

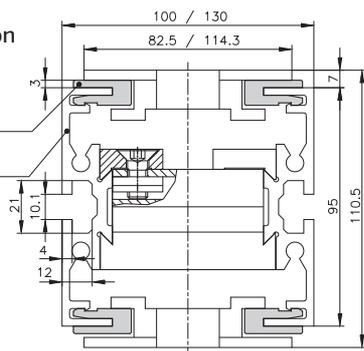
# Flat Top Chain Conveyors SBF-P 2254



Conveyor frame cross-section

Wear Strip mk 1044

Profile for conveyor frame mk 2254





The modular mk Flat Top Chain Conveyor System SBF-P 2254 is ideal for product handling in either stand-alone or integrated applications. Applications can be found in the packaging, manufacturing, bottling, glass, food, medical and pharmaceutical industries. Conveyors can be manufactured quickly and economically using the various individual components. Due to their modular

construction, later reconfigurations necessitated by product or production changes can be accomplished with relatively little effort. The system is available in two standard widths and can accept chain from a variety of suppliers. Conveyor frames are manufactured using our Profile mk 2254 which features a 10 mm T-slot. Accessories such as side rails, stands, etc. can be easily

mounted to the conveyor at any time. The chain is completely guided using wear strips on the running side as well as the return. A special feature of the modular design is the use of individual subassemblies. Components designed specifically for this conveyor system ensure a simple and quick assembly of the individual elements into a complex material handling system.

# Flat Top Chain Conveyors SBF-P 2254

**Drive Version AC**



*Contents SBF-P 2254*

SBF-P 2254 AC – Head Drive –

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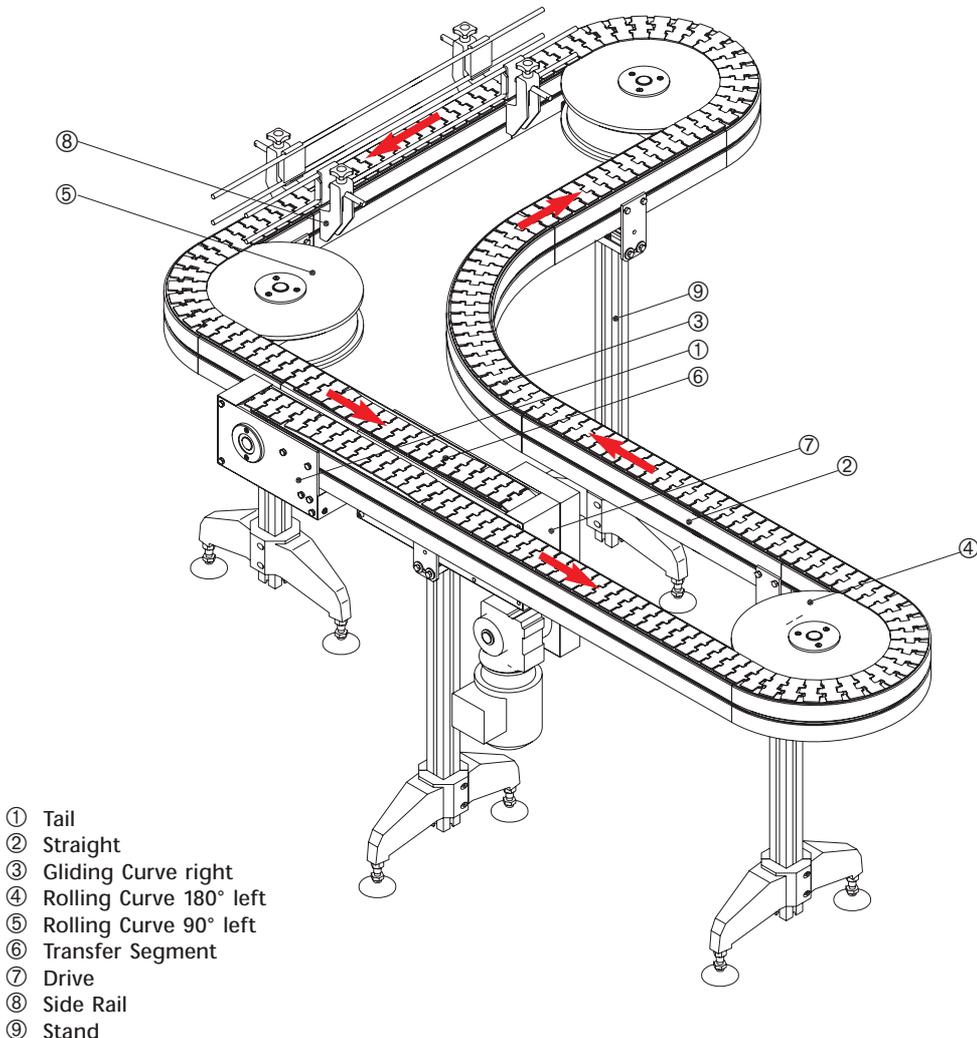
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# SBF-P 2254

## Ordering instructions

Various factors need to be considered when configuring Flat Top Chain conveyors. The total belt length, as well as the number of curves, the product to be conveyed, the conveyor environment, the product weight and the line speed all influence the motor power requirement. Motors will be

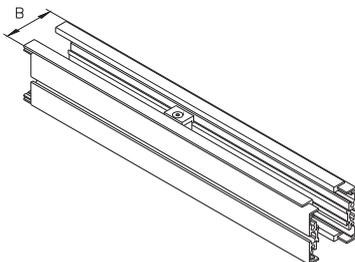
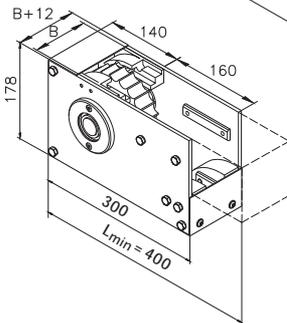
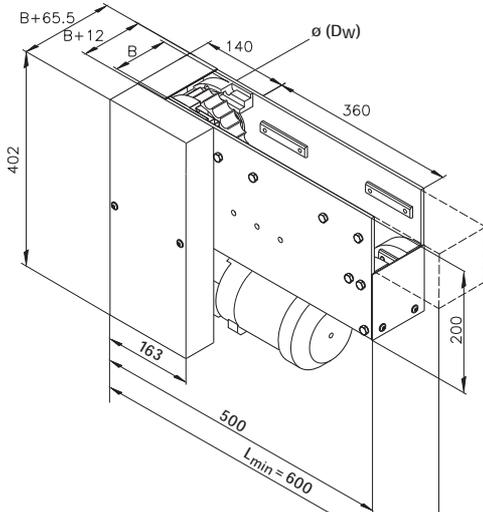
specified by mk depending on the above factors for each specific application. For systems which are to be completely installed by mk, please note that the direction (left/right) for the drive, transfer segments and curves must be defined in the direction in which the conveyor runs, i.e. towards the drive.



## Order Example

Name	Details	Ident-No.
Tail		B80.00.409
Transfer Segment	left	B37.00.002
Straight L1	670 mm	B08.00.409
Rolling Curve 180°	left	B36.00.428
Straight L2	700 mm	B08.00.409
Gliding Curve 90°	(R = 500 mm) right	B36.00.414
Straight L3	380 mm	B08.00.409
Rolling Curve 180°	left	B36.00.428
Straight L4	700 mm	B08.00.409
Rolling Curve 90°	left	B36.00.428
Transfer Segment	right	B37.00.002
Drive	Head/Left 230/400 VAC, 50 Hz Speed 20-100 ft/min Frequency Inverter Frame Width 100 mm	B01.00.409
Side Rail	SF10.1	B17.00.020
4 x Stands	System 52.5 (H = 700 mm)	B67.05.008
Chain		K114510031

# SBF-P 2254



## Drive AC

The motor can be located on the left (as shown) or right side. Motor power requirements typically vary between 1/3 - 3/4 Hp. Line speeds of about 8 - 40 m/min (130 fpm) are possible. Speeds less than 8 m/min. can cause the chain to run unevenly. In the range of  $L_{min} = 600$  mm, only straight lane elements may be used.

Width B	Chain Width B1	Type	Ident Nr.
100 mm	82,5 mm	sideflexing	<b>B01.00.409*</b>
130 mm	114,3 mm	sideflexing	<b>B01.00.410*</b>

\*without profiles and chain

## Tail

The tail, consisting of aluminum side plates and stainless steel covers, guides the belt precisely onto the running surface using high quality belt returns. In the range of  $L_{min} = 400$  mm, only straight lane elements may be used.

Width B	Chain Width B1	Type	Ident Nr.
100 mm	82,5 mm	sideflexing	<b>B80.00.409*</b>
130 mm	114,3 mm	sideflexing	<b>B80.00.410*</b>

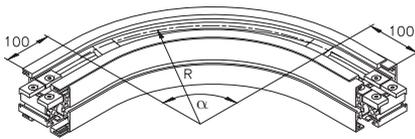
\*without profiles and chain

## Straight

Manufactured using our Profile mk 2254, the conveyor frame is extremely rigid. The belt is guided above and below using standard mk UHMW wear strips.

Width B	Chain Width B1	Ident Nr.
100 mm	82,5 mm	<b>B08.00.409*</b>
130 mm	114,3 mm	<b>B08.00.410*</b>

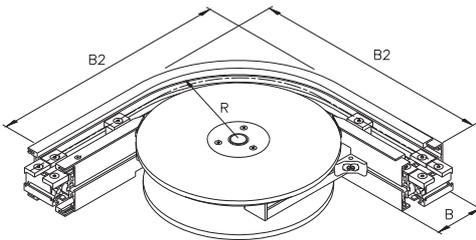
\*Assemblies with connecting elements, less chain



## Gliding Curve

UHMW guides the belt throughout the entire curve. This ensures that the belting never contacts the frame profiles. Economical to use, these gliding curves are primarily used with shorter conveyors as their application is limited to lighter loads and lower speeds.

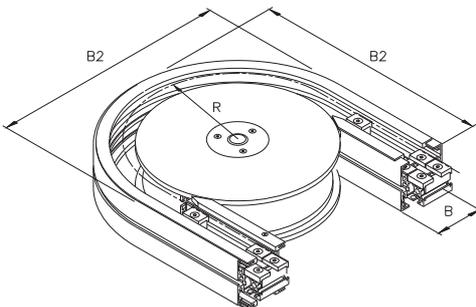
Width B	Chain Width B1	R	Ident Nr.
100 mm	82,5 mm	300 mm	<b>B36.00.416*</b>
100 mm	82,5 mm	500 mm	<b>B36.00.414*</b>
130 mm	114,3 mm	300 mm	<b>B36.00.417*</b>
130 mm	114,3 mm	610 mm	<b>B36.00.415*</b>



## Rolling Curve 90°

Designed using idler disks, the rolling curves significantly reduce the friction and tensile forces on the belt. As such, they are used where longer conveyor lengths, higher loads and higher speeds are required.

Width B	Chain Width B1	B2	R	Ident Nr.
100 mm	82,5 mm	500 mm	200 mm	<b>B36.00.428*</b>
130 mm	114,3 mm	530 mm	200 mm	<b>B36.00.429*</b>

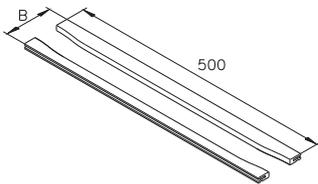
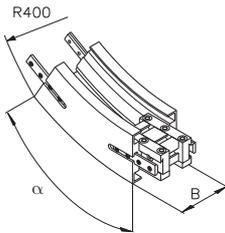


## Rolling Curve 180°

Designed using idler disks, the rolling curves significantly reduce the friction and tensile forces on the belt. As such, they are used where longer conveyor lengths, higher loads and higher speeds are required.

Width B	Chain Width B1	B2	R	Ident Nr.
100 mm	82,5 mm	500 mm	200 mm	<b>B36.00.430*</b>
130 mm	114,3 mm	530 mm	200 mm	<b>B36.00.431*</b>

\*Assemblies with connecting elements, less chain



## Vertical Bend

The vertical bend is designed for elevation changes. Depending on the product, we recommend cleated belts to prevent product slippage. As with all conveyor assemblies, wear strips ensure no contact between belting and frame profiles.

Width B	Chain Width B1	Type	Ident Nr.
100 mm	82,5 mm	15°	<b>B36.00.434*</b>
100 mm	82,5 mm	30°	<b>B36.00.435*</b>
100 mm	82,5 mm	45°	<b>B36.00.436*</b>
130 mm	114,3 mm	15°	<b>B36.00.438*</b>
130 mm	114,3 mm	30°	<b>B36.00.439*</b>
130 mm	114,3 mm	45°	<b>B36.00.440*</b>

## Transfer Segment

Using the transfer segment, products can be moved between conveyors on parallel lanes. With the precise guides and minimal gap, products remain very stable during transfer.

Width B	Chain Width B1	L	Ident Nr.
100 mm	82,5 mm	500 mm	<b>B37.00.002*</b>
130 mm	114,3 mm	500 mm	<b>B37.00.003*</b>

\*Assemblies with connecting elements, less chain

## Flat Top Chains

The flat top chains shown in the tables below are our normal standards. All represented chains are FDA-compliant. Plastics are not suitable for sharp-edged products or for cleaning with phosphoric acid/nitric acid. More accurate than by the permissible operating power, the right chain is selected at mk for each application individually using a chain calculation program which takes into account conveyor length, chain speed, dynamic pressure, lubrication, product type and weight. Other belts and materials are available.

Plastic Chains	Description	Ident-Nr.	Frame width [mm]	Chain width [mm]	R min [mm]	max. belt strength [N]	Material	Degree of hardness cleat	
	LF 880 TAB-BO-K325	<b>K114510031</b>	100	82,5	200	1680	POM brown		
	LF 880 TAB-K325	<b>K114510030</b>	100	82,5	500	2100	POM brown		
	LF 880 TAB-BO-K450	<b>K114510090</b>	130	114,3	200	1680	POM brown		
	LF 880 TAB-K450	<b>K114510085</b>	130	114,3	500	2100	POM brown		
	WLF 880 TAB-BO-K325	<b>K114510048</b>	100	82,5	200	1680	POM white		
	WLF 880 TAB-K325	<b>K114510049</b>	100	82,5	500	2100	POM white		
	WLF 880 TAB-BO-K450	<b>K114510091</b>	130	114,3	200	1680	POM white		
	WLF 880 TAB-K450	<b>K114510092</b>	130	114,3	500	2100	POM white		
	<b>with Cleats (not suitable for accumulated operating or side-discharge)</b>								
	HFP 880 TAB-BOT-K325	<b>K114510045</b>	100	82,5	200	1680	POM brown	45 shore A	
	HFP 880 TAB-BOT-K325	<b>K114510044</b>	100	82,5	200	1680	POM brown	60 shore A	
	HFP 879 TAB-BO-K450	<b>K114510093</b>	130	114,3	200	2100	POM brown	45 shore A	
	HFP 879 TAB-BO-K450	<b>K114510094</b>	130	114,3	200	2100	POM brown	60 shore A	
	Steel chains	Description	Ident-Nr.	Frame width [mm]	Chain width [mm]	R min [mm]	max. belt strength [N]	Material	
		SSR 8811 TAB-K325-8350N	<b>K114510047</b>	100	82,5	500	—	Carbon steel hardened	
SSC 8811 TAB-K450-8350N		<b>K114510063</b>	130	114,3	610	—	Carbon steel hardened		
SSR 8811 TAB-BO-K325		<b>K114510022</b>	100	82,5	200	4500	Stainless steel		
SSC 8811 TAB-K325		<b>K114510024</b>	100	82,5	500	6000	Stainless steel		
SSC 8811 TAB-K450		<b>K114510062</b>	130	114,3	500	6000	Stainless steel		
SSC 8811 TAB-K450-3500N		<b>K114510061</b>	130	114,3	610	—	Stainless steel		

# Flat Top Chain Conveyors

## *Application Examples*



180° Curve



Rolling Curve 180° with adjustable side rails



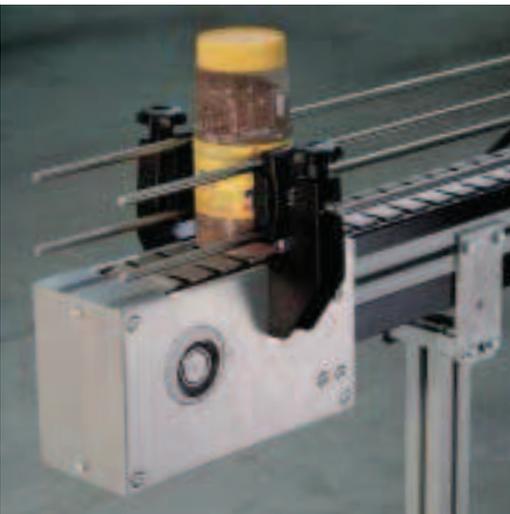
90° Curve with side rails



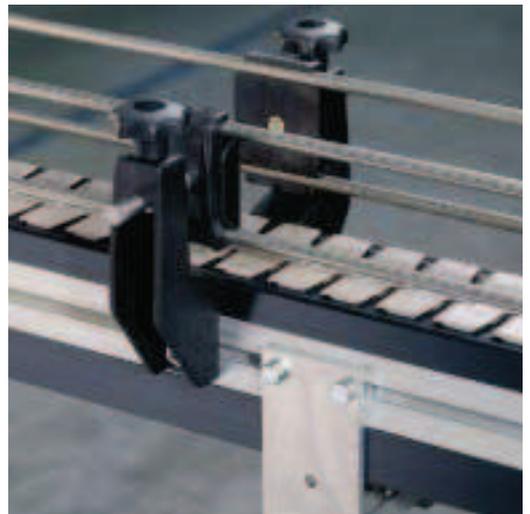
Stand 52.5



Transfer Segment with side rails



Tail



Standard side rails with width adjustment

# Flat Top Chain Conveyors

## *Application Examples*



**Mini-roller insert for bridging gaps when conveying small products**



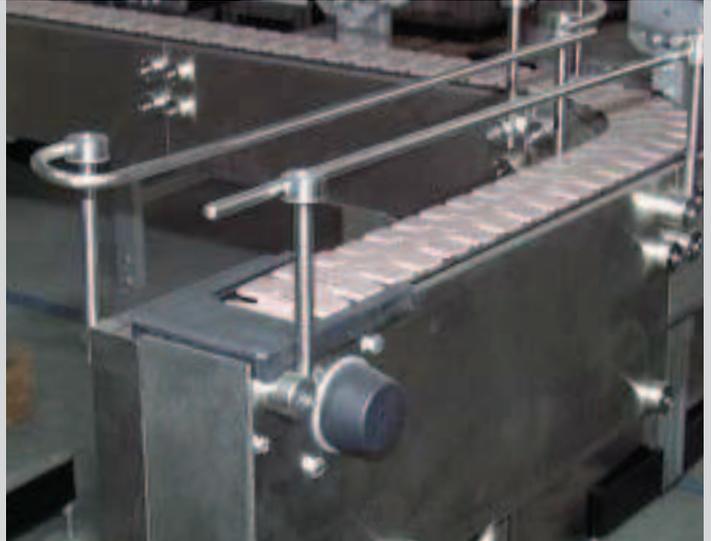
**Flat top chain with cleats**



**Section with small space requirements, e.g. for cooling the conveyed product**



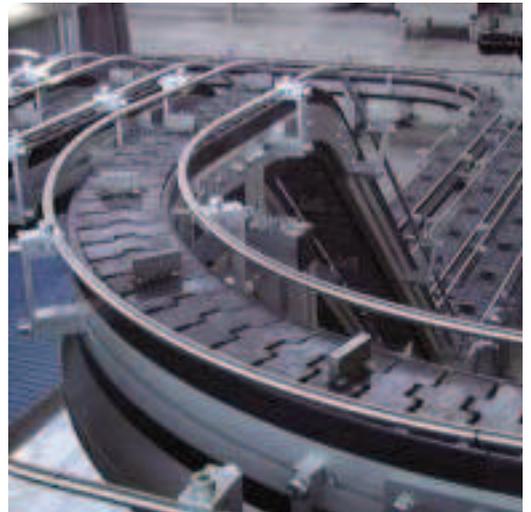
**Transfer Segment  
with Steel Chain**



**Flat top chain with stainless steel conveyor  
frame for use in the food industry**



**Transfer Segments from two sides**



**Flat top chain with welded cleats**

# Flat Top Chain Conveyors

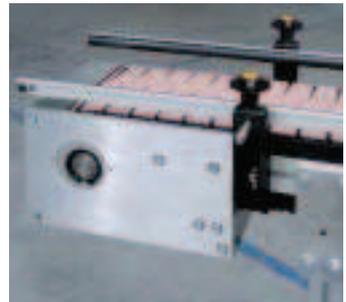
## *Application Examples*



180° Curve



Short vertical bend for forming  
a storage area with several levels



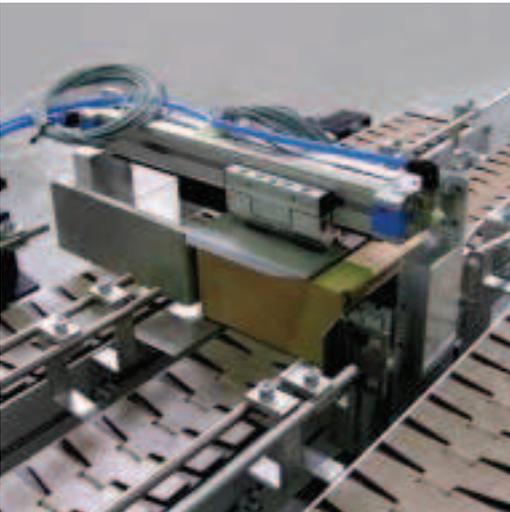
Tail with side rails



Curve with adjustable side rails



SBF-P 2254 tail and side rails



SBF-P 2254 with transfer pusher,  
e.g. for the packaging industry



Dual-lane flat top chain conveyors