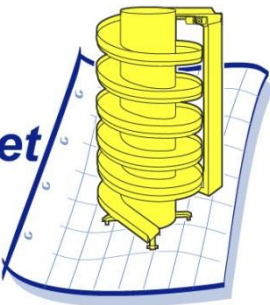
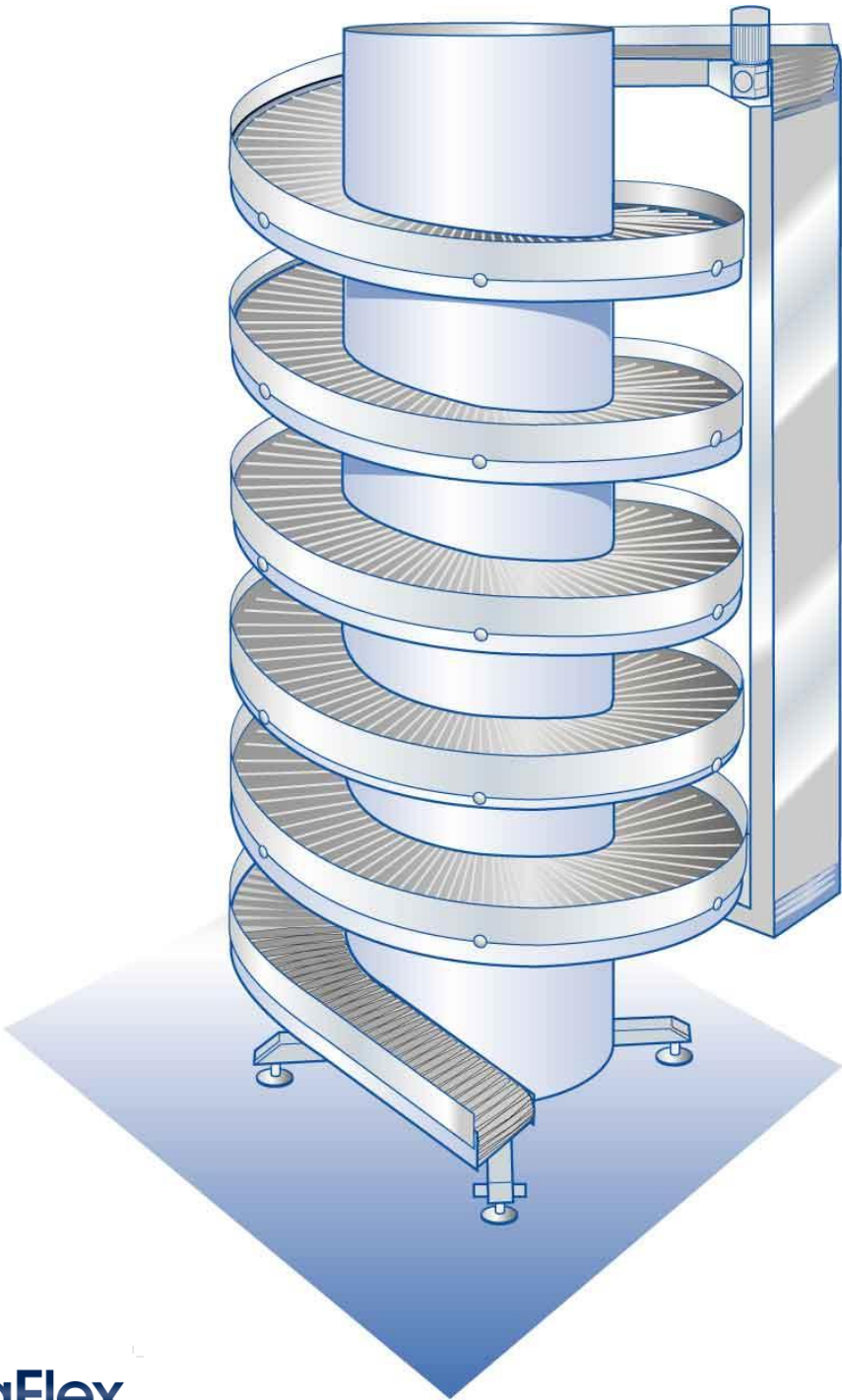


PDS  
Product Data Sheet

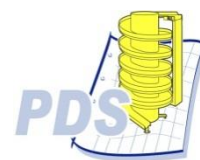


SpiralVeyor®  
General



1	Frame
2	Belt
3	Guides
4	Accessories
5	Packages
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# Introduction

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## How to read this document

This Product Data Sheet describes the relevant standard features, options, accessories and approved application of the SpiralVeyor®

Many special applications and features can be designed on customer demand to complete customized SpiralVeyor® products by our Engineered Product program. So if your feature or application is not mentioned in this document ask us for the possibilities at



Thanks to the large installed base, our decades of experience and our library of concepts we can satisfy almost all requests.

## Index

To increase the readability and focus the content , the SpiralVeyor® Product Data Sheet is build-up in different chapters.

### • SpiralVeyor® General

**This chapter deals with all general information that is applicable to most of the below chapters.**

#### • SpiralVeyor® SVs

This chapter deals with the specific extra information, parameters and options for small conveyor widths ranging from 100 up to 140 mm belt widths. Typically applied for single file container handling.

#### • SpiralVeyor® SV

This chapter deals with the specific extra information, parameters and options for medium conveyor widths ranging from 200 up to 600 mm belt widths. Typically applied for logistics and secondary packaging

#### • SpiralVeyor® SVE

This chapter deals with the specific extra information, parameters and options for extra wide conveyor widths ranging from 600 and wider widths. Type SVE is build up from more co-operating parallel belt tracks building one wider common conveyor belt for large items or mass flow of single items. Typically applied for logistics, parcels and luggage

#### • SpiralVeyor® SVM

This chapter deals with the specific extra information, parameters and options for the spiral conveyor with a belt build up from one or more co-operating belt tracks. Herewith it creates a larger common and stable conveyor surface especially suited for container mass flow applications. Typically applied for mass flow bottling and canning.

#### • SpiralVeyor® SVO

This chapter deals with the specific extra information, parameters and options for transportation of uniform sized plastic totes.



## Technical specifications

In case of a proposal quoted or order confirmed, this document serves as the base for the application and technical features. The separate quotation or order confirmation includes technical specifications (📄) listing up the options from this document. The technical specifications may describe extra features, special design or applications which are only available upon request. The technical specifications in the proposal quoted or order is leading and overrules this product sheet.

Not all options and configuration can be combined. In case an impossible combination is requested the AmbaFlex sales engineering department will inform you and suggest a better configuration or combination.

### Legend:

Example Picture:

#180

Option number/ parameter number

TPS High Friction

Explanation of the option / illustration

📄 = Symbol referring to the Technical Specification in quotation or order confirmation

⚠️ = May need additional explanation/ measures to comply with the CE regulations.

📄 = link to a pdf document with additional information/explanation.

📄 = link to an accompanying autocad drawing.

\* Disclaimer:  
Illustrations shown are indicative. Illustrations can differ on details for the supply. Illustrations may show options that are not in the scope of supply unless specified in the quotation / order.  
All dimensions specified in this document are design meant to be dimensions. For the as build dimensions, larger functional tolerances should be considered.  
The latest Product Data Sheet for this machine is available on the below hyperlink.  
[http://www.ambaflex.com/downloads/SVGeneral\\_PDS\\_EN.pdf](http://www.ambaflex.com/downloads/SVGeneral_PDS_EN.pdf)

# Frame

## Explanation machine code (#500)



SpiralVeyor® SV Single track parameters

Example: SV-400-1300-803-S-4-A-15-TU-TPSHF1

•SpiralVeyor® Type	SV
•Belt width belt (b)	400mm
•Centerline diameter belt (D)	1300mm
•Pitch belt (P)	803mm
•Material configuration	S
•No of windings belt (W)	4
•Configuration belt	A
•Speed belt	15
•Transport direction	TU
•Slat type: TPS High Friction1 (ratio)	TPSHF1

SpiralVeyor® SV X Multi track parameters

In all multi track configuration the parameters are numbered starting from spiral outside to inside. Example in case of a triple track; h2.1 is the elevation for the outer spiral track, h2.2 the elevation of the central track and h2.3 is the indication for the inner track.

Example: SV X-400/400-1743-803/803-S-4/4-A/A-15/23-TU/TU-TPS4HF1

•Spiralveyor® Type	SV X
•Belt width outer belt (b1)	400mm
•Belt width inner belt (b2)	400mm
•Centerline diameter belt (D)	1743mm
•Pitch outer belt (P1)	803mm
•Pitch inner belt (P2)	803mm
•Material configuration	S
•No of windings outer belt (W1)	4
•No of windings inner belt (W2)	4
•Configuration outer belt	A
•Configuration inner belt	A
•Speed outer belt	15
•Speed inner belt	23
•Transport direction outer belt	TU
•Transport direction inner belt	TU
•Slat type TPS High Friction1 (ratio)	TPSHF1

1

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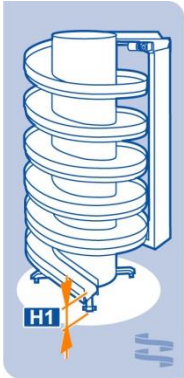
Documentation

# Frame

## A) Frame Dimensions

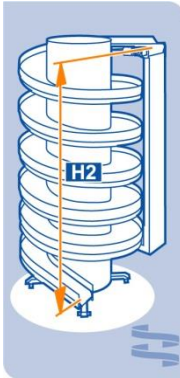
### i. Heights

#171



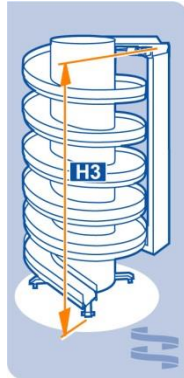
Lower end  
H1

#370

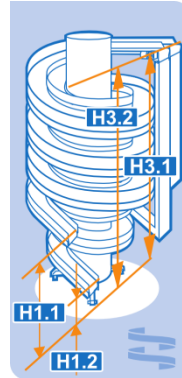


Elevation  
H2

#348



Upper end  
H3



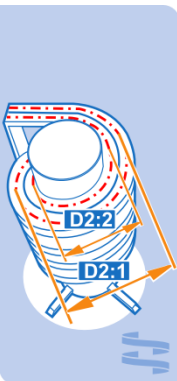
SV X  
H1.1, H1.2, H1.n  
H3.1, H3.2, H3.n

### ii. Top View

#561

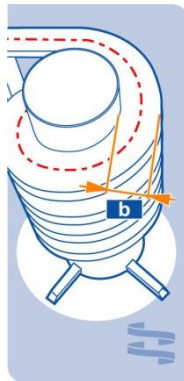


Centerline diameter  
D2

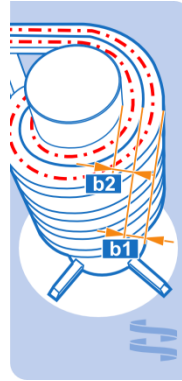


Centerline diameter  
D2.1, D2.2, D2.n

#560



Belt width  
b



Belt width  
b1, b2, bn

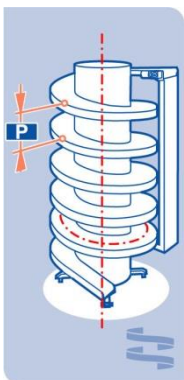
#562



Footprint  
X1 and X2

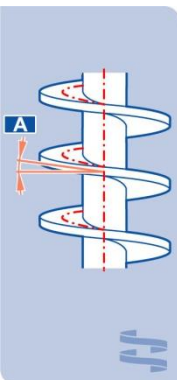
### iii. Incline

#347

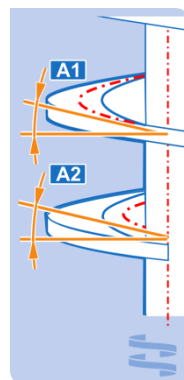


Pitch  
P1, P2, Pn

#371

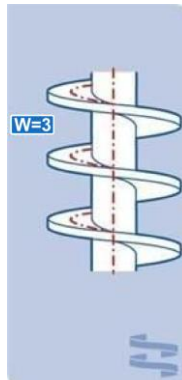


Centerline angle  
A



Centreline angle  
A1, A2, An

#160



Number of windings  
W1, W2, Wn  
Picture -> W=3

Example



2/3



1

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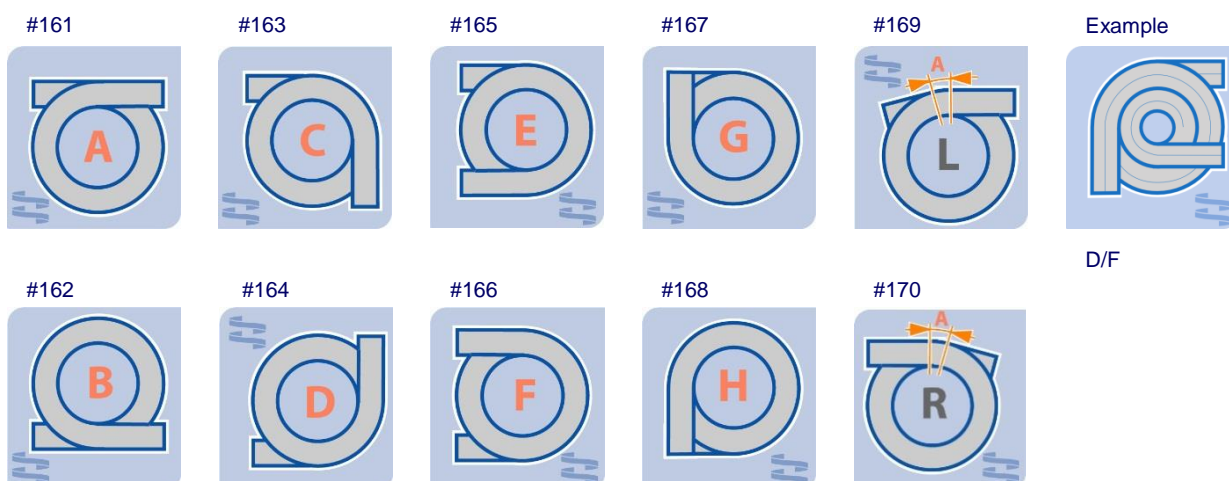
6

Application

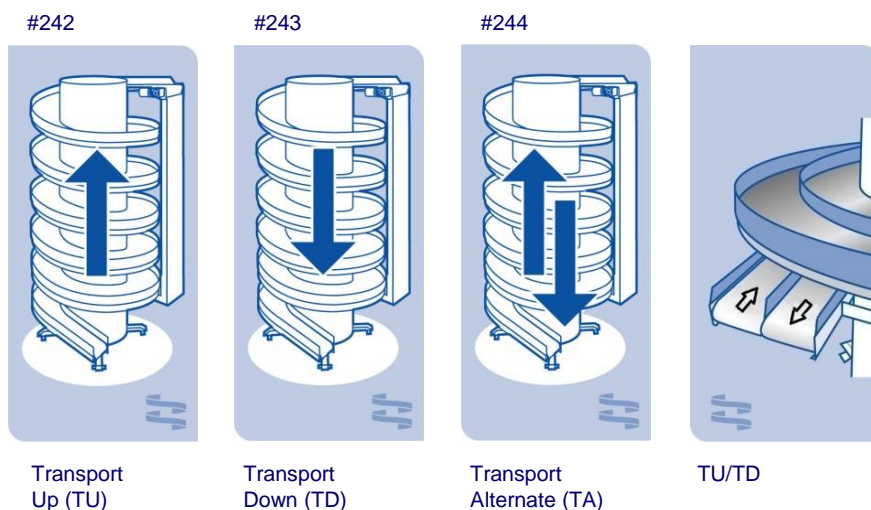
7

Documentation

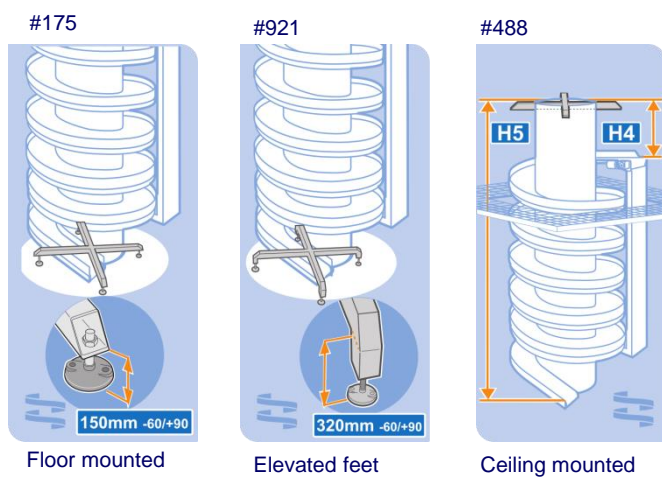
## B) In/ Out feed configurations



## C) Transport directions

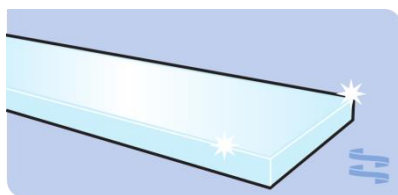


## D) Support



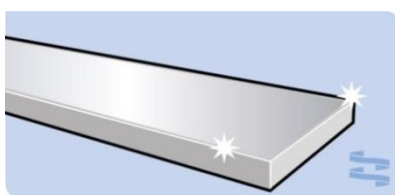
## E) Frame

#157



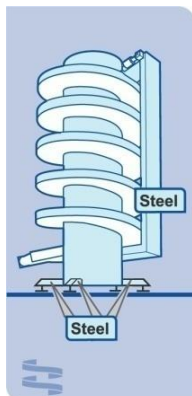
Carbon steel

#159



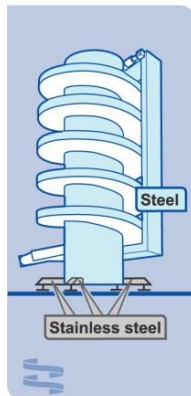
Stainless steel 304

#200



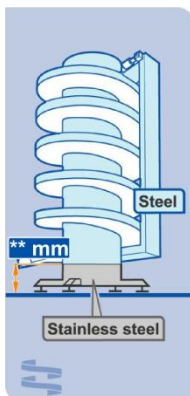
Full Carbon Steel

#198



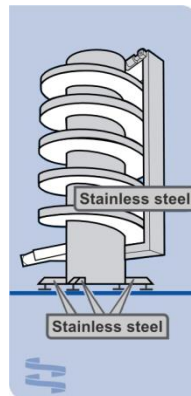
Carbon Steel frame  
Stainless steel support

#199



Carbon Steel frame  
Stainless steel pedestal

#201

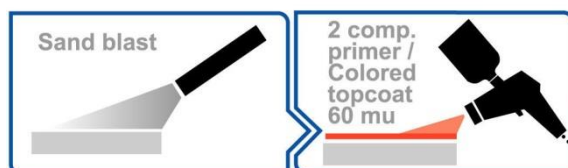
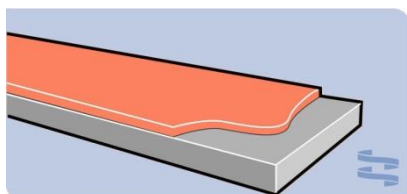


Full Stainless Steel

## F) Finishes

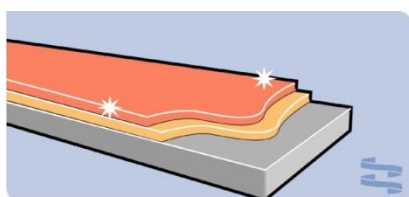
### I. Industrial Coating

#949



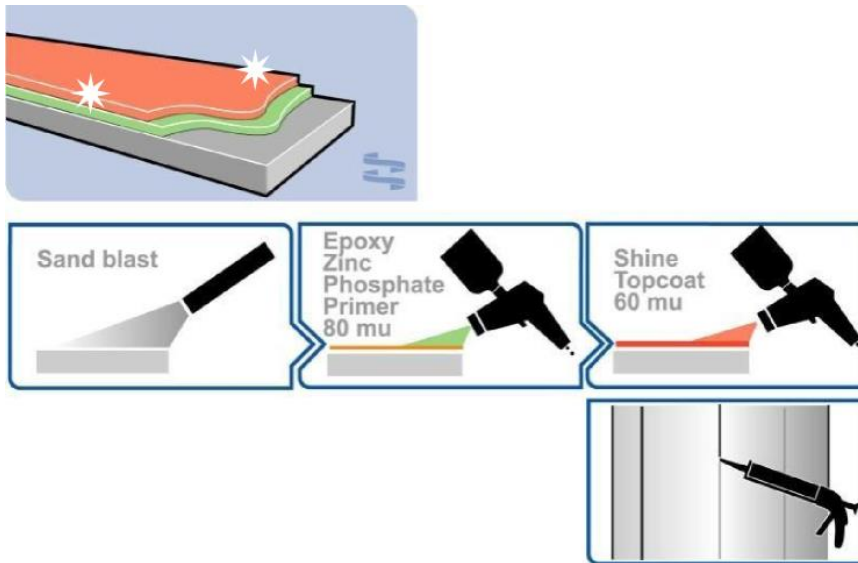
### II. High Gloss Coating

#384



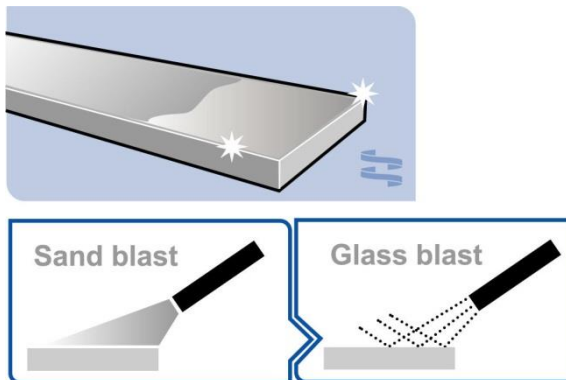
### III. High corrosion Protected Coating

#721



### IV. Blast Finish

#389



### V. Colour

#948



RAL colour code

#385



EFT colour code

#392



NCS colour code

#388

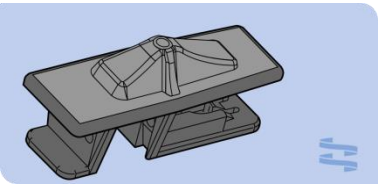
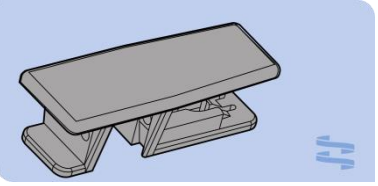


Colour sample

# Belt

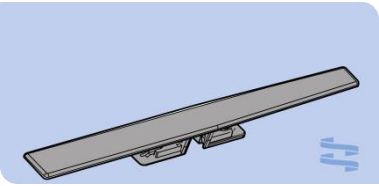
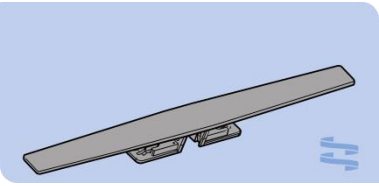
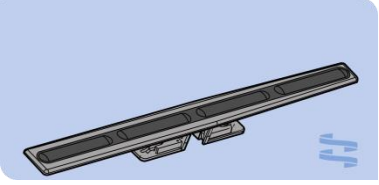
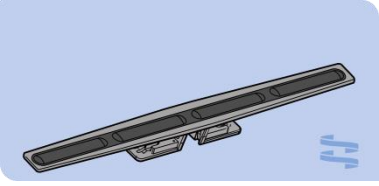
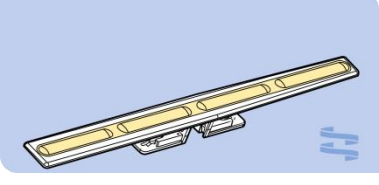
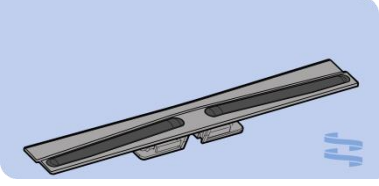
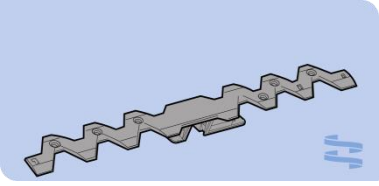
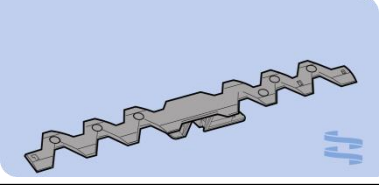


## A) Slat type

Belt type	Shape	Friction	Material		Colour		Slat width [mm]			Option
			Belt	Friction	Belt	Friction	100	140	200	#
TPFB		Standard	PP		Black	Grey	●			236
TPS		Standard	PP		Black		●	●	●	783
		High friction	PP	TPE	Black		●	●		784
		Medium friction	PP	TPE	Black	White	●	●		785

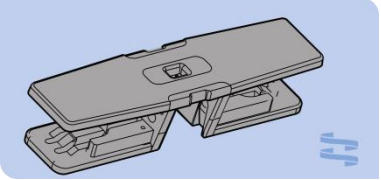
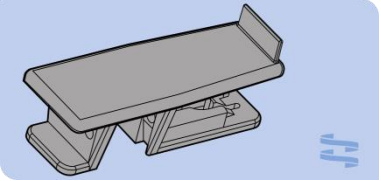
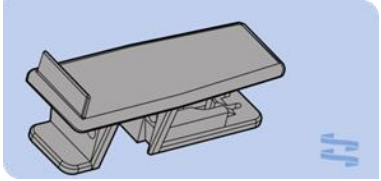
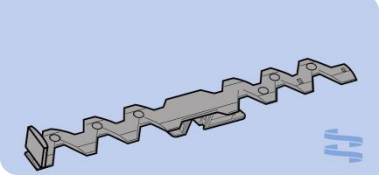
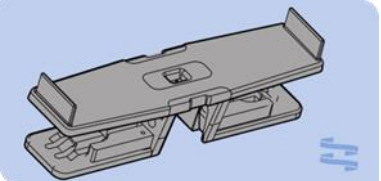
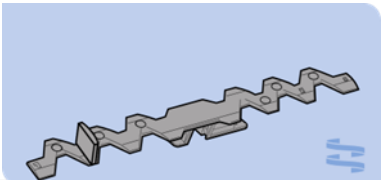
1	Frame
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## A) Slat type\*

Belt type	Shape	Friction	Material		Colour	Slat width [mm]					Option #
			Belt	Friction		200	300	400	500	600	
TPS		Standard	POM		Black	●		●		●	186
		Standard	POM		Black	●		●			
		High friction	POM	TPE	Black	●	●	●	●	●	
		High friction	POM	TPE	Black	●		●			
		High friction food grade	POM	TPE	White		●	●			955
TPO		High friction	POM	TPE	Black		●	●			362
TPT		Standard	POM		Grey			●			187
		High friction	POM	TPE	Grey			●			182

\*) Pictures based on 400 mm belt width, looking in transport direction and column at the right side

B) Slat type add-ons

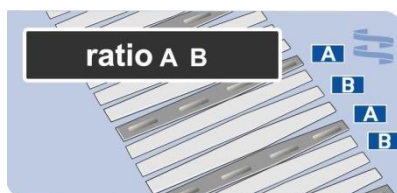
Slat add-on	Shape	Description	Location	Slat width [mm]							Option	
				100	140	200	300	400	500	600	#	
TG		Tooth Gap	Above chain	●	●						238	
SG		Integrated Side Guide	Inner radius	●	●						239	
		Integrated Side Guide	Outer radius	●	●						240	
								●			372	
		Integrated Side Guide	Double sided	●	●						241	
		Integrated Side Guide	Outer radius With inset					●			653	

## C) Customized Friction Configuration\*



#188 HF1	Ratio= $A/(A+B)$	Picture -> 1:1 → B=0
#189 HF2	Ratio= $A/(A+B)$	Picture -> 1:2
#190 HF3	Ratio= $A/(A+B)$	Picture -> 1:3
#191 HF4	Ratio= $A/(A+B)$	Picture -> 1:4
#192 HF6	Ratio= $A/(A+B)$	Picture -> 1:6

## D) Customized Belt Configuration\*

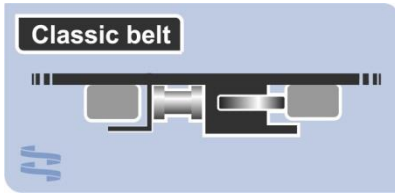


#213 First slat type A
#214 Second slat type B
#215 Ratio= $A/(A+B)$ Picture -> 1:4

\*) Pictures based on 400 mm belt width

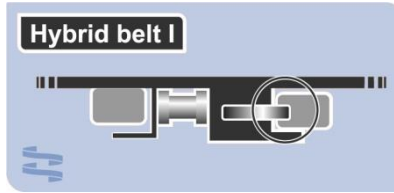
## E) Belt guide

#957



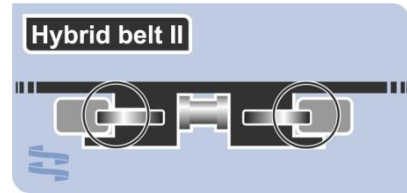
Belt roller guide system, classic

#958



Belt roller guide system, Hybrid

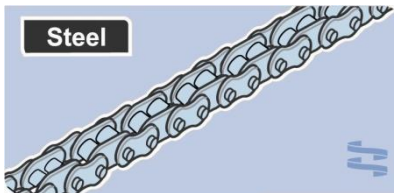
#757



Belt roller guide system, full Hybrid rolling belt (high capacity conveyor)

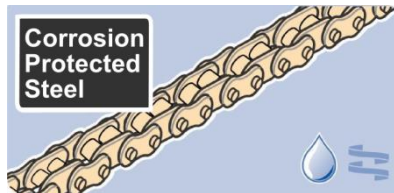
## F) Chain

#193



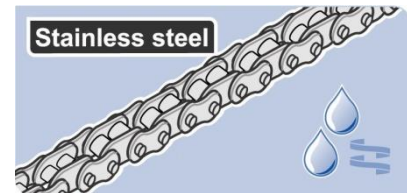
Belt base chain, carbon steel

#738



Belt base chain, corrosion protected, carbon steel

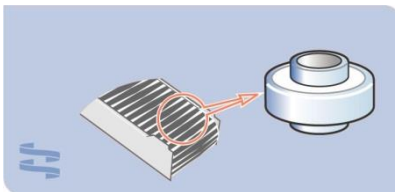
#195



Belt base chain, stainless steel

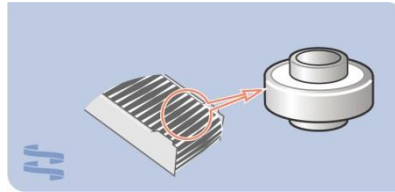
## G) Bearings

#429



Steel z-seal

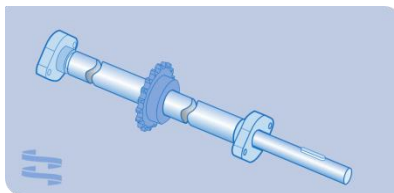
#430



Stainless rs-seal

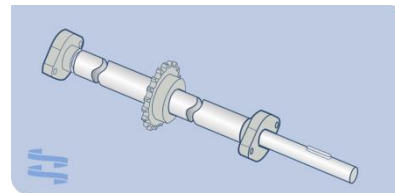
## H) Shafts & Sprockets

#196



Carbon steel shaft, bearings, sprockets, fasteners

#197



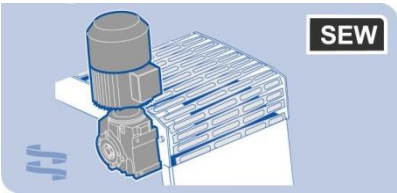
Stainless steel shaft, bearings, sprockets, fasteners

# Accessories

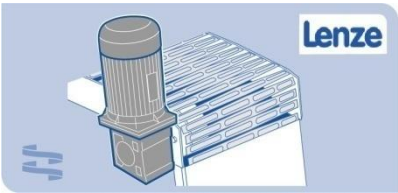


## A) Gear motors

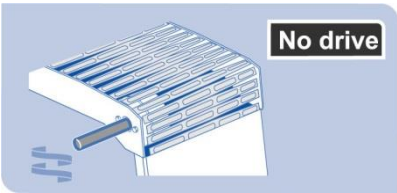
#378



#211

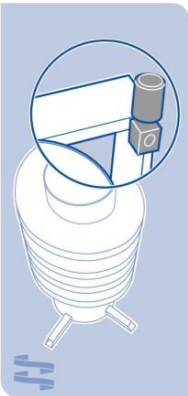


#203



## B) Drive positions

#204



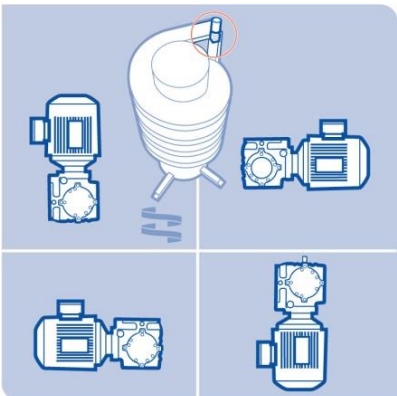
Inside

#205



Outside

#208



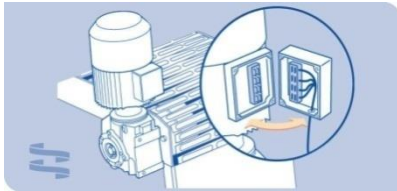
#207  
Drive orientation

#649

#209

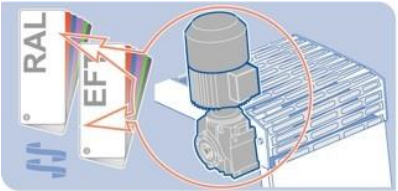
## C) Drive options

#419



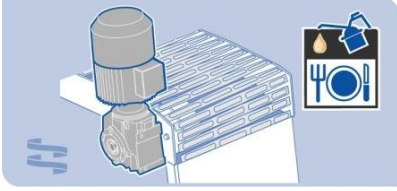
IS connector

#720



Customer specific colour

#923



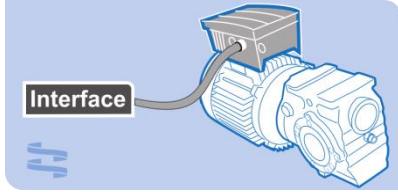
Food grade oil

#718



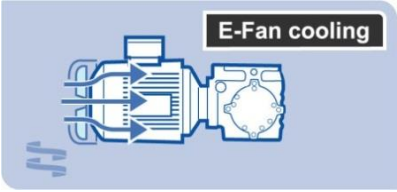
Integrated frequency inverter

#719



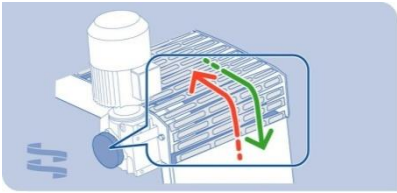
Interface on integrated frequency inverter

#440



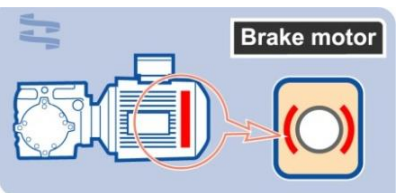
f < 18 Hz

#744



+ backstop (up running only!)

#467



+ manual brake release

1

Frame

2

Belt

3

Guides

4

Accessories

5

Packages

6

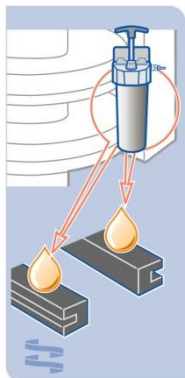
Application

7

Documentation

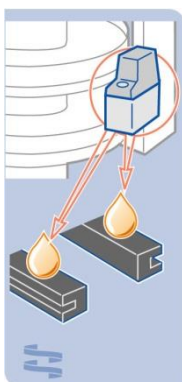
## D) Belt guide slide film applicator

#431



Manual

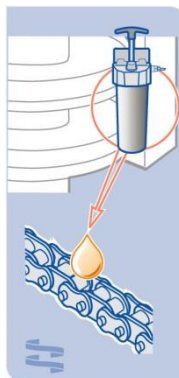
#568



Electric

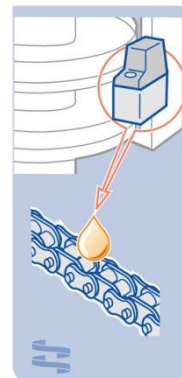
## E) Chain lubrication

#681



Manual

#682



Electric

## F) Alert options

#736


Chain overlength  
sensors

24V DC

#926


Chain overlength  
sensors

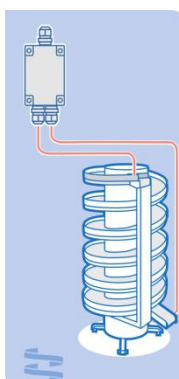
110V AC/DC

#692

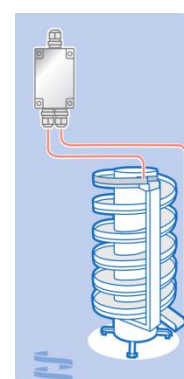

Missing slat & tab  
detection sensors

24V DC only

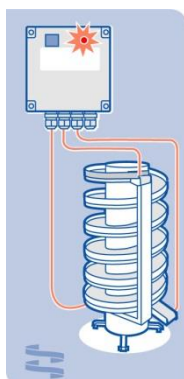
#759


Junction box  
Polycarbonate

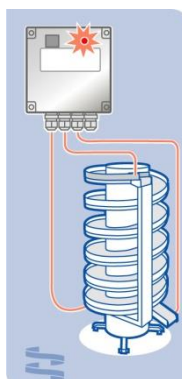
#918


Junction box  
Stainless Steel

#690


Maintenance Alert  
System (MAS)  
Polycarbonate  
24V DC only

#691

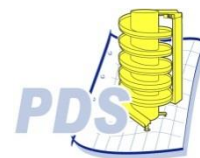

(MAS) Stainless  
Steel  
24V DC only

## G) Specials

#444

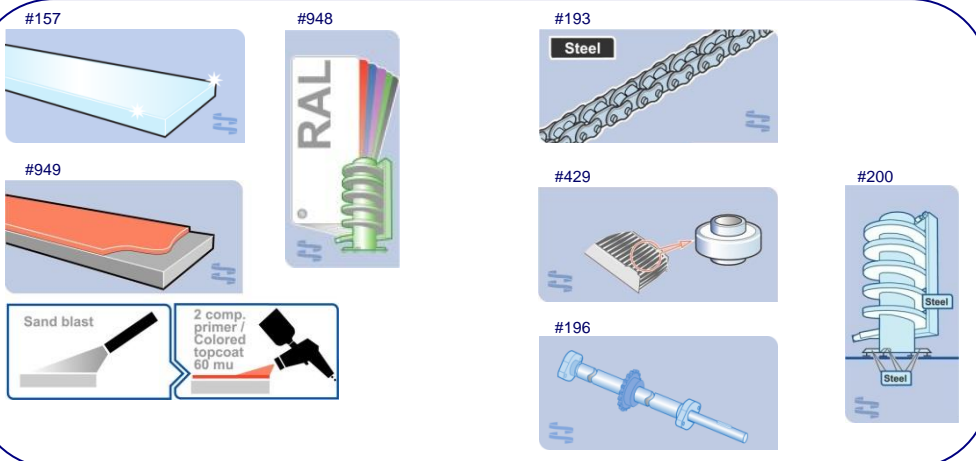


# Packages



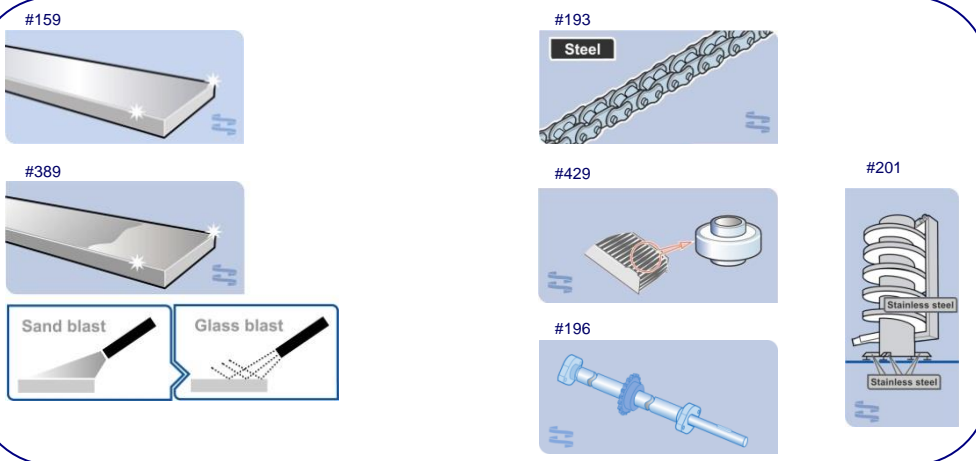
## A) Dry use (S)

#564



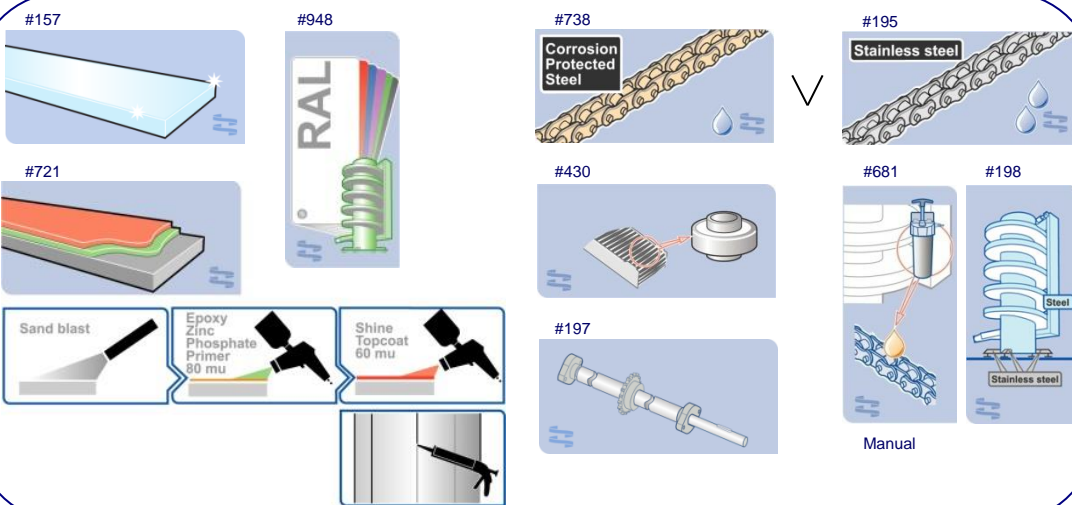
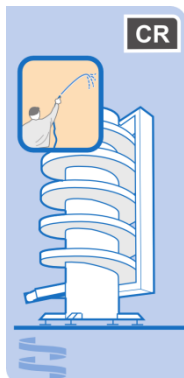
## B) Wipe Down (R)

#565



## C) Wash down Economic (CR)

#712



1

Frame

2

Belt

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Guides

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Accessories

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Packages

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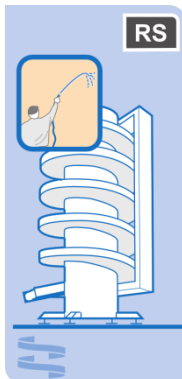
Application

7

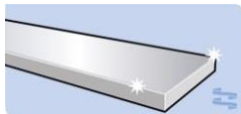
Documentation

## D) Wash down (RS)

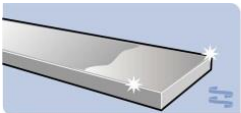
#566



#159



#389

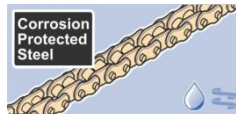


Sand blast

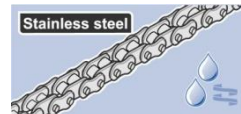
Glass blast



#738

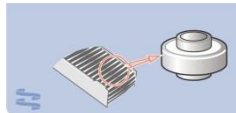


#195

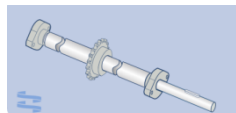


V

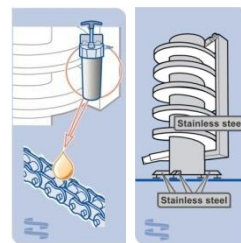
#430



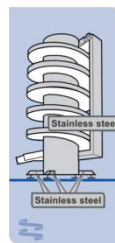
#197



#681



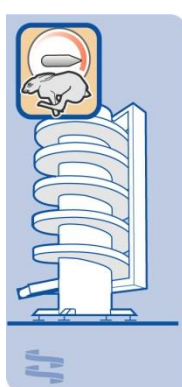
#201



Manual

## E) High Speed Pack

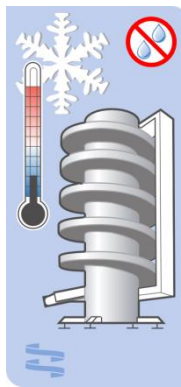
#567



High Speed pack

## F) Polar Pack

#916

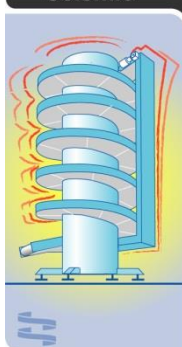


Polar pack

## G) Seismic Pack

#991

Seismic



Seismic

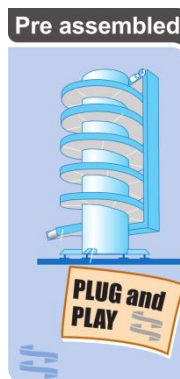
Standard the SpiralVeyor® is not designed for installation in a seismic hazardous zone.

Ask for our special seismic option pack.

## A) Delivery



All SpiralVeyor® are delivered pre-tested and ready to run after integration unless specified in the ☐. In case the SpiralVeyor® does not fit in the building or truck we refer to the non-assembled delivery options.



All SpiralVeyor® are delivered pre-assembled and ready for integration unless specified in the ☐.



#703

All SpiralVeyor® leave the factory wrapped in stretch foil for light protection. Special packaging is available on request. Normally the SpiralVeyor® is transported in the horizontal position, however due to transport limitations it may be delivered upright.



#753

Packaging suited for open truck



#734

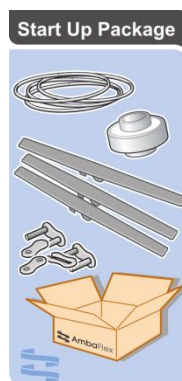
Packed in wooden crate



#704

The equipment is supplied Ex Works, excluding installation and integration. Installation assistance is available on request.

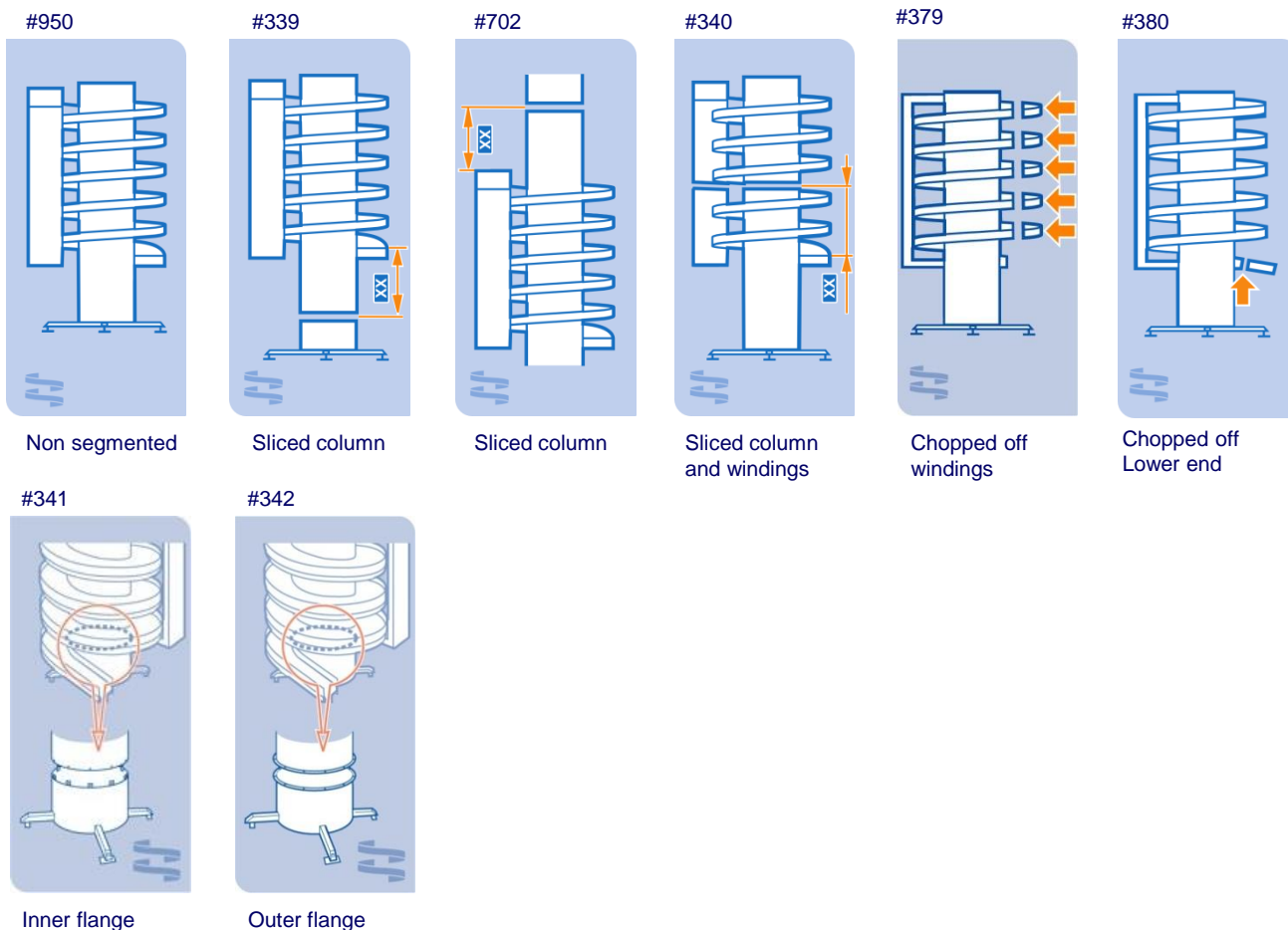
## B) Start Up Package



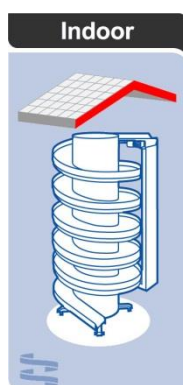
#328

The SpiralVeyor® will be delivered with a standard Start Up Package.

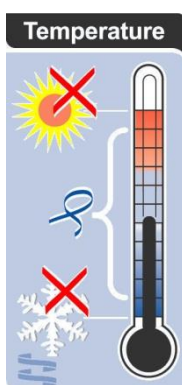
## C) Segmentation



## D) Environment



The SpiralVeyor® is designed to be used indoors.  
For outdoor use AmbaFlex can offer special SpiralVeyor®



The SpiralVeyor® is designed to operate in non-freezing conditions. (temperature range of 0-35°)

See our Polar options for freezing applications.

## E) Cleaning



Wet cleaning is allowed for certain component materials. See the available material packages choices.



High pressure cleaning should be avoided. If unavoidable ensure that there is no high pressure water contact with seals, bearings and electrical components.



A list of approved cleaning detergents for various component materials is available on request.

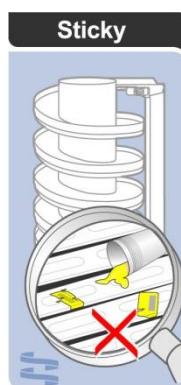
## F) Contamination



Any contamination that may harm the SpiralVeyor® or its function must be avoided.



The SpiralVeyor® is not designed to cope with abrasive or aggressive spillage, dirt, glass or atmosphere. AmbaFlex will, when asked, give advice. A wear resistant package may be an option.



Make sure any spillage, dirt or glass that may become sticky is avoided. Otherwise a proper cleaning program within the cleaning possibilities of the SpiralVeyor® should be maintained. Sticky contamination may cause the SpiralVeyor® to be blocked and may overload the drive gear or cause chain damage.



Contamination from foreign objects or leaking products must be avoided. They may block the chain or other moving parts in their function and can cause substantial damage. Let our sales engineers advice you.



Contamination from upstream conveyors like leakage and specially dry lubrication should be avoided unless specified and custom designed.

# CE regulations and documentation

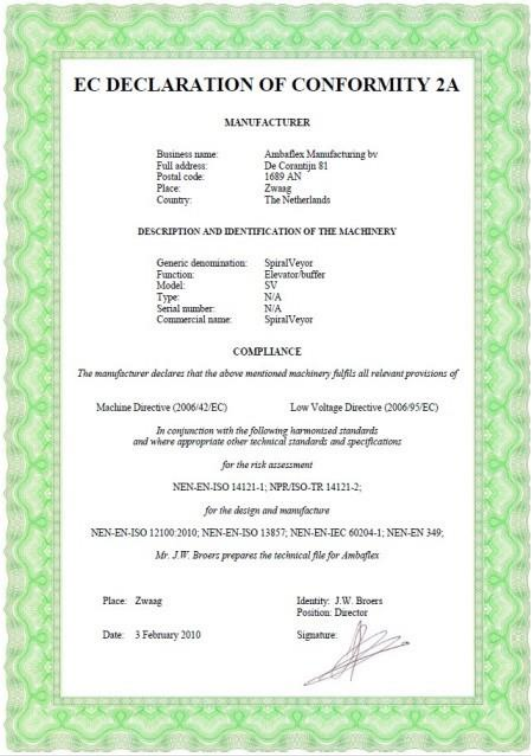
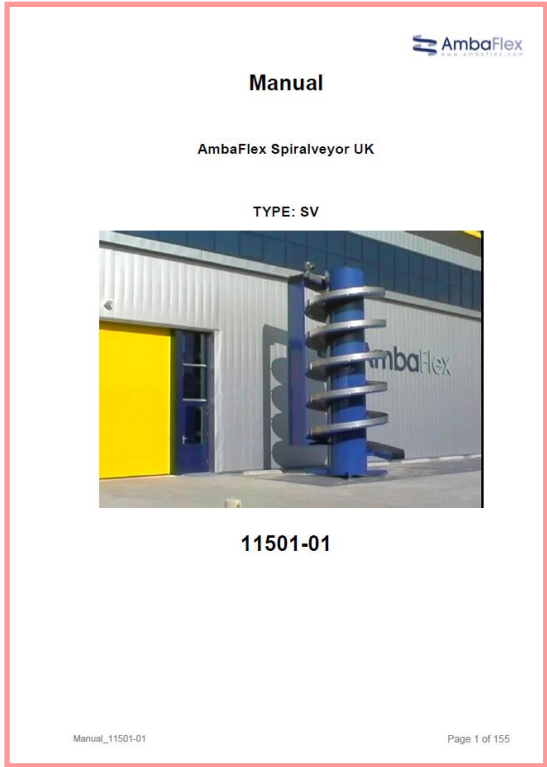


The SpiralVeyor® will be delivered according to the CE classifications. However these classifications do not always comply with local regulations. Ask for advice in case of doubt.



Delivery of the SpiralVeyor® is including instructions according to the actual CE directive. For reasons of environmental protection, these instructions will be delivered as one copy in English (original) and one copy as a translation into one of the official languages of an EU member state only. These manuals will also be delivered on one CD only.

Should additional copies and/or other languages be required, we can send you an offer on request.



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Frame

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Belt

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