openings are fitted with remote controlled shut-off gates allowing to choose the receiving silo from the central control room. The final discharge opening in the drive station remains open at any time.



Reclaim of bulk material from various silos or hoppers

A double row needle gate or a motorized slide gate, open in normal operation, isolates the silo or hopper from the Chain Conveyor for maintenance purposes. During the discharge process the full load of the bulk material is supported by a discharge table located underneath the reclaim opening on the return run.

This arrangement enables the volumetric discharge at the required rate by regulating the height of the material layer either with the chain speed through the frequency converter or with a motorized or manual level control. Discharge onto subsequent equipment is realized through the discharge opening in the tension station.

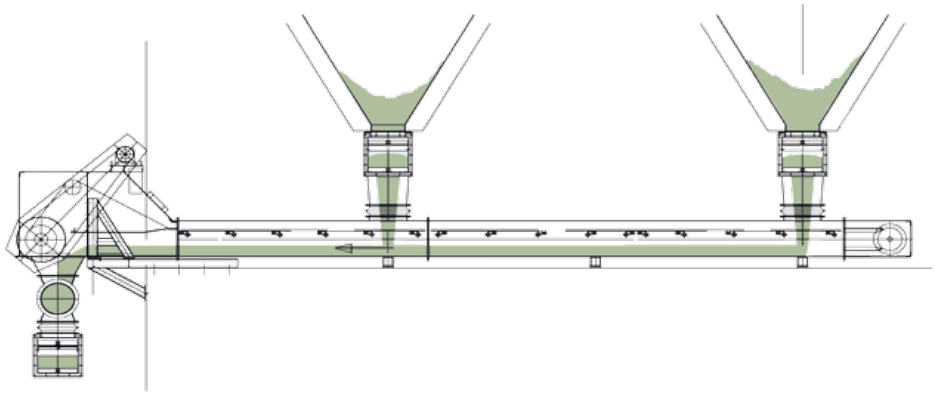


Coal Mill Feeding

For coal mill feeding applications, all Chain Conveyors come in a shock-pressure proof design resisting to 3.5 bar on a standard basis.

These Chain Conveyors fearure a double.strand chain. A variable speed drive with frequency converter ensures a uniform material flow and controlled feeding.

Chain Conveyor with Gravity Chain Tensioning



For the reclaim of fines such as precipitator dust from filter hoppers, the Chain Conveyor with gravity chain tensioning is an economic solution as an integrated or add-on conveyor.

Chain tensioning is achieved by guiding the chain over an idler roller in the drive station, thus causing the chain to sag by its own weight, ensuring perfect fit of the chain around the chain sprocket. With this conveyor design, no tensioning device is required in the return station.

Hot boiler ash from a row of boilers

Waste Incineration Plants

A double-strand chain conveyor loads FGD Gypsum from the flue-gas desulphurisation into the storage silo

Proportional feeding of the chain conveyor handling the boiler ash allows for homogeneous distribution of the 200 - 550° C ash in the conveyor trough.

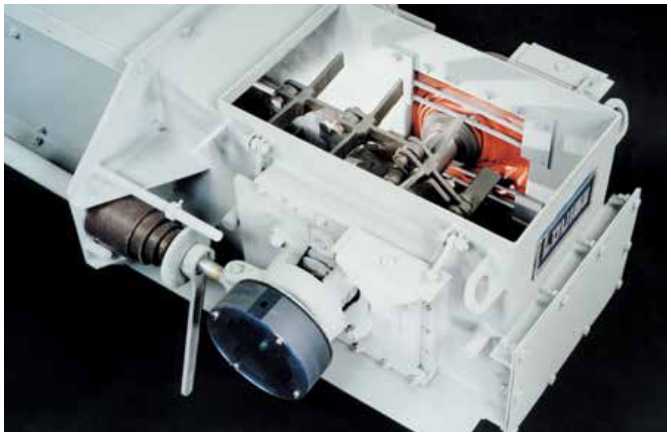
The dust taken from the precipitator has a temerature of approx. 300° C.

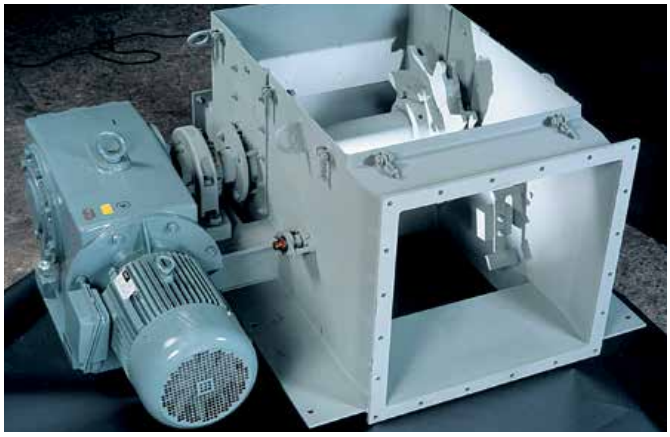
Both chain conveyors are equipped with a single strand chain.

Bottom ash and filter dust are unloaded into intermediate storage silos.

Limestone handling

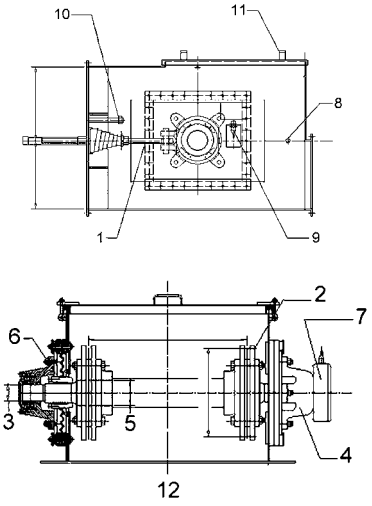
Components & Details





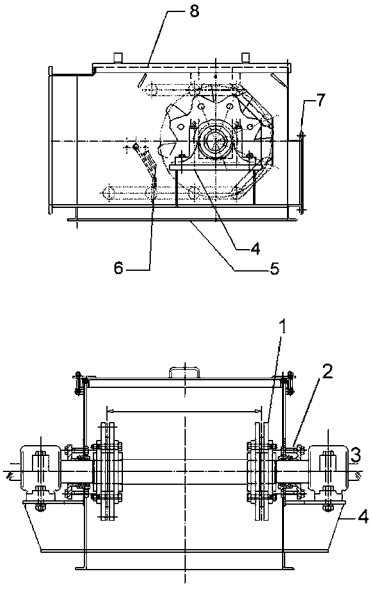
Tension Station

1 Chain tensioning device
2 Return sprocket
3 – 4 Tension bearing
5 Hub
6 Stuffing boxes
7 Speed monitor
8 Bearing shield end position
9 Chain monitoring
10 Reference point for pretension
11 Station cover
12 Nominal width + 110 mm



Drive Station

1 Drive sprocket
2 Stuffing box
3 Pillow block bearing
4 Pillow block bearing support
5 Outlet flange
6 Chain scraper
7 Maintenance opening
8 Station cover



Fork Link Chains

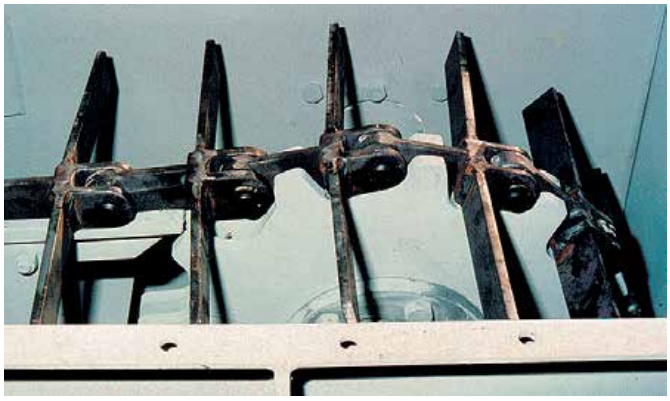
LOUISE single and double-strand chains are drop-forged and extremely wear-resistant.

Chain links and connecting pins are hardened to 58–60 HRC.

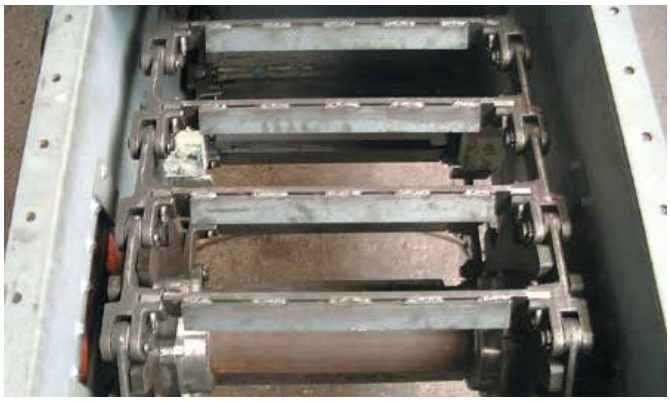
The flights are either welded to the chain links for single-strand chains or fixed with fastening bowson both sides of the chain links for double-strand chains.

The steel used for fabrication of the flights is chosen to suit the bulk material's properties. If abrasive material is to be conveyed, the flights are fabricated from wear-resistant steel.

Standard widths of single-strand chains range from 250 mm to 630 mm. Standard double-strand chains range from 630 mm to 2,000 mm.



Single-strand chain

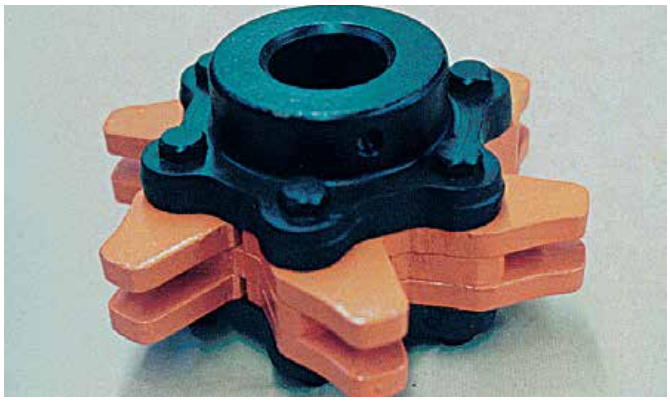


Double-strand chain

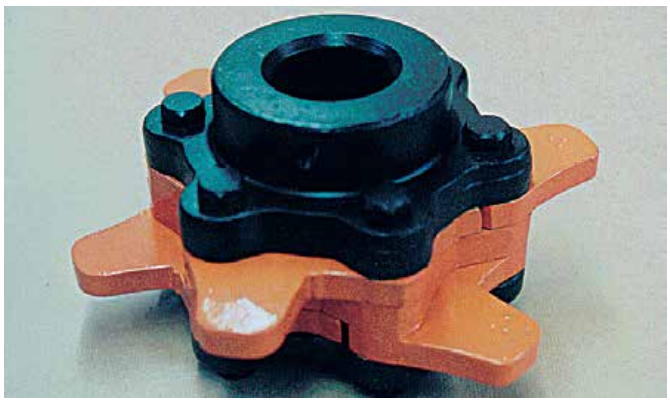
Chain Sprockets

The chain sprockets are hardened in areas subject to wear. The sprockets are split into segments as a standard. Therefore, replacement of the sprocket sections does not imply disassembly of the chain strand.

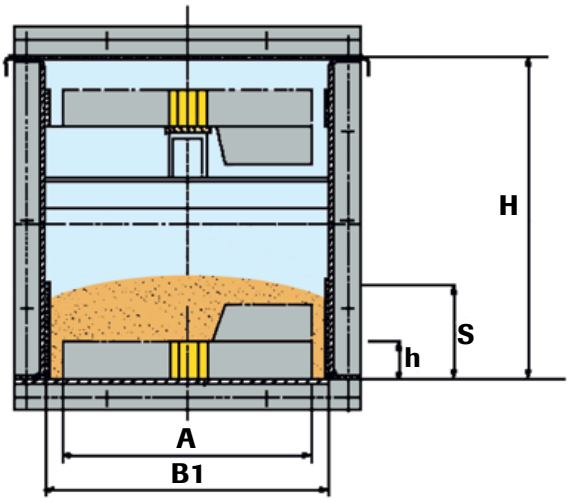
Depending on the load, the sprockets feature six, eight, ten or twelve teeth.



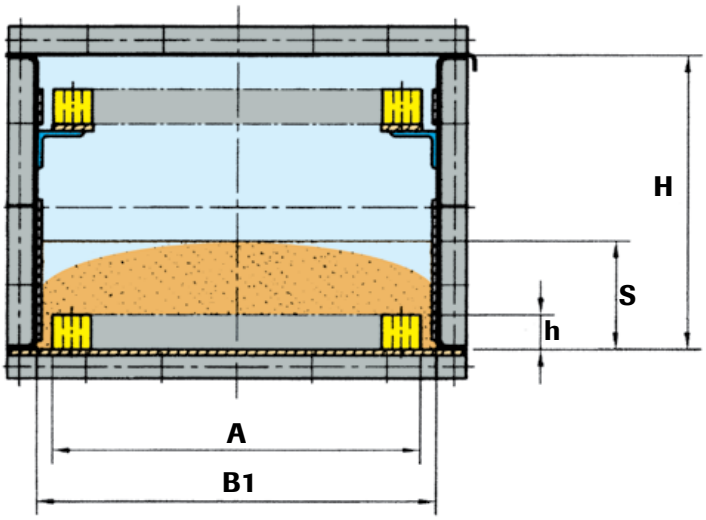
Drive sprocket



Take-up sprocket



Single-strand chain



Double-strand chain

Conveying Capacity

The properties of the bulk material are essential to determine the main features of the chain conveyor's components such as chain type or flight height. They also condition the material layer and the actual conveying capacity. The following capacities are based on standard conditions.

Conveying Capacity with standard conditions

Width A	Trough		Material level	Flight	**Theoretical capacity m³/h Theoretical capacity m³/h**					
	Width B1	Height H	S	Height h	**Conveying speed m/s**					
mm	mm	mm	mm	mm	0.05	0.10	0.15	0.20	0.25	0.30
250/1	306	515	100	50	5.5	11.0	16.5	22.0	27.5	33.0
400/1	456	515	150	50	12.5	25.0	37.5	50.0	62.5	75.0
		645		50						
630/1	686	515	170	50	20.0	40.0	60.0	80.0	100.0	120.0
630/2		645		50						
800/2	856	515	200	50	29.5	59.0	88.5	118.0	147.5	
		645	230	60	34.5	69.0	103.0	138.0	172.5	
1,000/2	1,056	645	230	60	49.5	99.0	148.5	198.0	247.5	
		775	280	60	51.5	103.0	154.5	206.0	257.5	
1,200/2	1,256	645	230	60	50.5	101.0	151.5	202.0	310,0	
		775	280	60	62.0	124.0	186.0	248.0		
1,400/2	1,456	645	230	60	59.0	118.0	177.0	236.0		
		775	280	60	71.5	143.0	214.5	286.0		
1,600/2	1,656	775	280	80	81.5	163.0	244.5	326.0		
1,800/2	1,856	775	280	80	91.5	183.0	274.5			
2,000/2	2,056	775	280	80	102.0	204.0	306.0			

After Sales Service

Customer Proximity around the World
At AUMUND, service does not end at the sale of the equipment. It's the beginning of a long-term partnership. AUMUND offers you a full range of services – from commissioning to the delivery of quality spare and wear parts to customized preventive maintenance programs and equipment upgrading. The benefits for you: Maximum equipment efficiency at lower operating cost.

Commissioning and Field Service
Today, presence "on the spot" is an absolute "must". Therefore, our commissioning and service engineers operate from support centers on all continents to guarantee immediate and competent support.

Spare and Wear Parts
A comprehensive range of genuine spare parts is available for our entire product range from stocks in Germany, Hong Kong and the USA. Our product specialists provide assistance and respond instantly.

Retrofits & Modernisation
Aged and worn equipment? Capacity increase needed? Too high operating cost? Aumund "just as new" retrofits are economical and tailor-made solutions for improving your existing equipment at reasonable cost.

Preventive Maintenance
Knowing beforehand that service will be needed allows you to schedule downtime and save money with timely repairs. Repairs or retrofits can be accurately anticipated allowing for the downtime to be at the most convenient times and at the lowest possible cost.

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AUMUNDGROUP

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We design, engineer, manufacture, erect and service reliable equipment.
Reputation and competence proven by more than 10.000 installations in over 100 countries.

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