The MayTec Conveyor System

The MayTec conveyor system provides optimal adaptation to the required task. Belt material, drive type and profile design can be combined in any number of combinations to best suit the application.

Simple handling, reliable technology and solid construction guarantees the problem free operation and long life of the system. Along with the huge range of standard sizes and designs, special sizes and custom designs are available on request.

For self assembly, individual components and assemblies can be delivered along with parts lists and assembly instructions as required.

MayTec offers a conveyor system for rapid implementation with short delivery times.

The Components

1. Product Type:	• Complete conveyor • Components for self assembly
2. Designs:	• MayTec Protection Class: M-SK1 • MayTec Protection Class: M-SK2 • MayTec Protection Class: M-SK3
3. Belt Path:	• Belt running to outside edge • Belt running along inside edge
4. Drive Types:	• Direct drive • Drive under belt • Center drive • Axial caylinder motor
5. Conveyor Height:	• 30 mm • 60 mm • 100 mm • 150 mm

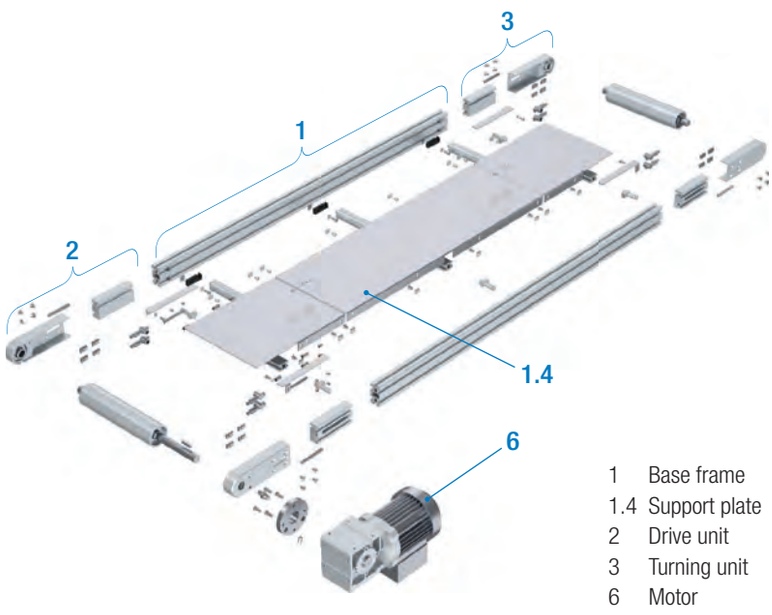
The Advantages

1. **Available in any required stage of assembly**
2. **Pivoting bearing housings for shaft bearings**
3. **Simple belt tensioning**
4. **Easy removal of drive motor and gearbox**
5. **Short assembly times**
6. **No disturbing contours by belt or frame**

Belt Conveyors

- Belts can be run over the framing profile flush with the outside edge (outside running) or between the profiles (inside running) as required.
- Drive variations include direct drive, drive under the belt, center drive and driven roller.
- The selected height of the conveyor side rail (30, 60, 100 and 150 mm) is governed by the expected maximum weight (max. 150 kg/m).
- Belt widths are available from 100 to 1,300 mm with roller distances from 300 to 12,000 mm and possible belt speeds of 1.5 to 60 m/min.

Single parts for self assembly



1 Base frame
1.4 Support plate
2 Drive unit
3 Turning unit
6 Motor

Conveyor complete

	Description		MayTec Protection Class		
			M-SK1	M-SK2	M-SK3
Base Frame	Frame Profiles	with slots	•		
		without slots		•	•
	Support Plate	stainless	•	•	•
	Support Rollers	galvanised	•	•	
		stainless			•
Drive Roller	Bearing	standard	•	•	
		stainless			•
	Rollers, Shafts	St-52	•		
		stainless		•	•
	Cover for Tensioning Unit			•	•
Drive Mounting Set	Bearing	standard	•	•	
		stainless			•
	Shafts	St-52	•		
		stainless		•	•
Connection Elements	Screws	galvanised	•	•	
		stainless			•
	Connectors	galvanised	•	•	
		stainless			•
Accessories	Motor	IP 54	•	•	
		IP 65			•
	Belt	PVC	•	•	
		PU			•

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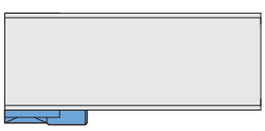
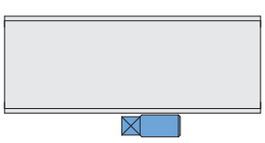
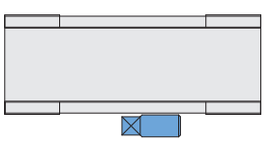
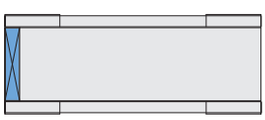
Drive types and belt paths

5.04

Drive type	Belt path	
	Belt running outside 	**Belt running inside** 
Direct drive		
Drive under belt		
Center drive		
Axial cylinder drive		

= Motor

Belt running outside

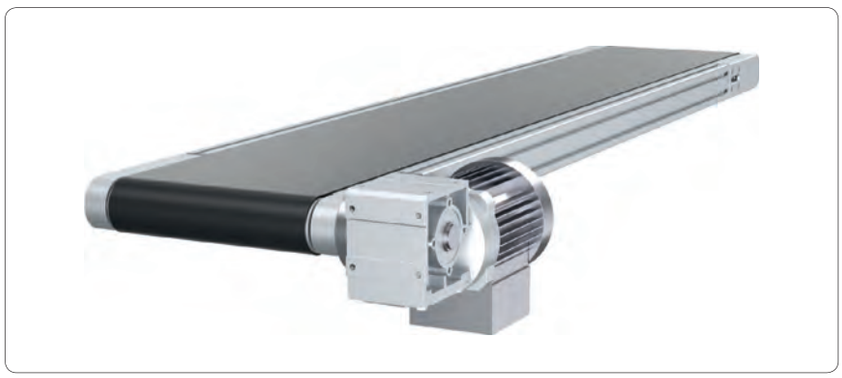
Direct drive

Drive under belt

Center drive

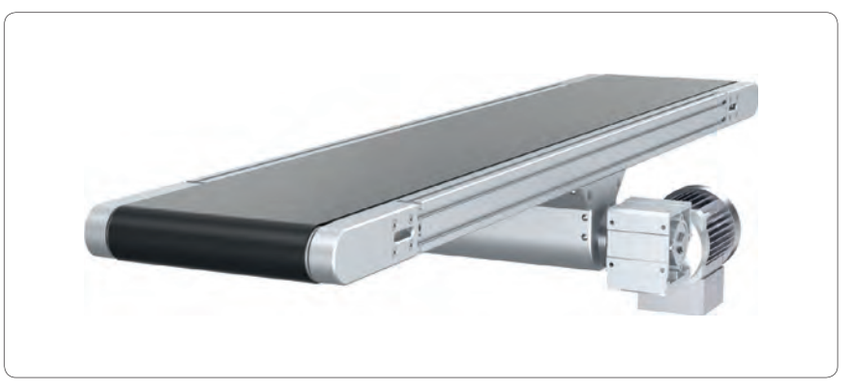
Belt running inside

Direct drive



Drive under belt

Center drive



Axial cylinder motor

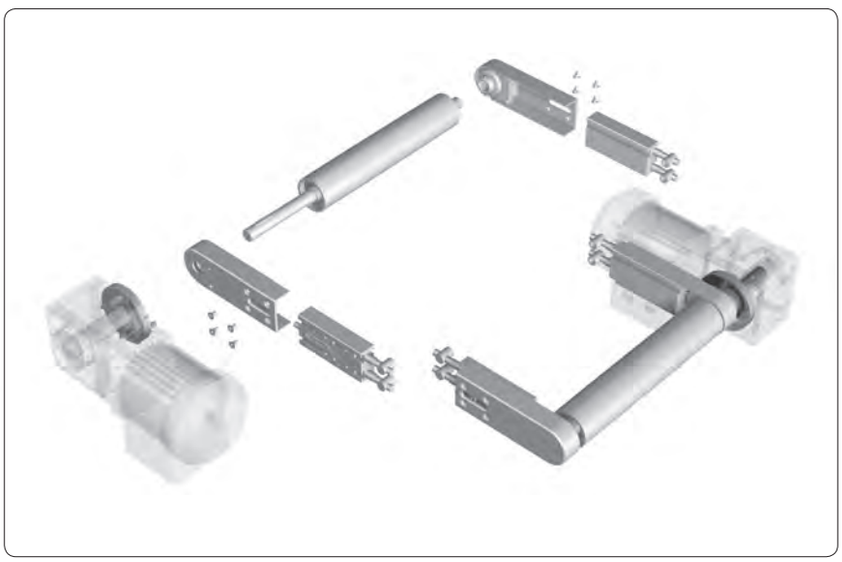
Patent pending

The most important factors for an effective assembly and operation of the unit are:

- Simple assembly
- Simple adjusting of the belt

End roller brackets

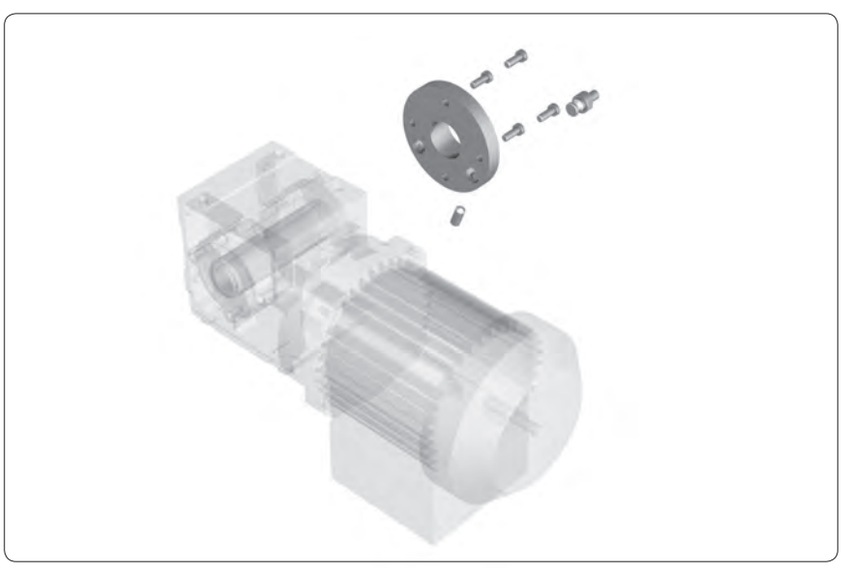
- No overlapping of the frame profile
- Pivoting shaft bearings in casing
- Anodised aluminium housing



The bearing for the end roller shafts are mount in spherical sockets to allow the pivoting movement of the shaft without causing damage.
This technology eliminates any pivotal forces and damage to the bearing caused by one sided adjustments of the roller to compensate for belt tolerances.
The exact nature of the shaft guidance provided by the end roller brackets allows fine adjustments of the belt tension to be made.

Drive mounting

- Completely encased drive shaft
- Rapid change drive system



The drive shaft is completely protected by a ring flange thereby saving the shaft from dirt build-up and protecting the system from external particles or objects.

The motor and gearbox are mounted to the line using a special flange with a single locking bolt allowing the drive to be changed in a matter of seconds.

Plastic link chain conveyors

Designed initially for the food industry, plastic link chain conveyors are now being more widely used as alternatives for metal and wire chain link types.

Also, standard material belt conveyors are now being replaced with modular designs due to shorter life spans of lines. MayTec conveyor building blocks are available in belt heights of 60, 100 and 150 mm with chain links of 1/2, 3/4, 1, 1.5 and 2 inches.

- The plastic chain belt must be run between the profiles (inside running).
- Drive variations include direct drive, center drive and driven roller.
- The selected height of the plastic link chain conveyor can be 60, 100 or 150 mm and is governed by the maximum weight of 150 kg/m.
- Belt widths are available from 100 to 2,000 mm with roller distances from 300 to 25,000 mm and belt speeds of 3.0 to 30 m/min.

The advantages

1. **Positive geared tooth drive.**
2. **Tensioning device often not required or used with very little adjustment.**
3. **Belt control is simple, side movement impossible, little or no belt maintenance required.**
4. **Plastic link chain belts can be used over a wide temperature spectrum.**
5. **Corners can be easily achieved through curved designs without handing product over between two straight lines.**
6. **Large axis distances are possible due to the strength and stability of the belt.**
7. **Endless belts can be assembled without any special tools.**
8. **Damaged sections of belts can be replaced separately without replacing the whole line.**
9. **Spare parts inventory is reduced as only short belt lengths need to be kept.**
10. **Plastic link chain belts offer a high degree of lateral stability.**
11. **Open surface design (e.g. mesh form) of the belt is possible.**
12. **Belt width can be larger than the axis distance.**
13. **No limits to belt width.**
14. **Simple cleaning.**
15. **Low slide resistance of the material.**
16. **Higher resistance to cutting and impact damage.**
17. **No expensive, high tolerance drive and idling rollers required.**
18. **Cross members and side plates for inclined conveyors can be fitted with small guide rollers.**

Article-No.:
5.111.1120.10030
.84SP.□□□□×□□□□□
(width × length in mm)

M-SK1 Belt conveyor complete

Type: 111-1120-100

- **Running outside**
- **Direct drive**
- **Height: 100 mm**
- **Conveyed material: ...**
- **Max. weight of conveyed material: 70 kg/m**
- **Belt width: □□□□**
- **Total width: ...**
- **Axle distance: □□□□□**
- **Total length: ...**
- **Base frame: Profile 30×100, 8F, SP**
- **Belt type: MG 10/2 0+05 PVC black, double ply**
- **Belt speed: ...** ☞ 85
- **Motor: ...** ☞ 85
- **Position of motor: ...** ☞ 84

Numerical key 5.08

Conveyor

	Type	
5.□□□.□□□□.□□□□□		**Key (line 1)**
5.□□□.□□□□.□□□□□	Design [1]	
5.□□□.□□□□.□□□□□	Type [2]	
5.□□□.□□□□.□□□□□	Construction [3]	
5.□□□.□□□□.□□□□□	Position of belt [4]	
5.□□□.□□□□.□□□□□	Kind of drive [5]	
5.□□□.□□□□.□□□□□	Position of profile [6]	
5.□□□.□□□□.□□□□□	Belt support plate [7]	
5.□□□.□□□□.□□□□□	Conveyor - height	
5.□□□.□□□□.□□□□□	Profile width	
.□□□□.□□□□×□□□□□		**Key (line 2)**
.□□□□.□□□□×□□□□□	Profile-Type	
.□□□□.□□□□×□□□□□	Belt width	
.□□□□.□□□□×□□□□□	Axle distance	

[1] MayTec Protection Class
1 = M-SK1
2 = M-SK2
3 = M-SK3

[2] 1 = Belt conveyor
2 = Plastic link chain conveyor
3 = Metal link chain conveyor

[3] 1 = Linear
2 = Ascending
3 = Angled
4 = Curved

[4] 1 = running outside
2 = running inside

[5] 1 = Direct drive
2 = Drive under belt
3 = Center drive
4 = Axial cylinder motor

[6] 1 = horizontal
2 = vertical

[7] 0 = flat
1 = channeld down
2 = channeld up
5 = slide rail Type 1
6 = slide rail Type 2