

# **Standard Belt Conveyors**



# **MONK Conveyors Limited**

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# **Overview**

Our compact yet robust belt conveyor is a proven product which is very reliable and easy to install. Ideal for handling most light and medium weight products. They have a very narrow profile and are especially suitable for use in production lines where space is limited. Our conveyors are built using standard modules which enables us to quickly build a conveyor to your specification. They are safe, have a low noise level and have T-slots on both sides for installing guide rails, sensors, etc. There is also a choice of three different drive units.



- Tee slots for M8 fixings.
- Idler roller diameter 50mm.
- Adjustable side guide option.
- Belt speeds 0.13 to 53m/min.
- Choice of drive configurations.
- Crowned rollers for accurate tracking.
- Drive Roller Diameters 50mm and 63mm
- Stainless steel belt support & side guides.
- Low power requirement conserves energy.
- Backbone 40mm square anodised aluminium extrusion.
- Standard Belt Widths: 40mm, 80mm, 100mm, 200mm, 300mm, 400mm & 600mm.



# **Fixed Integral Side Guides**

- Standard stainless steel side guides
- Integral part of the bed plate
- Increases the stiffness of the bed plate
- Heights: 20 and 40mm



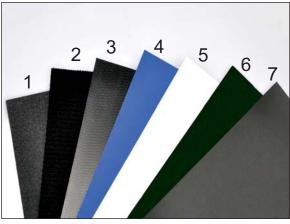
# **Adjustable Side Guides**

- Aluminium extrusion
- Replaceable plastic wear strip
- Adjustable for height and width
- Can be bent to form a lead-in



#### **Belt Guard Option**

- Guards the edge of the belt using our special extrusion
- Full underside guarding can also be supplied
- Ensures extra operator safety



#### **Belts**

There are many different belts available. Our top seven are described below.

- 1. Silon low grip flock surface ideal for delicate parts
- 2. Black PVC heavy duty course grip belt ideal for inclines
- 3. Black ribbed urethane high grip belt ideal for inclines
- 4. Blue urethane food quality belt
- 5. White urethane food quality belt
- 6. Green smooth PVC general use belt
- 7. Black smooth urethane general use belt





#### Centre Drive M1950-CD

This drive can be moved to any position along the length of the conveyor. This enables the conveyor to fit conveniently into restricted spaces.

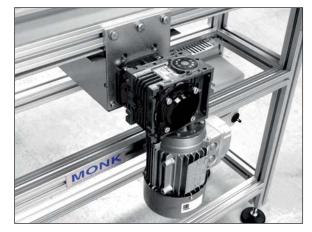
- Large drive roller diameter of 63mm
- Belt has a large rap around of 255 degrees
- Integral thermal overload trip
- End Roller Diameters: 50mm
- Speed Ranges: 0.13 to 53m/min



#### End Drive M1950-ED

This conveyor can be used with belt flights and attachments.

- Drive and idler roller 50mm diameter
- Belt Widths: 80 to 600mm
- Lengths: 1m 5m
- Speed Ranges: 1.4 to 42m/min



## **Heavy Duty Quick Change Drive**

Motors are very reliable but sometimes may need to be changed.

- Motor can be changed with the minimum of down time
- Ideal for use in long production lines
- Choice of SEW or Motorvario geared motors



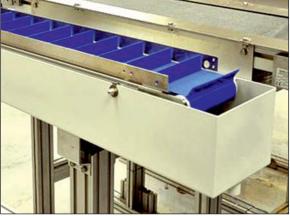
#### Controls

- Inverter motor speed controller
- Adjustable ramped acceleration & deceleration
- Frequency indicator
- Simple fault finding codes
- Easy to install and program
- limited number of parameters for an AC drive
- Also available in the IP65 (NEMA 4) version
- Ratings up to 2.2 kW.
- 220v, 110v single phase or 3 phase 220v and 400v
- Comes complete with built-in class A EMI filter



# In line Flights

- In line flights can be welded to the belt
- Separates the belt into lanes
- Can be used to keep components separate
- Many different profiles and sizes available



#### **Drip Trays**

- Oil, cutting fluid etc. can be saved and returned to a tank
- Used on the outlet of machining centres



## **Integral Belt Edges**

- Used where small components could get under the belt
- Also used to keep a liquid on the belt



#### **Belt Bend**

- Inner radius 200mm to 1200mm
- Outer radius 600mm to 2200mm
- Stainless steel main frame
- Turning angle 90 or 180 degrees (other angles phone)
- Belt Widths: 300mm, 400mm & 600mm.
- Speed Range 1.4 to 20m/min
- Load up to 10kg/sqm
- Food standards FDA/USDA



# **Small Conveyors**

- Conveyor shown is only 300mm long
- Used in automatic machines
- We can design special conveyors to your specification



# **Split Belt Conveyor**

• Suitable for "headed" components



# **Multi-Lane Conveyors**

- Used for conveying high volumes of components
- Driven from one motor



# **Belt Flights**

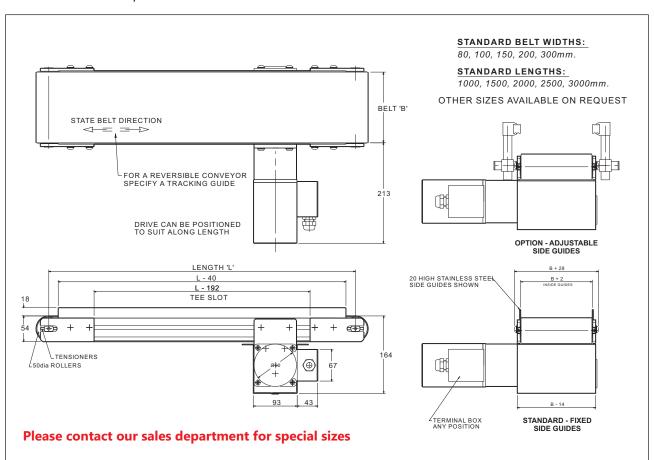
- Belt flights can be welded to the belt
- Ideal for separating products
- Can be used for collating groups of products
- Many different profiles and sizes available
- Used on inclined conveyors and elevators

# MONK CONVEYORS Example: Standard Belt Conveyor M1950-CD Centre Drive - End Roller size 50mm Ø



Food quality belt option blue or white.

Variable speed.



#### **FIXED SPEEDS**

	BELT SPEED
	M/min
	53
	44
	35*
	26
	22*
	17
	13*
	11
	9*
	5*
	3.5*
	2.6*
	2.2
	1.7
	1.3
_	

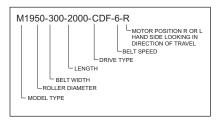
#### **VARIABLE SPEED**

BELT SPE	BELT SPEED M/min		
MIN	MAX		
5.4	55		
4.6	45		
3.6	36*		
2.7	27		
2.2	23*		
1.8	18		
1.4	14*		
1.1	11		
0.9	9*		
0.5	5.4*		
0.4	3.6*		

#### NOTES:

- 1). \* PREFERRED SPEEDS.
- 2). MANY OTHER SPECIFICATIONS ARE AVAILABLE.

#### **ORDERING EXAMPLE**





# **Example:**

**Standard Belt Conveyor M1950-ED** 

End Drive - End Roller size 50mm Ø

Standard belt widths 80 to 600mm.

Standard Lengths 1 to 5 meters.

Backbone 40mm square extruded section.

Tee slots for M8 fixings

Bed plate stainless steel.

Optional stainless steel side guides.

Motors 230v 90W or 415v/3ph/50hz 90W.

Thermal overload protection switch.

Continuous rating.

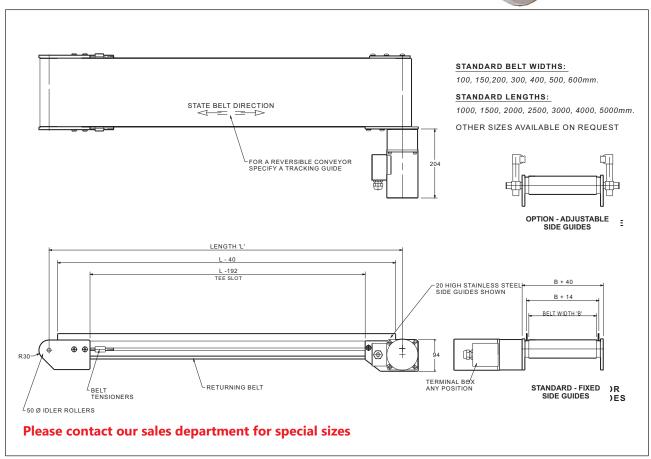
B class insulation & terminal box to Ip54.

Belt speeds from 0.1m.min to 26m/min.

Variable speed option.

Food quality belt option - blue or white.





#### **FIXED SPEED**

BELT SPEED M/min 42* 35* 28*
42* 35*
35*
28*
21
18*
14
10*
8
7*
4*
2.8*
2.1
1.7
1.4

# VARIABLE SPEED

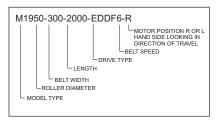
BELT SPEED M/min			
Min	Max		
8*	42*		
7*	35*		
6*	28*		
4	21		
18*	18*		
3.6	14		
2.0*	10*		
1.6	8		
1.4*	7*		
0.8*	4*		
0.4*	2.8*		
0.4	2.1		
0.3	1.7		
0.2	1.4		

#### NOTES:

#### 1). \* PREFERRED SPEEDS.

2). MANY OTHER SPECIFICATIONS ARE AVAILABLE.

#### **ORDERING EXAMPLE**





# **Conveyors & Handling Equipment Examples**



**Grip Conveyors** 



**Special Flat Belts** 



**Mat Top Conveyors** 



Hand Assembly
Stations with Rotating
Storage Tables



Carton Handling Conveyors



**Escapements** 



Special Roller Conveyors



Rotating Storage Tables



Roller Conveyor Diverter Units



**Indexing Buffer Stores** 



Elevators - Plastic or Stainless Steel



Lifts to Overhead Conveyors



Multi-Lane Flat Belt Conveyors



Ready Made Meal Conveyors



Conveyors With Liquid Return Troughs



**Fruit Packing Lines** 

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