



Floor-based conveying technology

System BFT 823

Intelligent Power & Free floor-based conveying technology in particular for transporting plastic components. Thanks to its high positioning accuracy, the system is also ideally suited for robot applications.

General key data	BFT 823
Rail system	U80
System height	330 mm
Flange width	340 mm
Universal joint link chain (chain pitch 400 and 500)	H70
Buffer length carrier	300 mm
Max. payload	200 kg
Min. radius curve H	$R_H = 700$ mm
Min. radius curve V	$R_V = 1100$ mm
Temperature range	up to 250 °C
Max. incline	30°
Positioning accuracy (in 2 m height spherical)	5 mm



Overview

- ▶ Three-track system allowing ascending and descending slopes as well as branching for complex material flow
- ▶ Varying speeds in process areas through frequency-controlled drives of the individual chain circuits
- ▶ Special guide rails ensure high positioning accuracy; passive or active rotary units provide correct orientation during the coating process
- ▶ High plant availability and low maintenance effort through the use of standard components by Schierholz such as the carriers, drives and the known universal joint link chain
- ▶ Can be used on hall level or in pits provided for this purpose
- ▶ Smooth running and stability due to special carrier construction with 4 wheels and 4 guide rollers
- ▶ Carriers can be coupled by using a crossbar

Advantages in layout design

- ▶ Ascending/descending slopes up to 30° (load-dependent)
- ▶ Infeed and outfeed points for branching
- ▶ Buffer lines, maintenance area, parallel loading/unloading stations, overtaking routes as well as multiple circling
- ▶ Rotating stations from 0 to 360°, continuous or stationary
- ▶ Short stack distance of 300 mm

Advantages in running

- ▶ Conveyor lines with varying speeds by using switches and chain changes in separate chain circuits
- ▶ Special chain circuits for different temperature ranges
- ▶ Intelligent end of work mode switching, colour change control as well as plant start within the system is possible
- ▶ Plant control with PLC including plant visualisation
- ▶ Good positioning and guiding accuracy thanks to adjustable free rail

Advantages in running costs

- ▶ Simple and proven mechanics, low spare parts provision
- ▶ Low-maintenance and oil-free cardan chain; low maintenance in general
- ▶ Sealed roller bearings for carrier and cardan chain
- ▶ Calculation of the chain forces and drives using specially developed design software

