

Flex Chain Conveyor



Ecoclean

Technology

The FCC is designed and used to handle parts on pallets. The maximum load per pallet is around 10 to 12 kg (the maximum load per pallet depends on the length and on the accumulated number of parts). The speed is 6 to 10 m/min.

This type of conveyor offers the possibility of creating a circuit around a main loop by integrating secondary loops to distribute parts to different machines or work stations by means of a pallet identification system.

With the diversity of equipment (curve, divert unit, return unit) and the specificity of the drive unit you can easily build-up your own system just like a jigsaw puzzle.

Fields of application

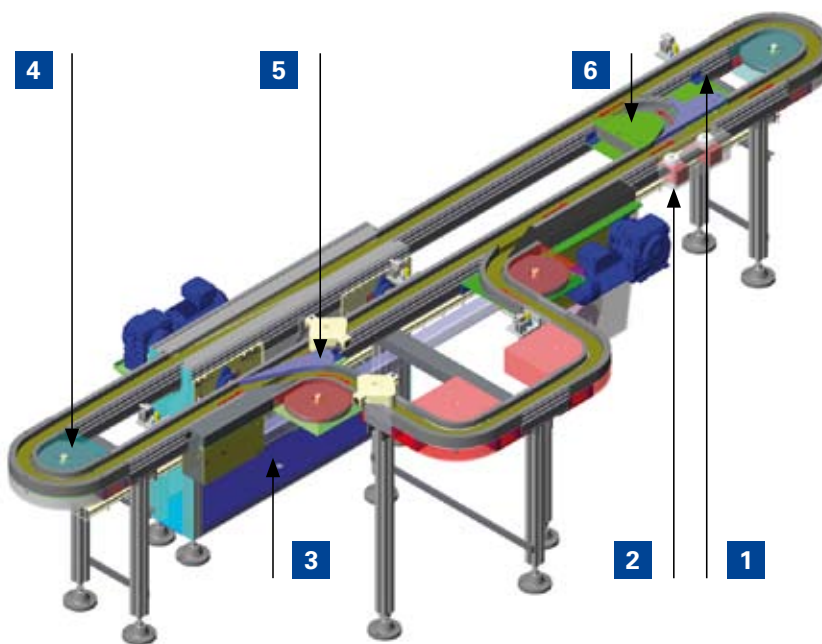
- The FCC is made to distribute parts towards different operations from a main loop by means of secondary loops.
- Equally suited for slightly wet or dry manufacturing environments
- Manual load and unload
- Exchange parts via gantries, robots,

Accumulation

- The FCC is designed for accumulation.
- The pallet design is made to permit the accumulation in the curve (depending on the part).

Transported part types

- Automobile gearbox parts (shaft, pinions,)
- Automobile engine parts (camshaft, connecting rods,)
- Various stamped parts
- All parts have to be transported on a pallet, maximum load per pallet: 12 Kg



1 Pallet

The molded resin standard pallet permits, with its central fastening and 2 points of centering, the adaptation of support tools for all types of parts.

The pallet is pre-equipped with lateral spaces to attach a detection ring and an electronic sticker permitting the following of production.

2 Anchorage - Stopper

The compact pneumatic module fixed on the profile side permits pallet distribution.

The fastening mode on the conveyor belt profile ensures easy and fast adjustment.

3 Drive unit

Complete and integrated module in a frame, it integrates the motorization and drive unit. The balancing adjuster ensures the absorption of slack on the chain and the advanced regulation of the lead chain between 2 modules.

4 Curve 180°

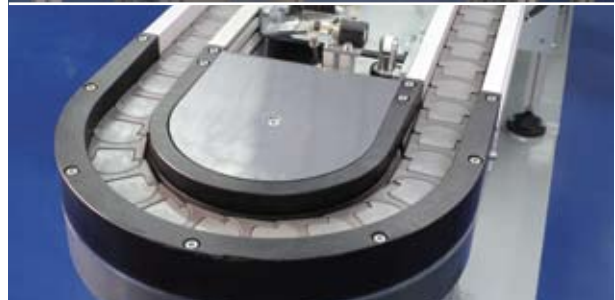
The curve, with its different standards (180°, 90°,) and adaptation possibilities, enables all types of circuits to be created. Consisting of a rotary plate on bearings, it limits chain strain and guarantees smooth functioning.

5 Divert unit

This function permits, directly on the circuits, the deviation of a pallet from one circuit to another, following flux selection benchmark. Compact and under pneumatic control, this module is a complete set with integrated curve.

6 Round About

This function, adapted to mass-production lines with or without under-rings, allows the pallet to be returned from the exit to its starting position, following the flux selection benchmark, and subsequent operations to be either carried out or not. The plate does not need a drive unit since it is driven by the chain. As it is compact, this module is a complete set with integrated divert unit.



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FCC product integration

- FCC Curve (180°, 90°)
- FCC Divert unit
- FCC Return unit
- FCC Anchorage
- FCC Centering unit

Safety

The chain is an enclosed safety chain.
The drive unit is completely protected.
The divert unit has a force limitation.

Collection of drippings

The conveyor structure is an open architecture; the chain moves between 2 aluminum beams and is supported by 2 circular steel bars, so possible drippings can easily be drained to the drip pan through the structure.

The standard drip pan is located on the floor which makes it easy to clean and provides maximum access to the drives and equipment. We can also supply different types of drip pans.

Maintenance and redeployment

- Curve, divert unit... are equipped with long life lubricated bearings.
- Designed for easy access to the different equipment.

Technical Data

Part	Size	Width	Length
Minimum	50 mm	50 mm	-
Maximum (1) (2)	200 mm	170 mm	350 mm

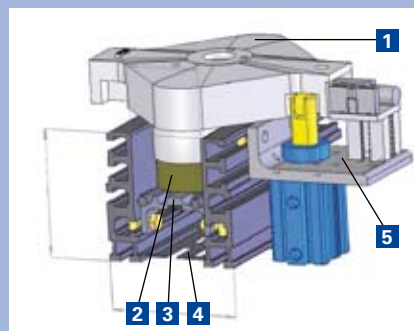
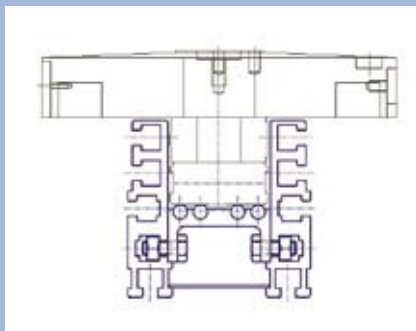
(1) Maximum size for the flow of parts in curves.

Please contact us for parts of larger size.

(2) Dimensions of parts related to shape and center of gravity of the parts.

Please contact us if you have further questions.

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Ecoclean FCC

- 1 Pallet
- 2 Chain
- 3 Chain rail
- 4 Security
- 5 Stop