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## **TYPE C250, C300, C350 & C500**

FM Flight conveyors are designed for horizontal or inclined conveying in industrial process plants, where very gentle handling of the products is demanded.



#### The Flight Conveyor fulfills the following demands:

- » Very gentle handling of the products.
- » Totally closed and completely self-emptying.
- » Low energy consumption.
- » Low maintenance costs.
- » Low noise level.

#### Used for the following products:

- » Pressed feed pellets.
- » Extruded feed pellets.
- » Other products demanding gentle handling.

Please note that the drive- and tensioning chain wheels always are mounted with spring bushings, and that the conveyor sections always are pre-assembled from the factory.

Transport kapacitet op til 138 m<sup>3</sup>/h.

#### We supply our Flight conveyors in the following executions:

- » Manufactured in St. 37 and painted in RAL 1013 (other colours on request)
- » Manufactured in St. 37 and hot dip galvanised especially for erecting outside.
- » Manufactured in stainless steel type AISI 304.
- » Manufactured in stainless steel type AISI 316.



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## TYPE C250, C300, C350 & C500

### Measurements for the Flight conveyor.













TYPE	Α	С	D	F	Н	Т	J	К	L	М	Ν	0	t	D <sub>ø1</sub>	$D_{\emptyset 2}$	M <sup>3</sup> /H
C250	665	266	320	346	611	65	450	300	400	471	307	490	3	40	50	40
C300	665	316	370	376	719	65	528	300	500	551	307	532	3	40	50	56
C350	703	366	420	430	807	65	600	300	550	624	307	572	3	50	60	77
C500	785	516	624	630	1050	65	819	500		819		656	4	60	80	138

Туре	Q	R	S	U	V	Y
C250 Bomb door	990	711	872	568	260	576



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## **DESIGN & CAPACITY**

### Modular design:

Flight conveyor type C-250, C-300, C 350 and type C 500 are built from a large number of standard components, which gives a lot of flexibility.

- » Combined drive- and tensioning section, with end outlet, overflow hatch and safety switch.
- » The turn end of the conveyor is fully trough formed, securing that no product can be left here, and thus completely self emptying.
- Inlet sections with cover for the return chain. (Similar to side inlet principle)

- » Intermediate sections with trough-shaped bottom, and hinged top cover. Normally supplied in sections, 1990 mm and 990 mm, and can be supplied in special lengths where needed.
- » Intermediate outlets bomb door type with pneumatic remote control.
- » The chain is equipped with Nonfric scrapers, designed for fully emptying of the conveyor.

Flight Conveyor:	Туре С 250	Туре С 300	Туре С 350	Type C 500
Conveying capacity	40 m <sup>3</sup> /h	56 m <sup>3</sup> /h	77 m <sup>3</sup> /h	138 m <sup>3</sup> /h
Rpm main shaft	33 rpm.	29 rpm.	27 rpm.	24 rpm.
Chain speed	0,4 m/sec.	0,4 m/sec.	0,41 m/sec.	0,37 m/sec.

#### Effect formula:

Necessary motor power:

K = Capacity in tons pr. hour. L = Total length in meter.

Necessary motor power in kW =  $(K \times (L + 5) / 544) + 0,37$ 

Please do not hesitate to ask for further information, also regarding other possibilities for utilizing the Flight conveyor.



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### DESIGN

### Design for the drive- and turning end of conveyor

Drive end is designed as a combination of the drive and tensioning section, and the turn end is equipped with a non moveable shaft.



The combined drive- and tensioning section is demanding use of hollow shaft gearboxes, as drive units for the Flight conveyor. The drive end is naturally equipped with overflow hatch as any other conveyor.





The rounded design of the turn end is securing against building op of any material, as it is totally self emptying. It also eliminates the risk of any mixing of products.

To enable easy inspection and cleaning the top cover easily can be dismantled.



The chain is equipped with Nonfric scrapers, that gently convey the product on the trough-shaped bottom.

This is securing the totally self-emptying and gentle handling.



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### **IN-AND OUTLET DESIGN**



The Flight Conveyor inlet is built to guide the incoming products directly to the bottom of the conveyor, securing gentle handling. The inlet can be supplied in various lengths depending on application. The outlets in Bomb-door design are pneumatically operated. The advantage of the Bomb-door design for the outlets are that no material is carried over the outlet, risking any mixing of products, and that the design is avoiding any goods remaining on top of the shutter plate.

Contact us for further information and recommendations regarding application.



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## **GENERAL DESIGN**

The intermediate sections for the Flight conveyor are always supplied with hinged covers, enabling easy access for inspection and cleaning purposes.

The hinged top covers are securely bolted, demanding need of tools for opening, complying with the EU Machinery Directive.





The Flight conveyor is a total closed design, securing against dust outlet.

The Combined drive and tension end, the turn end, and the intermediate sections are always delivered totally assembled.

The Flight Conveyor is equipped with Nylon rollers, carrying the return chain, similar to the standard chain conveyor type.

Contact us for further information and application solutions.





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## **MINERALTRANSPORT**



The Flight conveyor is here seen conveying vitamins, minerals, and similar micro products to a micro dosing plant in a feedstuff factory.

The Big bag is emptied into the hopper, and directly into the Flight conveyor.

Handling is done from the small platform.



The inlet is done directly into the turning end of the conveyor, that easily takes the product to the requested position with 45 degree inclination.

This type of inlet is enabling low building height.



The combined drive and tension end is here equipped with outlet fitted to the travelling screw conveyor via a flexible tube connection.

The travelling screw conveyor is allowed to fill all the small silos in the micro-dosing plant.

The travelling screw conveyor is equipped with easy running rubber wheels, and is also equipped with dust controlling sealing.



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