

Chain Conveyor

Process

The van Aarsen chain conveyors are used for the horizontal and slightly inclined transportation of different products, granulated as well as powdered. The maximal angle of inclination is 15 degrees.

The chain conveyor is designed for dust-proof transportation of high capacities over long distances.

Capacities range from 20 to 500 m³/h.

Flexible

- ▶ Multiple speeds possible, high maximum speed possible (maximum 0.9 m/s)
- ▶ One type of chain with similar pitch for the whole range; only the scraper is different.
- ▶ Drive can be placed on left- or right hand side
- ▶ Can optionally be provided with a multiple of inlets and outlets
- ▶ Slide on intermediate surface for transport on upper chain provides more flexibility and a reduction of transport length (option)
- ▶ Extension of the upper part of the chain conveyor, for transporting product over the upper chain (optional)
- ▶ Transmission frequency controller (option), for intake pit
- ▶ Product discharge on the intermediate surface (reduction of transport length, transport on upper chain)
- ▶ Standard provided with openings for slides and/or adapters for piping connections.
- ▶ Each intermediate part has a inspection hatch on both sides

Design

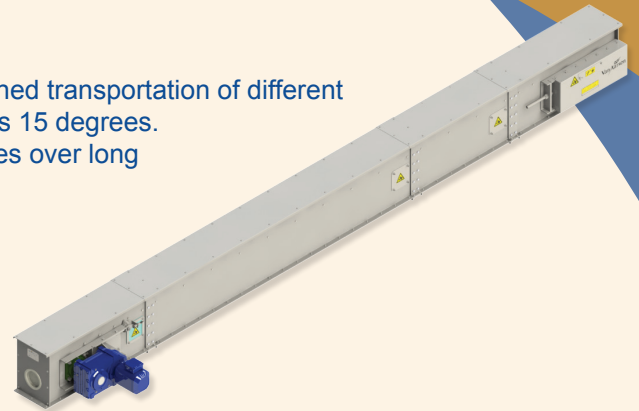
- ▶ Solid industrial design
- Standard:*
 - Anti-contamination bottom in the tension box
 - Overflow protection device in the drive box. Consists of a mechanical valve + product sensor for an immediate stop of production when the outlet is filled with product
 - Flexible 100% nylon scrapers
 - Mechanical chain cleaner, during running of the chain
 - Intermediate surface in intermediate parts
 - Intermediate surface in tension box
 - Standard 2 transparent inspection hatches on the drive box. Can easily be interchanged with the non-transparent hatches
 - Speed control
- ▶ Material thickness bottom plate 4 mm
- ▶ Chain cleaner and overflow protection provided with flange bearing

Energy efficiency

- ▶ 100% nylon scrapers; less wear due to low frictional resistance results in low energy consumption
- ▶ Slide on intermediate surface for transport on upper chain provides a reduction of transport length for lower motor power resulting in less energy consumption (option)

High effectiveness

- ▶ A set of scrapers is provided at a pitch of 300 mm: minimum load per scraper



Low maintenance costs

- ▶ Hardly any wear of sheet metal because of optimised alignment
- ▶ Chain guide strip for slides, for prevention of wear of the bottom plate
- ▶ For outdoor use, special anti-corrosion treatment (galvanized and use of sealant)
- ▶ Made of galvanized steel (option)
- ▶ Wear resistant manganese strip on bottom plates
- ▶

Easy and safe operation

- ▶ Overflow protection and product detection for reliability and accuracy
- ▶ Tension box provided with a ruler for optimal control of an even chain tension, to prevent running out of alignment
- ▶ Layer thickness control with external ruler for optimal adjustment (option)
- ▶ Speed control, for quick detection of slip and chain breakage
- ▶ Mechanical valve + sensor for product detection (option)

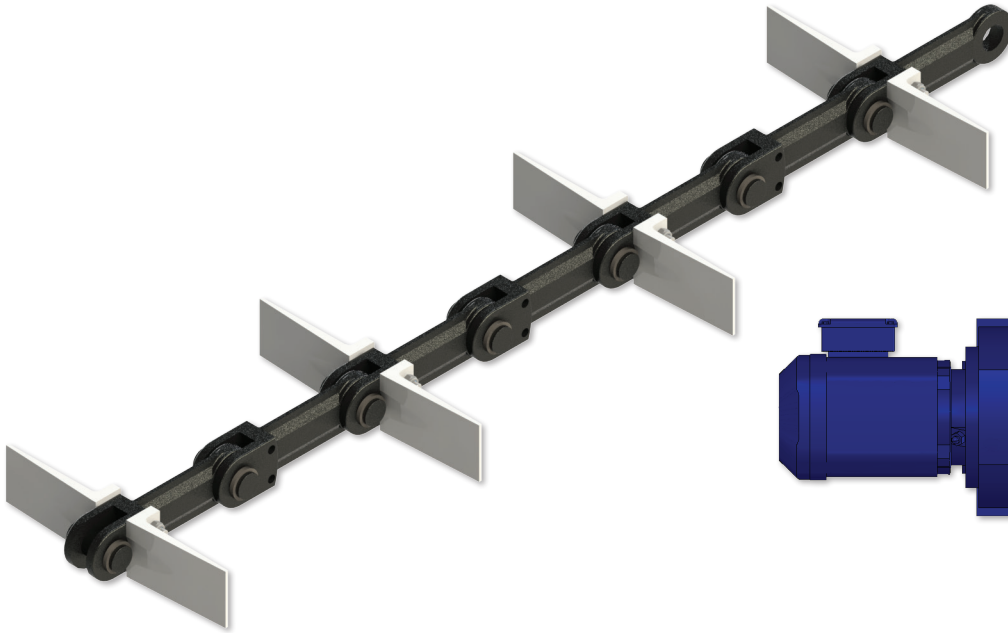
Hygienic production

- ▶ Low contamination due to almost seamless connection of the intermediate parts
- ▶ Felt sealings between moving parts, to prevent dust emission
- ▶ Anti-contamination bottom in tension box, moves back and forth during tensioning
- ▶ Dust filter, to exhaust dust from the chain conveyor (option)
- ▶ Outside and inside of the conveyor is coated, to prevent corrosion during transport and storage prior to assembly
- ▶ Chain cleaner, to prevent contamination

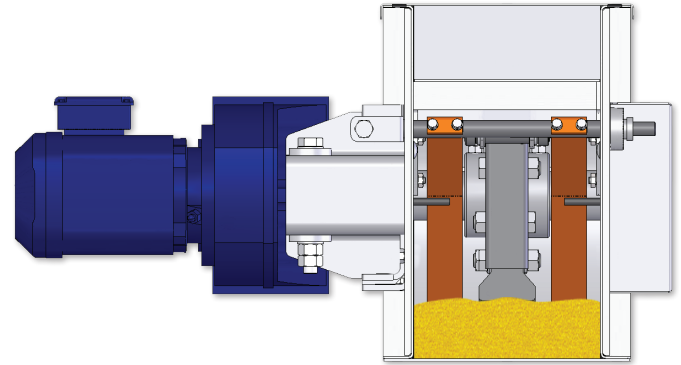
Taylor made solutions

- ▶ Non-standard versions for special applications can be provided on request: please inform us about the used products and the required densities.

Datasheet



Chain with nylon scrapers



Cross section chain conveyor, filled with product

		Type chain conveyor			
		265x395x105	365x490x110	465x490x110	565x535x110
Product layer width	mm	265	365	465	565
Max. product layer thickness*	mm	200	275	390	425
Plate thickness cover plate	mm	2	2	3	3
Plate thickness side plate	mm	3	3	4	4
Plate thickness bottom plate	mm	4	4	4	4
Plate thickness intermediate surface	mm	3	3	4	4
Chain pitch conveyor	mm	150	150	150	150
Pitch nylon scrapers	mm	300	300	300	300
Speed / rpm conveyor chain	m/s	0.5/25	0.5/20	0.5/20	0.5/18
Maximum		0.9/44	0.8/32	0.7/28	0.65/24
Capacity (max)	m ³ /h	86 (155)	163 (260)	264 (369)	389 (506)
Maximum power of drive	kW	11	22	(2x15) 30	(2x22) 44
Weight					
-Intermediate part (l=3900 mm)	kg	218.5	265.5	378.5	423.5
-Tension box	kg	190	275	405	450
-Drive box (excl. shaft + motor support)	kg	155	235	305	350

* Transport on bottom