



TRANZBAND

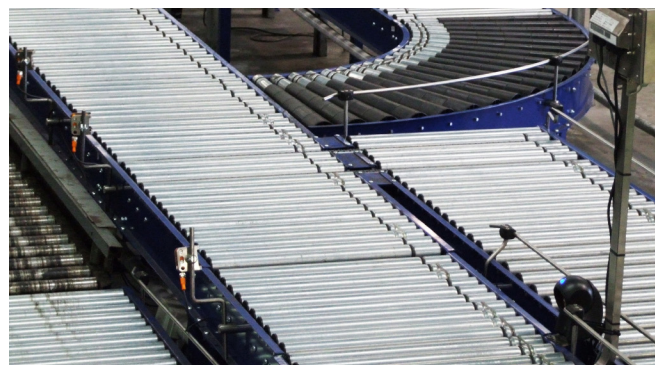
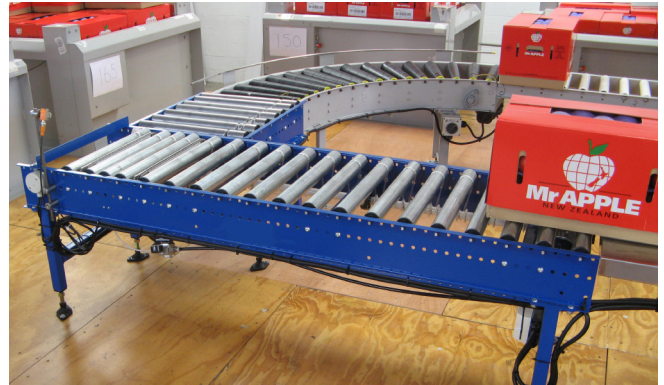
Whether straight transfers, accumulation, around bends or through gates, Tranzband (or lineshaft) powered roller conveyor with inbuilt accumulation has been proven in many industrial situations. The basis of the system is the tough polyurethane belt, which enables each grooved roller to be independently driven from a common line shaft. Simple, yet providing the whole system with reliability and flexibility; plus minimum power consumption due to no loss energy through skid friction.

Features & Benefits

- Modular design allows the system to be modified or added to easily
- Accumulation allows rollers under product to stop when it comes up against a physical stop
- Accumulation pressure is adjustable
- Tapered rollers give accurate powered transfer around bends
- Incline/Decline belts can be incorporated into system (accumulation not recommended for these sections)
- Minimum power consumption due to no loss of energy through skid friction
- Safe - Spacers between drive spools, no pinch points or chains
- Fully guarded option available

Uses

- Warehousing and Distribution
- Fruit/Vegetable carton and crate packing
- Meat - carton handling
- Product Manufacturing
- Logistics and baggage handling





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Specifications

Dimensions

Standard straights: 2.4m and 1.2m - customised lengths available on request

Width: optional

Standard bends: 90° and 45° - other angles available on request

800mm inside radius

163 x 25 x 3mm channel

Frame Construction

Powder-coated mild steel, Colour; Pommel Blue (standard)

Custom colours available on request

304 Stainless Steel option

Drive Motor

Geared drive motor, 3 phase, IP55 (other IP rated motors available for special application)

Single phase optional

Variable speed available

Shaft mounted gear boxes

Drive Shaft

25mm Ø

304 stainless steel or mild steel

Sealed precision bearings in cast iron housings on mild steel systems

Plastic block bushed bearings for wash down on stainless systems

Rollers

Galvanised - Galvanised steel tube with sealed precision bearings, aluminium shaft

Dynopipe - PVC tube, aluminium Q shaft, plastic bearing housing with stainless steel or carbon steel balls

Tapered - Rollers for bend sections

Stainless Steel - 304 and 316 stainless steel rollers also available 64, 96, 128 or 160mm pitch

Sprocketed Couplings

Stainless steel or zinc plated

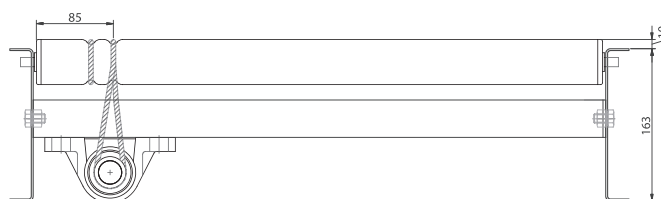
Safe and clean plastic couple chain

Stands

Adjustable height 600-900 TOR. Free standing or provision for bolt down. Other heights available on request

Design Recommendations

- Roller drive – 8kg each when accumulating
- Pitch of rollers – minimum 3 rollers under load at all times
- Stands – to calculate number required, allow 1 stand for each straight section (best placed on joint), 2 stands for each bend plus one additional stand for each complete conveyor.
- Design the system so that only straight flat sections are used for accumulation where possible.



1.0 End view of standard Tranzband system

Calculations for Drive

Details required

- 1) Pitch of rollers
- 2) Speed required
- 3) Total length of straight conveyor used with and without accumulation
- 4) Number of bends

Power required for bend = 6 m of straight without accumulation.

1m of straight used for accumulation = 2m of straight not used for accumulation.

Maximum length of conveyor that can be driven by standard 1/2 0.37kw inline geared motor

Roller Pitch	SPEED	
	14mpm	28mpm
64mm	20m	10m
96mm	30m	15m
128mm	40m	20m

mpm = metres per minute

m = metres of straight conveyor not used for accumulation.

Double capacity for 1hp 0.75kw drive unit.

Maximum length of shaft either side of drive unit, 15 metres.



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Options

Chain Transfer

Used to transfer another product onto a conveyor line at 90°.



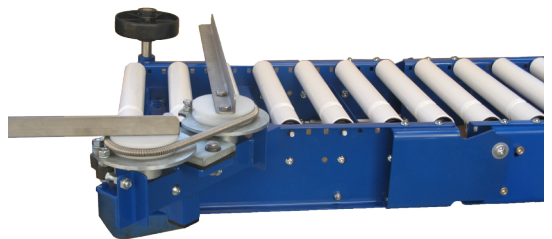
Chain Transfer

Drop Gate

Creates a gap in the line to feed off meter into machinery e.g case taper, labelling machine or weigh scale.

Policeman/Merge

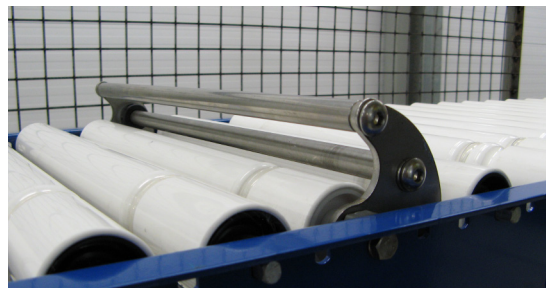
Operated by carton pressure only. The police man alternates the flow of traffic by only allowing one lane to progress at a time.



Policeman/Merge

Rollover stop

A physical stop that comes up between the rollers to stop the product, can be air operated or by a mechanical handle.



Rollover stop

Linebrake

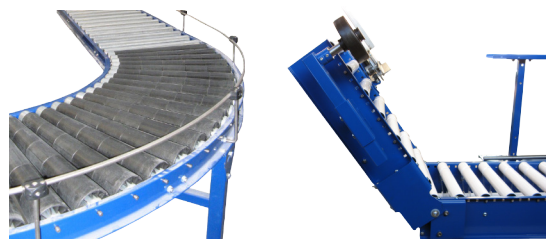
A series of rollers to lower accumulation pressure or create gaps between products.



Linebrake

Pedestrian Access Gate

Allows a pedestrian through conveyor lines, as the gate lifts up, the drive on the gate disengages.



Guiderrails

Pedestrian Access Gate

Accelerator

Speeds up a series of rollers to create a gap between cartons.