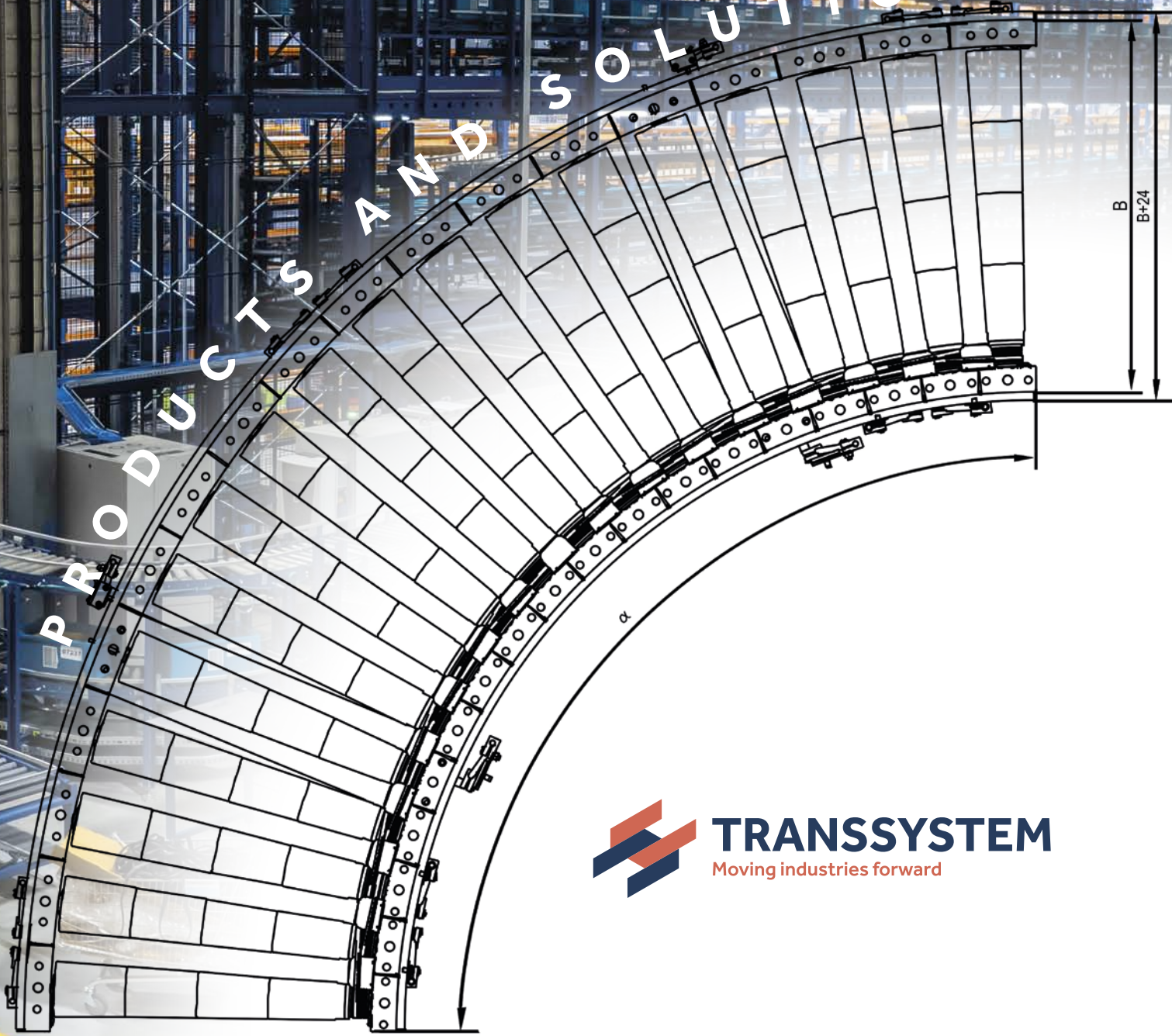


PRODUCTS AND SOLUTIONS



**TRANSSYSTEM**

Moving industries forward

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# Moving industries forward

## ABOUT US

**At Transsystem we specialize in technology solutions customized to the individual needs of our customers.**

We focus on tire & intralogistics industry and industrial companies using automated material handling systems in their production and logistic processes.

Headquartered: **Łańcut**

Founded: **1991**

Transsystem was founded in 1991 and for the first years of its activity it was involved in the production of steel structures for the automotive industry. In subsequent years the company expanded its scope of activity to include design, production, assembly on facilities and start-up of technological transport systems and for over a decade it has been successful in the delivery of advanced intralogistics systems and tire handling equipment.

### **The company's main areas of activity are:**

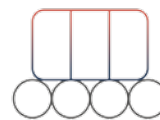
- Internal technological transport systems and intralogistics
- Tire and rim handling systems and rubber cutting machines
- Steel structures for all applications according to our own and entrusted documentation
- Assembly of devices and steel structures on facilities
- Modernization of hall transport systems
- Development of concepts and programming of transport processes

The company employs over 400 people and the design and production of devices that are part of transport systems takes place in the plant next to the company's headquarters in Lancut near Rzeszów. Many years of experience in the industry, attention to high product quality, creativity of engineering departments and competence of the crew enable the company to offer modern and efficient devices and transport systems. Transsystem SA offers transport devices, extensive functional sets and complete transport and storage systems, implementing projects as a general contractor or as a subcontractor.

In this catalogue you will find the most important products, devices and systems manufactured and offered by Transsystem SA. The catalog does not contain the company's full offer and if you are looking for devices or solutions that are not in the catalog or whose parameters differ significantly from those presented in the catalog, please contact us. In addition to the production of standard transport devices, Transsystem SA specializes in the design and production of devices and structures dedicated to specific needs, such as load-bearing columns for ski lifts or casings for specialist industrial furnaces.

We respond to every query and if necessary, we organize online meetings and visits to Clients so that after collecting the data, we can prepare the most optimal solution and present the most advantageous offers. We invite you!

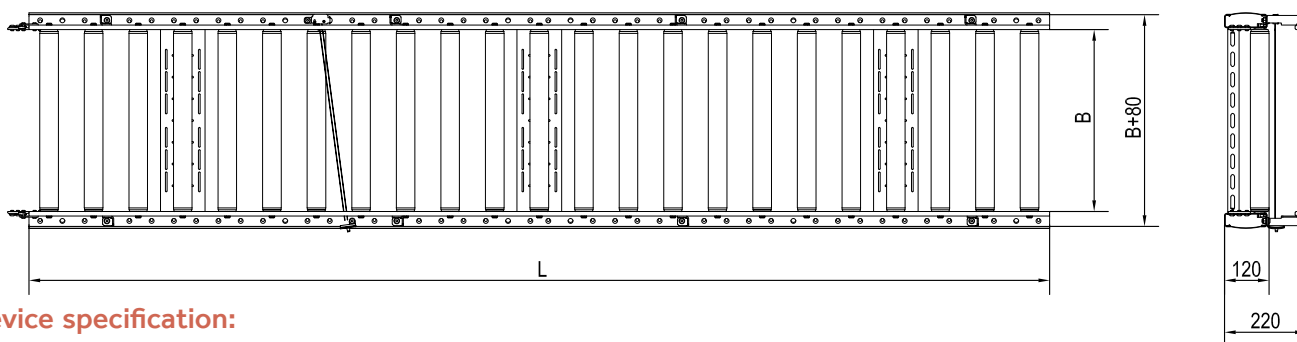
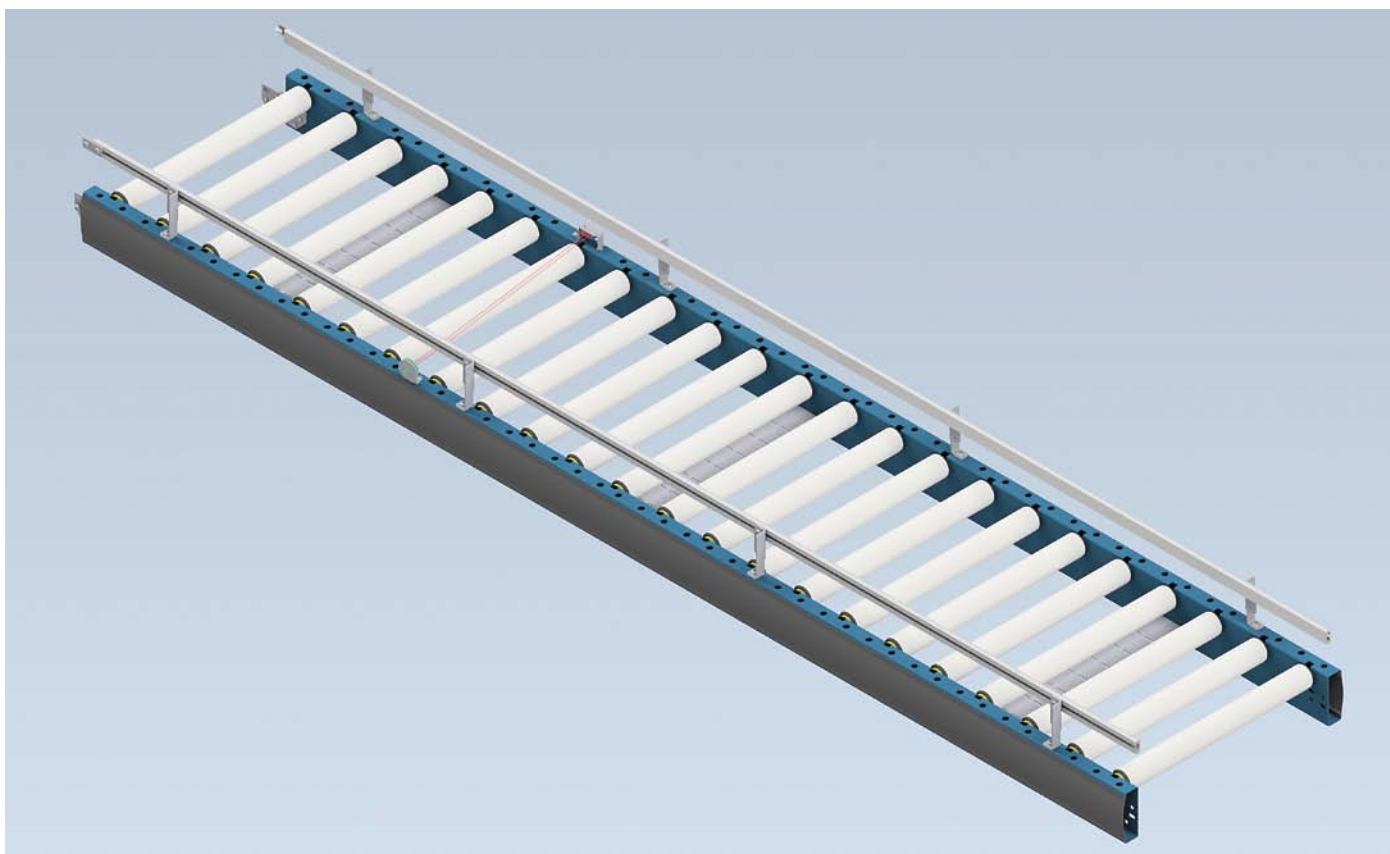
# 1. Basic transport equipment in standard version Light transport



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## Gravity roller conveyor

The gravity roller conveyor is designed for the transportation of goods without the need for a mechanical drive. Products are moved along the conveyor by means of gravity. The conveyor is equipped with aluminum guides, with steel guides available as an optional feature, ensuring the safe transport of products and preventing them from falling off.



### Device specification:

- Transport speed: depends on angle, length of conveyor and a product weight
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Roller surface material: galvanized steel
- Working temperature: 0–40 °C
- Equipment elements: steel/aluminum guides, side cover caps, sensors, supports

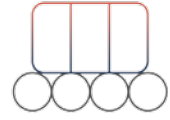
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	300–3000 [mm]
P1	Roller pitch	96; 120 [mm]

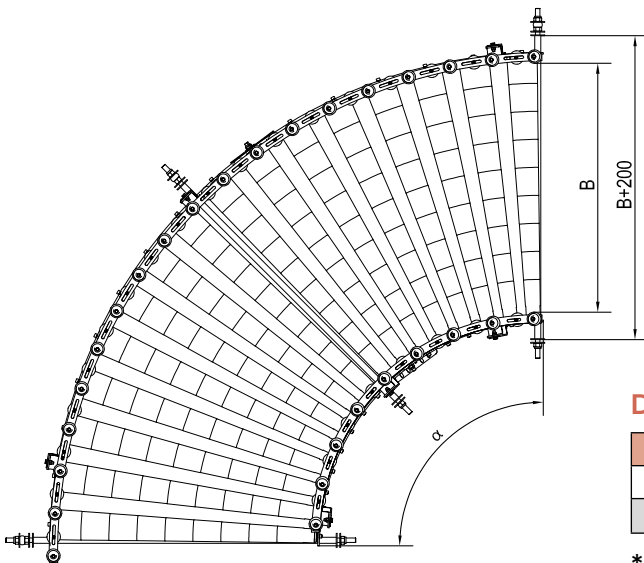
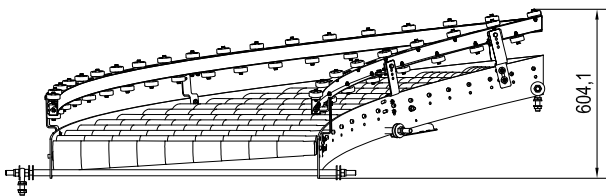
\*Change of product specifications at the customer's request is possible after agreement.

## Arc roller gravity conveyor

The arc roller gravity conveyor is designed for the transportation of goods without the need for a mechanical drive. Products are moved along the conveyor by means of gravity. The conveyor is equipped with aluminum guides, with steel guides available as an optional feature, ensuring the safe transport of products and preventing them from falling off.



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### Device specification:

- Transport speed: depends on angle, length of conveyor and a product weight
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Roller surface material: galvanized steel
- Working temperature: 0–40 °C
- Equipment elements: steel/aluminum guides, side cover caps, sensors, supports

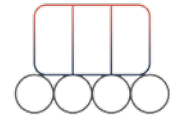
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
$\alpha$	Angle arc	30; 45; 60; 90 [°]

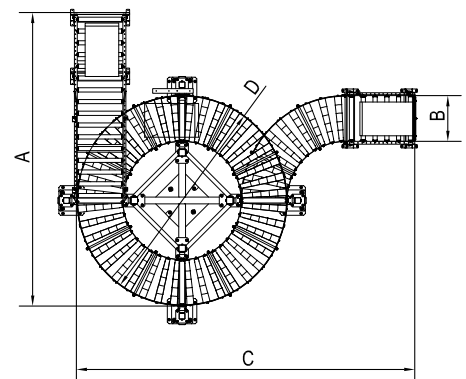
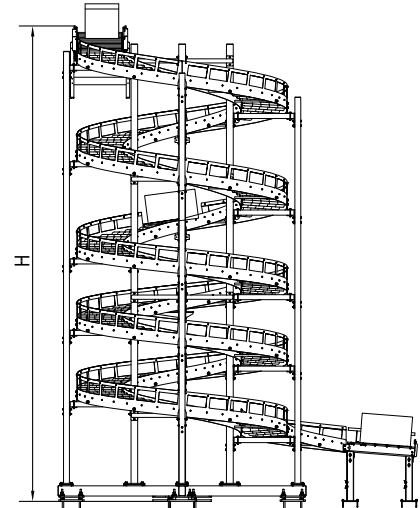
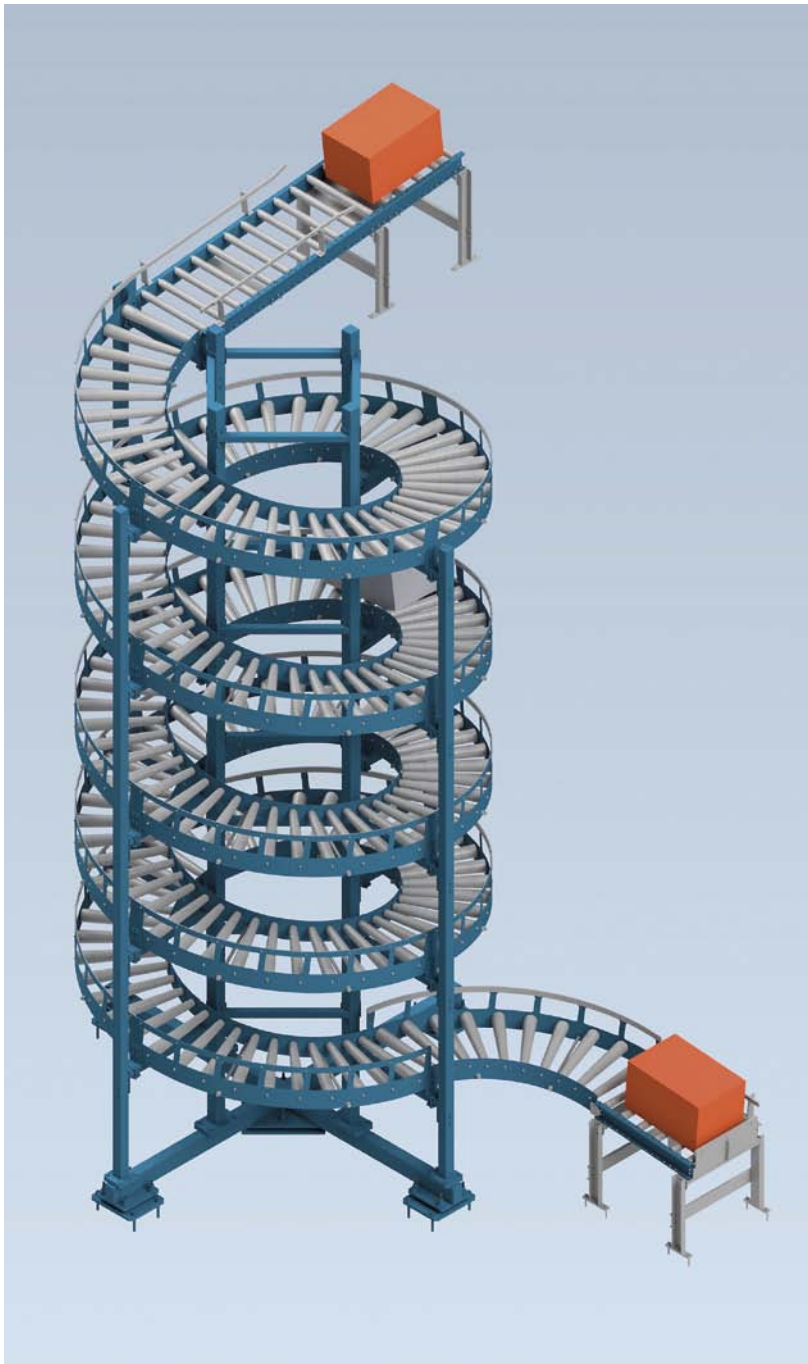
\*Change of product specifications at the customer's request is possible after agreement.

## Spiral gravity conveyor

The spiral gravity conveyor is designed for the transportation of goods without the need for a mechanical drive. Products are moved along the conveyor by means of gravity. The conveyor is equipped with aluminum guides, with steel guides available as an optional feature, ensuring the safe transport of products and preventing them from falling off.



INTRALOGISTICS BUSINESS UNIT



### Device specification:

- Transport speed: depends on angle, length of conveyor and a product weight
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Roller surface material: galvanized steel
- Working temperature: 0–40 °C
- Equipment elements: plastic guides, supports

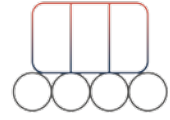
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
H	Height	According to customer specifications [mm]
D	Diameter	2500; 2900, 3300 [mm]

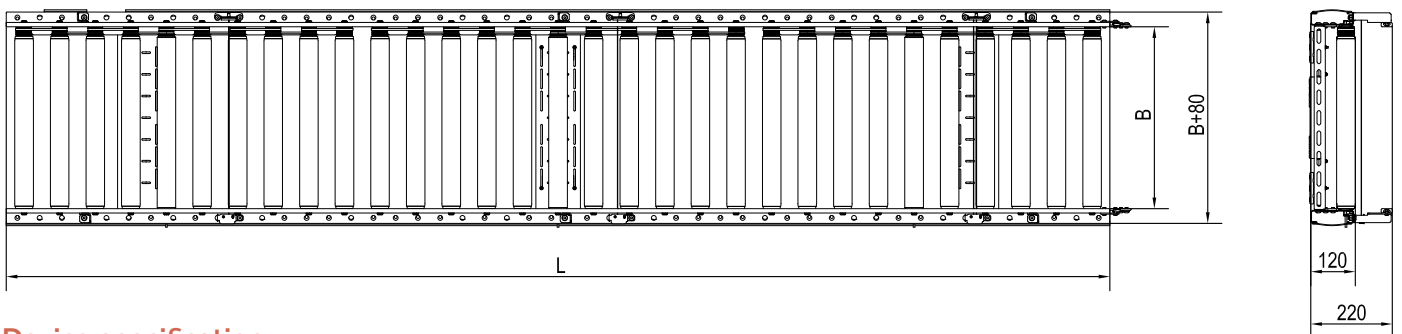
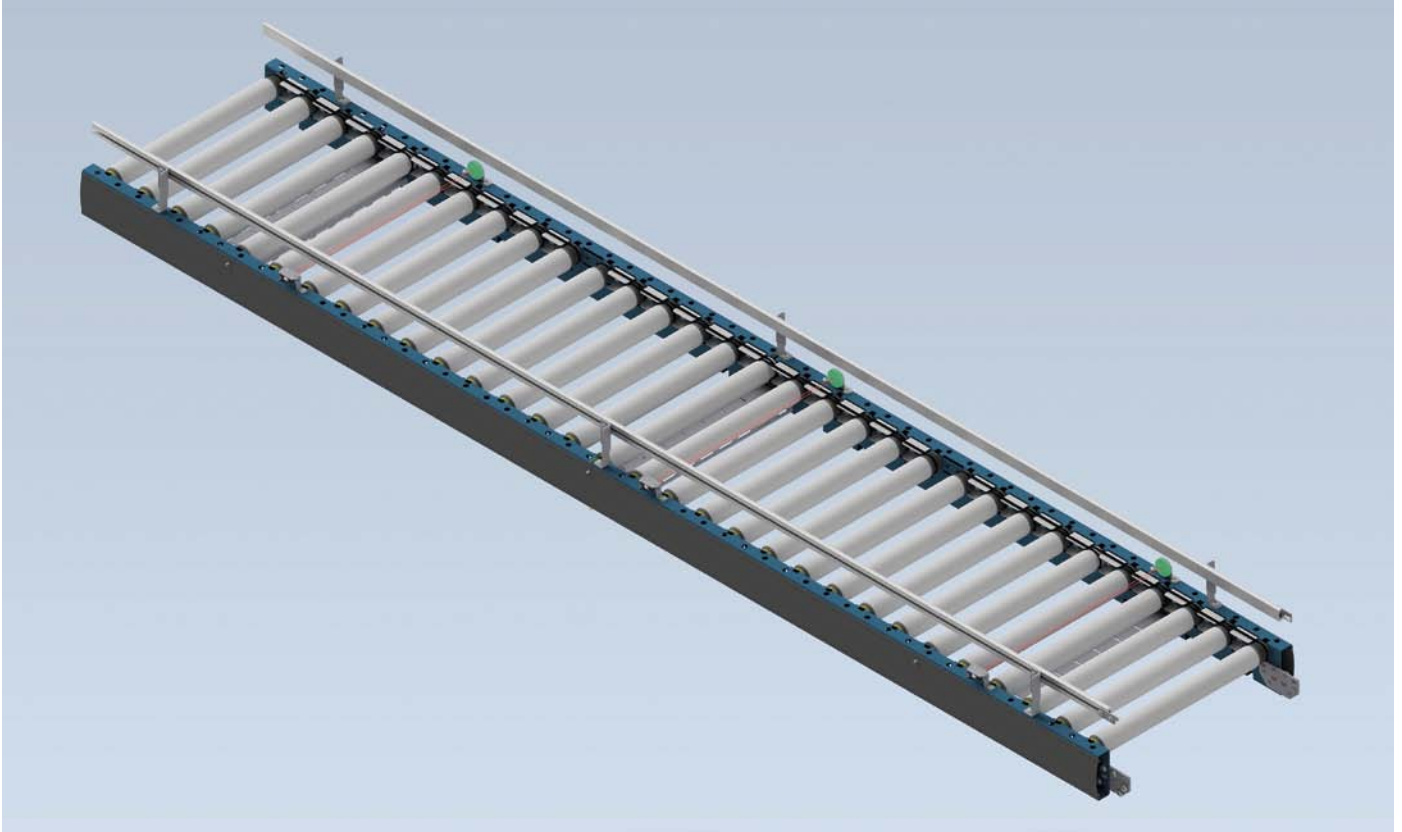
\*Change of product specifications at the customer's request is possible after agreement.

## Accumulation roller conveyor

The accumulation roller conveyor is designed for the transportation of goods using a mechanical drive. The products are moved along the conveyor by an electric roller that drives passive rollers via belts. Depending on its length, the conveyor may include several contactless accumulation zones for product buffering. It is equipped with aluminum guides, with steel guides available as an optional feature, ensuring the safe transport of items and preventing them from falling off.



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### Device specification:

- Transport speed range: from 0,5 up to 1,2 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Roller surface material: galvanized steel
- Voltage supply: 24 V DC, 48 V DC
- Drive transmitted by: Poly-V belt
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers

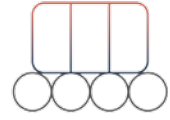
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	300–2880 [mm]
P1	Roller pitch	96; 120 [mm]
	Length of standard accumulating sections	960; 1920; 2880 [mm]

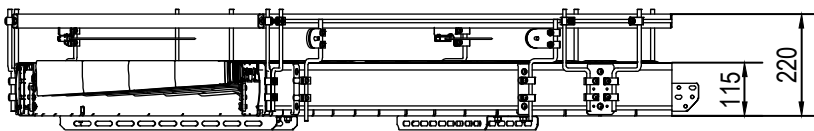
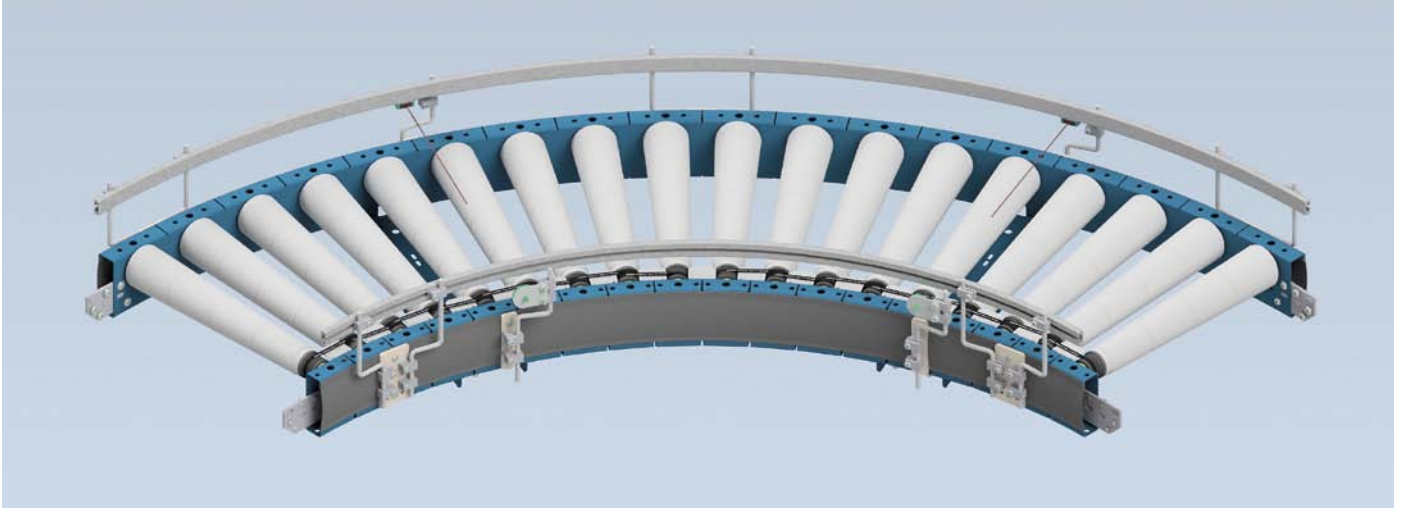
\*Change of product specifications at the customer's request is possible after agreement.

## Accumulation roller arc

The accumulation roller arc is designed for the transportation of goods using a mechanical drive. The products are moved along the conveyor by an electric roller that drives passive rollers via belts. Depending on the angle, the conveyor may include several contactless accumulation zones for product buffering. It is equipped with aluminum guides, with steel guides available as an optional feature, ensuring the safe transport of items and preventing them from falling off.

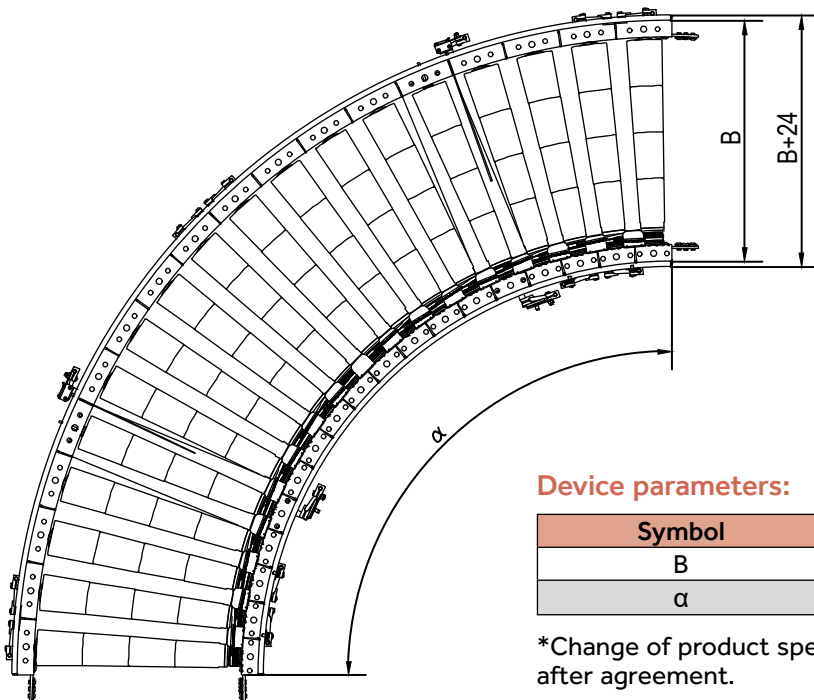


INTRALOGISTICS BUSINESS UNIT



### Device specification:

- Transport speed range: from 0,5 up to 1,2 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Roller material surface: galvanized steel
- Voltage supply: 24 V DC, 48 V DC
- Drive transmitted by: Poly-V belt
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers



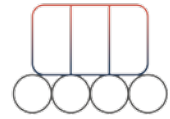
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
$\alpha$	Arc angle	30; 45; 60; 90 [°]

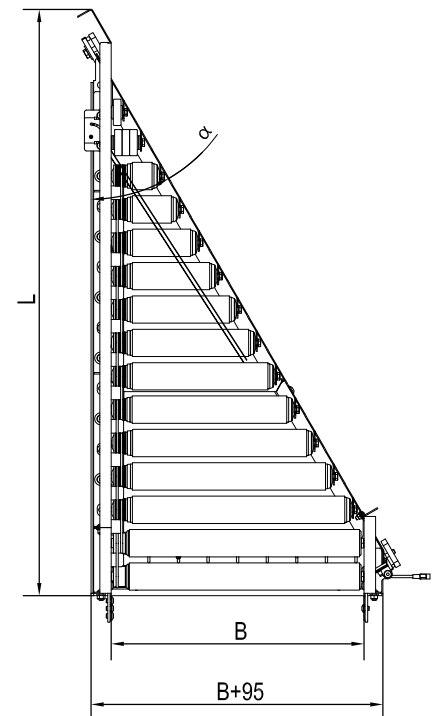
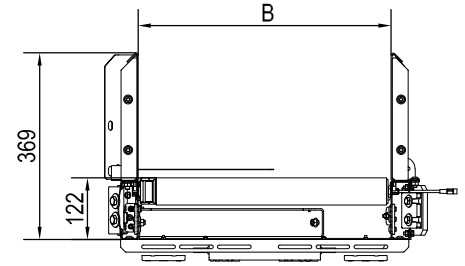
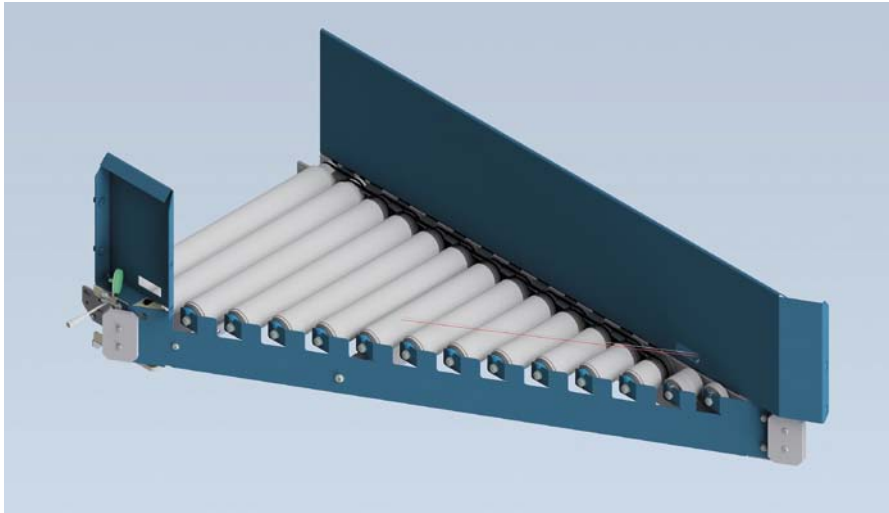
\*Change of product specifications at the customer's request is possible after agreement.

## Merging conveyor – Roller merge

The connecting conveyor is designed to link two product lines at an angle, ensuring a smooth and uninterrupted flow of goods. It is equipped with aluminum guides, with steel guides available as an optional feature, to safeguard the transported items and prevent them from falling off.



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### Device specification:

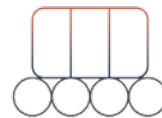
- Transport speed range: from 0,5 up to 1,2 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Roller surface material: galvanized steel
- Voltage supply: 24 V DC, 48 V DC
- Drive transmitted by: Poly-V belt
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	1160 [mm]
P1	Roller pitch	96; 120 [mm]
$\alpha$	Angle of connecting lines	30; 45 [°]

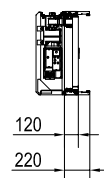
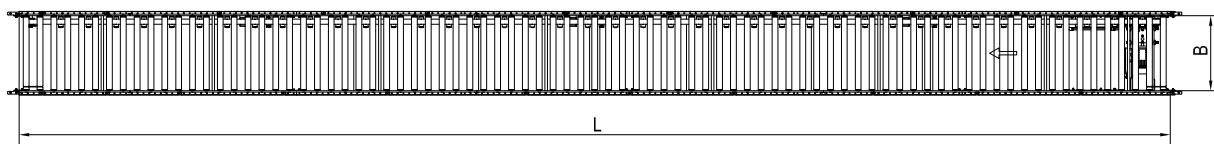
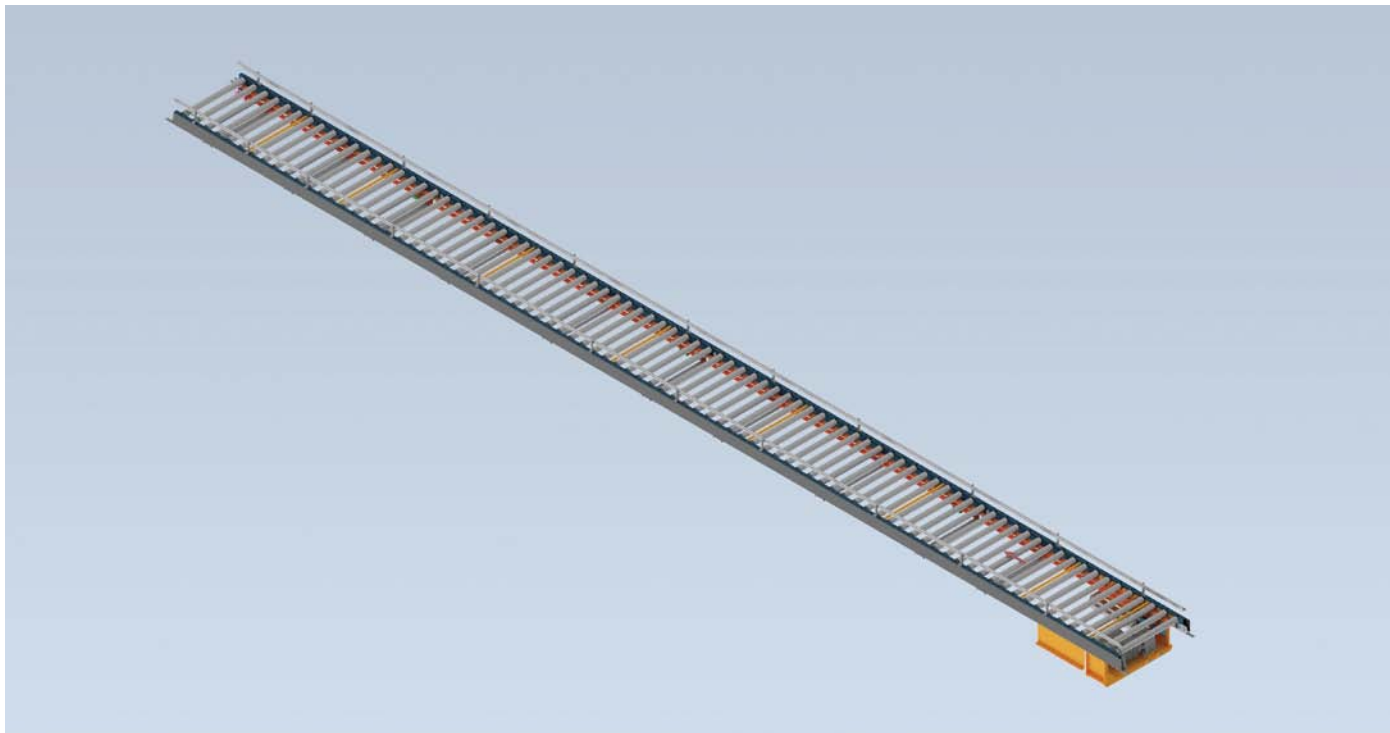
\*Change of product specifications at the customer's request is possible after agreement.

## Roller conveyor driven by an abrasive belt



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The roller conveyor is composed of passive rollers attached to the sides. The rollers are driven by a belt placed under the rollers. The belt is driven by a gear motor. This design allows the construction of a long conveyor using one drive. The conveyor has aluminum or optionally steel guides that protect the transported items from falling out.



### Device specification:

- Transport speed range: from 0,5 up to 1,5 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Roller surface material: galvanized steel
- Control type: Profinet
- Voltage supply: 400 V AC
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

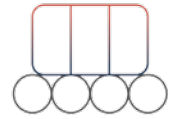
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	5–30 [m]

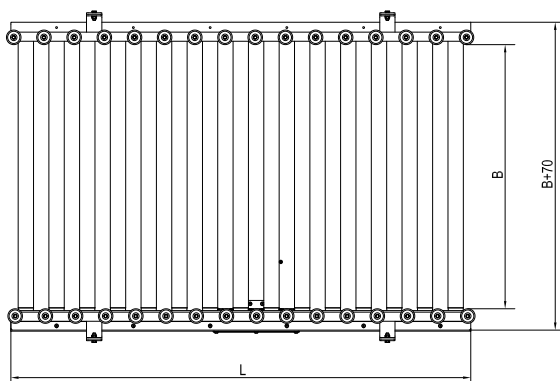
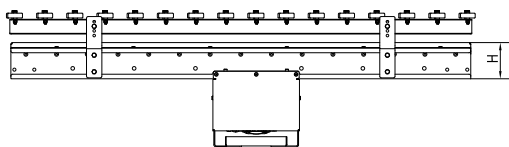
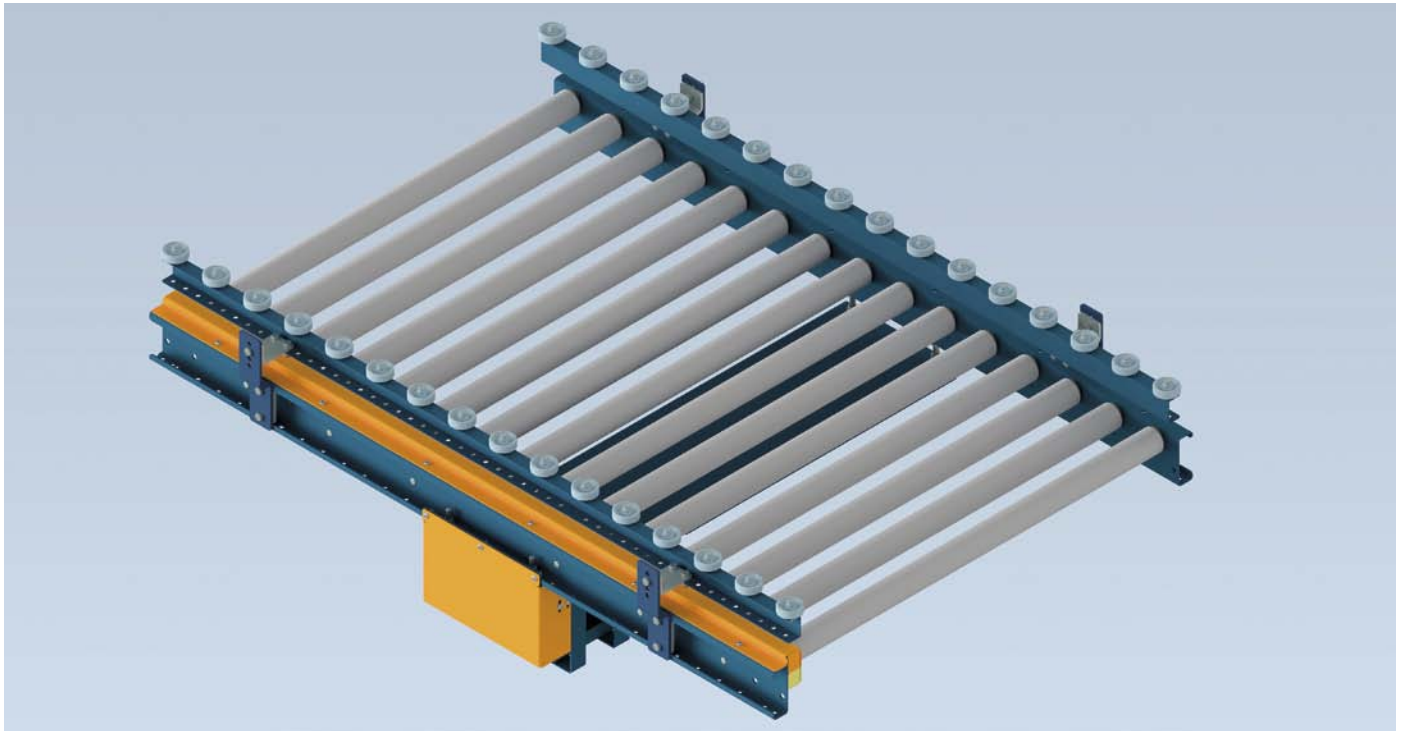
\* Change of product specifications at the customer's request is possible after agreement.

## Driven roller conveyor 400 V AC

The driven roller conveyor is used to transport goods using a 400 V AC drive. The transported products move along the conveyor thanks to a gear motor driving passive rollers by belts. The conveyor is equipped with aluminum or optionally steel guides to prevent the transported goods from falling out.



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### Device specification:

- Transport speed range: from 0,5 up to 1,5 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Roller surface material: galvanized steel
- Voltage supply: 400 V AC
- Drive transmitted by: Poly-V belt
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

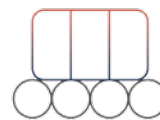
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	300–2880 [mm]
P	Roller pitch	96; 120 [mm]
–	Length of standard accumulating sections	960; 1920; 2880 [mm]
H	Height (w/o supports)	120 [mm]

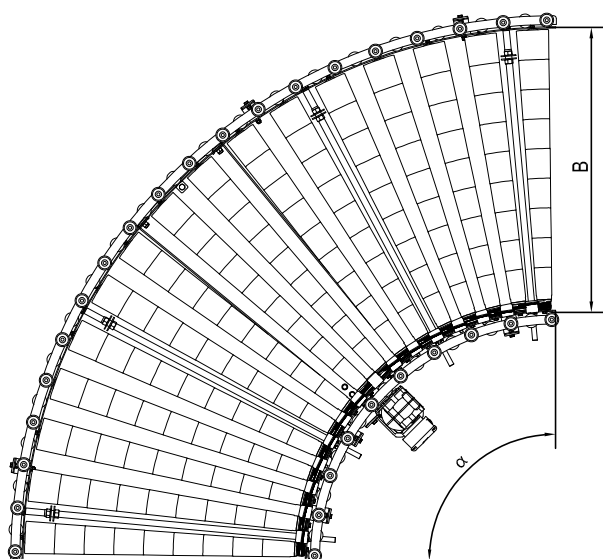
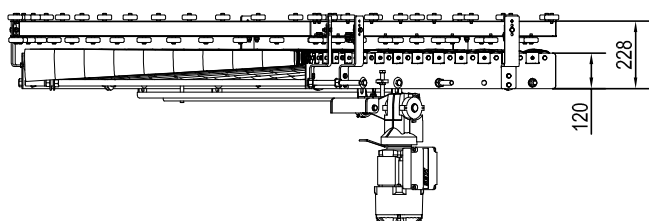
\*Change of product specifications at the customer's request is possible after agreement.

## Arc roller conveyor driven by gear motor

The arc roller conveyor is used to transport goods using a mechanical drive. The transported products move along the conveyor thanks to a gear motor driving passive rollers by belts. The conveyor is equipped with aluminum or optionally steel guides to prevent the transported goods from falling out.



INTRALOGISTICS BUSINESS UNIT



### Device specification:

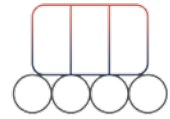
- Transport speed range: from 0,5 up to 1,5 [m/s]
- Maximum load: 50 [kg/m]
- Arc direction: right/left
- Control type: Profinet
- Roller material surface: galvanized steel
- Voltage supply: 400 V AC
- Drive transmitted by: Poly-V belt
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
$\alpha$	Arc angle	30; 45; 60; 90 [°]

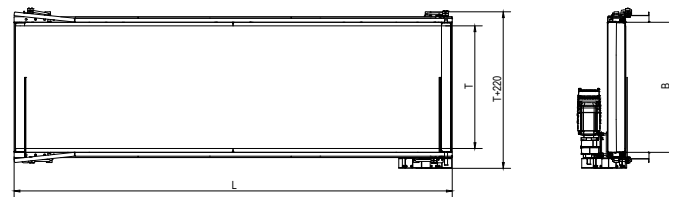
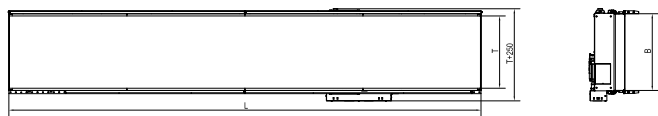
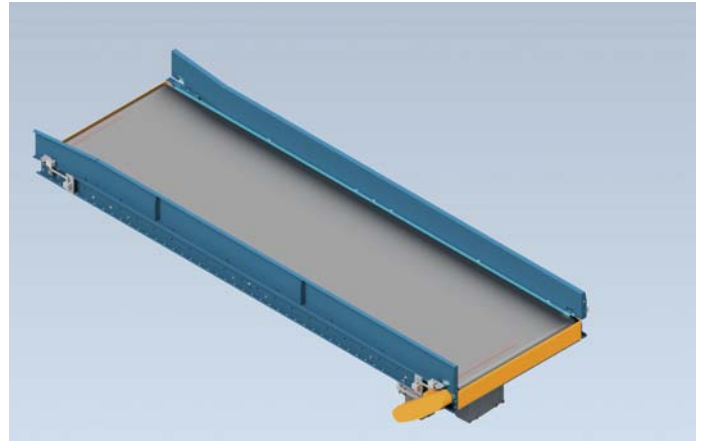
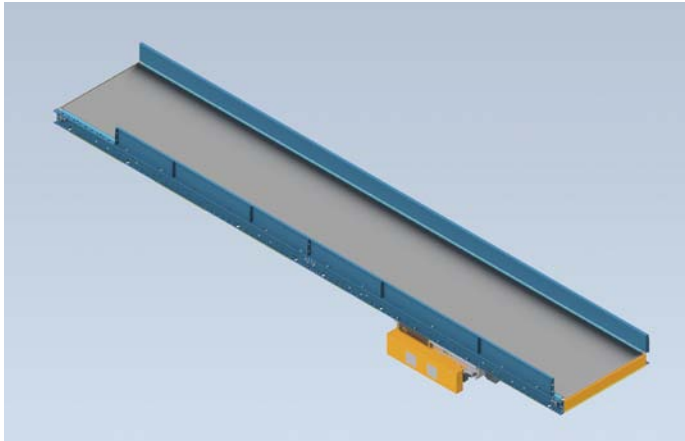
\*Change of product specifications at the customer's request is possible after agreement

## Flat belt conveyor



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Belt conveyors are used for the smooth transport products of various sizes and shapes on straight sections. The conveyor consists of a steel frame with galvanized sheet metal supporting the belt, a drive segment, a set of tensioning drums and a conveyor belt. The conveyor is equipped with aluminum or optionally steel guides to prevent the transported goods from falling out. The drive can be located centrally or at the end as a gear motor or drum motor.



### Device specification:

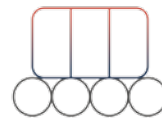
- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Belt support: galvanized steel
- Control type: Profinet
- Voltage supply: 400 V AC
- Drive: gear motor / drum motor
- Transmission of drive: belt transmission / directly
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
T	Belt width	400; 600; 800 [mm]
L	Conveyor length	1000–20000 [mm]
P	Drive power	0,37–4 kW
HSG	Height of a side guide	50–300 [mm]

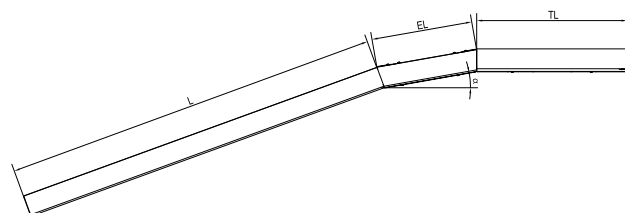
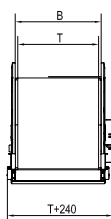
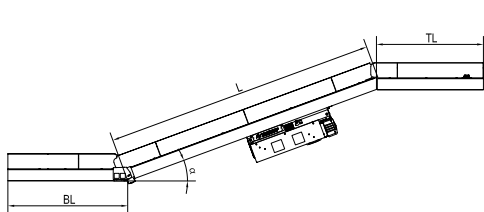
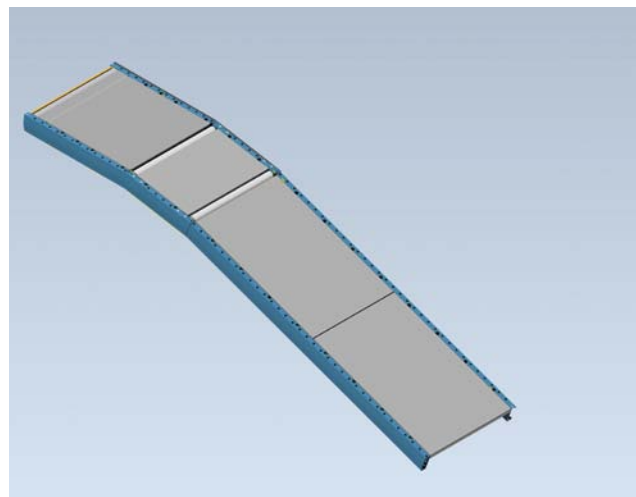
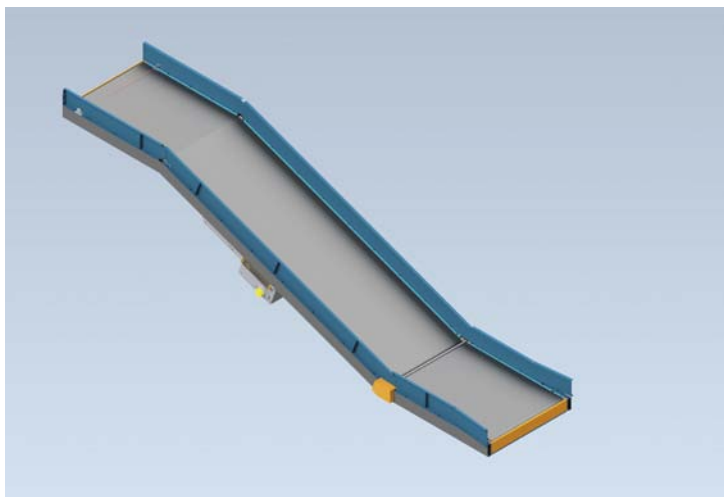
\*Change of product specifications at the customer's request is possible after agreement.

## Inclined and declined belt conveyor



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This type of belt conveyors are used for the smooth transport of products of various sizes and shapes between different levels. The unit consists of a steel frame with galvanized sheet metal supporting the belt, a drive segment, a set of tensioning drums and a conveyor belt. The conveyor is equipped with aluminum or optionally steel guides to prevent the products from falling out. The centrally located drive is provided by a geared motor or drum motor. The conveyor can be equipped with flat feed segments in the lower and upper run and a double break in the upper run for a quiet and smooth transfer of the transported goods.



### Device specification:

- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Belt support: galvanized steel
- Control type: Profinet
- Voltage supply: 400 V AC
- Drive: gear motor / drum motor
- Transmission of drive: belt transmission / directly
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

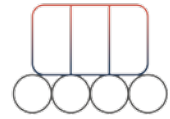
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
T	Belt width	400; 600; 800 [mm]
L	Conveyor length	1000–20000 [mm]
N	Drive power	0,37–4 kW
HSG	Height of a side guide	50–300 [mm]
BL / TL	Length of a flat segments	600–1200 [mm]
EL	Length of a connecting segments	300–1200 [mm]
$\alpha$	Angle of inclination	Max 21 °

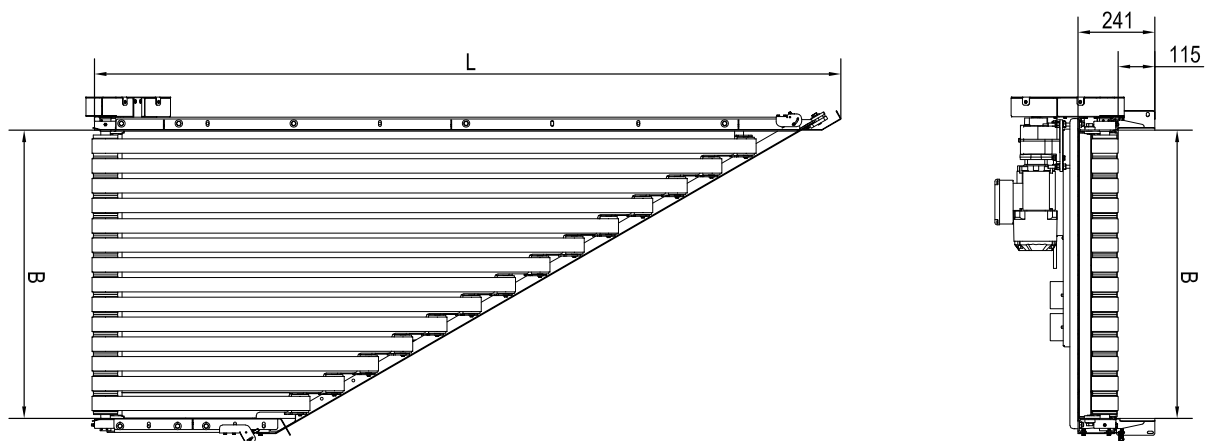
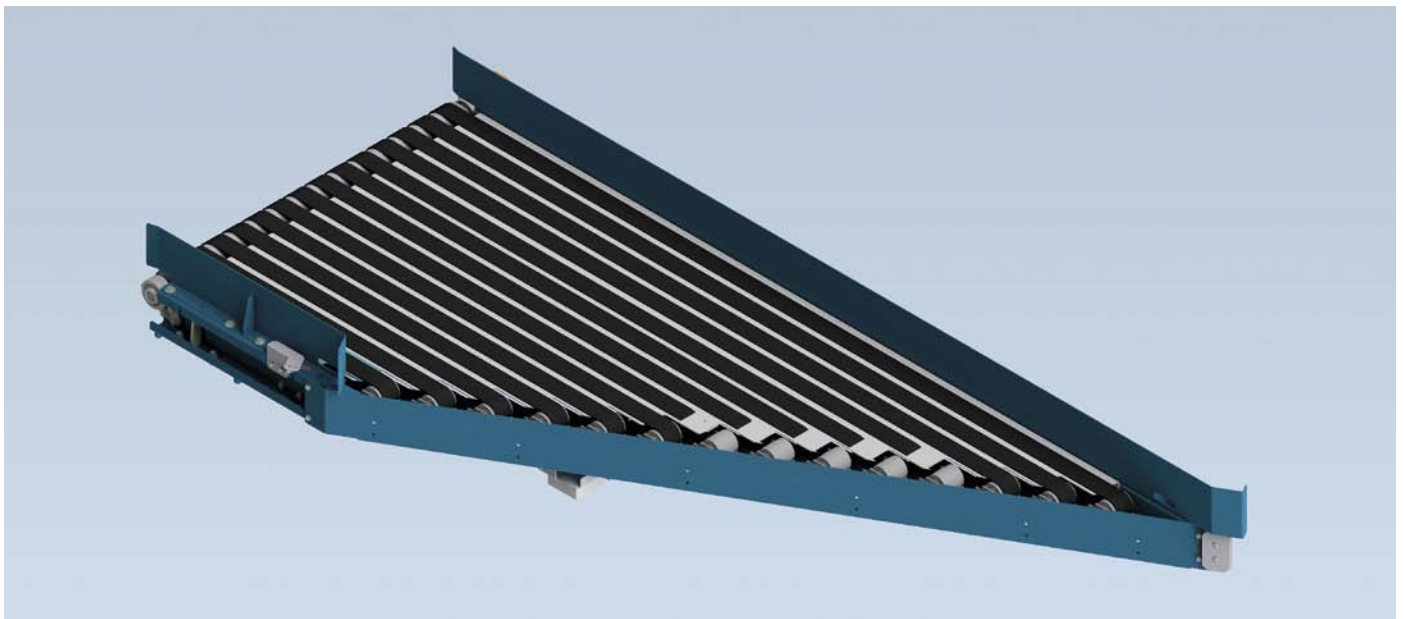
\*Change of product specifications at the customer's request is possible after agreement.

## Merging conveyor – Belt merge

A connecting conveyor used to merge two product lines at an angle, maintaining a smooth flow of goods. The conveyor is equipped with aluminum or optionally steel guides to prevent the product from falling out.



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### Device specification:

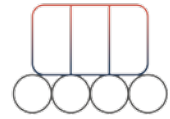
- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Control type: Profinet
- Drive: gear motor / drum motor
- Drive power: 0,37 [kW]
- Working temperature: 0–40 °C
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	2365 [mm]
P2	Belt pitch	62 [mm]
$\alpha$	Angle of connecting lines	30; 45 [°]

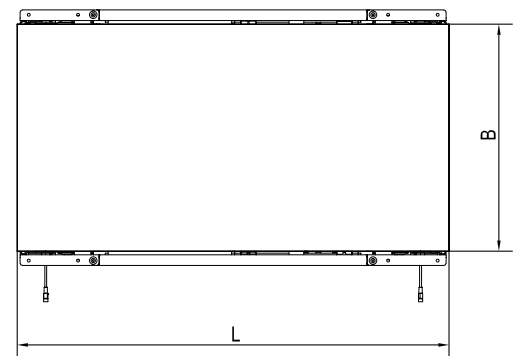
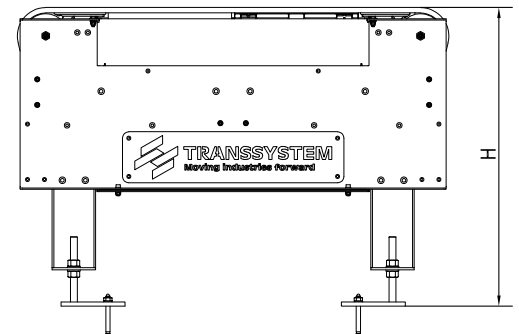
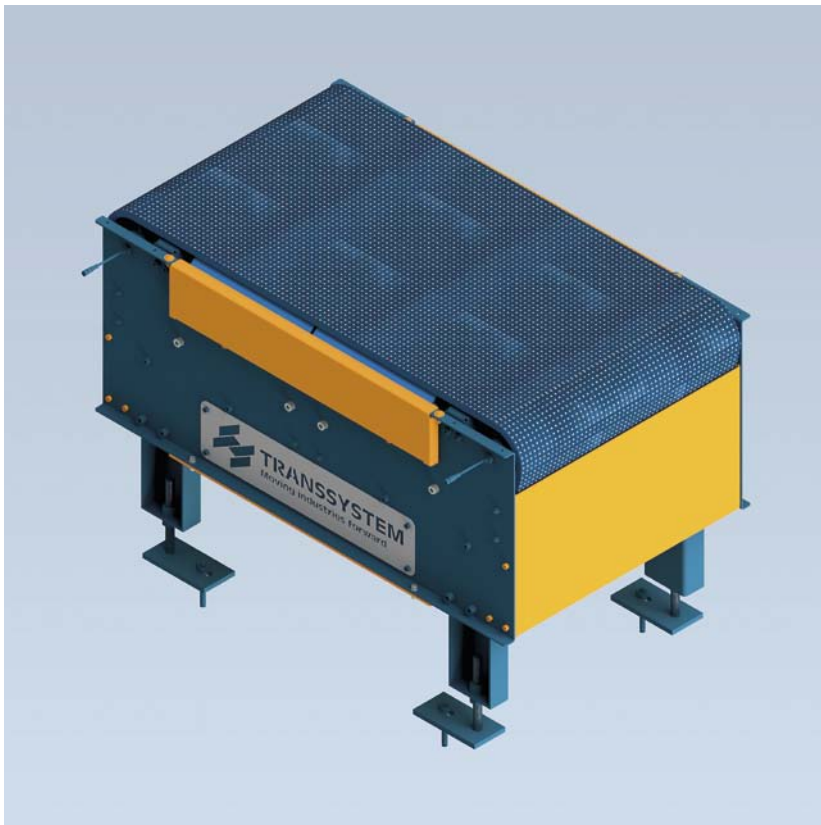
\*Change of product specifications at the customer's request is possible after agreement.

## Modular belt conveyor – Ball belt



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The ball belt modular belt conveyor is used to smoothly transport products of various sizes and shapes in various directions. The device includes a steel frame with PE1000 plastic profiles supporting the upper run of the belt, a set of rollers supporting the lower run, a drive, supports and a modular ball belt conveyor belt made of plastic with sets of balls on its surface. These balls allow the load to be easily moved, rotated or reoriented in any direction. The conveyor has aluminum or optionally steel guides that protect the transported items from falling out.



### Device specification:

- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Belt support: plastic
- Voltage supply: 24 V DC or 400 V AC
- Control type: Profinet
- Drive: gear motor/drum motor
- Transmission of drive: directly
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers

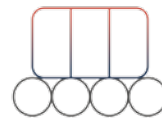
### Device parameters:

Symbol	Definition	Dimension
B	Transport width [max]	400; 600; 800; 1000 [mm]
H	Height	According to customer specifications
L	Length	According to customer specifications

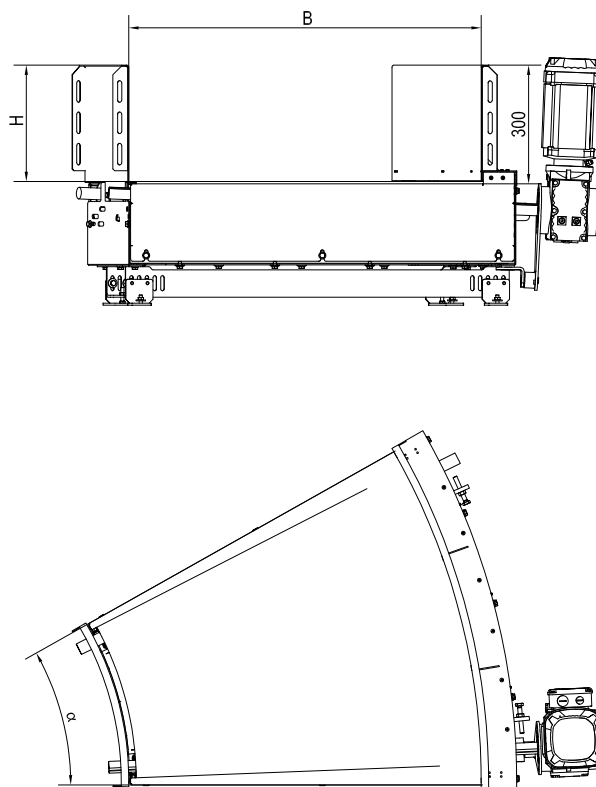
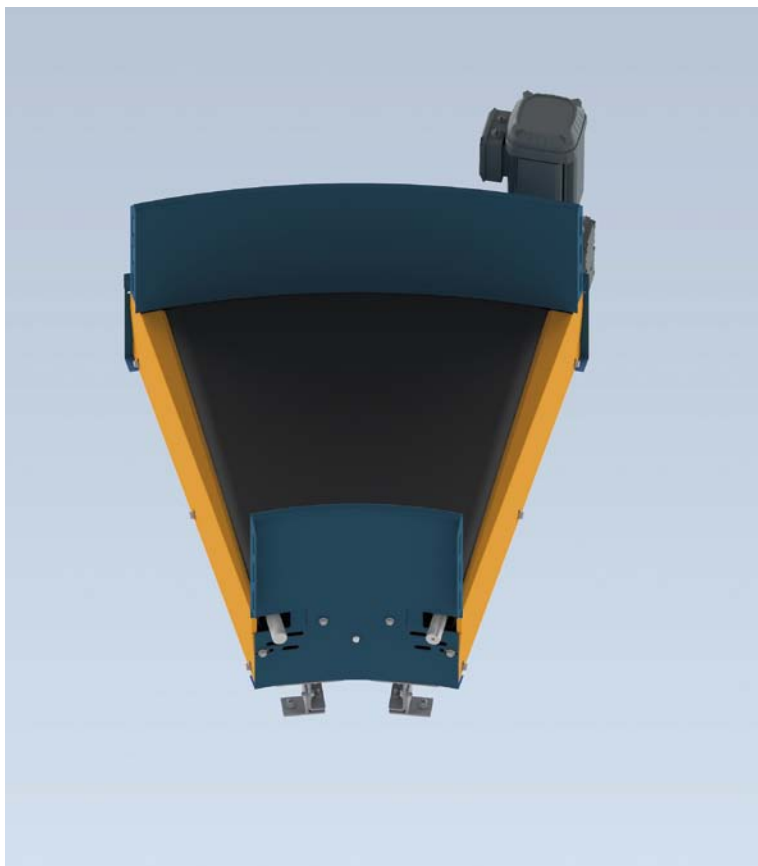
\*Change of product specifications at the customer's request is possible after agreement.

## Driven arc belt conveyor

The driven arc belt conveyor is used to transport goods using a mechanical drive. The transported products move along the conveyor thanks to a gear motor driving the conveyor belt. The device includes a steel frame, drive drum, passive drums and a transport belt. The conveyor has aluminum or optionally steel guides that protect the transported items from falling out.



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### Device specification:

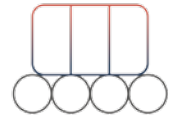
- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Arc direction: right/left
- Control type: Profinet
- Voltage supply: 400 V AC
- Working temperature: 0–40 °C
- Gear motor location: inside / outside of arc
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	500; 700; 900, 1100 [mm]
$\alpha$	Arc angle	30; 45; 60; 90 [°]
H	Height of a side guide	120; 300 [mm]

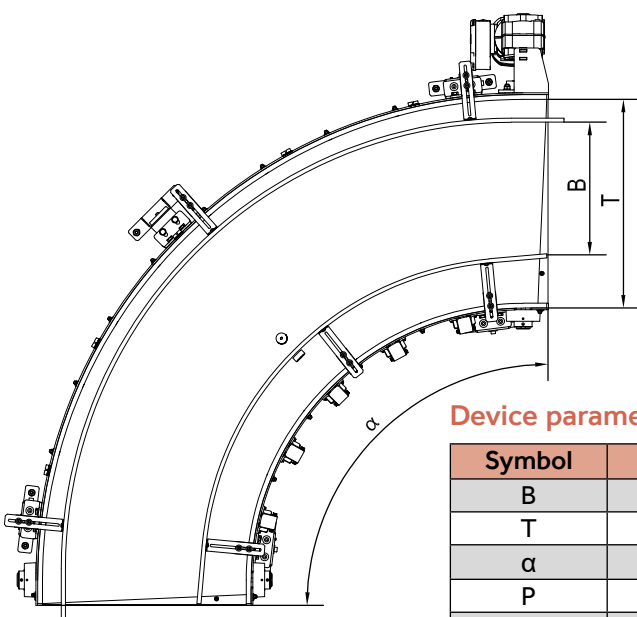
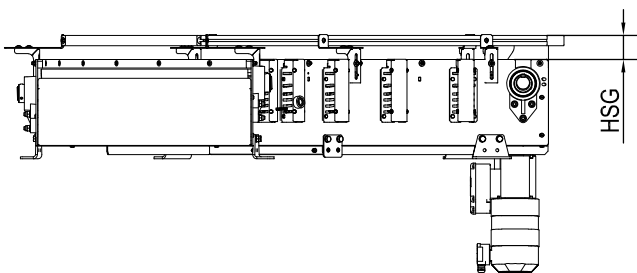
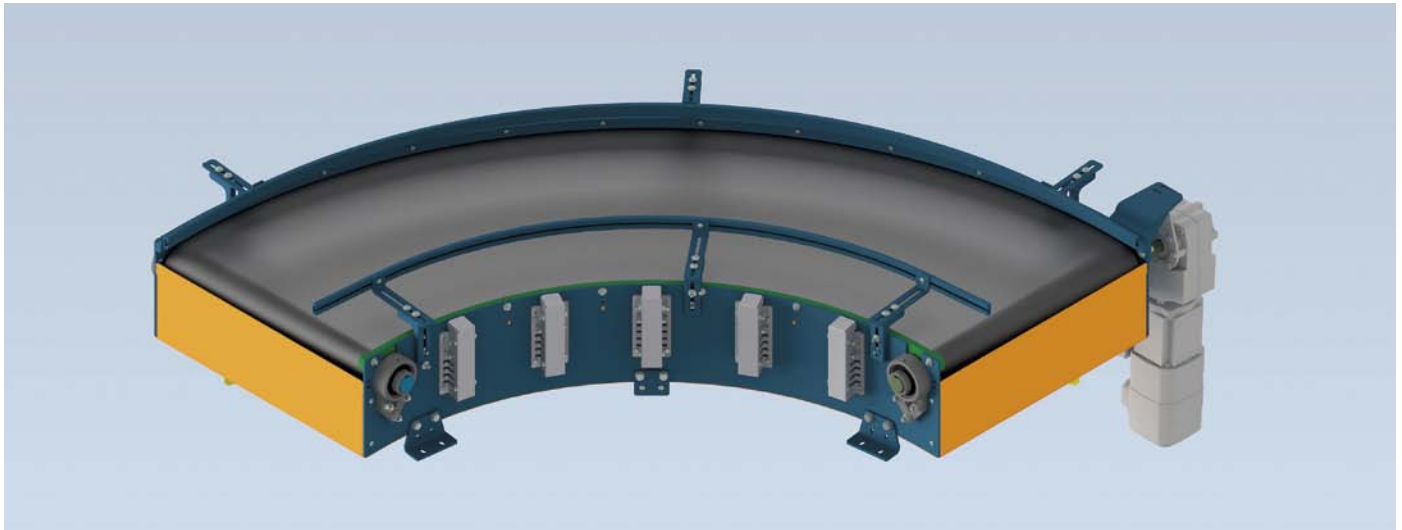
\*Change of product specifications at the customer's request is possible after agreement.

## Modular belt arc conveyor



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Modular belt bends are used to smoothly transport products of various sizes and shapes around bends. The device includes a steel frame with PE1000 plastic profiles supporting the upper run of the belt, a set of rollers supporting the lower run, a drive, supports and a modular conveyor belt made of plastic. The conveyor has aluminum or optionally steel guides that protect the transported items from falling out.



### Device specification:

- Transport speed range: from 0,5 up to 1,5 [m/s]
- Maximum load: 50 [kg/m]
- Belt support: plastic
- Arc direction: right/left
- Control type: Profinet
- Voltage supply: 400 V AC
- Drive: gear motor
- Transmission of drive: directly
- Working temperature: 0–40°C
- Set of gear motor: inside / outside of arc
- Equipment elements: aluminum guides, side cover caps, sensors, supports, controllers.

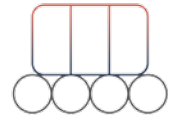
### Device parameters:

Symbol	Definition	Dimension
B	Transport width [max]	450; 650; 850 [mm]
T	Belt width	600; 800; 1000 [mm]
$\alpha$	Arc angle	45, 60, 90 [°]
P	Drive power	0,37 kW
HSG	Height of a side guide	50–300 [mm]

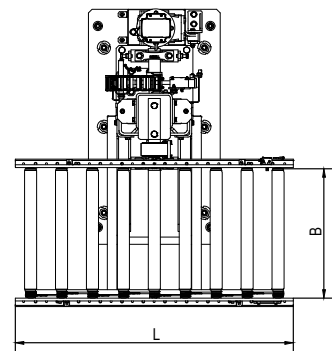
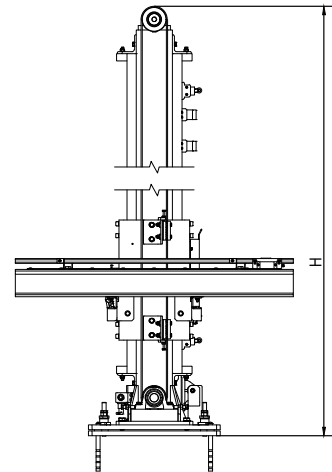
\*Change of product specifications at the customer's request is possible after agreement.

## Single-post elevator

The elevator is used to move items between levels. The main structure of the elevator is a steel column. The trolley is guided by rollers and guides. The elevator is driven by a gear motor connected to a gear pulley by a shaft. The elevator trolley can be equipped with a roller or belt conveyor.



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### Device specification:

- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Transmission of drive: toothed belt
- Working temperature: 0–40 °C
- Voltage supply: 400 V AC

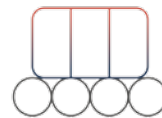
### Device parameters:

Symbol	Definition	Dimension
H	Height [max]	12000 [mm]
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	960-2880 [mm]
P1	Roller pitch	96; 120 [mm]
	Length of standard accumulating sections	960; 1920; 2880 [mm]

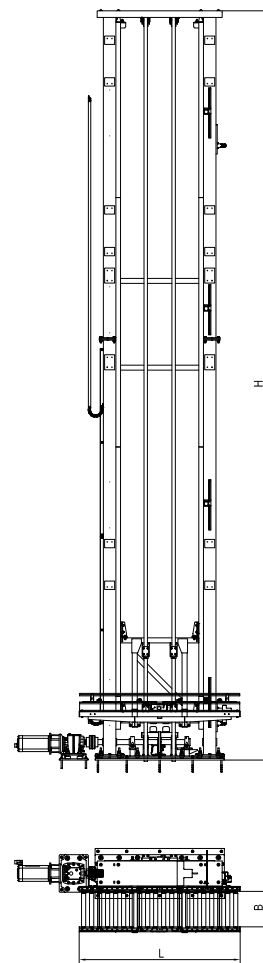
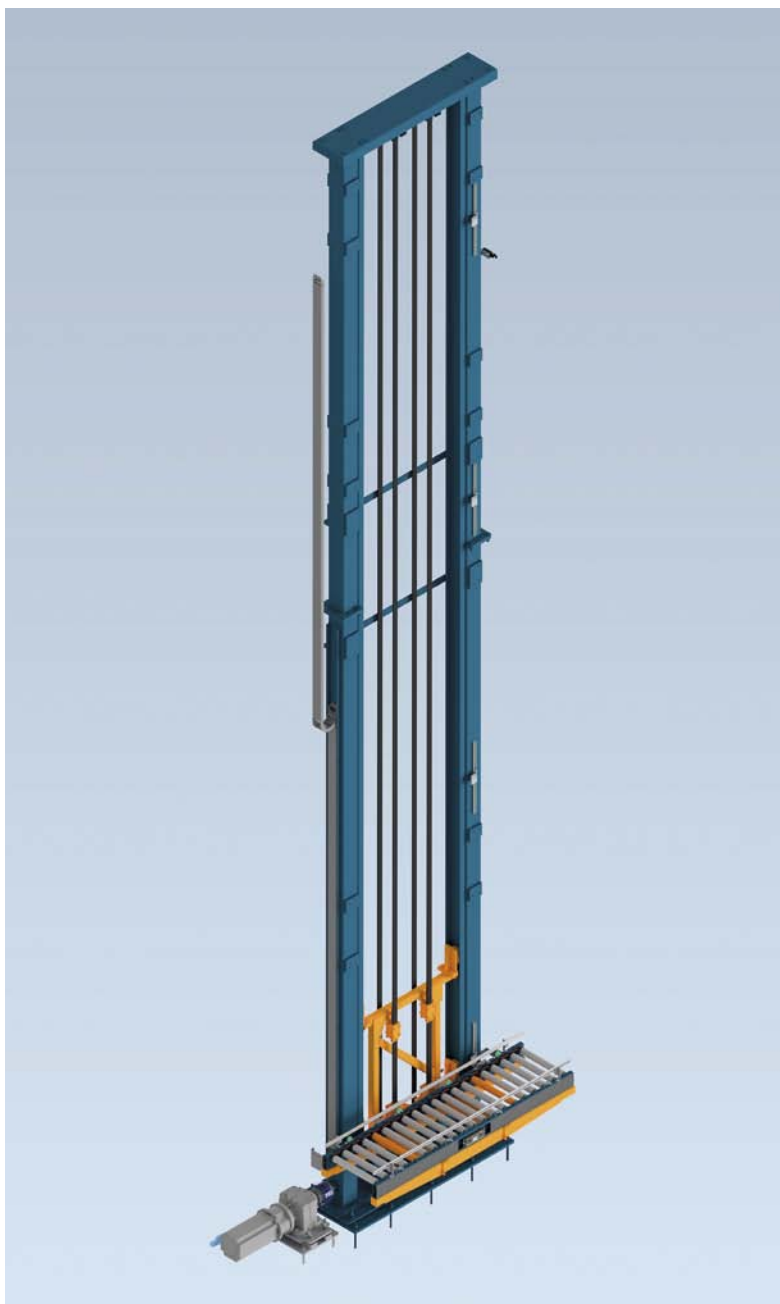
\*Change of product specifications at the customer's request is possible after agreement.

## Double-post elevator

The elevator is used to move items between levels. The main structure of the elevator consists of two steel columns. The trolley is guided by rollers and guides. The elevator is driven by a gear motor connected to the drive drum by a shaft. The elevator trolley can be equipped with a roller or belt conveyor.



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### Device specification:

- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Roller diameter: 50 [mm]
- Control type: Profinet
- Transmission of drive: toothed belt
- Working temperature: 0–40 °C
- Voltage supply: 400 V AC

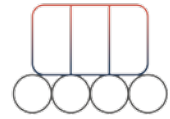
### Device parameters:

Symbol	Definition	Dimension
H	Height [max]	15000 [mm]
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	300-2880 [mm]
P1	Roller pitch	96; 120 [mm]
	Length of standard accumulating sections	960; 1920; 2880 [mm]
	Number of conveyors	1–2

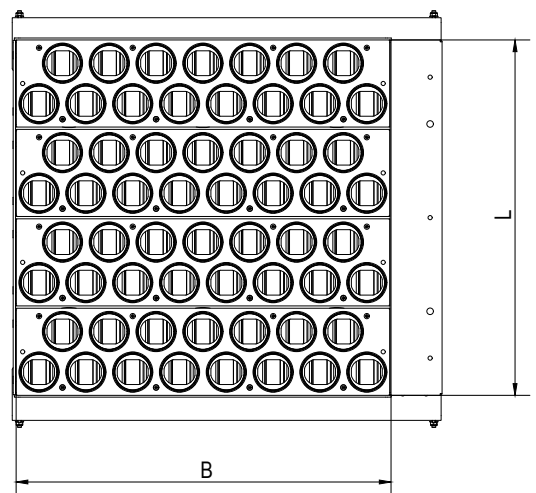
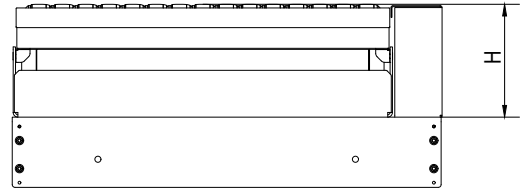
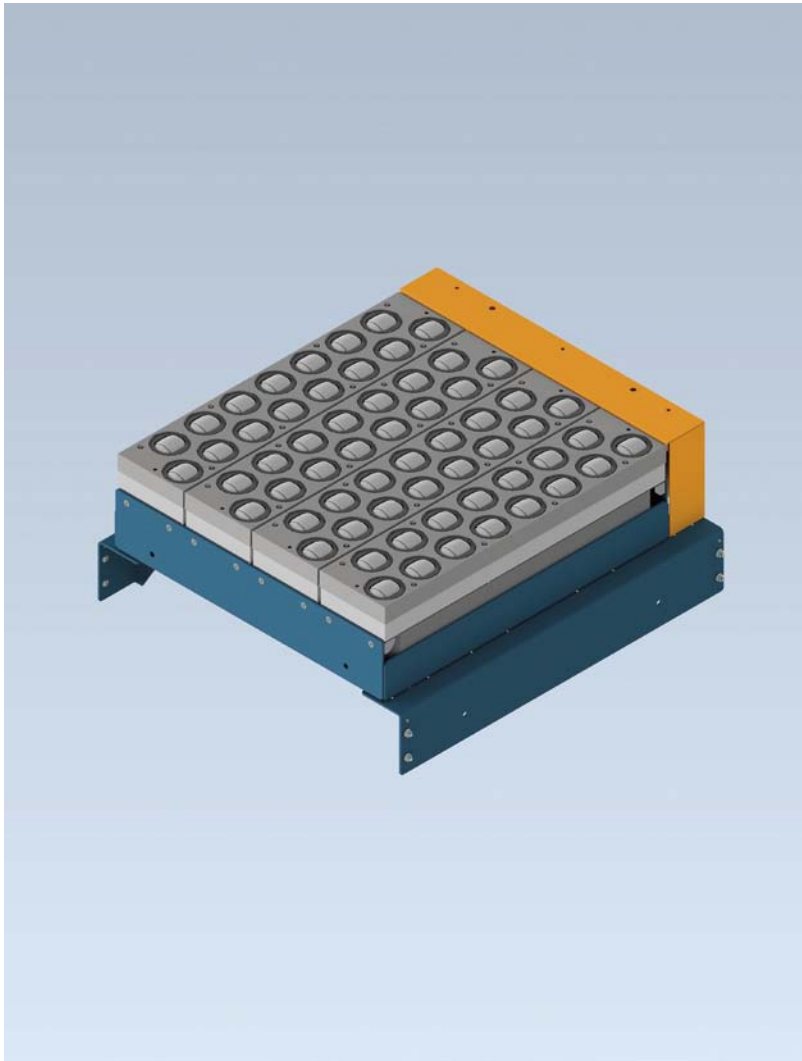
\*Change of product specifications at the customer's request is possible after agreement.

## Separating and sorting modules

Separating and sorting modules can move products smoothly and quickly at an angle. The modules are available in various widths and can be connected together to match the size of the products being moved.



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### Device specification:

- Transport speed range: 1,5 [m/s]
- Maximum load: 30 [kg]
- Efficiency: up to 4300 [pcs/h]
- Control type: Profinet
- Voltage supply: 24 V DC
- Working temperature: 0–40 °C

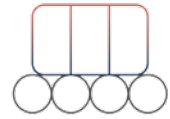
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	400; 500; 600; 700; 800 [mm]
A	Number of modules	As per specifications
L	Length	Depending on the number of modules used
H	Height (w/o supports)	200 [mm]

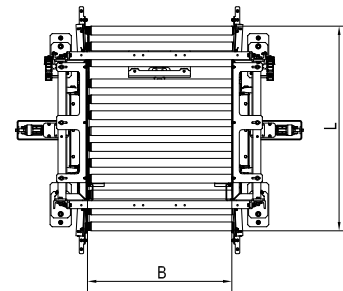
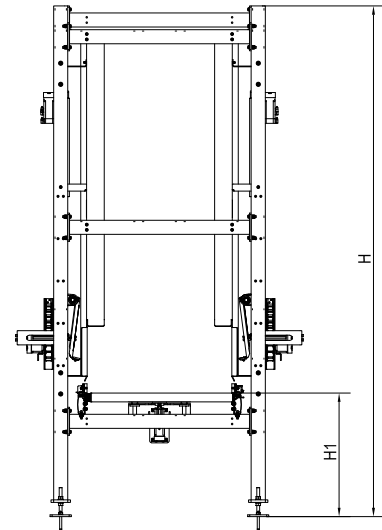
\*Change of product specifications at the customer's request is possible after agreement.

## Stacker/Destacker

The stacker/destacker is used to stacking or separating boxes/cartons and transferring them to a neighboring device. The device operates above a roller or belt conveyor, which is used to move the transported material. The vertical movement is performed by two opposite sliding mechanisms or grippers. The device stacks the transported material or removes it in reverse order and then passes it on.



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### Device specification:

- Drive type: pneumatic actuator/gear motor
- Transport speed range: from 0,5 up to 1,5 [m/s]
- Maximum load: 50 [kg/m]
- Working temperature: 0–40 °C
- Efficiency up to 800 [containers/hour]
- The load and number of elements in the stack depend on the method of transporting material
- Equipment elements: actuators, gear motors, conveyor, side guides, controllers

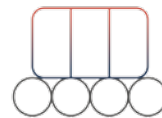
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	300–2880 [mm]
	Length of standard accumulation sections	960; 1920; 2880 [mm]
H	Height	3000 [mm]
H1	Transport height	700 [mm]

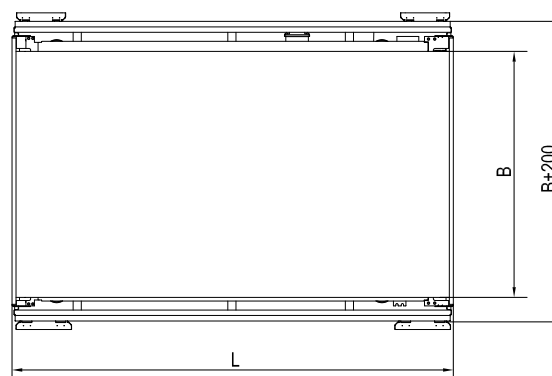
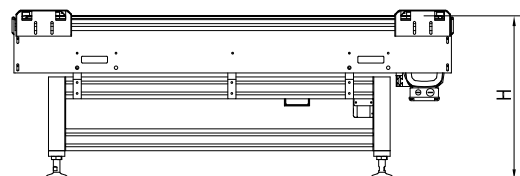
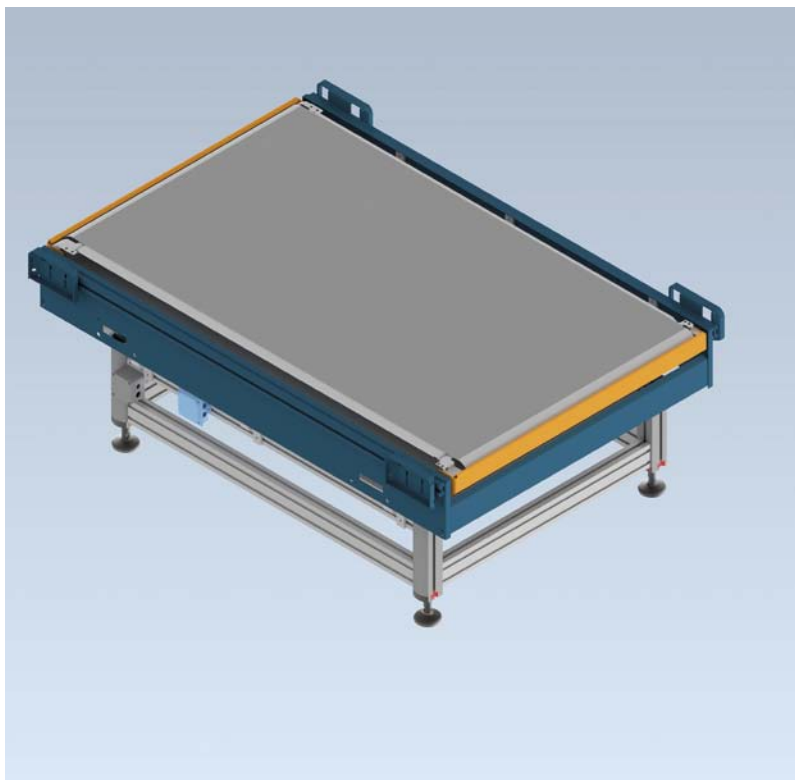
\*Change of product specifications at the customer's request is possible after agreement.

## Flow scale

A flow scale allows you to control the transported material moving continuously on the conveyor. It is distinguished by accurate weight registration, even under harsh operating conditions. The scale checks the quantity of goods, their unit weight and completeness.



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### Device specification:

- Transport speed range: 0,2–2,0 [m/s]
- Weighing range: 15–60 [kg]
- Weighing accuracy: up to 5 [g]
- Voltage supply: 230 V AC
- Control type: Profinet
- Type of transport: belt
- Working temperature: 0–40 °C

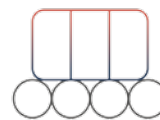
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	up 1000 [mm]
L	Length	up 1600 [mm]
H	Height	450–925 [mm]

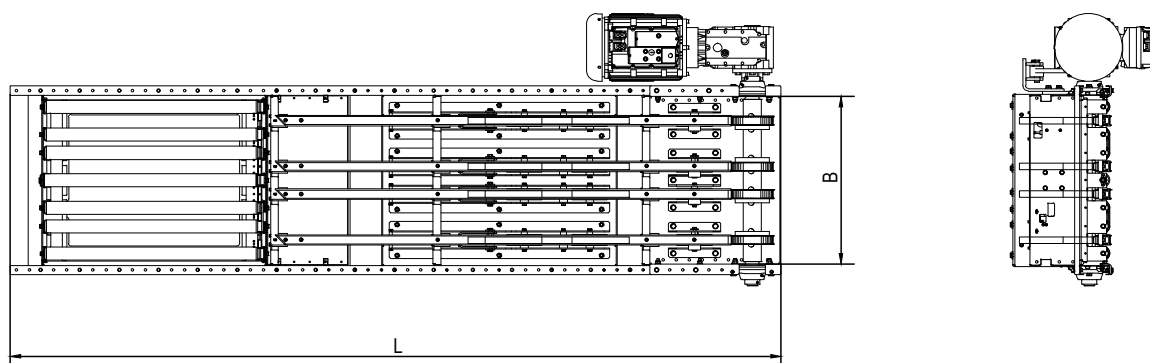
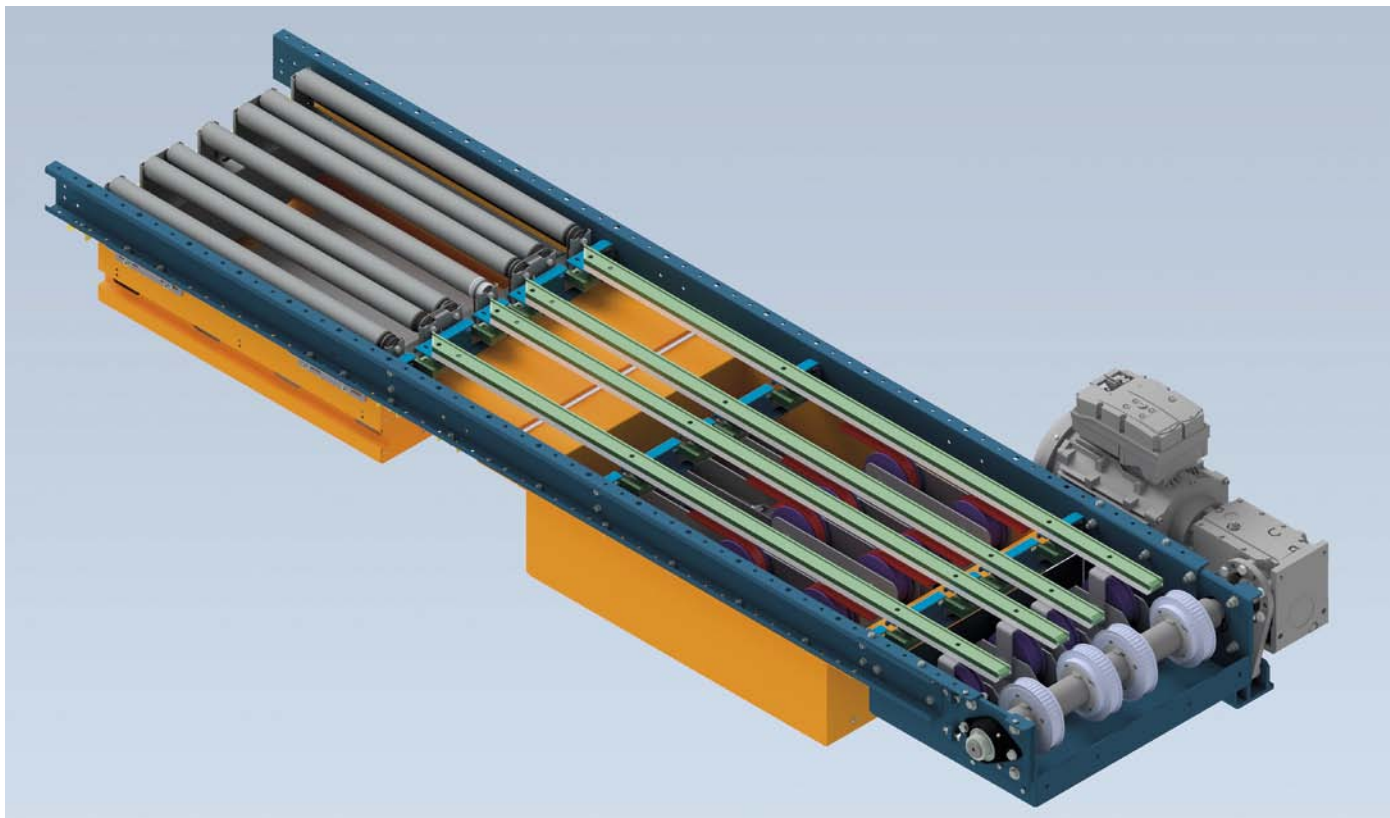
\*Change of product specifications at the customer's request is possible after agreement.

## Narrow belt sorter

The narrow belt sorter is a transport system consisting of narrow belts placed next to each other, used for transporting goods. It is equipped with rollers made of high-friction material that extend between the belts, directing the goods at a 90-degree angle without stopping. It is designed for bidirectional or unidirectional sorting of packages and other small or medium-sized goods, ensuring dynamic operation of the device and maximum efficiency.



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### Device specification:

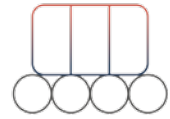
- Transport speed range: from 0,5 up to 2,0 [m/s]
- Maximum load: 50 [kg/m]
- Efficiency: up to 6000 [pcs/h]
- Working temperature: 5–40 °C
- Voltage supply: 400 V AC
- Equipment elements: aluminum side guides, side cover caps, sensors, supports, controllers

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	1,5–30 [m]
N	Drive power	0,37–4 [kW]

\*Change of product specifications at the customer's request is possible after agreement.

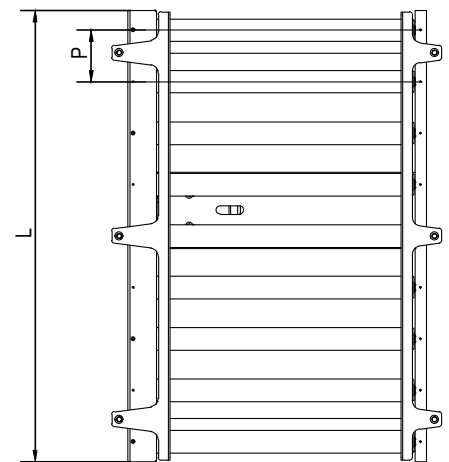
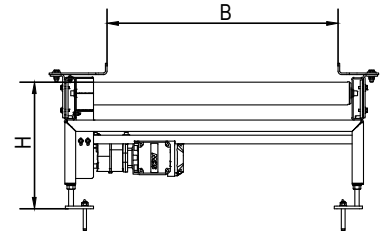
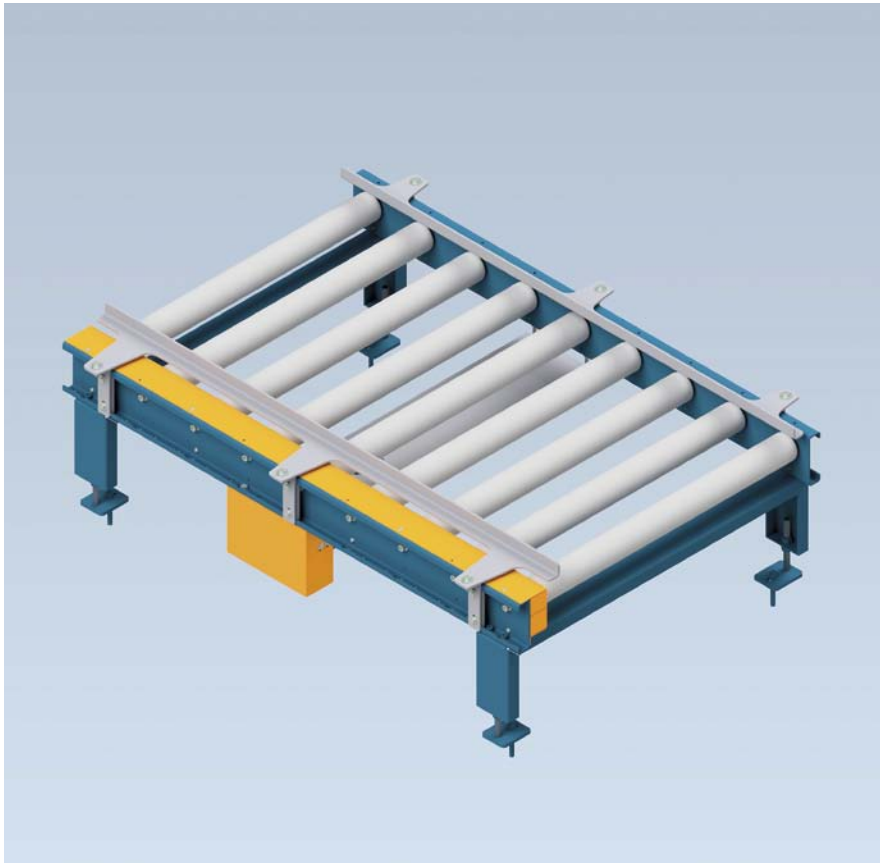
## 2. Basic transport equipment in standard version Heavy transport



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### Driven roller conveyor 400 V

The driven roller conveyor is used for transporting goods through mechanical drive. The transported products move along the conveyor thanks to a gearmotor that drives the passive rollers with a chain. The system consists of a steel frame, drive rollers, passive rollers, and chains. Additionally, the conveyor has guides that prevent the transported items from falling out, in the form of side rails or rings on the rollers.



#### Device specification:

- Transport speed: 0,4 [m/s]
- Maximum load: 500–1500 [kg/m]
- Roller diameter: 80, 89 [mm]
- Roller surface material: galvanized steel
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover cap, sensors, supports

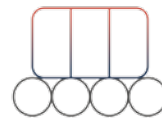
#### Device parameters:

Symbol	Definition	Dimension
B	Transport width	850, 1250 [mm]
L	Conveyor length	1250–6000 [mm]
H	Transport height	200–800 [mm]
P1	Roller pitch	182,5 [mm]

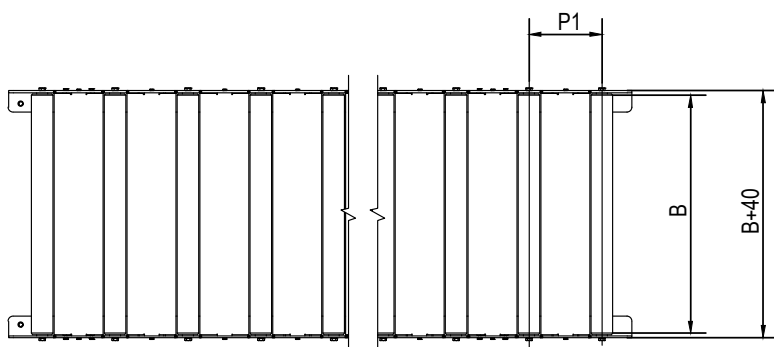
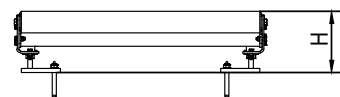
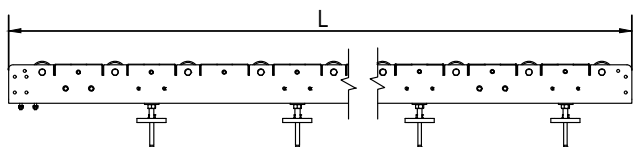
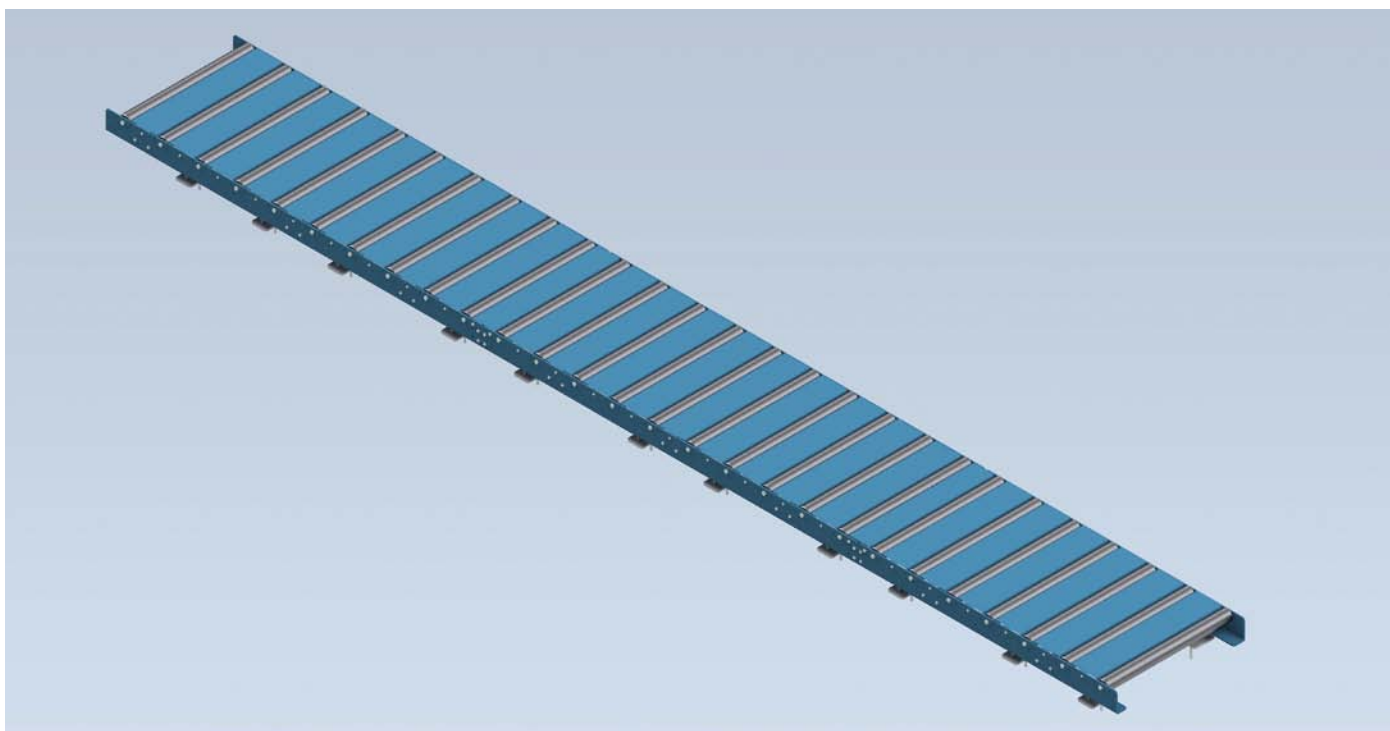
\*Change of product specifications at the customer's request is possible after agreement.

## Roller conveyor without drive

An undriven roller conveyor, also known as a gravity conveyor, is used to transport goods without the use of a mechanical drive. Transported products move along the conveyor under the influence of gravity or using the operator's force.



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### Device specification:

- Transport speed: depends on angle, conveyor length and product weight
- Maximum load: 500–1500 [kg/m]
- Roller diameter: 80, 89 [mm]
- Roller surface material: galvanized steel
- Working temperature: 0–40 °C
- Equipment elements: aluminum guides, side cover cap, sensors, supports

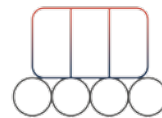
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	850, 1250 [mm]
L	Conveyor length	1250–6000 [mm]
P1	Roller pitch	182,5 [mm]
H	Conveyor height	250–800 [mm]

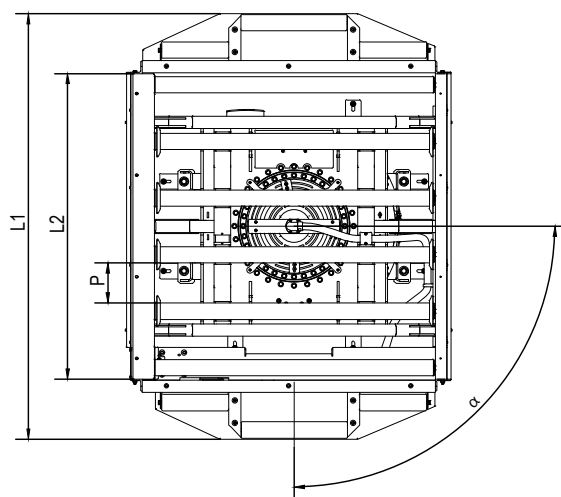
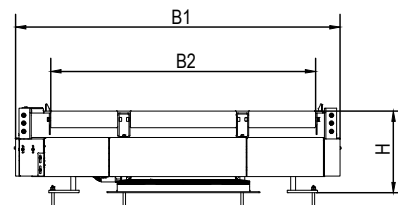
\*Change of product specifications at the customer's request is possible after agreement.

## Rotary table

The rotary table is a device used to change the direction of product transport by rotating around its own axis in the range from 0° to 180°. Its structure consists primarily of a fixed base and a rotating module containing a roller conveyor that allows the transport of materials corresponding to the size of euro pallets and industrial pallets. The turntable serves as an element of the transport line cooperating with roller conveyors.



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### Device specification:

- Transport speed: 0,4 [m/s]
- Maximum load: 500–1500 [kg/m]
- Roller diameter: 80, 89 [mm]
- Roller surface material: galvanized steel
- Voltage supply: 400 V AC
- Drive power: 0,37 [kW]
- Method of power transmission: gear ring
- Equipment elements: sensors, supports, controls, entry rollers
- Working temperature: 0–40 °C

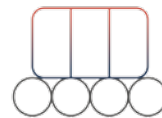
### Device parameters:

Symbol	Definition	Dimension
B1	Total width of the conveyor	1600 [mm]
B2	Working width	850, 1050 [mm]
H	Transport height	400–800 [mm]
L1	Total length conveyor	2086 [mm]
L2	Working length conveyor	1250 [mm]
P	Roller pitch	182,5 [mm]
α	Rotation range	0–180 [°]

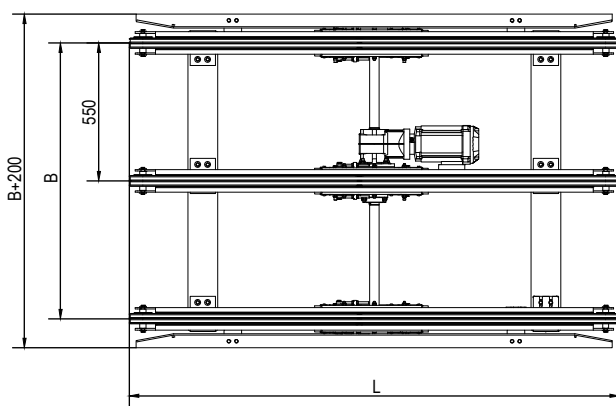
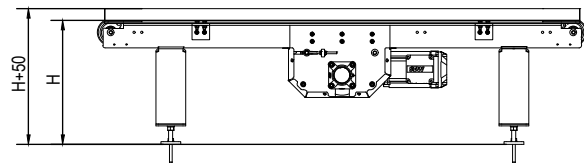
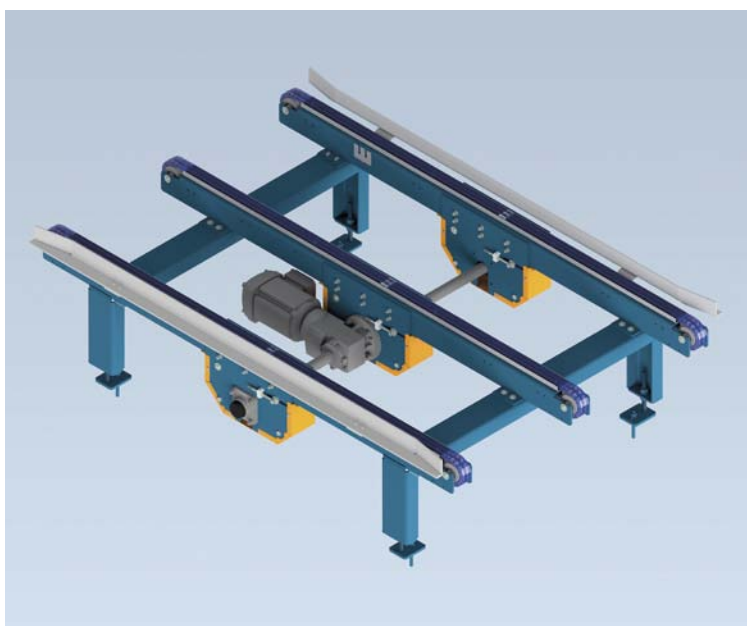
\*Change of product specifications at the customer's request is possible after agreement.

## Pallet chain conveyor

A chain conveyor is a device used for transporting pallets. Its operation is based on a motor drive connected to a gearbox that ensures the appropriate force and movement speed. The motion is transmitted through a shaft, sprockets, and chains. To reduce friction between components, sliding profiles are used, which helps minimize power consumption. The conveyor's structure includes a drive system, a shaft with gears, a tensioning system, sliding profiles, load-bearing profiles, and supports.



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### Device specification:

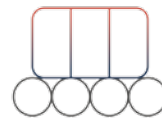
- Transport speed: 0,4 [m/s]
- Maximum load: 500–1500 [kg]
- Voltage supply: 400 V AC
- Drive transmitted by: chain 12B-2
- Working temperature: 0–40 °C
- Equipment elements: gear motor, sprocket, side guides, tensioning system, chain guides, supports, controls

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	850; 1250 [mm]
L	Conveyor length	1200–6000 [mm]
H	Transport height	350–800 [mm]

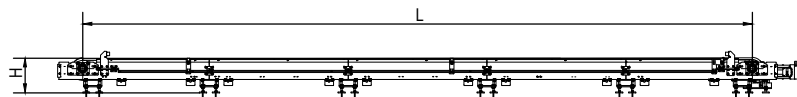
\*Change of product specifications at the customer's request is possible after agreement.

## Modular pallet conveyor



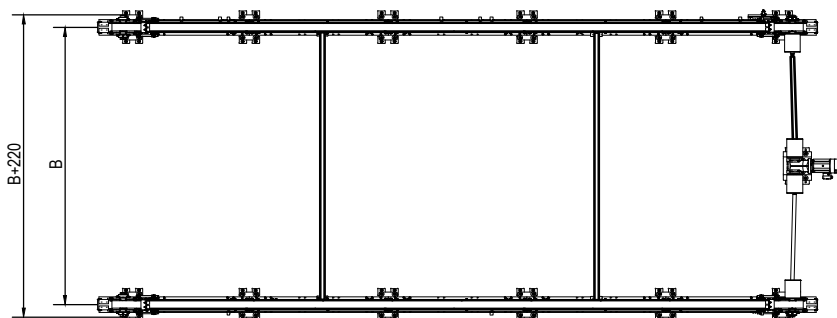
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A modular conveyor is a device used for transporting pallets. Its operation is based on a motor drive connected to a gearbox that ensures the appropriate force and movement speed. The motion is transmitted through shafts, chains, and modular belts. To reduce friction between components, sliding profiles are used, which helps minimize power consumption. The conveyor's structure includes a drive system, a shaft with gears, a tensioning system, sliding profiles, load-bearing profiles, and supports.



### Device specification:

- Transport speed: 0,4 [m/s]
- Maximum load: 500–1500 [kg]
- Voltage supply: 400 V AC
- An example of a transport element: M6420 Flat Top Heavy Duty 2,5"
- Working temperature: 0–40 °C
- Equipment elements: gear motor, sprocket, side guides, tensioning system, chain guides, supports, controls



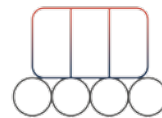
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	850; 1250 [mm]
L	Conveyor length	1200–6000 [mm]
H	Transport height	350–800 [mm]

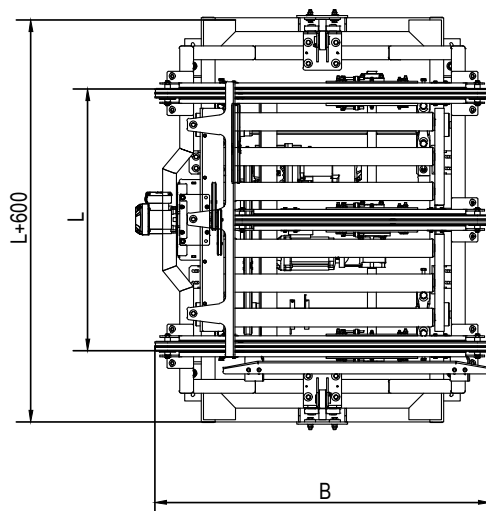
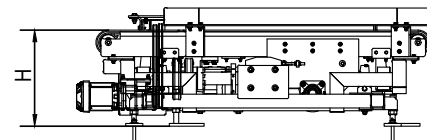
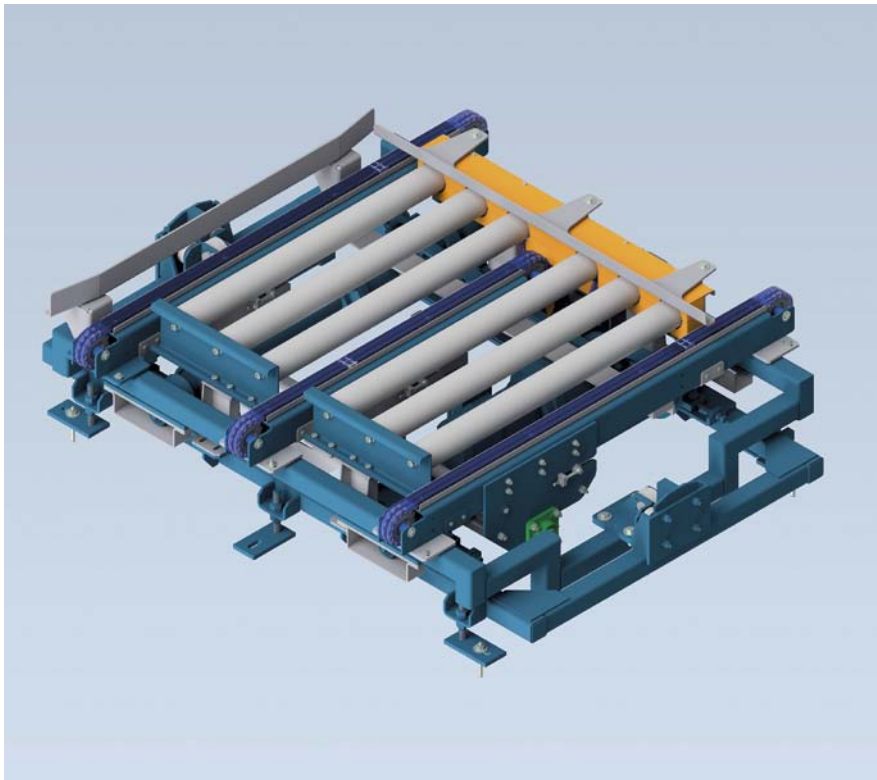
\*Change of product specifications at the customer's request is possible after agreement.

## Angular transfer system

Chain transfer, also known as angular transfer, is a module equipped with three independent drives: for the rollers, chain, and lifting mechanisms. Its function is to change the direction of load movement by 90 degrees. In this module, the chain segment is lifted. The entire structure consists of a steel frame, chains, rollers, a shaft, and geared motors



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### Device specification:

- Transport speed: 0,4 [m/s]
- Maximum load: 500÷1500 [kg/m]
- Voltage supply: 400 V AC
- Drive transmitted by: Chain
- Working temperature: 0–40 °C
- Lifting stroke 10–40 [mm]
- Roller diameter: 80, 89 [mm]
- Roller surface material: galvanized steel
- Equipment elements: gear motor, sprockets, side guides, guide rollers, tensioning system, chain guides, support frame, controls

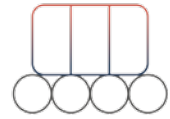
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	1450 [mm]
L	Conveyor length	1150 [mm]
H	Transport height	400–800 [mm]
P	Drive power	0,37–3 kW

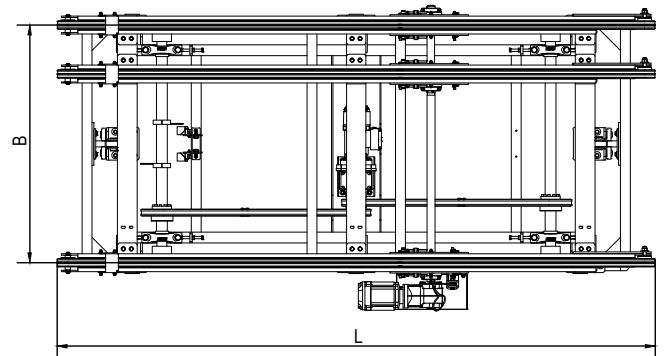
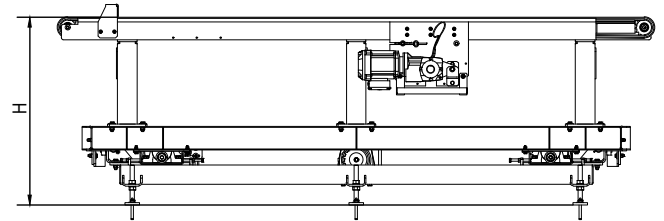
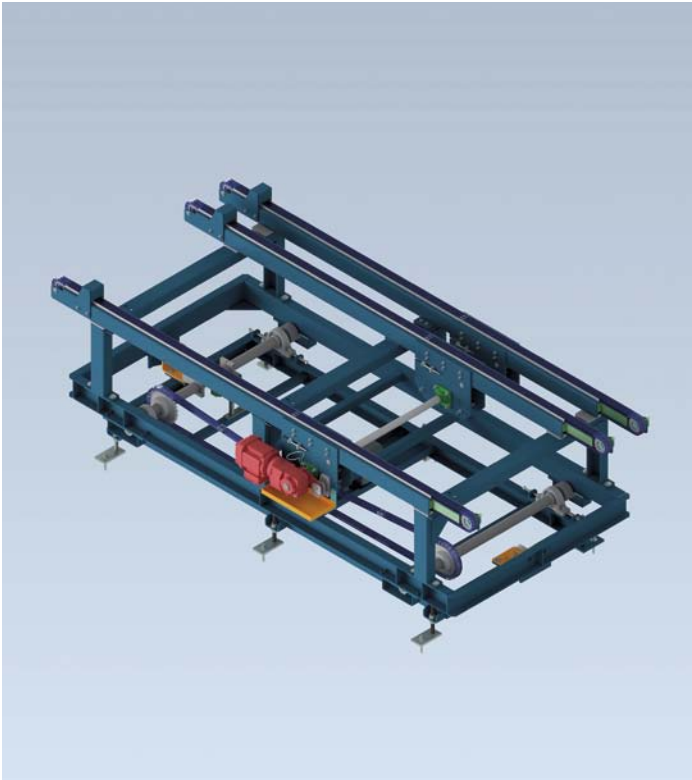
\*Change of product specifications at the customer's request is possible after agreement.

## Eccentric table

The eccentric table is used to transport products and transfer them to a neighboring device by adjusting the height. Horizontal and vertical movements are carried out using chains powered by geared motors. The device is equipped with covers and bumpers to prevent products from falling.



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### Device specification:

- Transport speed: 0,4 [m/s]
- Maximum load: 500–1500 [kg/m]
- Voltage supply: 400 V AC
- Drive transmitted by: chain 12B-2
- Working temperature: 0–40 °C
- Equipment element: gear motor, sprockets, side guides, tensioning system, chain guides, supports, controls

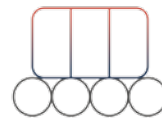
### Device parameters:

Symbol	Definition	Dimension
B	Transport width	850; 1250 [mm]
L	Conveyor length	1200–6000 [mm]
H	Transport height	500–1000 [mm]
S	Lifting stroke	50–350 [mm]

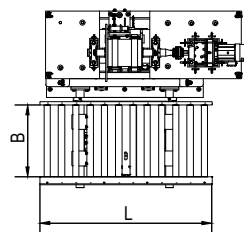
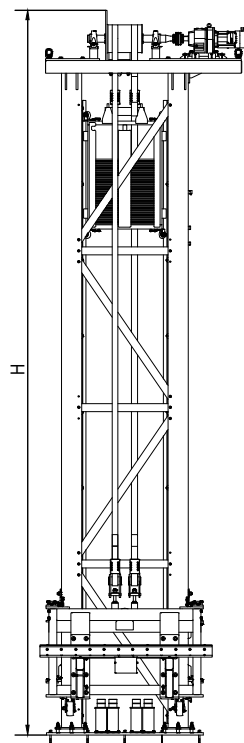
\*Change of product specifications at the customer's request is possible after agreement.

## Double-post elevator

The elevator is used to transfer elements between different levels. Its main structure consists of two steel columns. The trolley is guided by rollers and tracks. The elevator is powered by a gear motor, which operates a drum where the movement occurs. The trolley is driven by belts wrapped around the drum. Additionally, the wind trolley can be equipped with either a roller or a chain trolley.



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### Device specification:

- Transport speed: 1 [m/s]
- Maximum load: 500–1500 [kg/m]
- Roller diameter: 80 [mm]

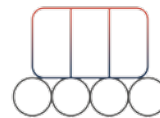
### Device parameters:

Symbol	Definition	Dimension
H	Total height	15000 [mm]
B	Transport width	850, 1250 [mm]
L	Conveyor length	1250–2500 [mm]
P1	Roller pitch	182,5 [mm]

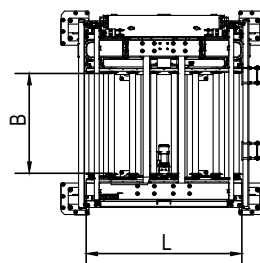
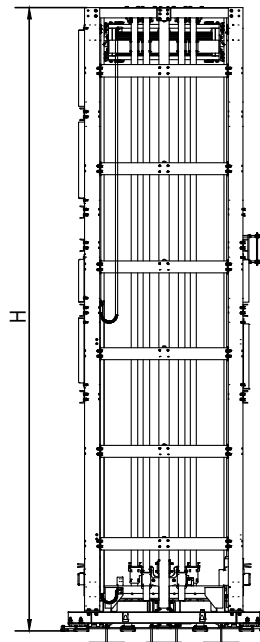
\*Change of product specifications at the customer's request is possible after agreement.

## Four-post elevator

The elevator is used to transfer elements between different levels. Its main structure consists of four steel columns. The trolley is guided by rollers and tracks. The elevator is powered by a gear motor, which operates a drum where the movement occurs. The trolley is driven by belts wrapped around the drum. Additionally, the wind trolley can be equipped with either a roller or a chain trolley.



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### Device specification:

- Transport speed: 1 [m/s]
- Maximum load: 1200 [kg/m]
- Roller diameter: 80, 89 [mm]

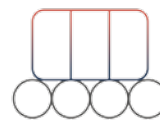
### Device parameters:

Symbol	Definition	Dimension
H	Total height	15000 [mm]
B	Transport width	850; 1250 [mm]
L	Conveyor length	1250-2500 [mm]
P1	Roller pitch	182,5 [mm]

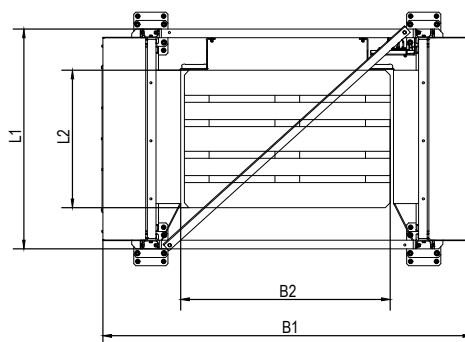
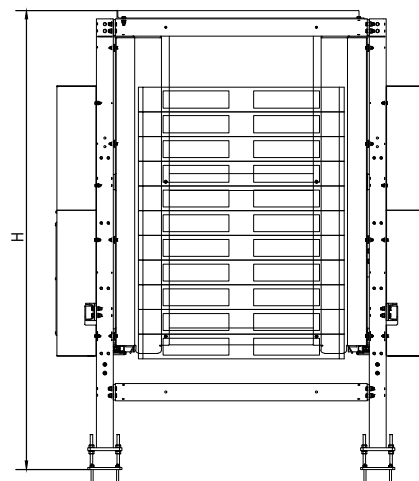
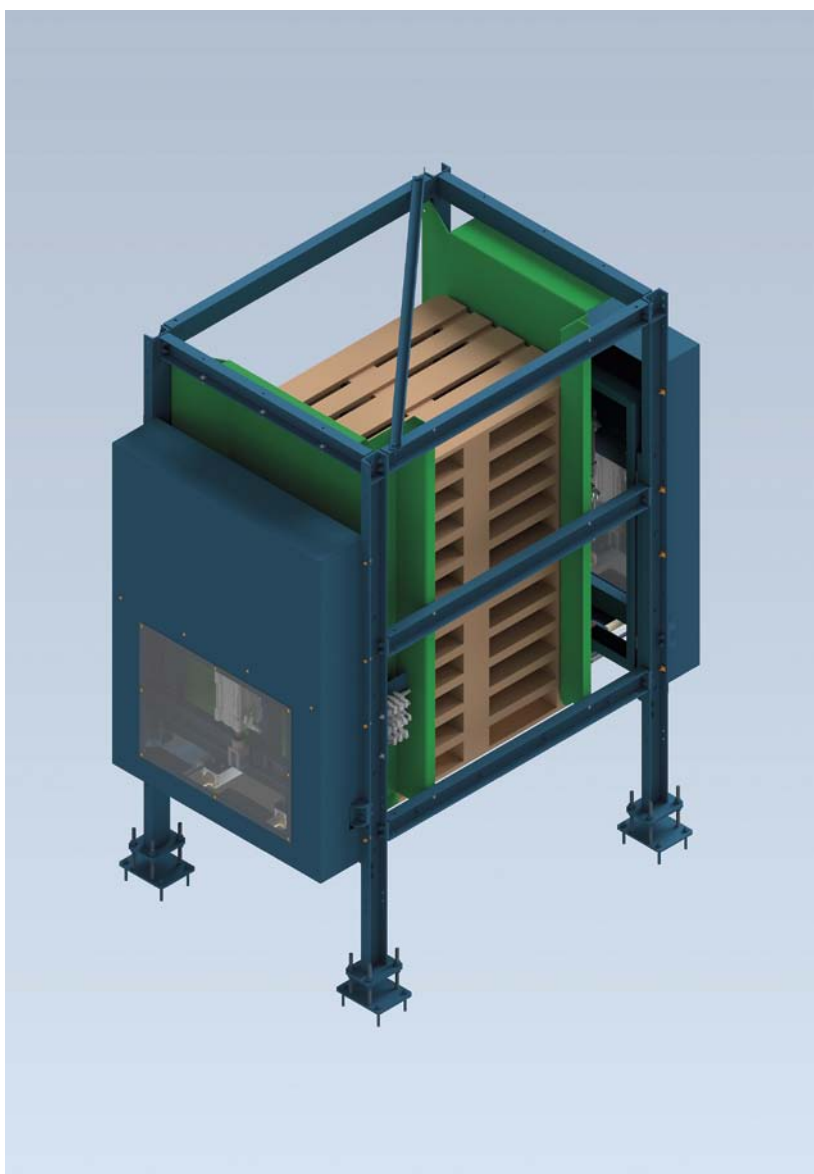
\*Change of product specifications at the customer's request is possible after agreement.

## Pallet Stacker/destacker

The stacker is used to automatically create stacks with a pallet, allowing them to be shared or transferred to the device. The destacker separates stacks of pallets into units that can be further used in production or logistics processes. The device works above a chain conveyor, which is used to move pallets. Movement is performed by two carriages using pneumatic actuators. Pallet holding is possible due to four actuators mounted horizontally, which can be used to set the grippers in motion. The actuators cooperate with control systems. The device is equipped with side covers and bumpers that prevent pallets from falling down.



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### Device specification:

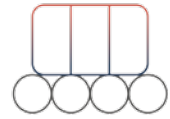
- Maximum load: 350 [kg]
- Drive: Pneumatic actuators
- Working temperature: 0–40 °C
- Maximal amount of pallets: 12
- Equipment element: actuators, side guides, lifting module, support frame, controls

### Device parameters:

Symbol	Definition	Dimension
B1	Total width	1500; 2000 [mm]
B2	Transport width	850; 1250 [mm]
L1	Total length	1300; 1700 [mm]
L2	Transport length	850; 1250 [mm]
H	Total height	2700 [mm]

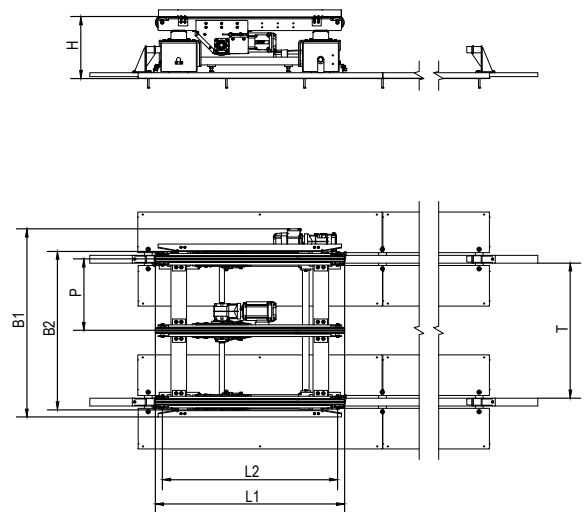
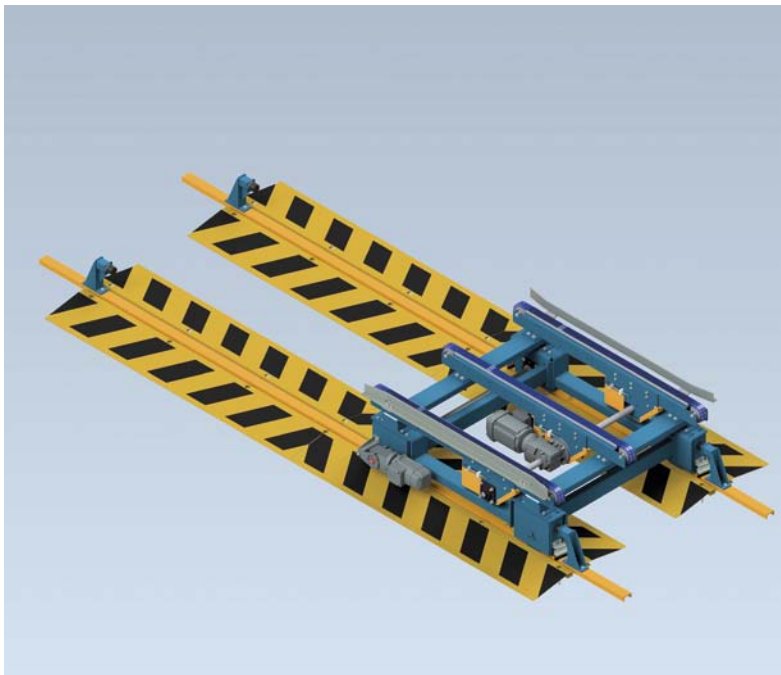
\*Change of product specifications at the customer's request is possible after agreement.

## Pallet trolley – „Shuttle”



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A shuttle is a device used for the linear transport of products by movement on rails. Its structure consists of a module moving on tracks and a module containing a chain or roller conveyor that allows the transport of materials corresponding to the size of euro pallets and industrial pallets. The shuttle can be divided into longitudinal and transverse types, depending on the arrangement of the modules relative to each other. The shuttle is used as an element of a transport line, cooperating with other types of conveyors, and is used in places where the communication route must be maintained.



### Device specification:

- Transport speed: 1 [m/s]
- Maximum load: 500–1500 [kg/m]
- Voltage supply: 400 V
- Drive power: 0,12/0,37 [kW]
- Drive transmission: directly/chain
- Equipment element: side guides, sensors, running track, controls, guide rollers, wheels,
- Working temperature: 0–40 °C

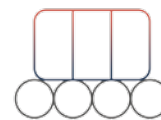
### Device parameters:

Symbol	Definition	Dimension
B1	Total width	1450 [mm]
B2	Transport width	1218 [mm]
H	Transport height	400–800 [mm]
L1	Conveyor length	1450 [mm]
L2	Working conveyor length	1350 [mm]
P	Chain track spacing	549 [mm]
T	Track spacing	1098 [mm]

\*Change of product specifications at the customer's request is possible after agreement.

## 3. Function sets in intralogistics

### Interlevel transport



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In modern intralogistics systems, where automation of the flow of goods is crucial, transport sets consisting of several cooperating devices constitute the basis for the efficient operation of warehouses and distribution centers. It is important that individual transport devices are built in a modular manner, enabling them to be combined into sets that perform specific functions in extensive transport systems.

An example of such a functional set for transporting pallets may be a combination of a chain or roller conveyor, a turntable, a stacker and an elevator – i.e. a set of appropriately configured basic transport devices.

For more information on configuring feature sets, please contact the **Intralogistics Department of Transsystem SA**



Transport devices that form a functional set for inter-level transport

#### Chain conveyor

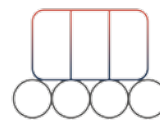
Chain conveyors are used to transport pallets horizontally along a designated route. Thanks to its design, it enables safe and stable transport of pallets in both automatic and semi-automatic systems.

- It consists of several parallel chain tracks on which pallets move.
- It is driven by an electric motor, which ensures smooth movement of transported loads.
- He can be equipped with sensors controlling the presence of pallets and stopping mechanisms at specific points.

## Turntable

The turntable allows you to change the direction of pallet movement, allowing them to rotate 90° or 180°, depending on the needs of the system.

- It has a rotating platform on which a chain conveyor is mounted.
- After receiving the pallet, the platform rotates in the given direction and the pallet continues its journey.
- Rotation is controlled automatically, usually using electric or pneumatic actuators.



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## Stacker/destacker

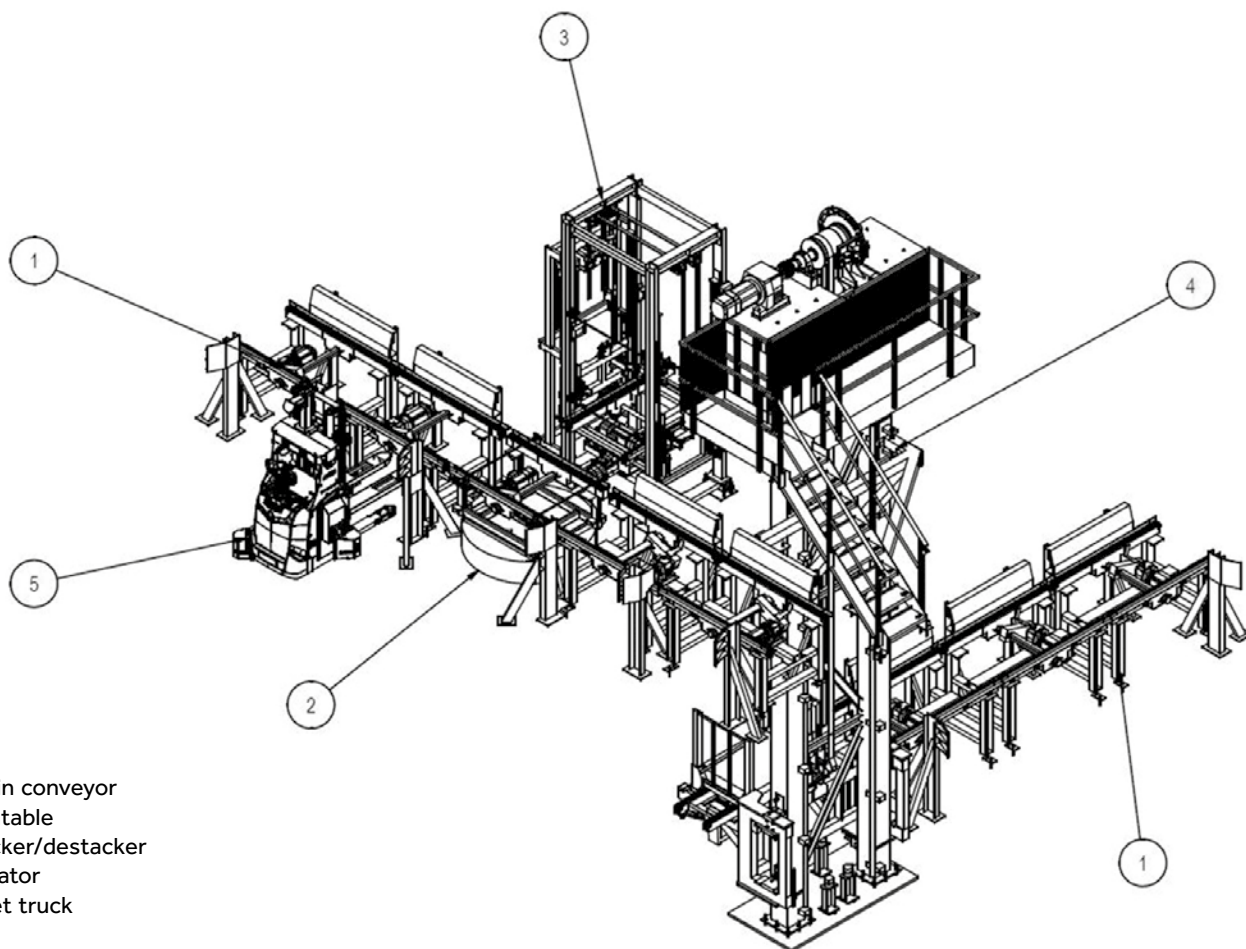
The stacker is responsible for vertically stacking pallets on top of each other stacking or destacking. It is essential in warehousing processes, shipment preparation and space optimization.

- Equipped with a mechanism for lifting and lowering pallets.
- He can work in automatic mode, removing pallets from the conveyor and stacking them.
- Equipped with sensors that detect stack height and safety systems to prevent pallets from tipping over.

## Elevator

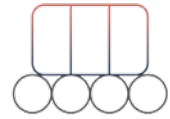
The elevator allows pallets to be transported between different levels in a warehouse or logistics system. It is a key element in multi-level distribution centers.

- It consists of a platform lifted by hydraulic cylinders, a screw mechanism or a rope system.
- He can be equipped with pallet guidance systems and locks to prevent the load from shifting during transport.
- After reaching the designated level, the pallet is transferred to the next stage of transport.



1. Chain conveyor
2. Turntable
3. Stacker/destacker
4. Elevator
5. Pallet truck

## 4. Basic transport devices in special versions

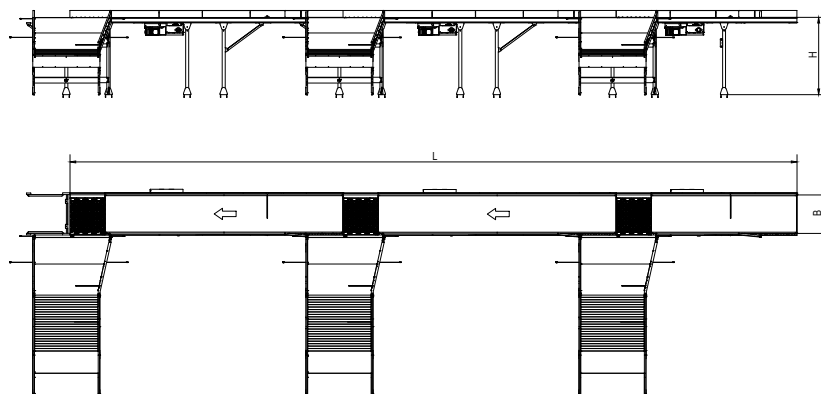
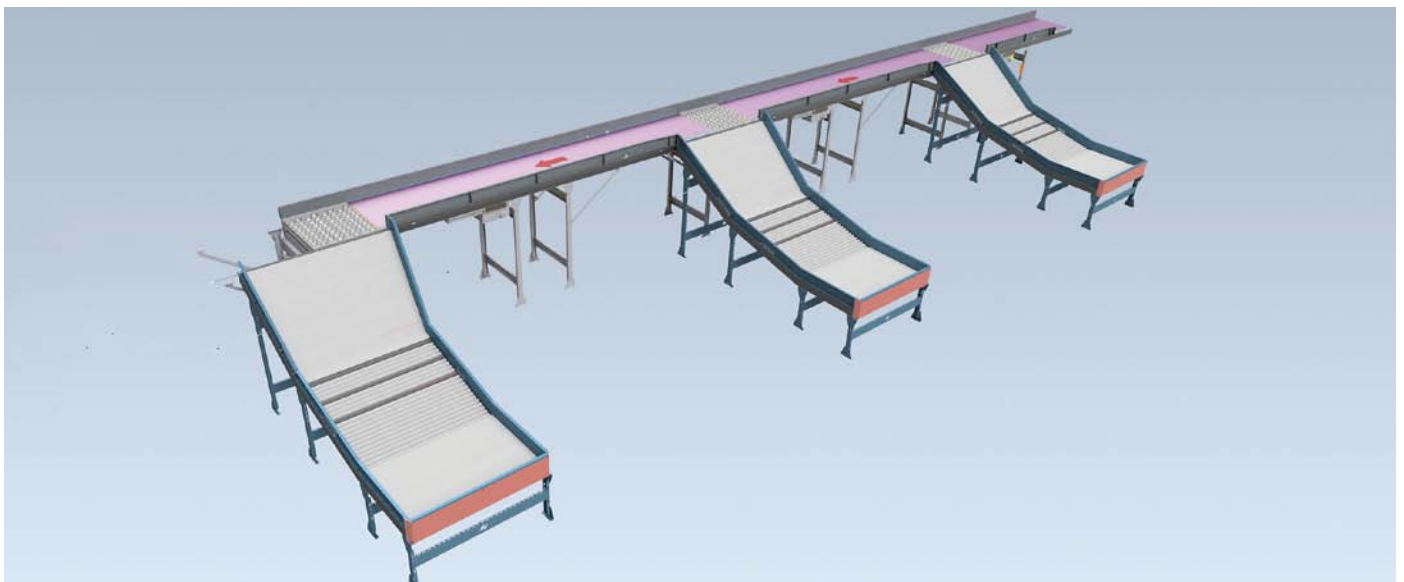


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### Diverter Sorter

The Diverter sorter is an advanced solution that enables efficient and precise sorting in various industries. The device can handle a wide range of products, including parcels, letters and irregularly shaped items. The sorter is built with efficient belt conveyors and sorting cassettes that allow items to be directed directly to the target chutes without having to stop the line. The modular design of the sorter ensures scalability and adaptation to specific operational needs, making it suitable for facilities of all sizes. The intelligent control system ensures smooth operation with minimal downtime, thus maximizing productivity and throughput. The solid construction and reliable operation of the sorter make it a reliable solution that streamlines sorting processes and optimizes logistics operations.

Detailed information on the construction and operation of the diverter sorter can be provided by the Intralogistics Department of Transsystem SA – please contact us.



#### Device specification:

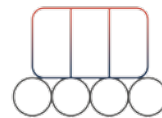
- Transport speed: 0,5–1,5 [m/s]
- Maximum load: 30 [kg]
- Power supply voltage: 24 V DC/400 V AC
- Working temperature: 0–40 °C
- Efficiency: up to 4000 [pcs/h]

#### Device parameters:

Symbol	Definition	Dimension
B	Transport width	400; 500; 600; 700; 800 [mm]
L	Length	Depending on the number of modules used
H	Height	up 400 [mm]

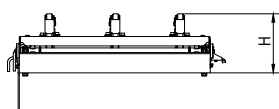
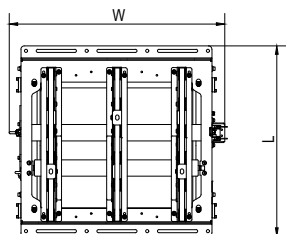
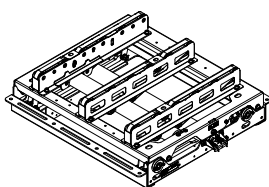
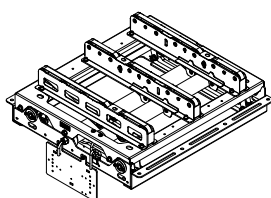
\*Change of product specifications at the customer's request is possible after agreement.

## Roller conveyor with cross-belt transfer



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The cross transfer module allows the direction of transport and sorting on the roller conveyor to be changed by 90°. Standardized transfer modules can also be used in existing roller conveyor systems. Cross transfers are powered by a safe 24 V/48 V DC voltage and are easy to install. The units are configured according to customer requirements and the specifics of the conveyors. The transfer modules are controlled by ConveyLinx or Motion Linx controllers, ensuring seamless integration with all types of conveyors, without the need for pneumatics and a control console.



### Device specification:

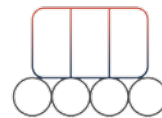
- Transport speed: 0,2 –1 [m/s]
- Maximum load: 50 [kg/mb]
- Maximum number of belts: 5
- Minimum required roller spacing: 75 [mm]
- Transfer stroke: 15 [mm]
- Maximum efficiency: 1400 [pcs/h]
- Power supply voltage: 24/48 V DC
- Drive: electric roller
- Drive transmission: belt

### Device parameters:

Symbol	Definition	Dimension
W	Width	360–800 [mm]
H	Height	168–183 [mm]
L	Length	360-800 [mm]

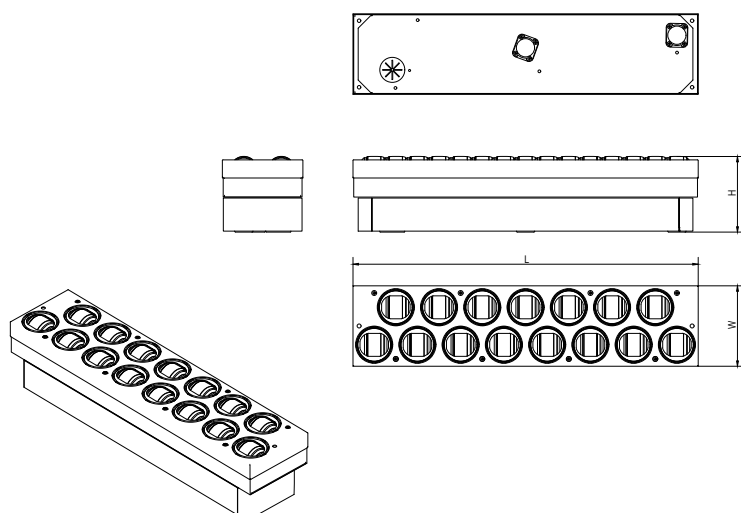
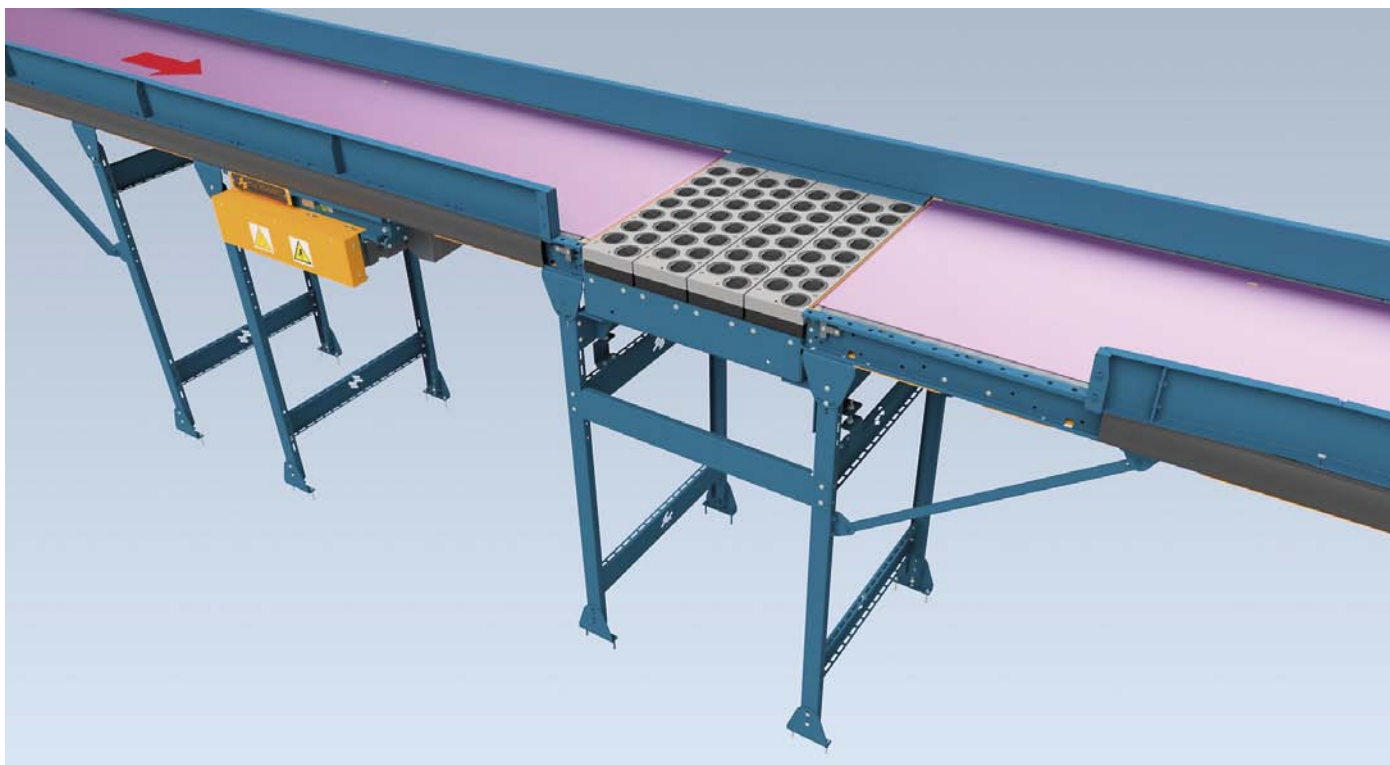
\*Change of product specifications at the customer's request is possible after agreement.

## Conveyor with sorting module



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Sorting multi angle modules are designed to change the direction of transport by various angle from 30° to even 90° also in a dynamic way. Their design is compact, so they can be easily integrated into new and existing conveyor lines. Sorting modules are powered by 24 V / 48 V, which ensures a high level of safety and ease of installation. The devices are configured according to the customer's requirements, ensuring seamless integration with all types of conveyors, without the need for pneumatics and a control console.



### Device specification:

- Transport speed: 0,2–1,5 [m/s]
- Maximum load: 30 [kg/m]
- Sorting efficiency: up to 4000 [pcs/h]
- Supply voltage: 24 V / 48 V DC
- Smallest dimensions of transported products: 100x150 [mm]

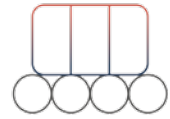
### Device parameters:

Symbol	Definition	Dimension
W	Transport width	186 [mm]
H	Height	175 [mm]
L	Conveyor length	400–800 [mm]

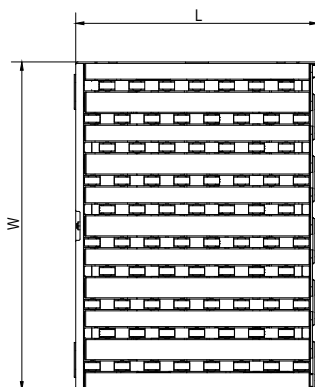
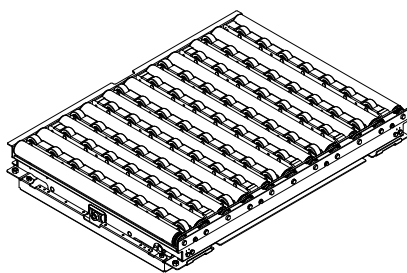
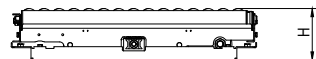
\*Change of product specifications at the customer's request is possible after agreement.

## F-RAT NX Sorting Module

The F-RAT NX module allows you to change the direction of transport and sorting by 90°. It has a compact design that makes it easy to use in both new and existing conveyor systems. The F-RAT device is powered by 24 V DC brushless motors, which ensures a high standard of safety and easy installation. The design of the device allows for quick and smooth transfer of even very delicate products.



INTRALOGISTICS BUSINESS UNIT



### Device specification:

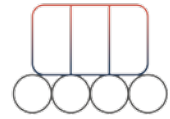
- Transport speed: 0,2–1 [m/s]
- Maximum load: 50 [kg/m]
- Maximum efficiency: up to 2250 [pcs/h]
- Supply voltage: 24 V DC
- Drive type: electric roller
- Drive transmission: Poly-V belt

### Device parameters:

Symbol	Definition	Dimension
W	Transport width	395; 495; 595; 695; 795 [mm]
H	Height	125 [mm]
L	Conveyor length	595; 745; 895 [mm]

\*Change of product specifications at the customer's request is possible after agreement.

## Sorter Cross-belt



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The Cross-belt sorter consists of several dozen or even several hundred conveyor belt segments moving perpendicularly to the direction of the main flow of goods. The sorting system consists of, among others, the feeding part (automatic or manual), spacing, positioning, identifying packages, and the output part and control system. The Cross-belt sorter can effectively sort all types of cartons, boxes, packages and many other types of items and is currently the main sorting system in the field of intralogistics. The intelligent, fast cross-belt sorter based on the IoT concept is an efficient system for dynamic sorting of a wide range of goods.

These sorters meet the constantly growing demand of the industry for fast and error-free sorting. Cross-belt sorters can be divided into horizontal (Horizontal Crossbelt Sorter) and vertical (Vertical Crossbelt Sorter).

Detailed information on the construction and operation of the Cross-belt sorter will be provided to you by the Intralogistics Department of Transsystem SA – please contact us.

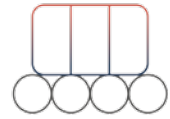


### Device specification:

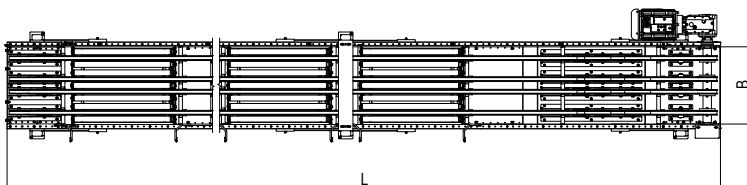
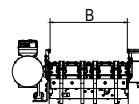
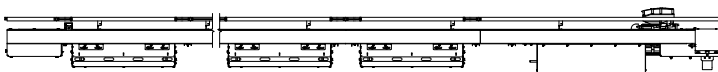
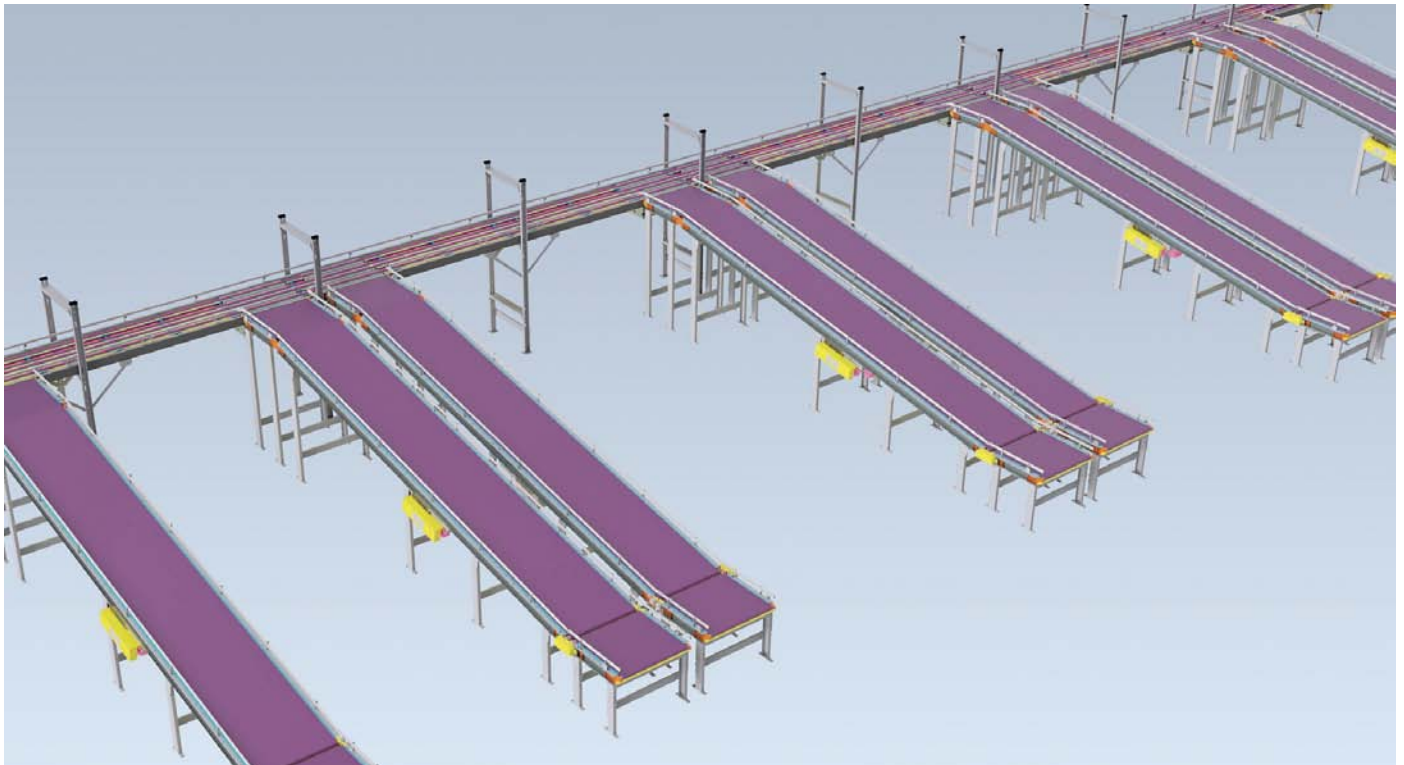
- Transport speed: 0,5–1,5 [m/s]
- Maximum load: 30 [kg/m]
- Power supply: 24 V DC / 400 V AC
- Working temperature: 0–40 °C
- Conveyor width: 500–1100 [mm]
- Minimum dimensions of the transported product: 75x75x5 [mm]
- Maximum dimensions of the transported product: 600x400x400 [mm]
- Maximum efficiency: up to 16000 [pcs/h]
- Modular and scalable design
- Quiet operation even at full load

## Sorter Narrow-belt

The narrow belt sorter, is a conveyor made of belts placed along the main transport, used to transport goods in to drop locations. The change of direction is realize by lifted roller segments that redirect the transported loads at a 90° angle to the right or left side, placing them on transverse receiving conveyors. The transfer takes place continuously, without stopping the main conveyor, which ensures dynamic operation of the device and maximum efficiency.



INTRALOGISTICS BUSINESS UNIT



### Device specification:

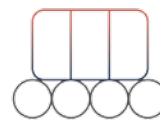
- Transport speed: 0,5–1,5 [m/s]
- Maximum load: 50 [kg/m]
- Maximum efficiency: up to 6000 [pcs/h]
- Ambient temperature: 5–40 °C
- Power supply voltage: 400 V AC
- System without pneumatics

### Device parameters:

Symbol	Definition	Dimension
B	Transport width	450; 650; 850 [mm]
L	Conveyor length	1,5–30 [m]
N	Drive power	0,37–4 [kW]

\*Change of product specifications at the customer's request is possible after agreement.

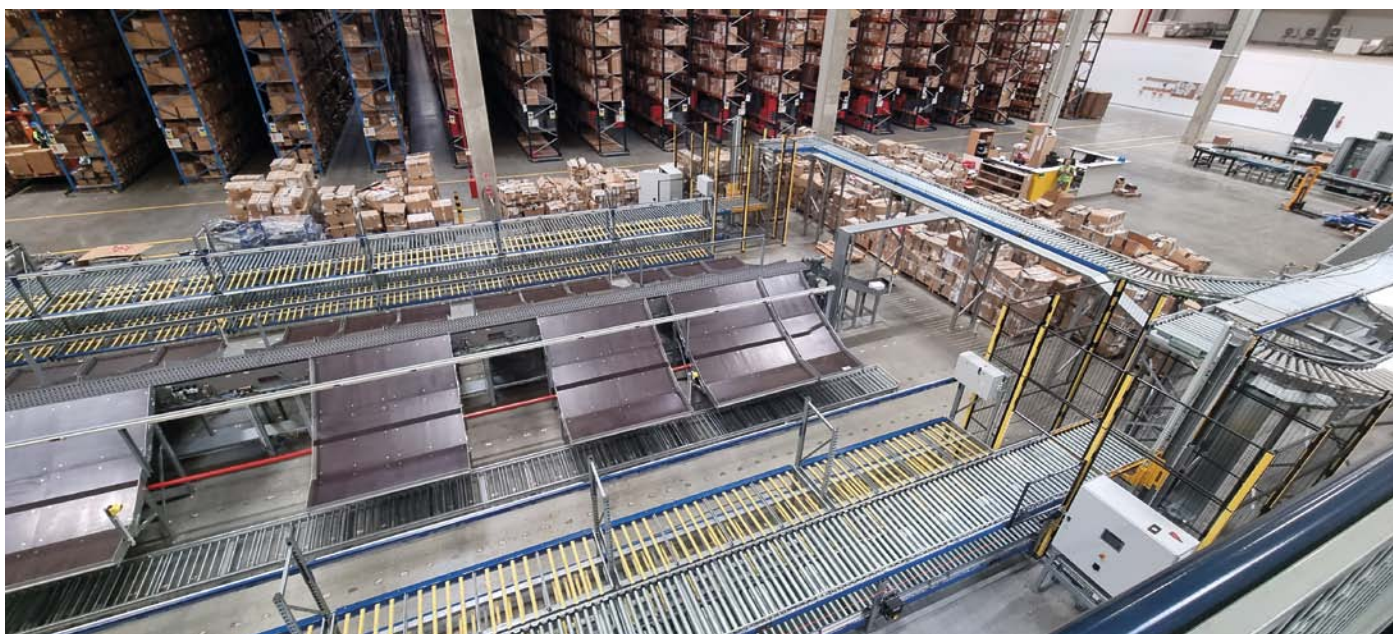
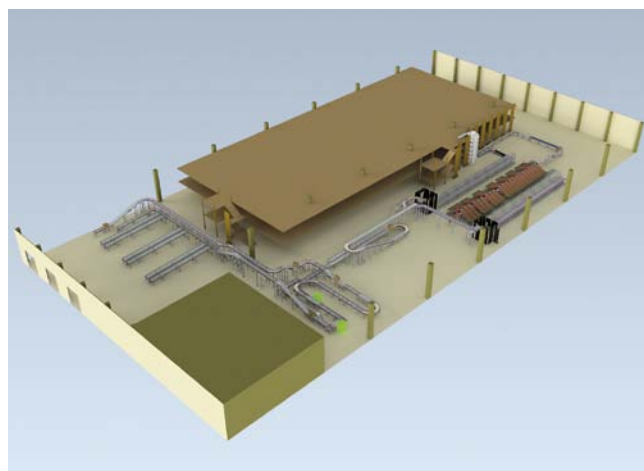
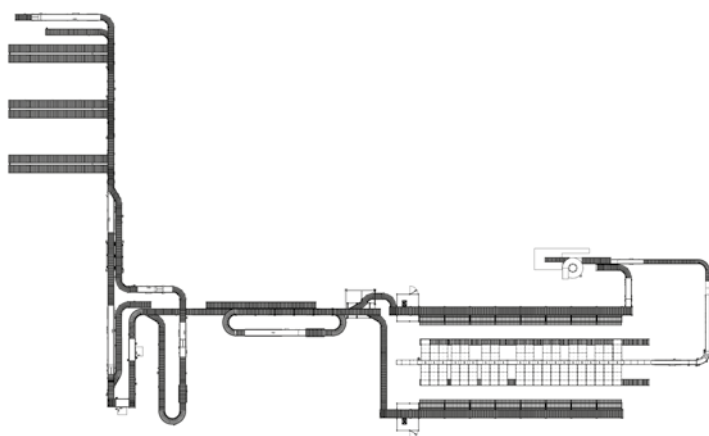
## 5. Comprehensive implementations in intralogistics

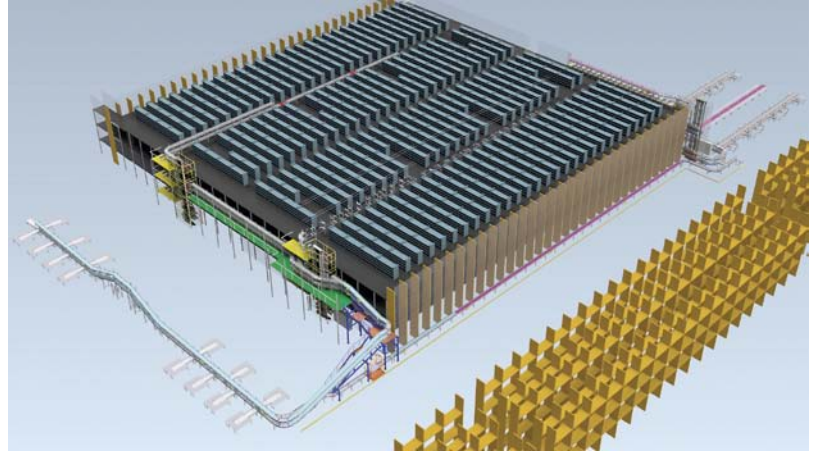
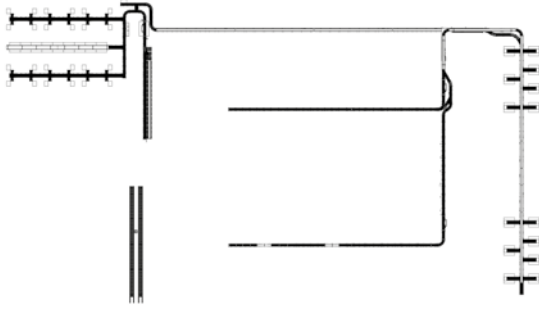
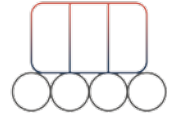


INTRALOGISTICS BUSINESS UNIT

Transsystem SA builds complete, automated high-bay warehouses with infrastructure and all necessary transport and sorting devices. We carry out comprehensive intralogistics projects from concept through design, production of steel structures, construction of transport devices and control cabinets, delivery of all components to the construction site, to assembly and start-up.

In the drawings and photographs below, we present selected examples of comprehensively implemented projects and please contact us if you are considering an investment of this nature





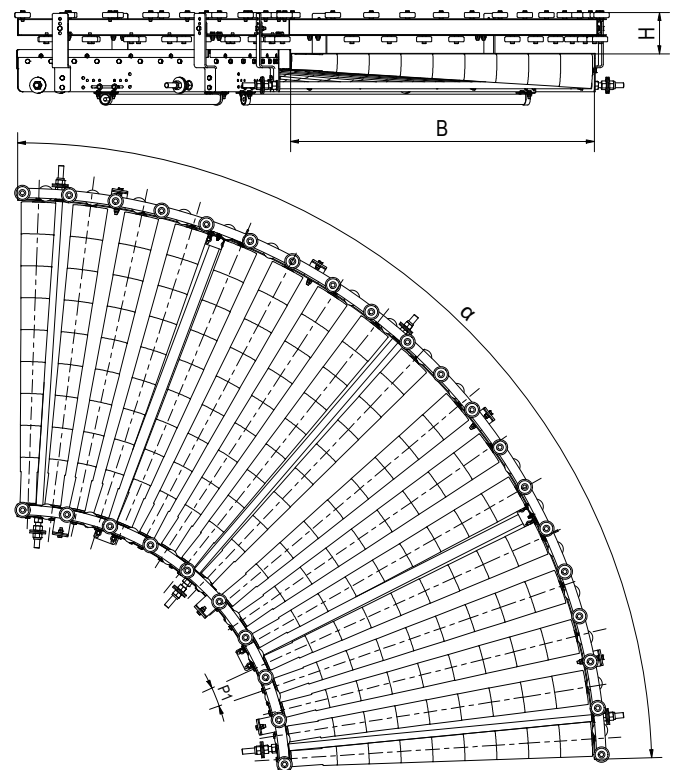
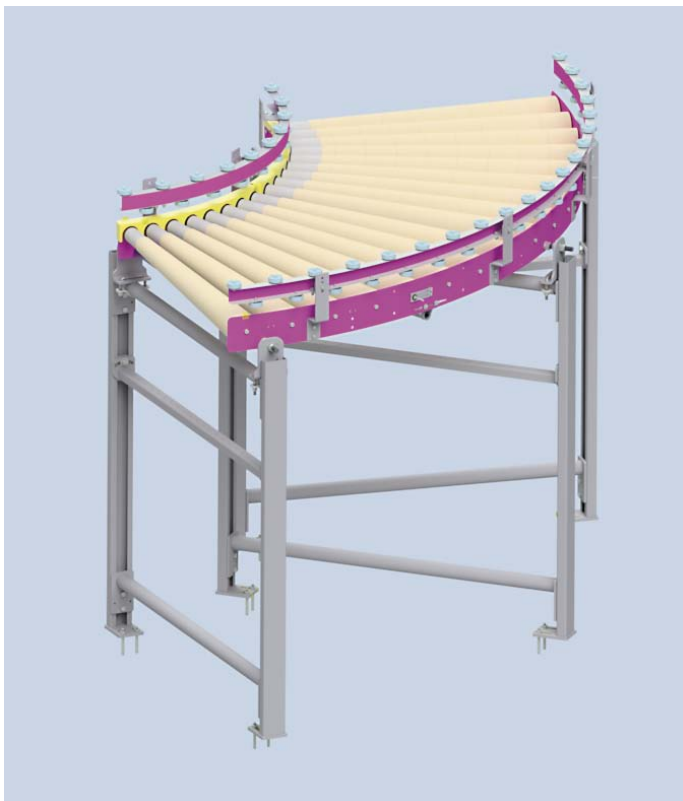
## 6. Basic transport equipment for the tire industry



TIRE BUSINESS UNITS

### Accumulating Roller Conveyor – Curve

The roller conveyor is used for transporting tires via a mechanical drive system. The transported products move along the conveyor thanks to the motorized conical roller, which drives the passive rollers through belts. The device consists of a steel frame, drive rollers, passive rollers, and belts. Additionally, the conveyor is equipped with a side guide composed of a steel profile and guide rollers. This solution ensures that the transported item is securely held and prevents it from falling off. To maintain safety, access to the drive belts is secured with a protective cover.



#### Device specification:

- Transport Speed: 0,5–1,2 [m/s]
- Maximum Load: 50,0 [kg]
- Drive Type: Motor roller
- Voltage: 24 V DC
- Roller Diameter: 55–110 [mm]

#### Device parameters:

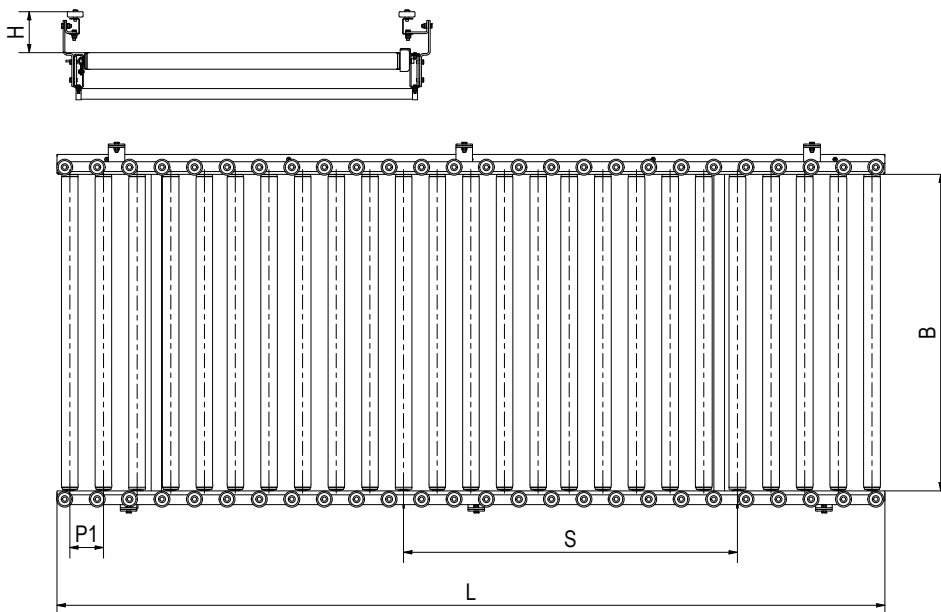
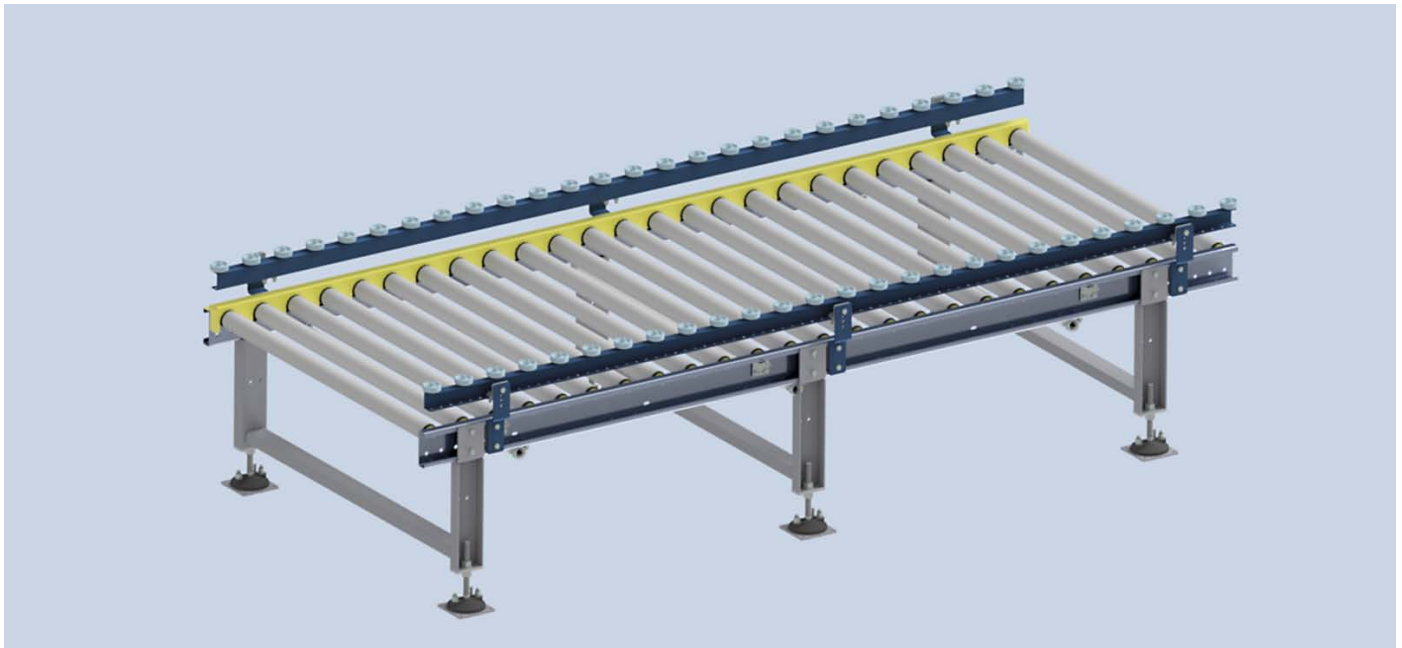
Symbol	Definition	Dimension
B	Transport Width	950,0–1050, [mm]
$\alpha$	Angle	10,0–90,0 [°]
P1	Roller Pitch	5,0 [°]
H	Side Guide Height	To be determined

# Accumulating Roller Conveyor



TIRE BUSINESS UNITS

The roller conveyor is used for transporting tires via a mechanical drive system. The transported items move along the conveyor thanks to a powered roller, which drives the passive rollers through belts. The system includes a steel frame, drive rollers, passive rollers, and belts. Additionally, the conveyor is equipped with a side guide composed of a steel profile and guide rollers. This design ensures that the transported item is securely held and prevents it from falling off. For safety purposes, access to the drive belts is protected by a cover.



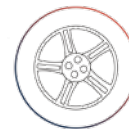
### Device specification:

- Transport Speed: 0,5-1,2 [m/s]
- Maximum Load: 50,0 [kg]
- Drive Type: Motor roller
- Voltage: 24 V DC
- Roller Diameter: 50,0 [mm]

### Device parameters:

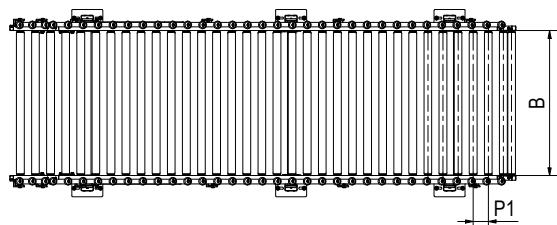
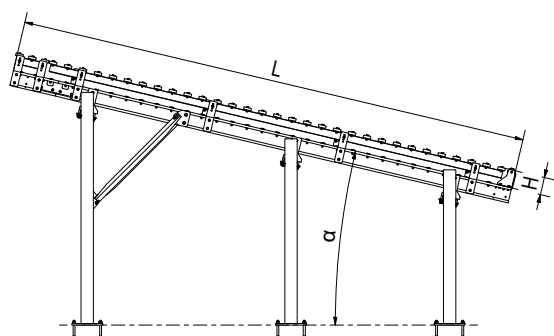
Symbol	Definition	Dimension
B	Transport Width	950,0–1050, [mm]
L	Conveyor Length	To be determined
P1	Roller Pitch	75,0; 101,6 [mm]
S	Conveyor Section Length	1100,0 [mm]
H	Side Guide Height	To be determined

## Gravity Roller Conveyor – Straight



TIRE BUSINESS UNITS

The gravity conveyor utilizes gravity force for tire transportation. Tires move down across the surface of the conveyor rollers under their own weight. The device consists of a steel frame and passive rollers. Additionally, the conveyor is equipped with a side guide made of a steel profile and guide rollers. This design ensures that the transported item is securely held and prevents it from falling off..



### Device specification:

- Transport Speed: – [m/s]
- Maximum Load: 50,0 [kg]
- Voltage: 24 V DC
- Roller Diameter: 55–110 [mm]

### Device parameters:

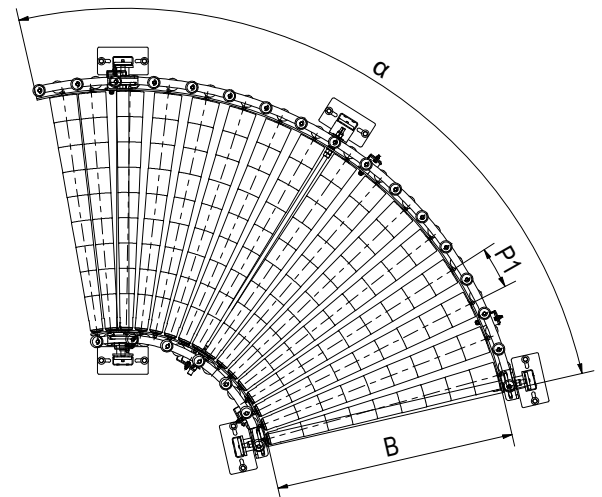
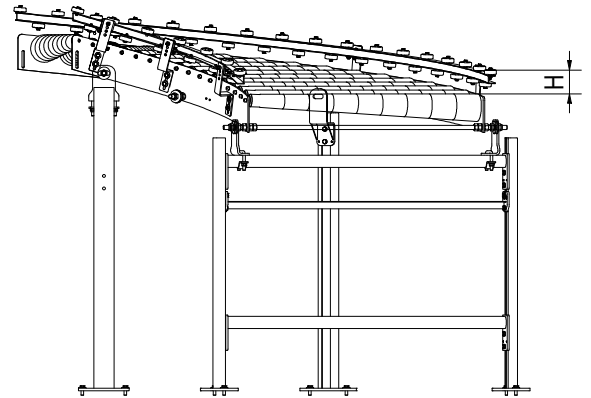
Symbol	Definition	Dimension
B	Transport Width	950,0–1050, [mm]
L	Conveyor Length	To be determined
P1	Roller Pitch	100,0 [mm]
H	Side Guide Height	To be determined
$\alpha$	Conveyor Inclination Angle	max 45,0 [°]

## Gravity Roller Conveyor – Curve



TIRE BUSINESS UNITS

The gravity conveyor utilizes gravity force for tire transportation. Tires move down across the surface of the conveyor conical rollers under their own weight. The device consists of a steel frame and passive rollers. Additionally, the conveyor is equipped with a side guide made of a steel profile and guide rollers. This design ensures that the transported item is securely held and prevents it from falling off.



### Device specification:

- Transport Speed: – [m/s]
- Maximum Load: 50,0 [kg]
- Roller Diameter: 55,0–110,0 [mm]

### Device parameters:

Symbol	Definition	Dimension
B	Transport Width	950,0–1050, [mm]
$\alpha$	Conveyor Angle	10,0–90,0 [°]
P1	Roller Pitch	5,0 [°]
H	Side Guide Height	To be determined

## Modular Belt Conveyors

Modular belt conveyors are devices dedicated to transport different size and type of tires. This type of conveyors are used in GTTS, CTTS and FFTTS areas.



TIRE BUSINESS UNITS

### Types produced:

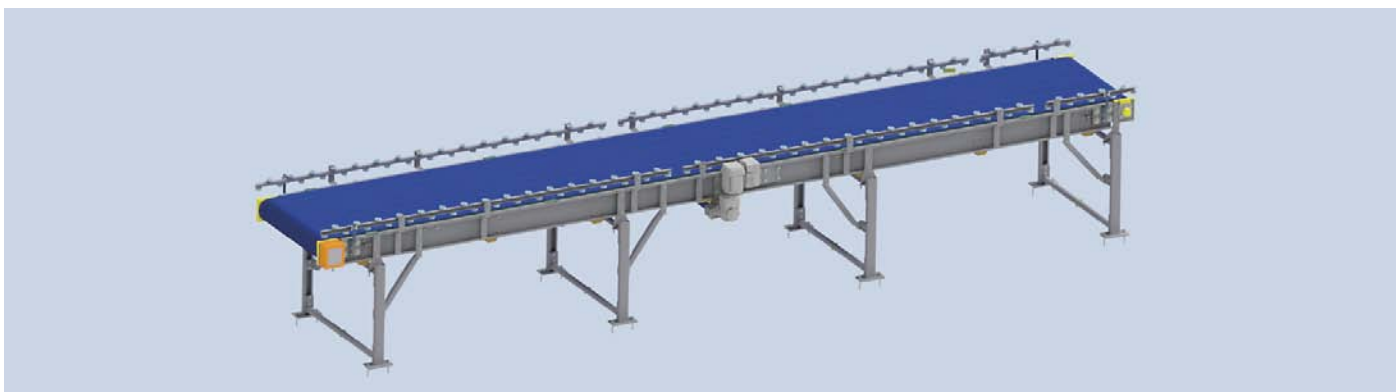
1. Modular Belt Straight Conveyors
2. Inclined/Declined Modular Belt Conveyors
3. Belt Curve Conveyor

## Straight Modular Belt Conveyors

**Straight belt conveyors** are devices used for transporting tires in a straight direction. Depending on the conveyor length, its main components include: the drive segment, the return segment, the intermediate segment, the conveyor belt, side guides, and supports. The drive segment consists of a gear motor, drive shaft, sprockets, and a frame. The conveyor drive can be positioned at the end (exit) of the conveyor for unidirectional transport or in the middle of the conveyor when transport occurs in both directions. This segment, as well as the return segment, also includes guiding and supporting components for the belt. The return segment consists of a return shaft, sprockets, and a frame made of carbon steel. For conveyors of significant length, an intermediate segment is required, which consists of a steel frame along with guiding and supporting components for the belt. A modular belt is primarily used for tire transport. To prevent the product from falling off the conveyor, side guides are installed. Rollers are mounted on a steel channel, which can be configured in various arrangements depending on the product parameters. The completed conveyor is placed on steel supports.

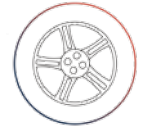


Modular Belt Straight Conveyor (Unidirectional type)

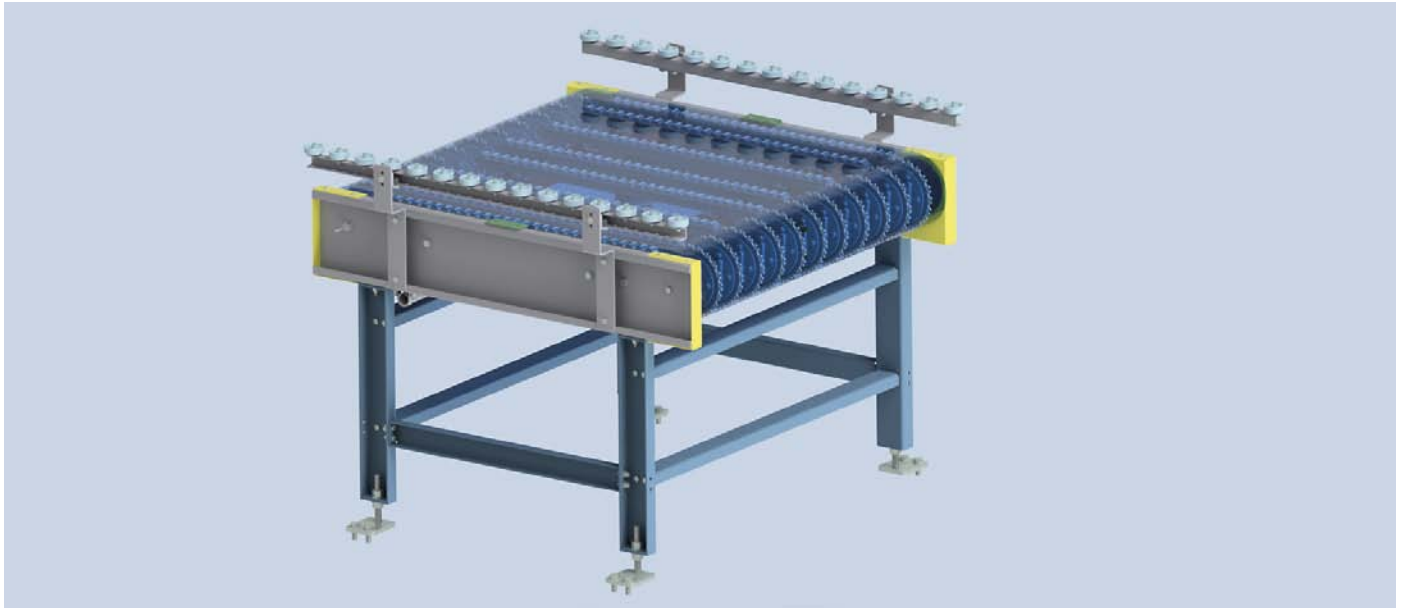


Modular Belt Straight Conveyor (Bidirectional type)

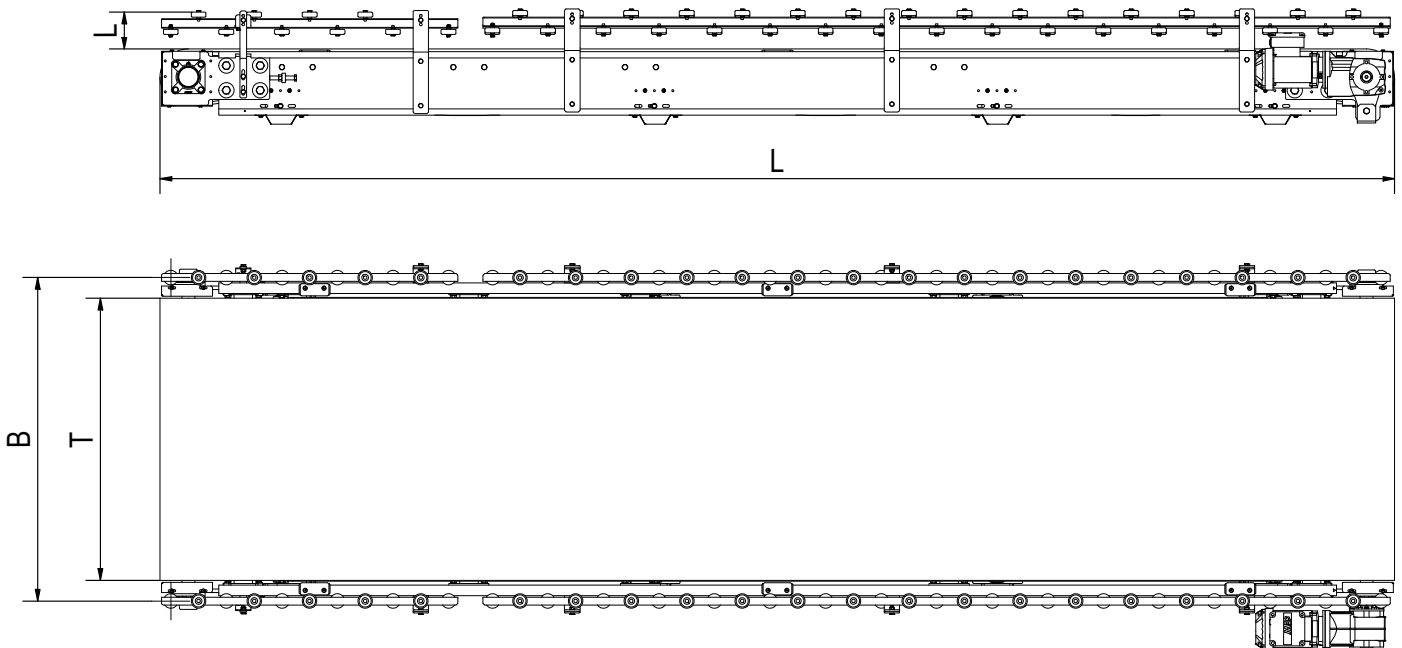
A new solution in our company is a **belt conveyor driven by an electric roller**. We use this solution for conveyors with a maximum length of  $L = 1500$  mm. This type of conveyor, similar to a conveyor driven by a gear motor, includes a drive segment, a return segment, a frame, belt guiding components, side guides, and supports.



TIRE BUSINESS UNITS



Belt Conveyor Powered by an Electric Roller



**Device specification:**

- Transport Speed: 35,0–60,0 [m/min]
- Maximum Load: 50,0 [kg]
- Drive Type/ Power Transmission: Gearmotor/ Directly; Electric roller
- Voltage: 400 V AC/ 24V DC
- Belt Support: Rollers

**Device parameters:**

Symbol	Definition	Dimension
B	Transport Width – Distance between side guides	To be determined
T	Conveyor Belt Width	800,00–1300,00 [mm]
L	Conveyor Length	1000,00–50000,00 [mm]
P	Drive Power	0.37–5,5 [kW]
H	Side Guide Height	To be determined

## Inclined and Declined Belt Conveyors



TIRE BUSINESS UNITS

**Inclined and declined belt conveyors** form another group of belt conveyors designed for transporting tires to between different levels. These conveyors are built using the same components as flat conveyors: drive and take-up unit, conveyor belt, side guides, and supports. In this type of equipment, a special modular belt with rubber elements is used.

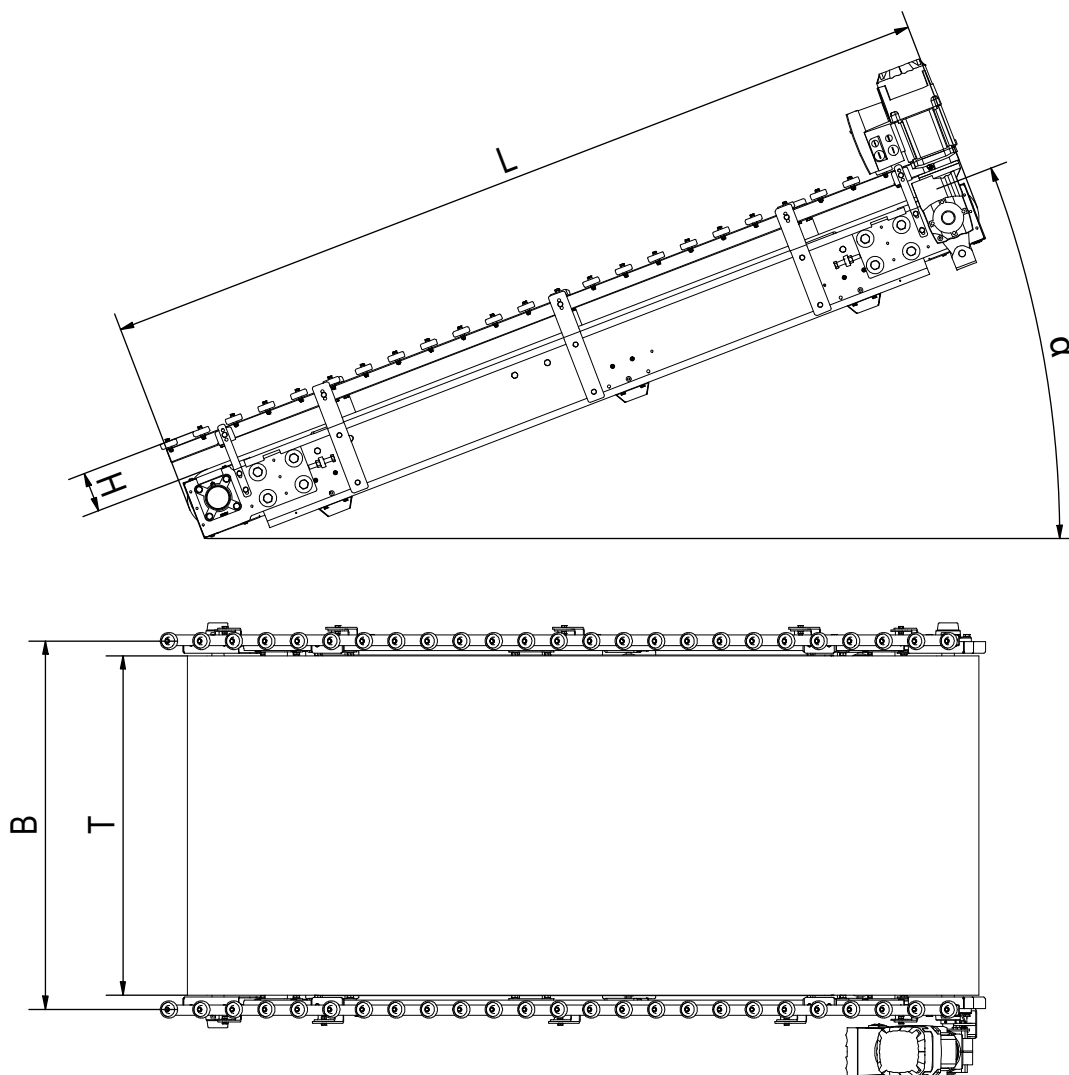
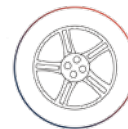
Depending on the transport system requirements and tire specifications, the inclined/declined conveyor may also include a short, straight segment that ensures smooth product transfer along its surface. The maximum incline angle is 30 degrees.



Inclined/Declined Belt Conveyor (Straight)



Inclined/Declined Conveyor with straight segment



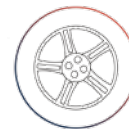
#### Device specification:

- Transport Speed: 35,0–60,0 [m/min]
- Maximum Load: 50,0 [kg]
- Drive Type/ Power Transmission: Gearmotor/ Direct
- Voltage: 400 V
- Belt Support: Rollers

#### Device parameters:

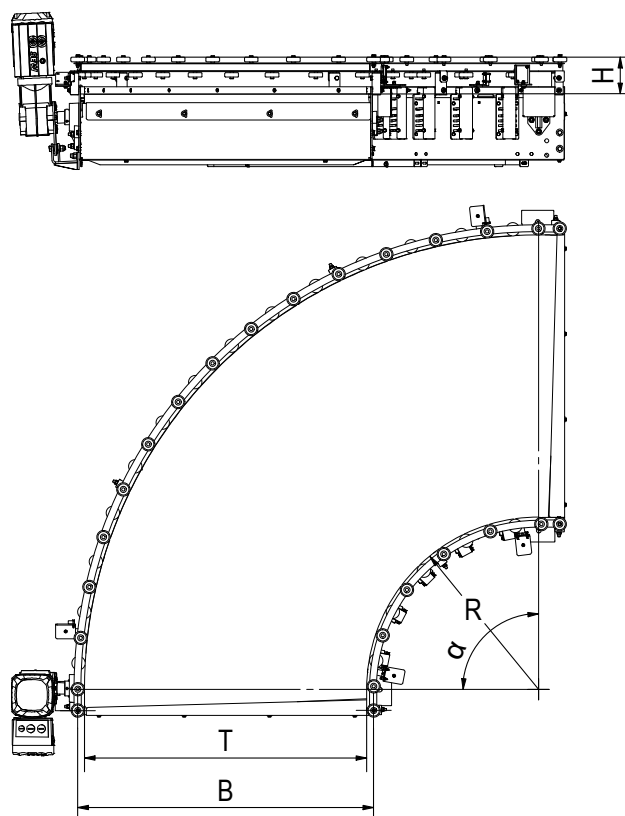
Symbol	Definition	Dimension
B	Transport Width – Distance between side guides	To be determined
T	Conveyor Belt Width	800,00–1300,00 [mm]
L	Conveyor Length	1000,0–10000,00 [mm]
P	Drive Power	0.37–3,0 kW
H	Side Guide Height	To be determined
$\alpha$	Maximum Incline Angle	30,0 stopni

## Belt Curve Conveyor



TIRE BUSINESS UNITS

**Belt Curve Conveyors** are a special type of belt conveyors used for tire transportation. These devices consist of a drive and take-up unit, modular belt, frame, side guides, and supports. The shaft and corresponding gears are part of both the take-up and drive units. The drive unit also includes a gearmotor, which is installed at the outlet of the conveyor, regardless of whether the movement occurs in one or both directions. The components that guide and support the belt are mounted on the steel frame of the curve. Side guides, which prevent tires from falling off the conveyor, are installed on the frame in various configurations. Belt curves can be designed for different angular ranges: 45°, 60°, 90°, and 180°, with a radius of 600 or 1000 mm.



Belt Curve Conveyor

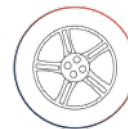
### Device specification:

- Transport Speed: 35,0–60,0 [m/min]
- Maximum Load: 50,0 [kg]
- Drive Type/ Power Transmission: Gearmotor/ Direct
- Voltage: 400,0 [V]

### Device parameters:

Symbol	Definition	Dimension
B	Transport Width – Distance between side guides	To be determined
T	Conveyor Belt Width	1000,0 [mm]
R	Radius	600,0 [mm]; 1000,0 [mm]
P	Drive Power	0.55–2,2 kW
H	Side Guide Height	To be determined

## Pneumatic Devices



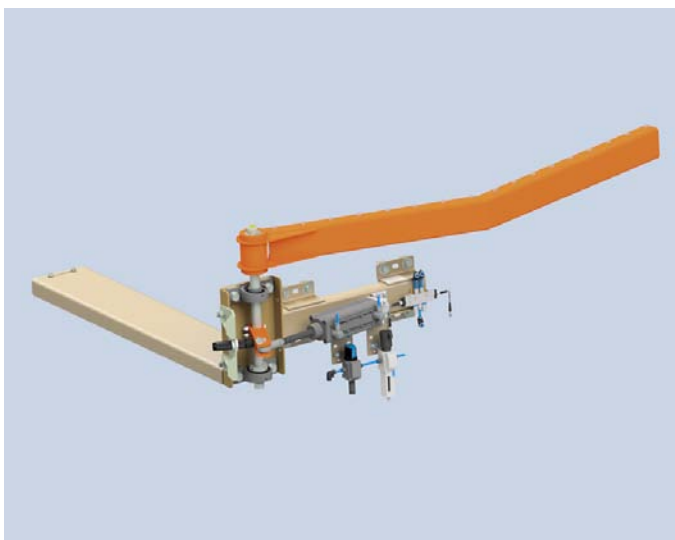
TIRE BUSINESS UNITS

Pneumatic devices are used for positioning, stopping, slowing down, dosing, and changing the direction of movement of transported tires. On TRT belt conveyors, devices are installed for proper positioning of tires and for changing their direction. Pneumatic devices used for stopping, slowing down, and dosing tires are mounted on gravity roller conveyors.

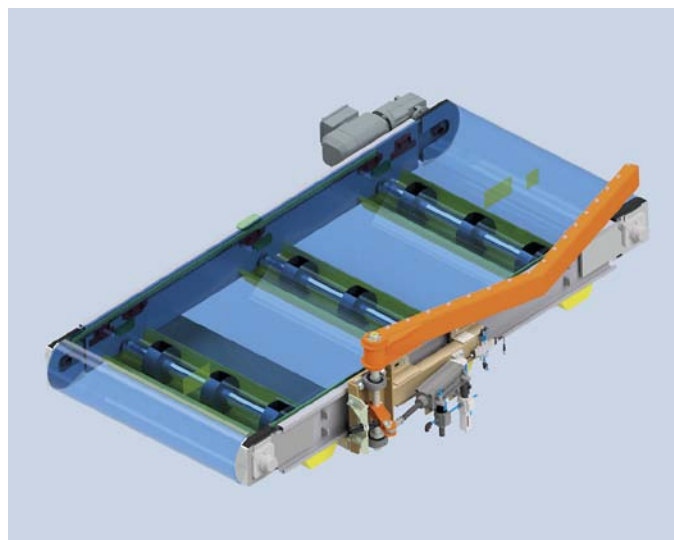
Pneumatic devices are controlled by using compressed air, with the exception of the **Centering Arms** and **Aligning Arms**, which only requires compressed air for device adjustment during installation.

### Devices for positioning and changing transport direction, installed on Belt Conveyors with S4400 TRT Belt:

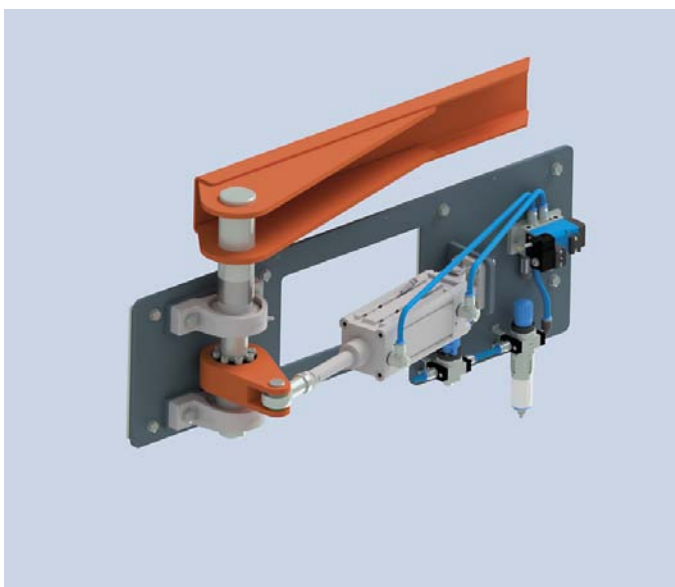
**Sorting Arm and Pusher.** These devices are used to change the direction of the transported tires.



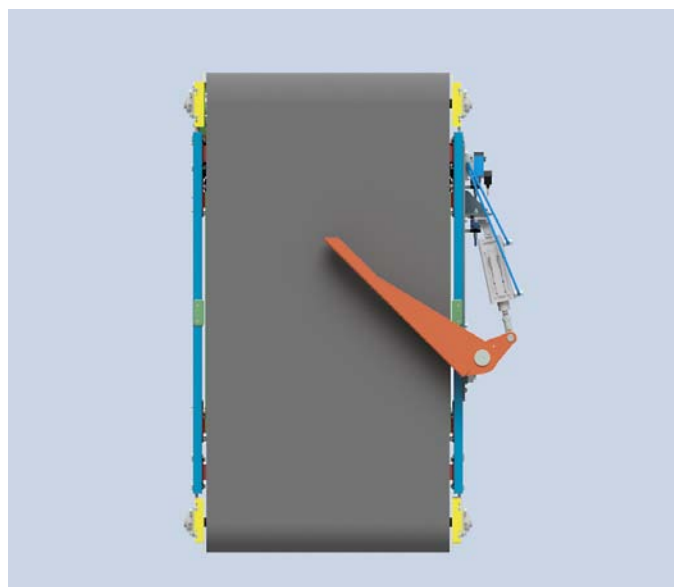
Sorting Arm



Sorting arm on the conveyor



Pusher



Pusher on the conveyor

## Centering Arms and Aligning Arms



TIRE BUSINESS UNITS

Centering Arms are used to align the transported tires with the conveyor axis.

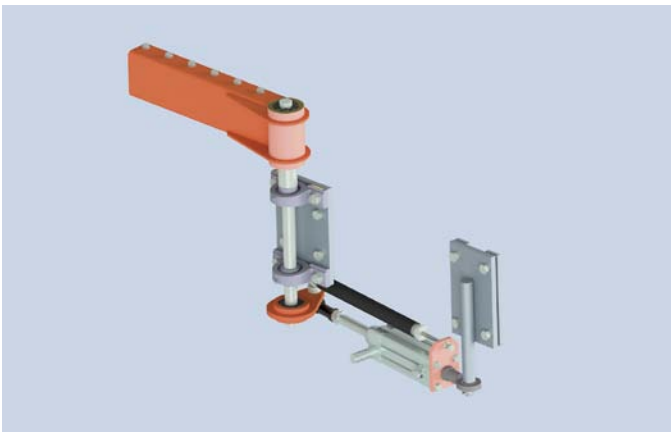


Centering Arms

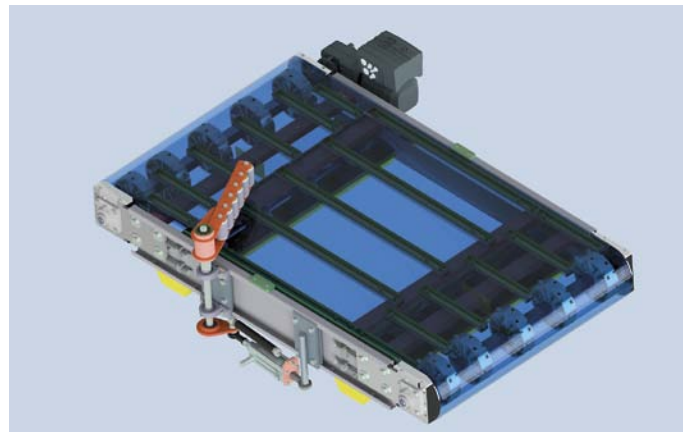


Centering Arms on the conveyor

**Aligning Arm** is used for aligning the tires on one side of the conveyor.



Aligning Arm



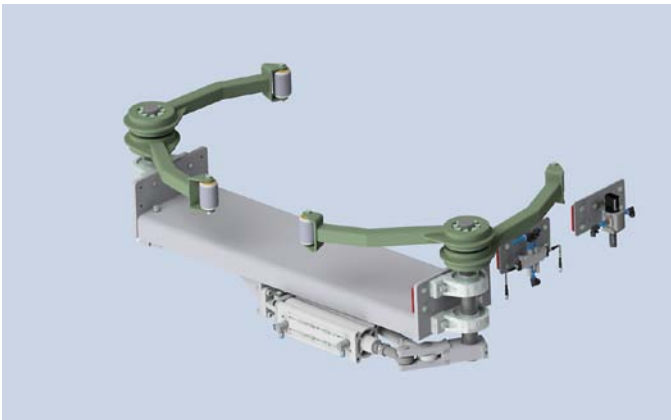
Aligning Arm on the conveyor

## Devices for stopping, slowing down, and dosing tires, mounted on Gravity Roller Conveyors:



TIRE BUSINESS UNITS

**Singulator/ Blockade** is used for dosing tires.



Singulator/ Blockade



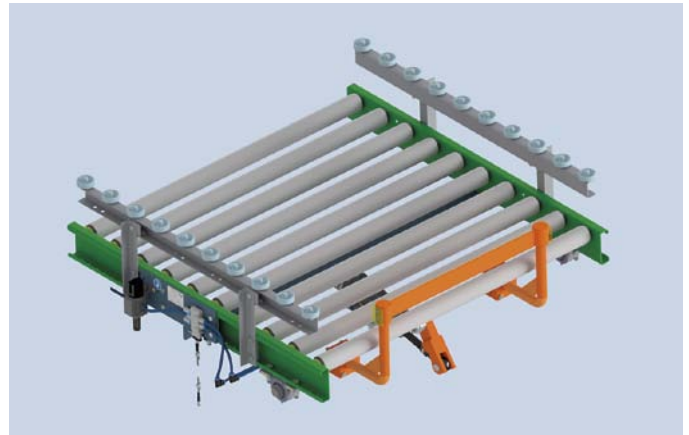
Singulator/ Blockade on the conveyor

### Pin Stopper

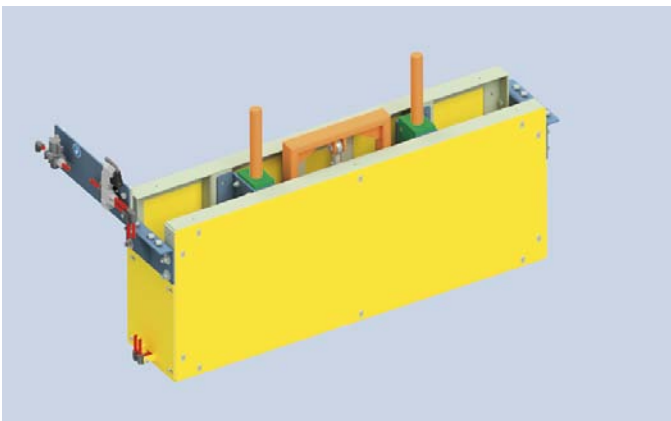
The **Pin Stopper** and **Vertical Pin Stopper** are used for stopping tires on conveyors. The locks differ in design, but their operating principle is the same. By moving the locking element above the transport level, the tire is stopped.



Pin Stopper



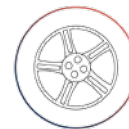
Pin Stopper on the conveyor



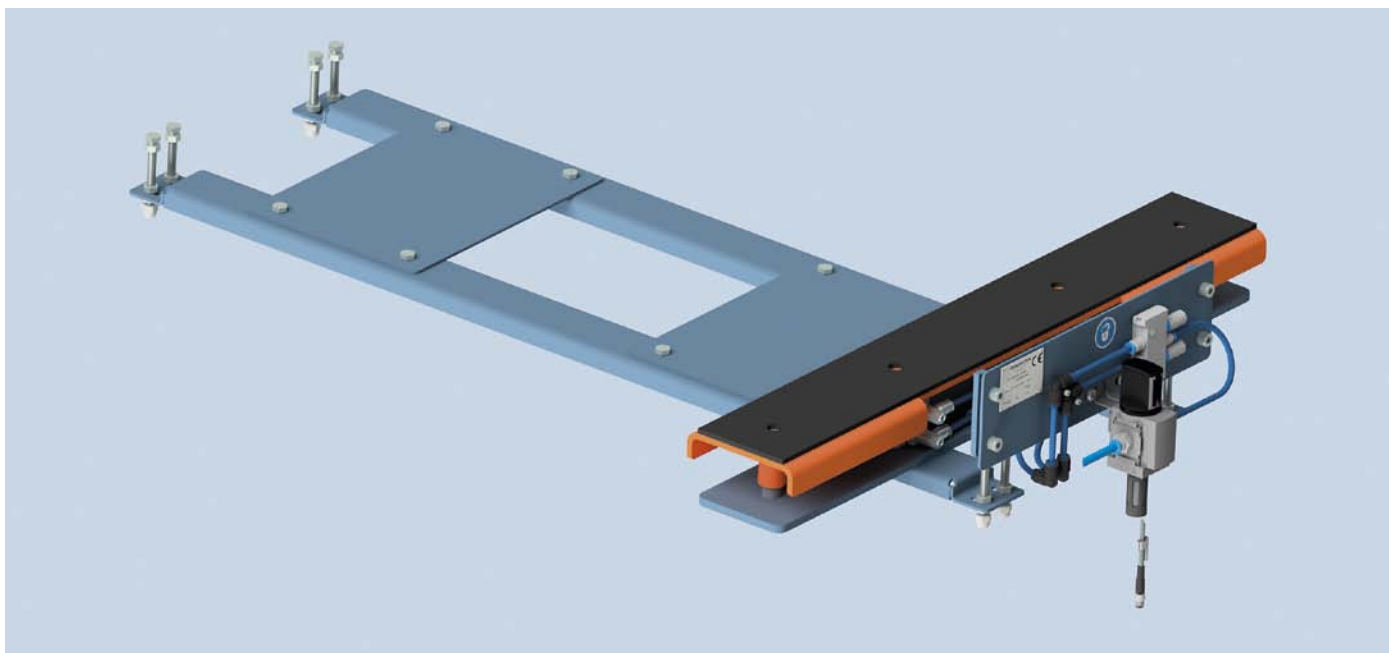
Vertical Pin Stopper

## Breaking Field

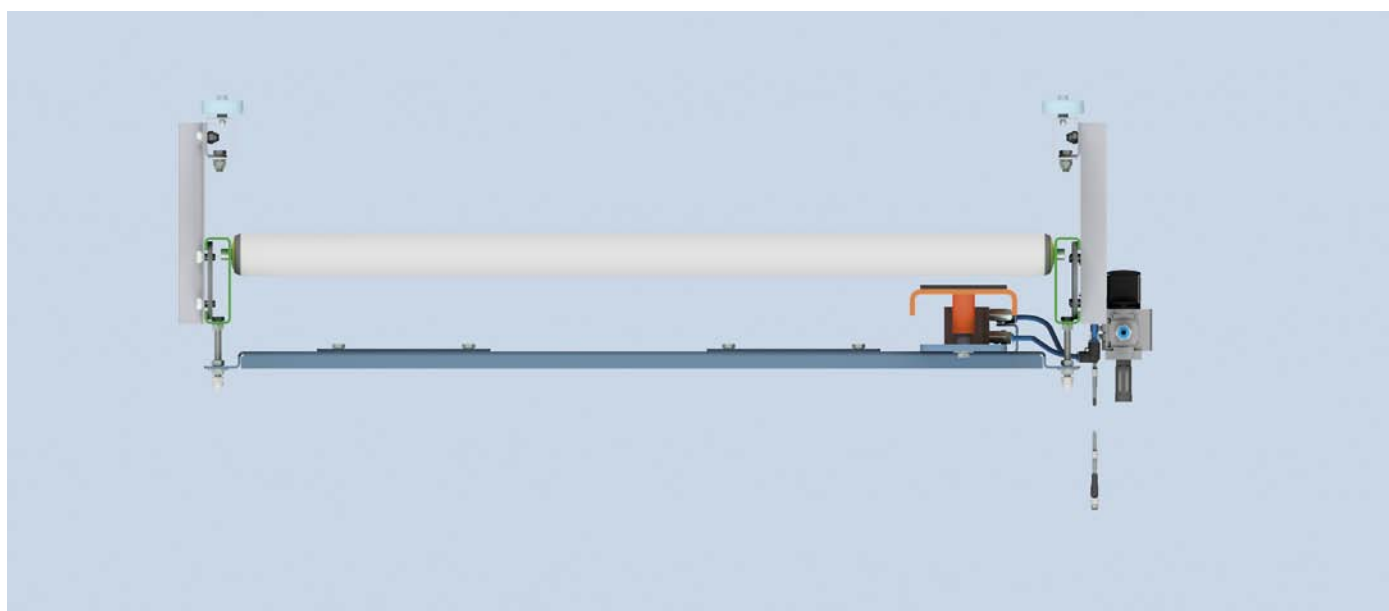
The **Breaking Field** is used for stopping tires by immobilizing selected conveyor rollers.



TIRE BUSINESS UNITS



Breaking Field



Blokada Breaking Field na przenośniku

### Device specification:

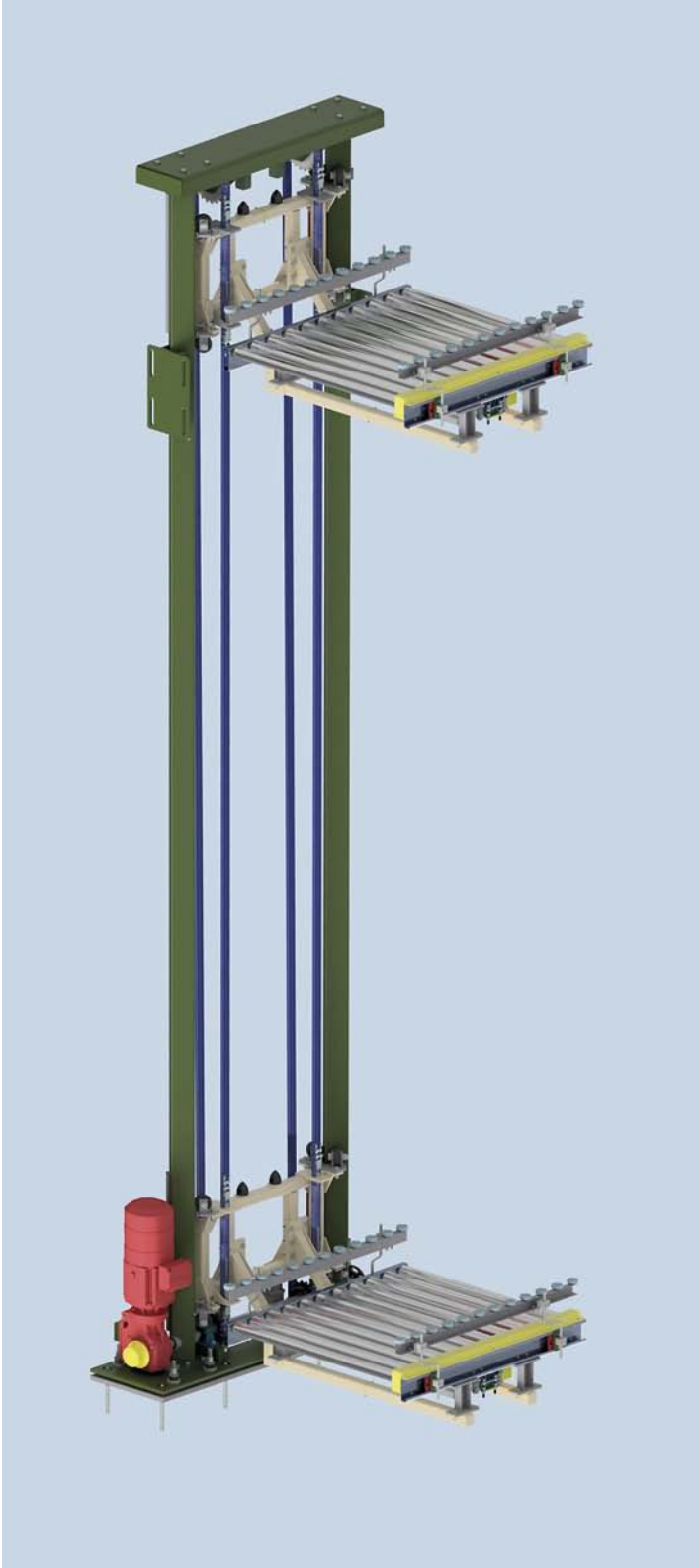
- Working Pressure: 5,0–6,0 [bar]
- Maximum Load: 50,0 [kg]
- Pneumatic Components: FESTO; SMC
- Dimension: According to conveyor design

## Elevator

The elevator is used for transporting tires between different conveyor levels. The main structural components of the elevator are columns (for a two-column system) or a single column (for a single-column system), along with conveyor of any type (roller, belt or even Pop-up) mounted on a trolley. The trolley is driven by a gearmotor. The power from the gearmotor is transmitted via a chain or a belt.



TIRE BUSINESS UNITS



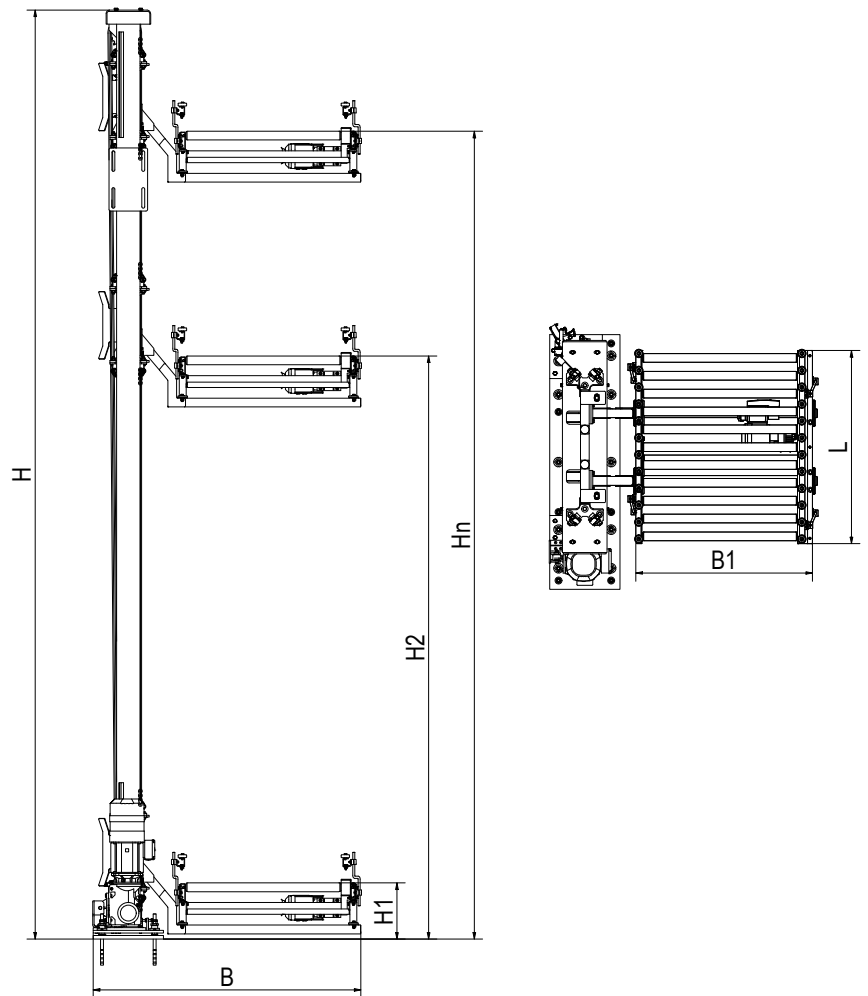
Double Post Elevator with roller conveyor

## Double Post Elevator

As the name suggests, the two-column elevator is constructed with two columns, along with a trolley with a conveyor mounted on it. The other components include: a gearmotor, drive and tension shafts, drive belts or chains, pulleys or gears and sensors.



TIRE BUSINESS UNITS



Double Post Elevator with a 24 V DC belt conveyor

### Device specification:

- Transport speed: 30,0 [m/min]
- Maximum load: 50,0 [kg]
- Drive type / Power transmission: Gearmotor / direct motor drive
- Voltage: 400 V AC/24 V DC
- Transport height: max. 5,2 [m]

### Device parameters:

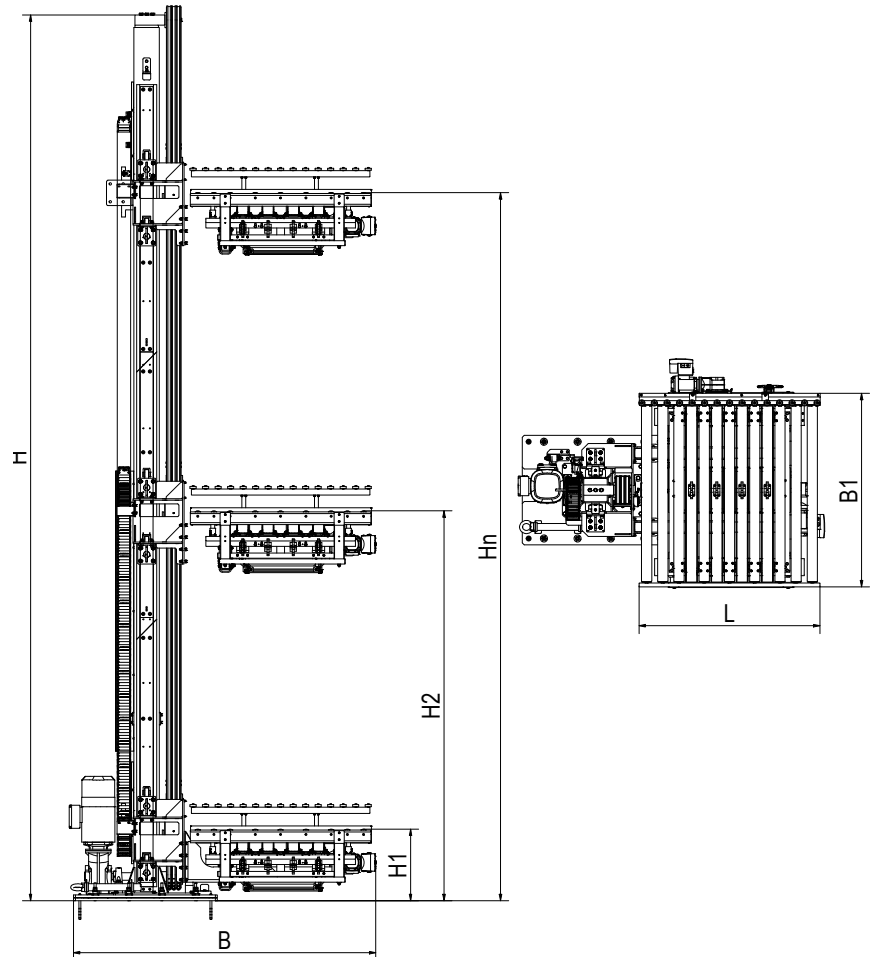
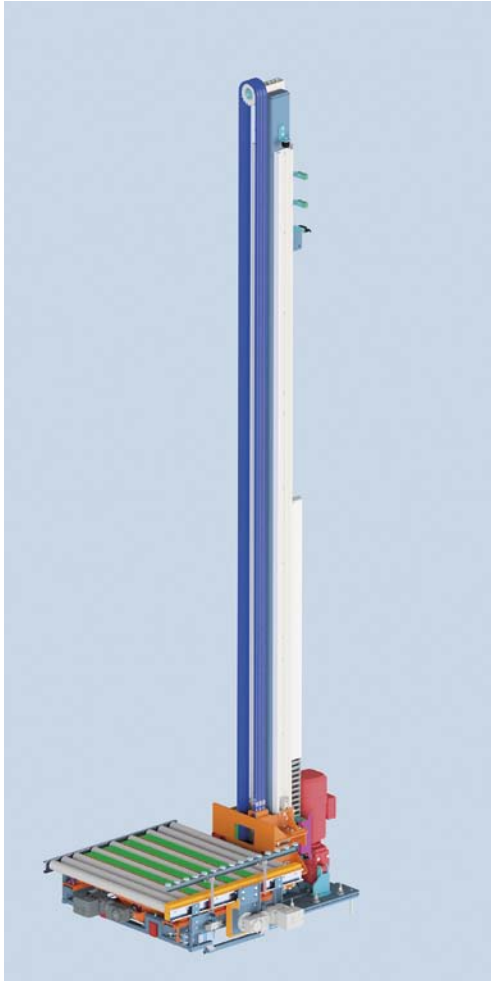
Symbol	Definition	Dimension
H1, H2, ..., Hn	Transport levels	To be determined
H	Total elevator height	To be determined
L	Conveyor length	1000,00–2200,00 [mm]
B	Elevator width	To be determined
B1	Conveyor width	To be determined
P	Drive power	To be determined

## Single Post Elevator



TIRE BUSINESS UNITS

The single post elevator is constructed with a single load-bearing column, on which a trolley with a conveyor is mounted. Other key components include: a gearmotor, drive and tension shafts, drive belts, gears, chain and sensors. Two profiles are mounted on the elevator column, which serve as the rail system along which the trolley, permanently fixed to the chain or belt, moves.



Single Post Elevator with Pop-up conveyor

### Device specification:

- Transport speed: 30,0 [m/min]
- Maximum load: 50,0 [kg]
- Drive type / Power transmission: Geared motor / Direct drive
- Voltage: 400 V AC/24 V DC
- Transport height: max. 7,8 [m]

### Device parameters:

Symbol	Definition	Dimension
H1, H2, ..., Hn	Transport levels	To be determined
H	Total elevator height	To be determined
L	Conveyor length	1000,00–2200,00 [mm]
B	Elevator width	To be determined
B1	Conveyor width	To be determined
P	Drive power	To be determined

## Sorter Conveyor TS-MABS

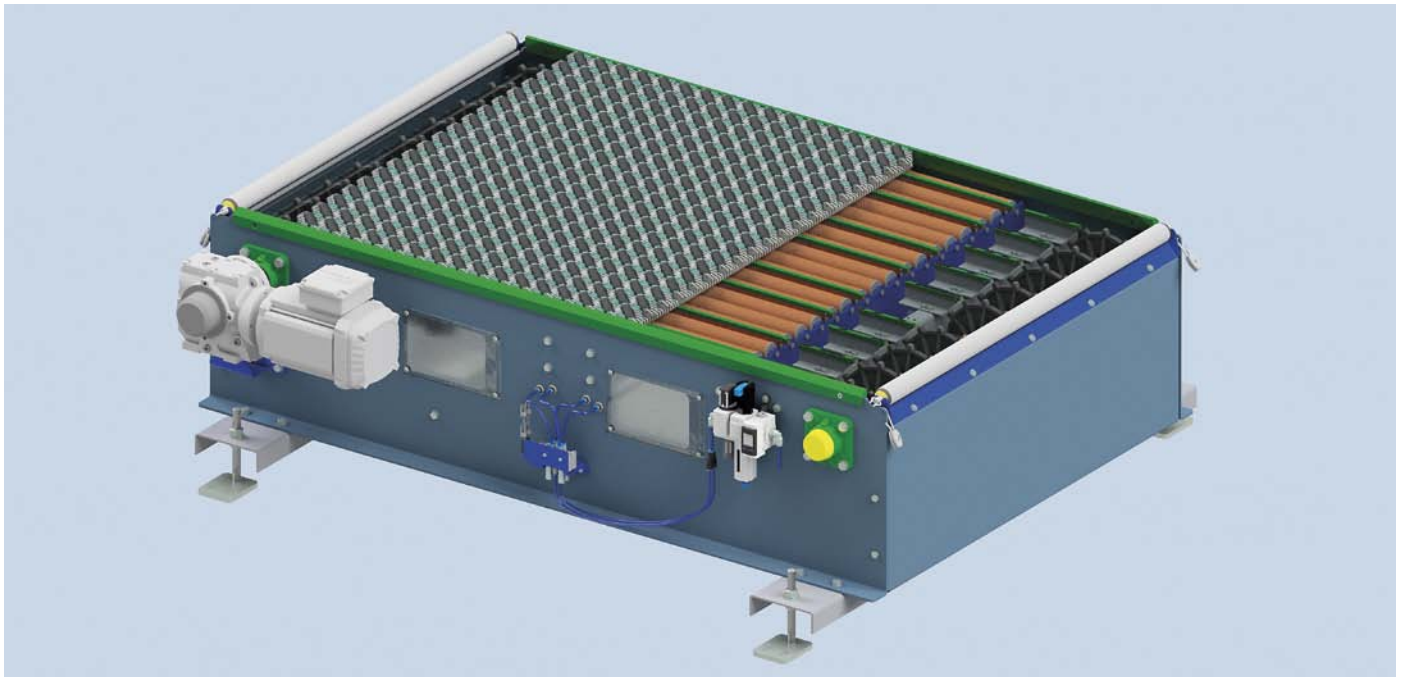


TIRE BUSINESS UNITS

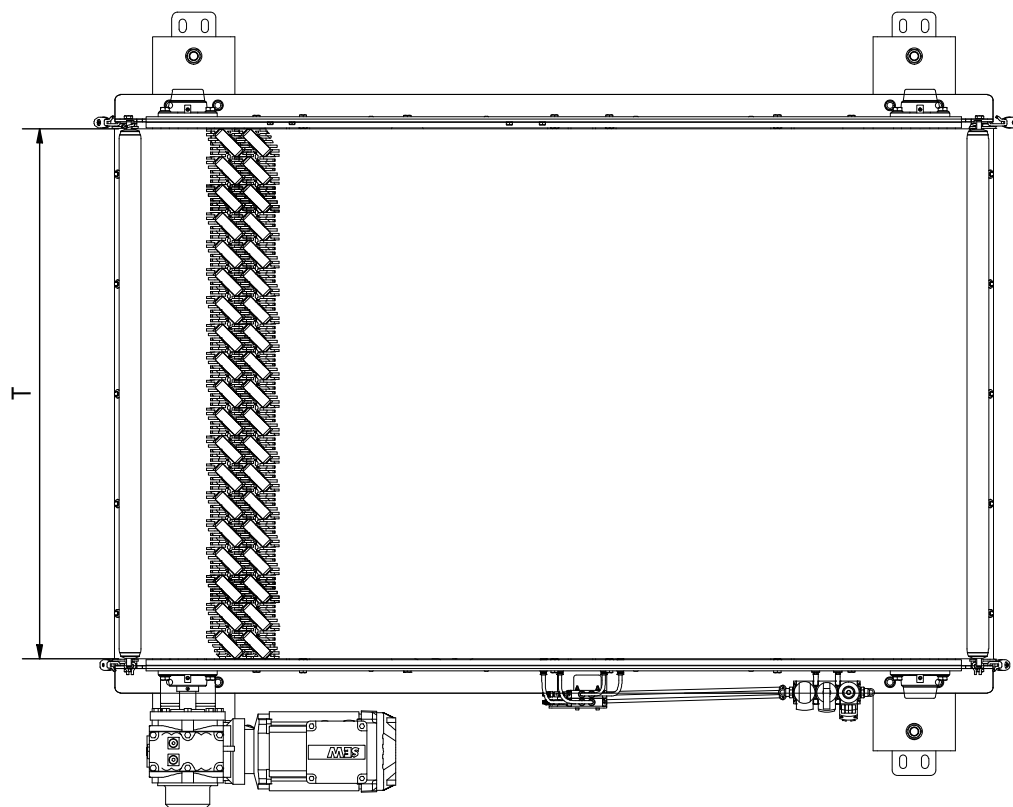
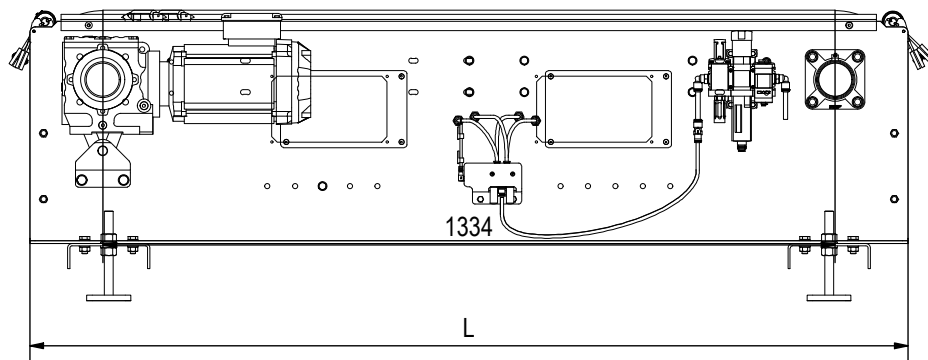
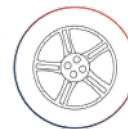
Sorter conveyor **TS-MABS** (TRANSSYSTEM – **M**odular **A**ctivated **B**elt **S**orter) is device dedicated to transport tires on straight and 90 degree directions (right - left). This type of conveyor can be installed in each manufacturing areas of the Green Tires Conveyor Systems, Cured Tires Conveyors Systems and Final Finished Tires Conveyors Systems.

**TS-MABS** is an electric-pneumatic conveyor, which guarantees the fast and reliable transfer of products in any direction. It is made up of the following main components: geared motor, drive and rewinding shaft, sprocket wheels, S4500 modular belt, POP-UP segments, belt support rollers and wheels including steel frame. During operation, the geared motor continuously drives the modular belt and moving the tires in a straight direction. Change of direction is possible by activating the POP-UP segments. The active POP-UP pneumatic section is responsible for the transfer of products in a 90-degree direction. The lower part of the conveyor belt is in contact with the POP-UP modules, which causes slanted rollers to move on the upper surface of the modular belt. The rollers rotated to the right or left and product has the possibility of transport in a 90-degree direction. When the POP-UP segments are in a passive position, the tires are transported in a straight direction. The belt then slides along the POP-UP section and the slanted rollers on top of it do not rotate.

The complete device is mounted on a steel frame and supports.



Sorter Conveyor TS-MABS

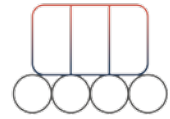


#### Device specification:

- Transport Speed: 35,0–60,0 [m/min]
- Maksimum Load: 50,0 [kg]
- Drive type/ Power Transmission: Gear motor/ Directly
- Voltage: 400 V AC
- Belt Support: Rollers

#### Device parameters:

Symbol	Definition	Dimension
T	Conveyor Belt Width	965,00–1300,00 [mm]
L	Conveyor Length	1500; 1600; 2000 [mm]
P	Drive Power	0,55–1,5 [kW]



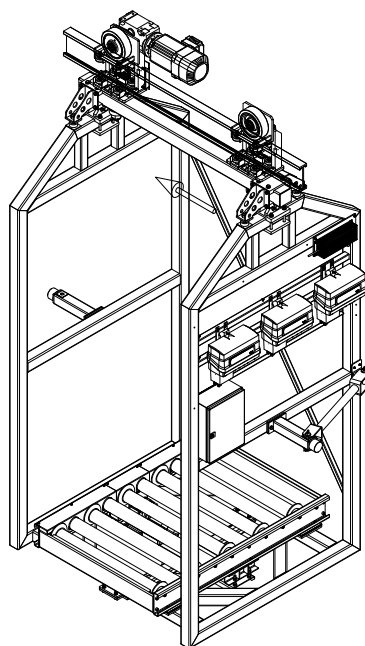
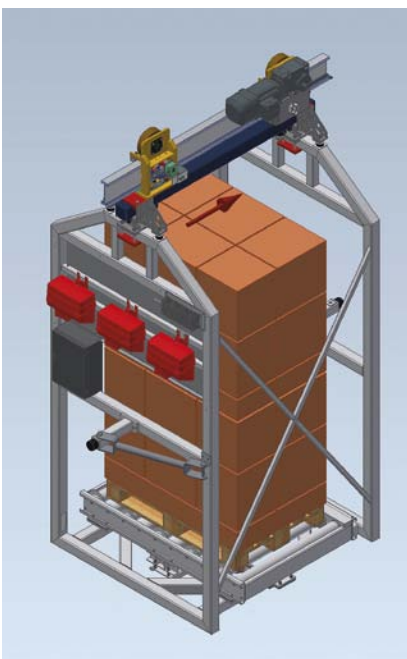
**Transsystem SA** offers mobile transport systems based on cooperation with proven business partners and high-class suppliers of control and navigation systems recognized on the market. The concept of transport projects containing mobile transport systems is comprehensively created, analyzed and developed by **Transsystem SA**. Since each case of a mobile transport system requires a separate study, we present only basic information on the offered solutions. We invite all interested parties to contact the **Intralogistics Department of Transsystem SA** directly, whose employees will be happy to analyze the reported needs, propose the most optimal solution and provide comprehensive information.

### EMS for pallet transport

The system is used to transport pallets through hanging cages on single aluminum rails. Each hanger containing a transport cage is equipped with a dedicated drive gear motor with a mechanical disengagement function, a roller conveyor driven by an angle gear motor, a controller, inverters, an antenna, a scanner, hanger position sensors, load and lock sensors and brushes drawing power from the conductor rails. In the version with inductive power supply, the function of the brushes is taken over by a U-shaped coil/coils. The hanger drive is provided by a running wheel mounted directly on the shaft of the gear motor that rolls on the rail. The second running wheel of the hanger has a supporting function. The driving and roller conveyor drive gear motors are equipped with brakes.

The rail attached to the structure is equipped with busbars or inductive power cables, an antenna cable or a waveguide, a tape with positions in the form of a series of QR codes and transmitting antennas connected to WLAN access points. The trolleys suspended on the rail communicate via WIFI with a superior controller that manages the operation of the fleet, including maintaining distances to prevent collisions. It is possible to use installations and software that ensure synchronous movement of hangers while maintaining the so-called "safe distance".

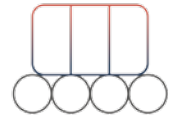
Standard transport trolleys allow the transport of one pallet with cargo, but double-pallet versions are also possible.



#### Device specification:

- Weight of mobile structure: 750 [kg]
- Load weight: 1100 [kg]
- Maximum speed: 120 [m/min]

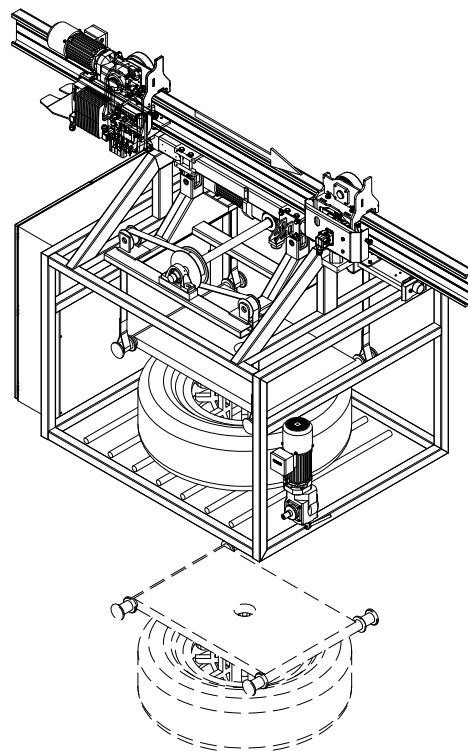
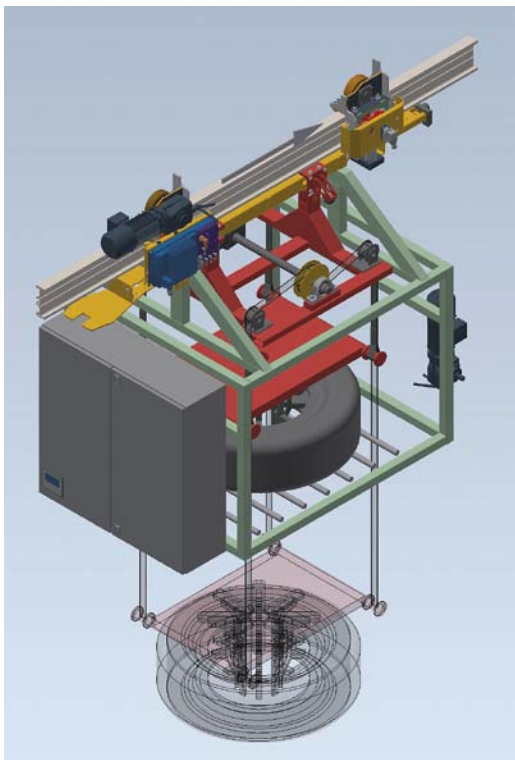
## EMS for tire transport



INTRALOGISTICS BUSINESS UNIT

The system is used to transport unvulcanized tires through hanging cages on single aluminum rails. Each hanger containing a transport cage is equipped with a dedicated drive gear motor with a mechanical release function, a cable mechanism for lifting and lowering the tire gripper, a mechanical protection against tire fall, a controller, inverters, an antenna, a scanner, hanger position sensors, load and lock sensors and brushes drawing power from the conductor rails. In the version with inductive power supply, the function of the brushes is taken over by a U-shaped coil/coils. The hanger drive is provided by a running wheel mounted directly on the shaft of the gear motor that rolls on the rail. The second running wheel of the hanger has a supporting function. All gear motors on the hanger are equipped with brakes.

The rail attached to the structure is equipped with busbars or inductive power cables, an antenna cable or a waveguide, a tape with positions in the form of a series of QR codes and transmitting antennas connected to WLAN access points. The hangers communicate via WIFI with a superior controller, which manages the operation of the fleet, including maintaining distances to prevent collisions.



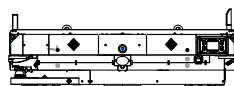
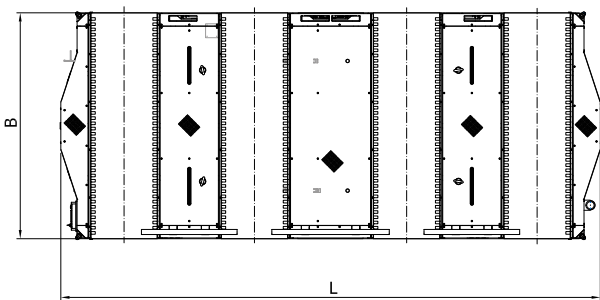
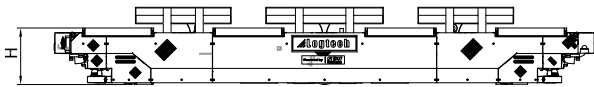
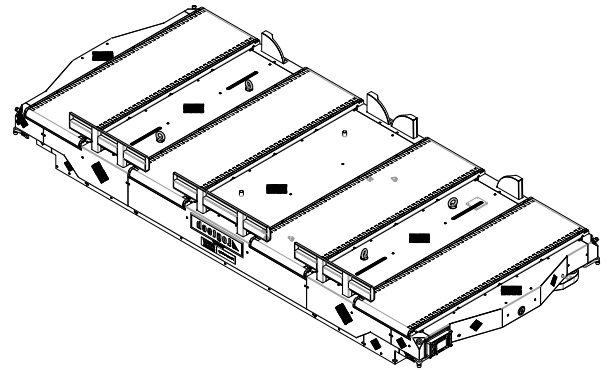
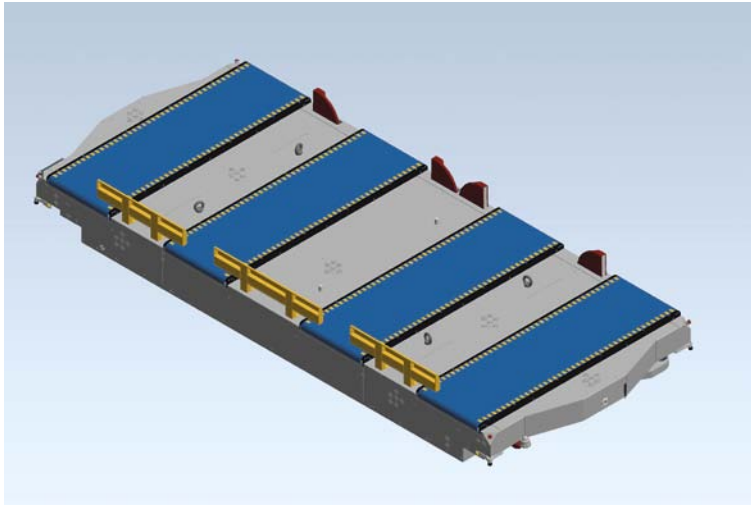
### Device specification:

- Weight of mobile structure: 450 [kg]
- Load weight: 200 [kg]
- Maximum speed: 120 [m/min]
- Max tire pick-up/drop height: 3,5 [m]

## Heavy AGV for transporting bulky goods

Automated Guided Vehicle designed in particular for transporting metal profiles and pipes from production halls to warehouses or sorting plants. The trolley's running gear consists of four swivel support wheels and two driving wheels mounted on servo drive shafts and pressed to the ground by mechanical or pneumatic springs. The drives are controlled by inverters that draw energy from transducers connected to receiver plates mounted under the vehicle just above the floor. The same transducers are used to power other inverters and power supplies for communication devices and other accessories. The vehicle position is determined based on encoders and updated with readings from RFID tags embedded in the floor. The trolley's movement and navigation, as well as the control of conveyors and signals, are managed by a controller on the trolley, which communicates via WIFI with an external controller. The inductive power cables in the floor are powered by transducers placed along the route. In the case of longer sections, capacitive line compensators are also re-

quired, which are also installed along the route. The inductive power cables are laid in grooves cut in the floor and filled with resin that withstands the passage of even the heaviest forklifts. It is also possible to lay the cables in special profiles, which, however, always protrude above the floor level. The communication system includes WIFI access points installed in selected places along the transport route.



**Device specification:**

- Vehicle weight: 5000 [kg]
- Load weight: 4000 [kg]
- Maximum load length: 7 [m]
- Speed for version with navigation: 15 [m/min]
- Power supply: inductive via cables embedded in the floor
- Power of induction line power supplies: 8 kW, 16 kW, 32 kW, 46 kW
- Diameters of power cable cores in the floor: 25 [mm<sup>2</sup>], 41 [mm<sup>2</sup>]
- Communication: WLAN
- Navigation: antenna identifying the power cables in the floor
- Positioning: encoders/resolvers, RFID
- Safety: front and rear safety scanners
- Equipment: longitudinal or transverse conveyors, mechanical locks, light and acoustic signals

**Device parameters:**

Symbol	Dimension	Dimension
L	Length	6200 [mm]
B	Width	2600 [mm]
H	Height	650 [mm]

## 8. Steel structures according to our own and entrusted documentation



STEELWORK BUSINESS UNIT

Transsystem SA is a renowned manufacturer of steel structures in Poland and worldwide, for over 30 years it has been one of the company's core products. We offer complete load-bearing and support structures for many industries, with particular emphasis on the automotive industry, as well as frame structures for shopping malls or large warehouses. In the case of implementation of complete projects, we undertake all design work together with static calculations, comprehensive execution, transport and assembly of structures on facilities. In the case of production or warehouse halls, we also offer complete technological transport systems and automated storage systems.

We manufacture steel structures according to our own documentation and based on the client's documentation, ensuring high quality and attractive terms of execution. We have competences, many years of experience, appropriate authorizations, certificates, production halls, processing machines, our own paint shop and large production capacities.

### Steel structures for the construction and equipment of production and storage halls or shopping malls

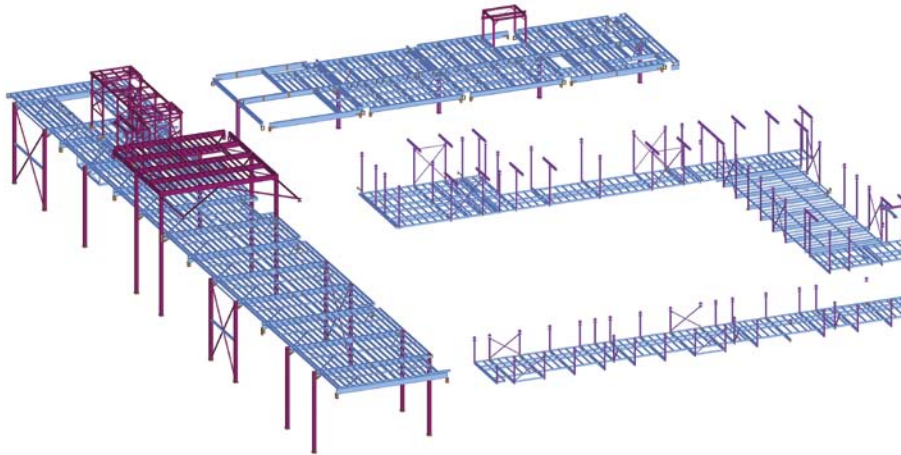
Below we present examples of steel structures used for the construction and equipment of halls and examples of responsible structures in the field of rope transport. The following projects do not represent all of our company's production capabilities in the field of steel structures and if you need additional information, please contact the **Steel Structures Department (SBU)** – we invite you!



## Support structure for car paint shop

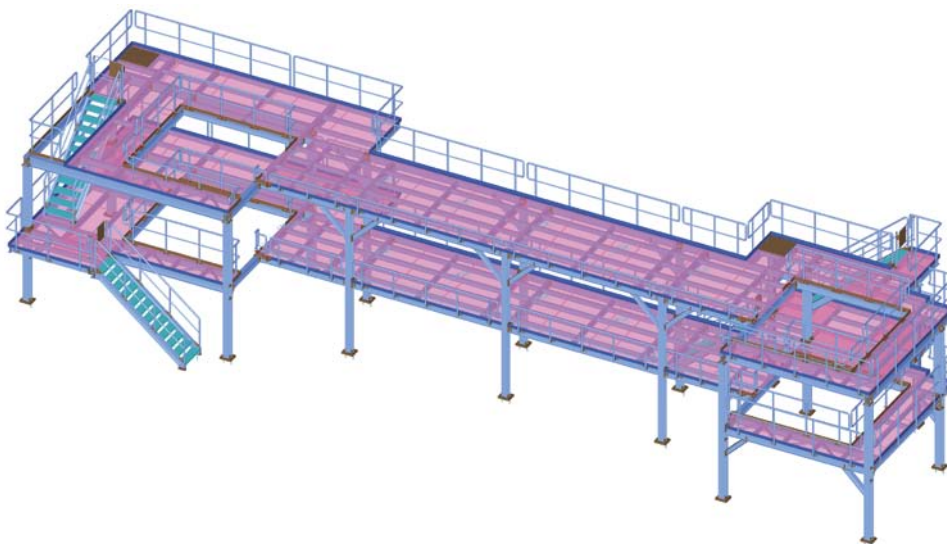


STEELWORK BUSINESS UNIT



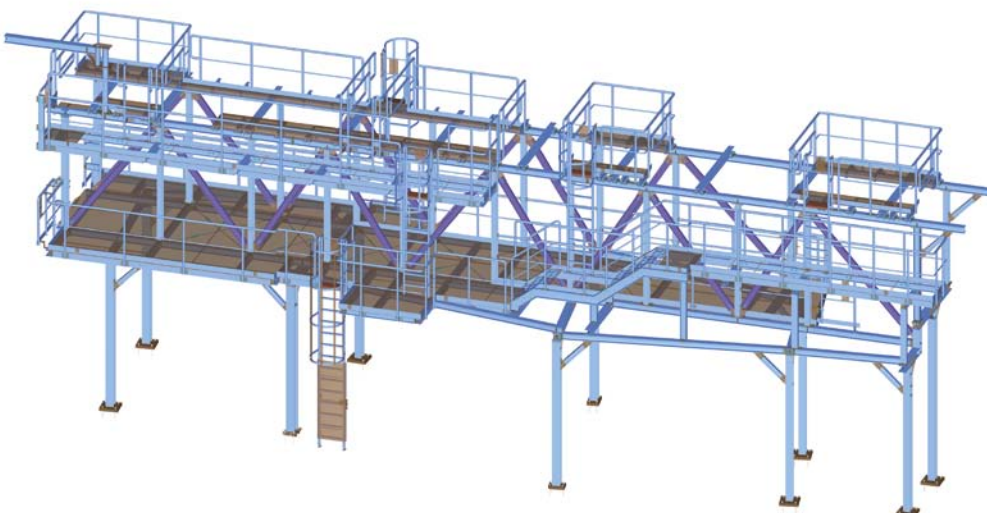
Supporting structure for paint booths and conveyors for transporting painted parts.

## Support structure for a car battery production line



Standing structure for electric car battery conveyors, turntables, elevators and boom cranes.

## The supporting structure of the bodywork element conveyors in the welding hall

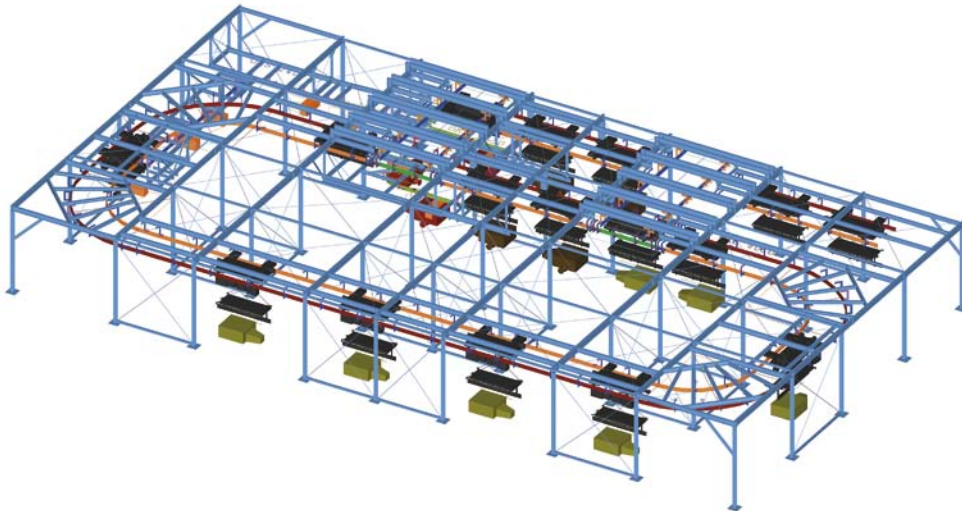


Supporting structure for accumulation conveyors transporting body parts between welding robot stations.

## Support structure for EHB/EMS suspended rail transport

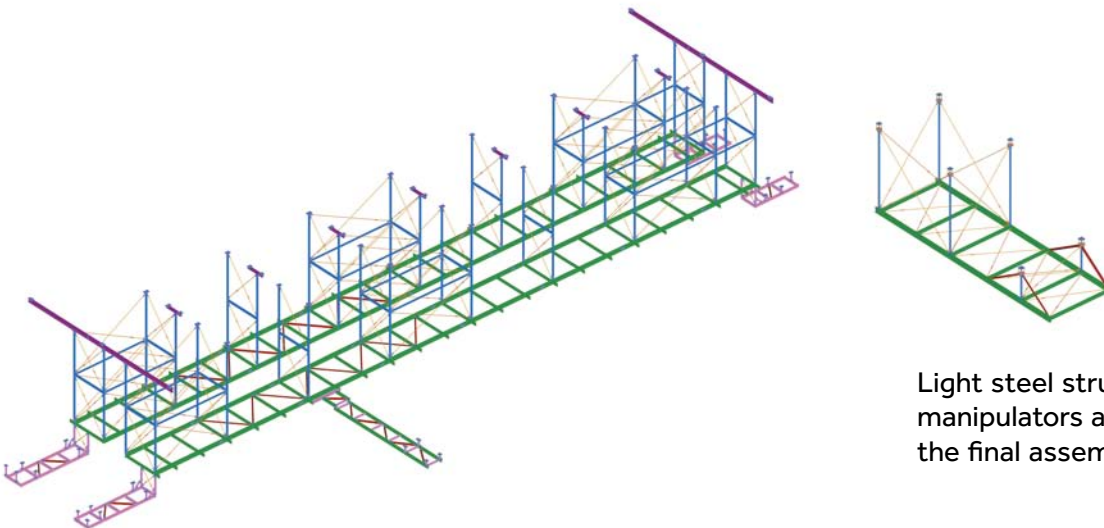


STEELWORK BUSINESS UNIT



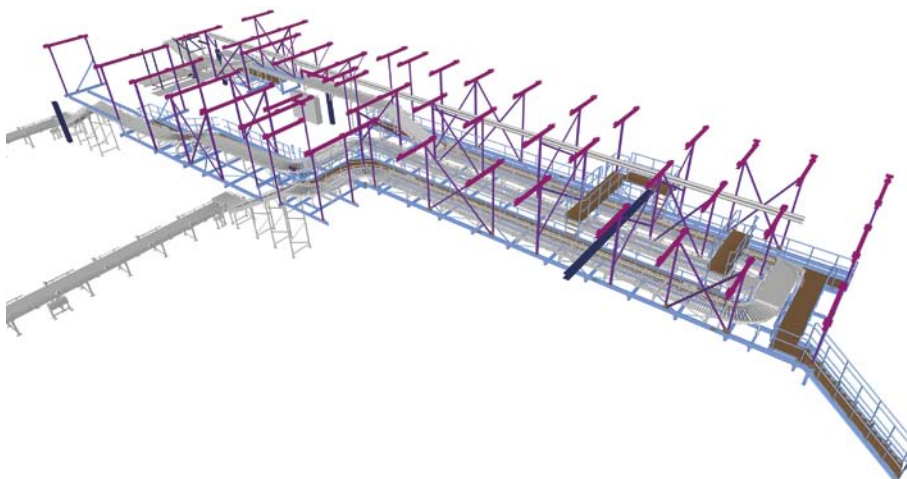
Supporting structure for transport using an aluminium rail enabling the assembly of running rails, switches, lifts and crossbeams.

## Design of final assembly lines and manipulators (BOK) in the automotive industry



Light steel structure for utilities, manipulators and tools used during the final assembly of the car.

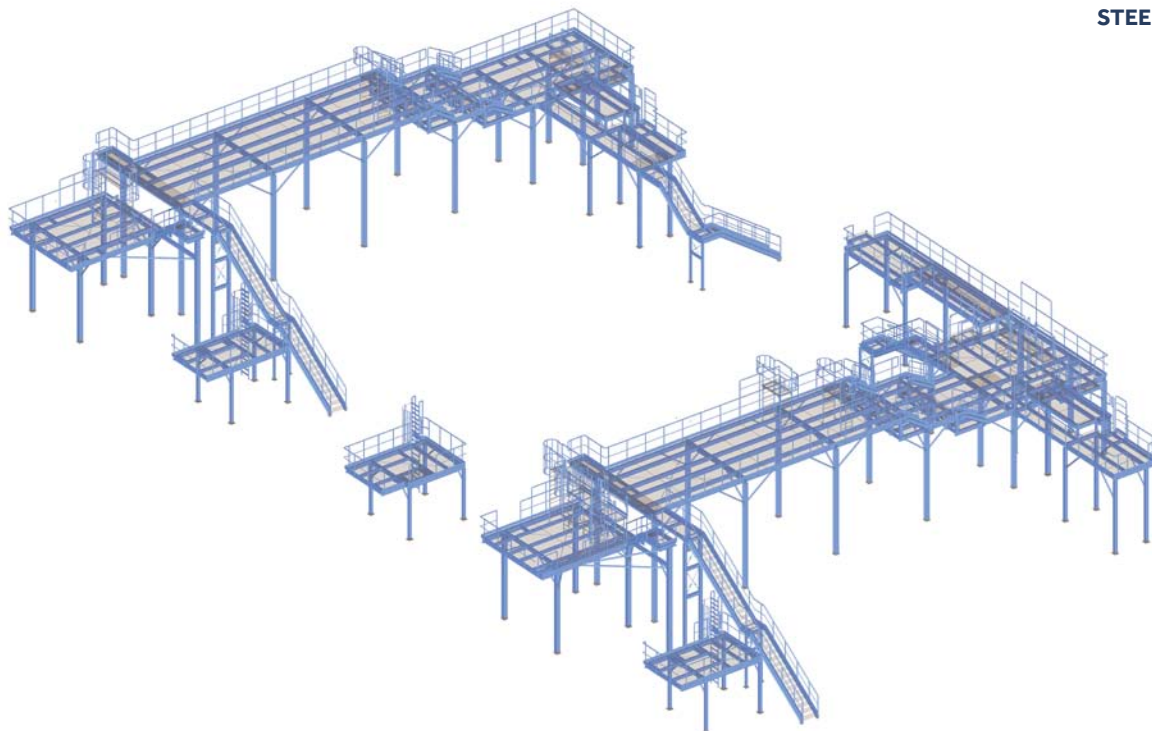
## Support structure for tire and wheel conveyors



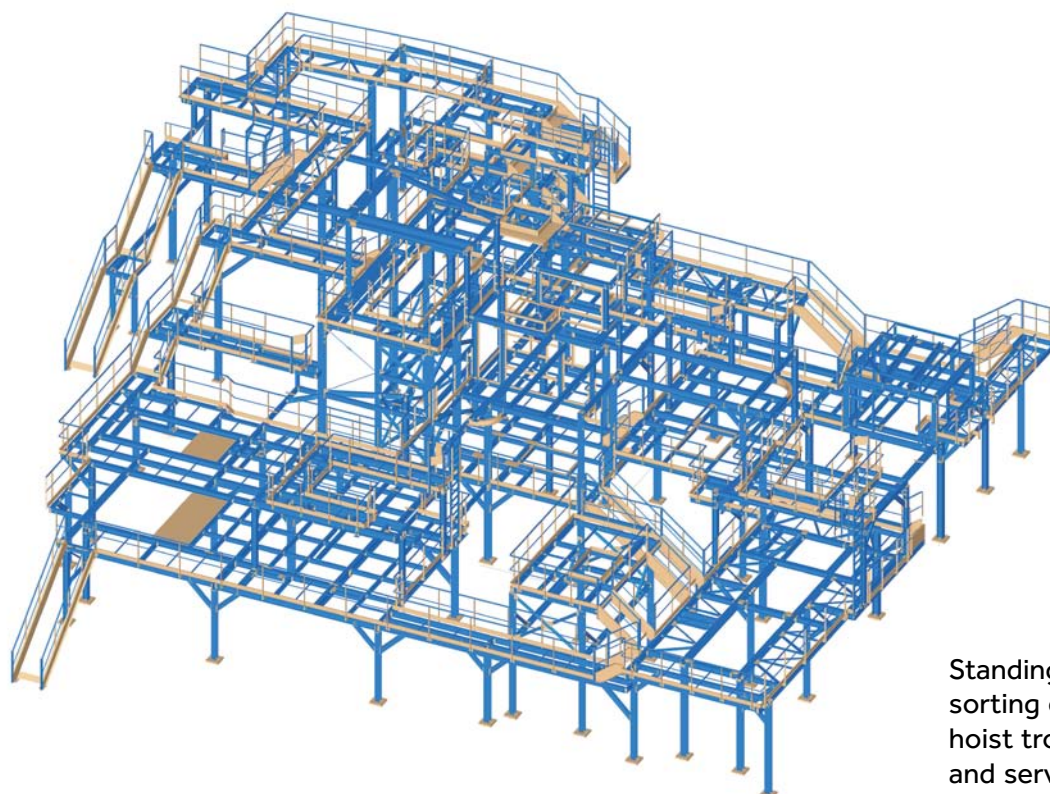
## Supporting structures for roller conveyors, belt conveyors, spiral gravity conveyors, elevators



STEELWORK BUSINESS UNIT



## Support structure for waste processing installations and devices

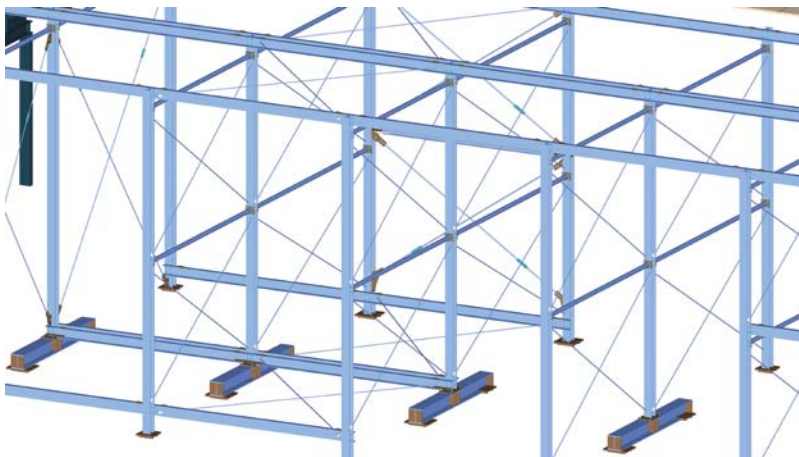
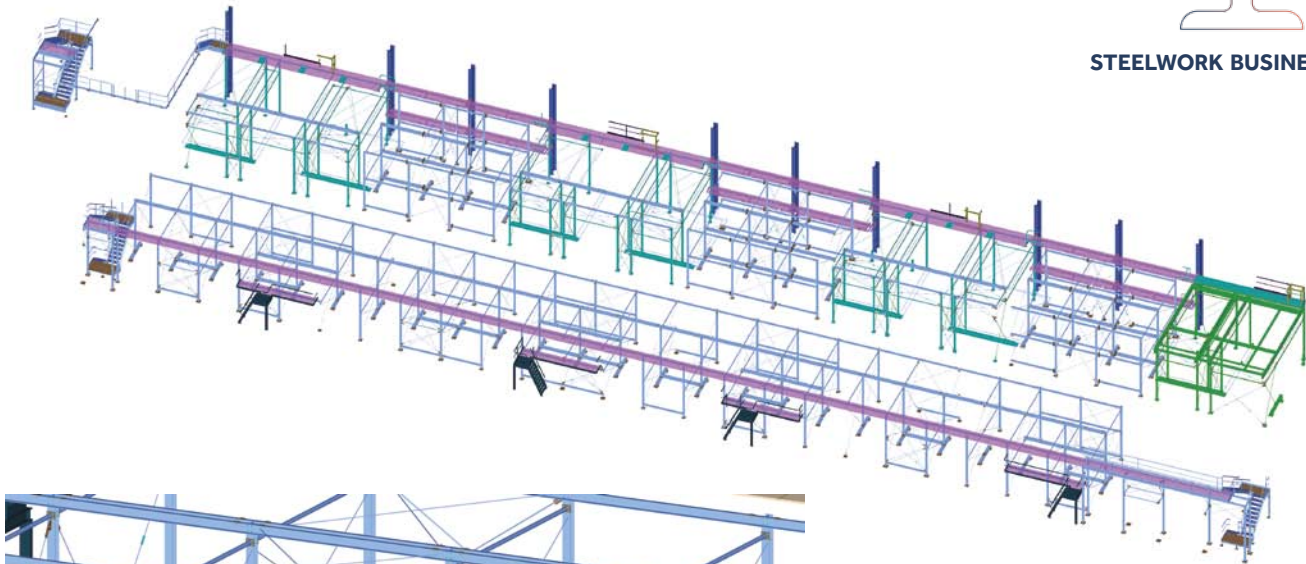


Standing structure for waste sorting equipment, chutes, hoist trolleys, belt conveyors and service passages with stairs and ladders.

## High-bay warehouse racking construction

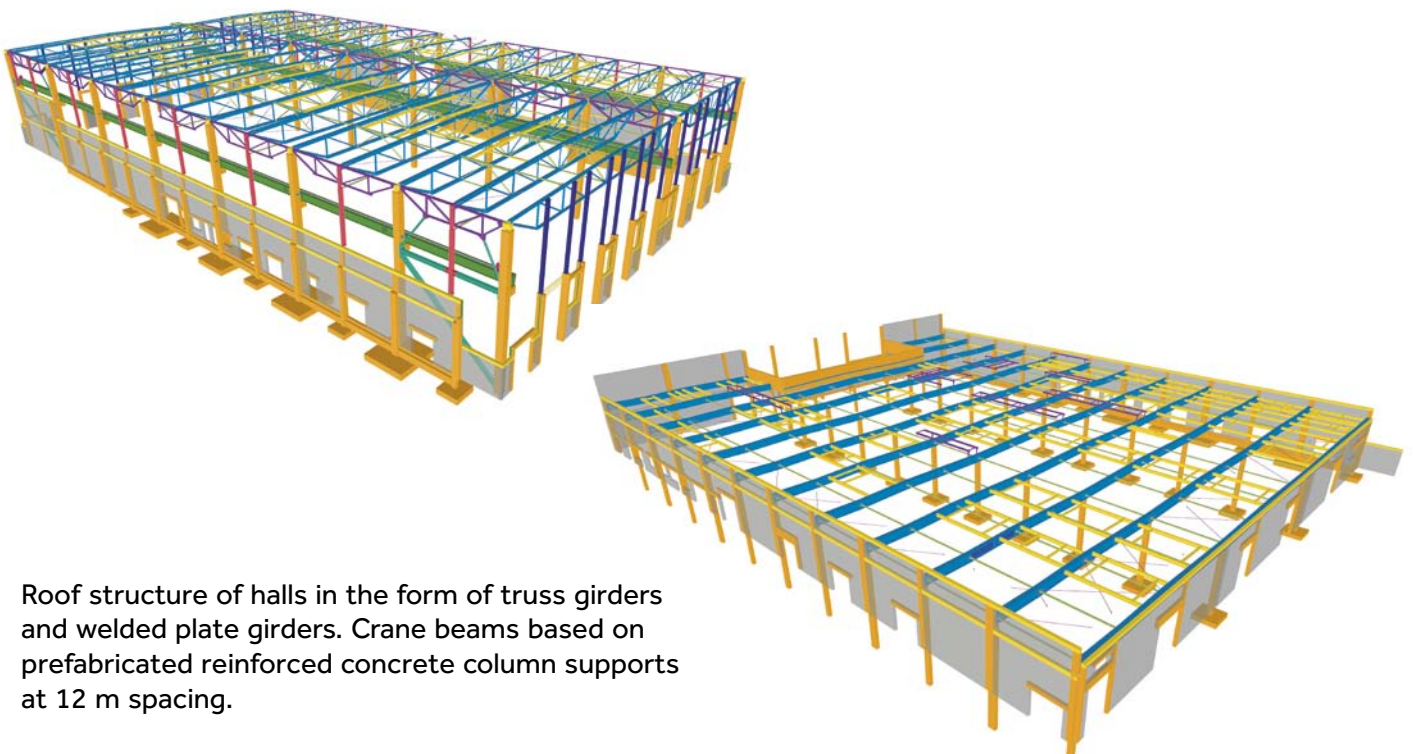


STEELWORK BUSINESS UNIT



The steel structure of warehouse racks is made in a modular form, consisting of independent standing frame structures connected by horizontal beams and stabilized by transverse stiffeners.

## Hall roofing with crane beams

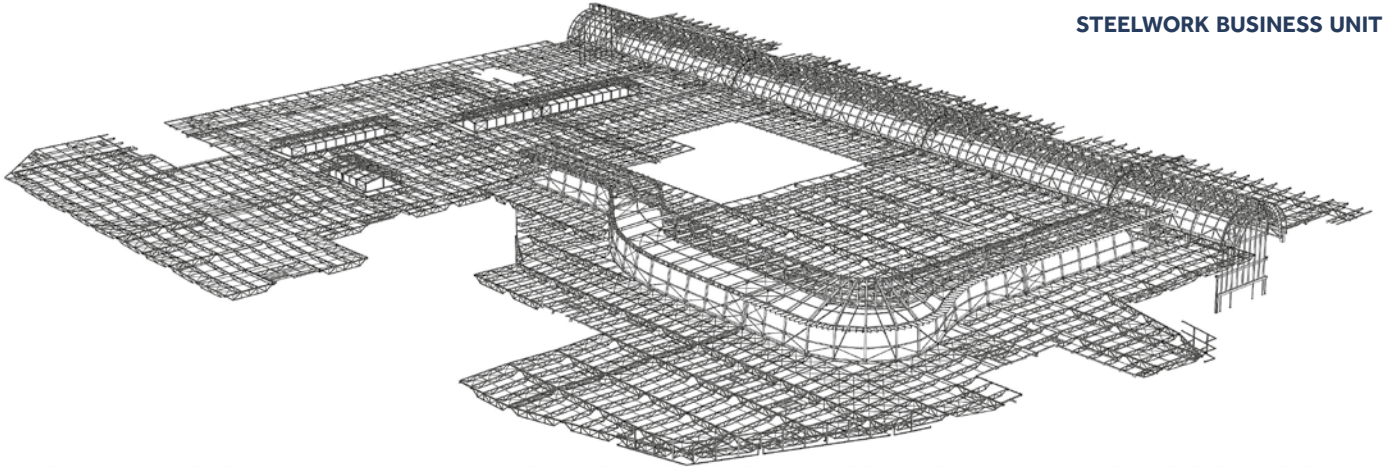


Roof structure of halls in the form of truss girders and welded plate girders. Crane beams based on prefabricated reinforced concrete column supports at 12 m spacing.

## Roof structure

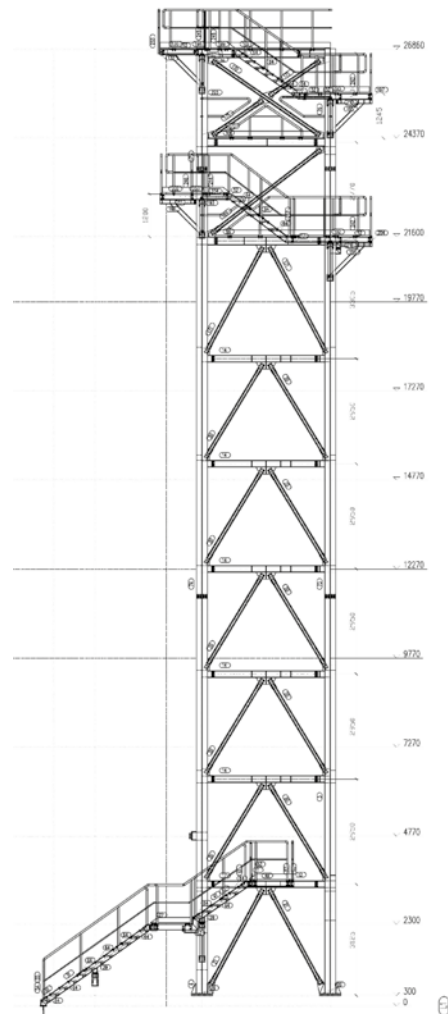


STEELWORK BUSINESS UNIT



The steel structure of the shopping mall roof consists of truss girders and lattice purlins. The main skylight is made of welded plate girder.

## Transfer tower



27.8 m high transfer tower with stairs.

# Special steel structures

## Large diameter steel pillars



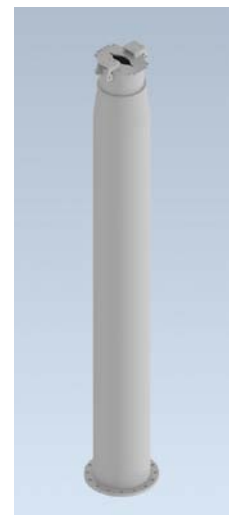
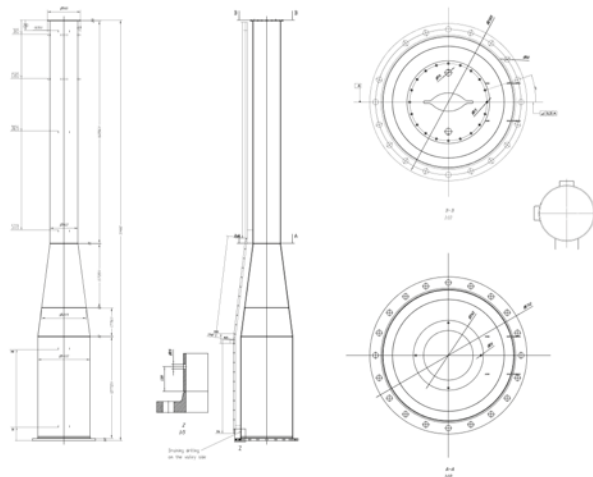
**CONTRACT MANUFACTURING  
BUSINESS UNIT**

An example of a specialist product in the field of steel structures manufactured by Transsystem are large-diameter steel poles used to build mountain cable cars or urban cable transport systems. Similar poles, although much smaller in size, are used f.e. in the construction of mobile phone relay stations or as supporting structures for large advertising boards. The production of such structures requires enormous experience and extraordinary care, and the manufacturer must have appropriate welding certificates. Transsystem SA meets all of these requirements.

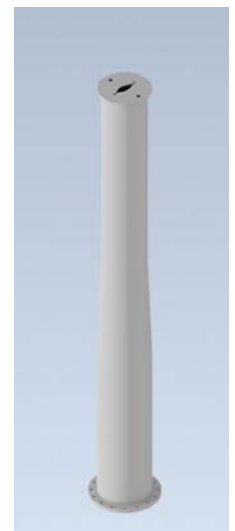
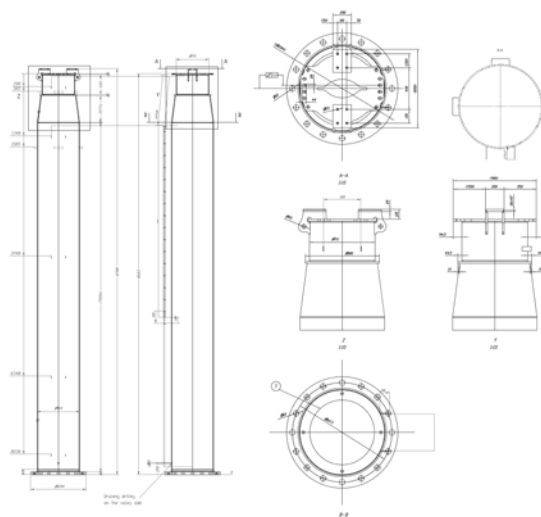
We present exemplary implementations of pillars used in the construction of mountain gondola lifts.



### Element with a length of over 11 m and a diameter at the base of almost 1,5 m



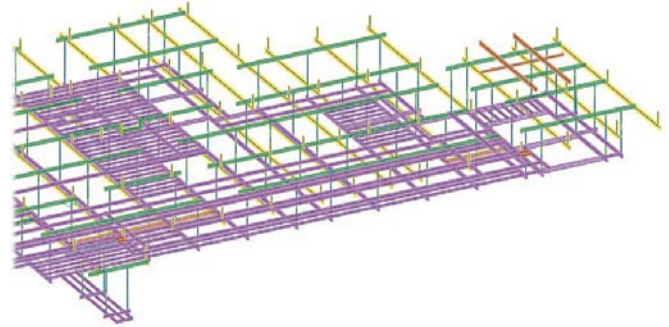
### Element with a length of over 8,8 m and a diameter at the base of almost 1,2 m



# 9. Standards – Software – Certificates

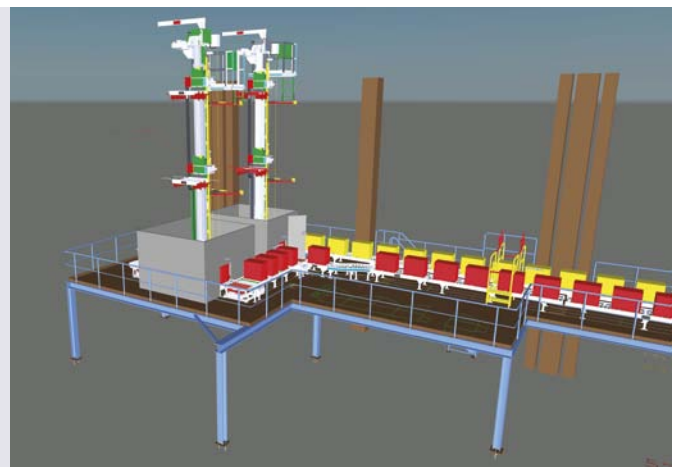
## Design concepts and layouts

ProSteel  
AutoCAD  
SolidWorks  
Autodesk Inventor  
Autodesk Navisworks



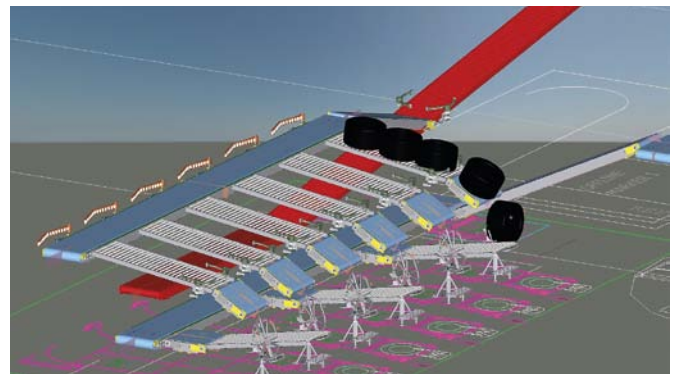
## Analysis of building and industrial layouts

Autodesk Navisworks  
Solibri  
MicroStation



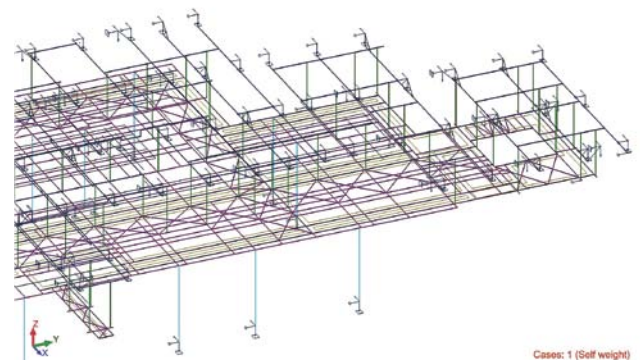
## Analyses of mechanical layouts

Autodesk Navisworks



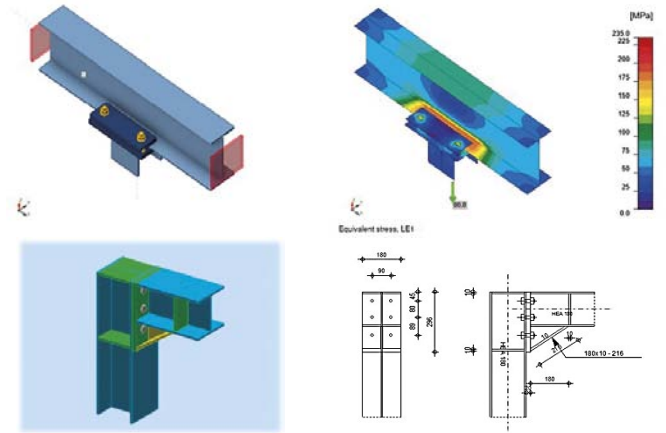
## Static Calculations

Robot Structural



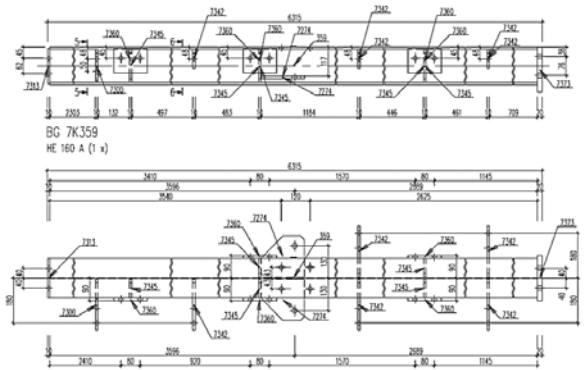
## Connection statics

Robot Structural  
IDEA StatiCa



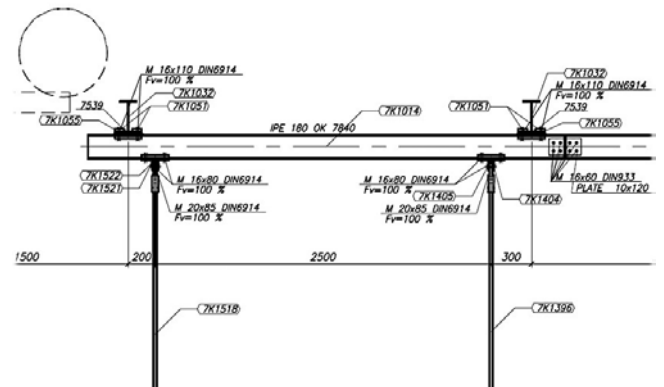
## Workshop documentation – drawings

ProSteel  
AutoCad  
SolidWorks  
Autodesk Inventor



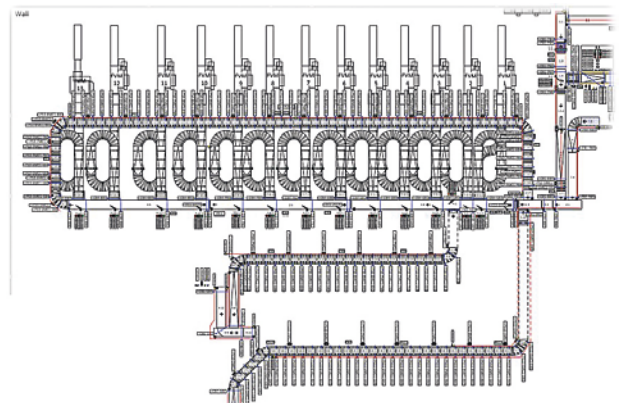
## Assembly documentation – drawings

ProSteel  
AutoCad  
SolidWorks  
Autodesk Inventor



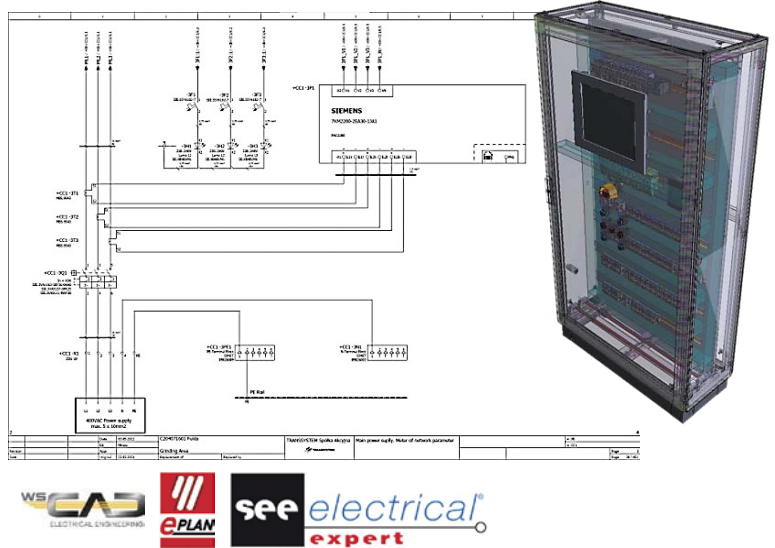
## Electrical concept and layout

Microsoft Visio



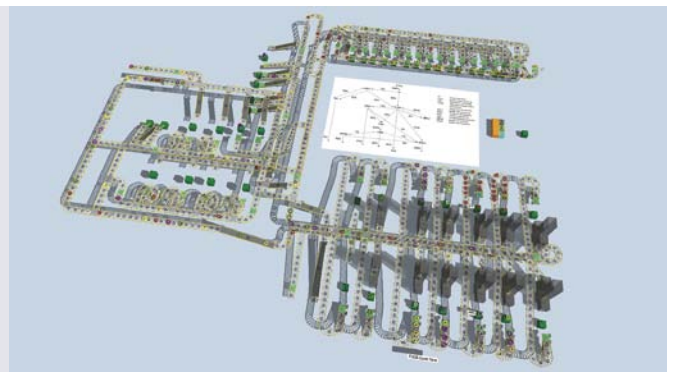
## Electrical documentation projects

EPLAN Electric P8  
SeeElectrical EXPERT  
WSCAD ElectriX  
Autocad Electrical



## Simulations and emulations of transportation systems

Emulate 3D



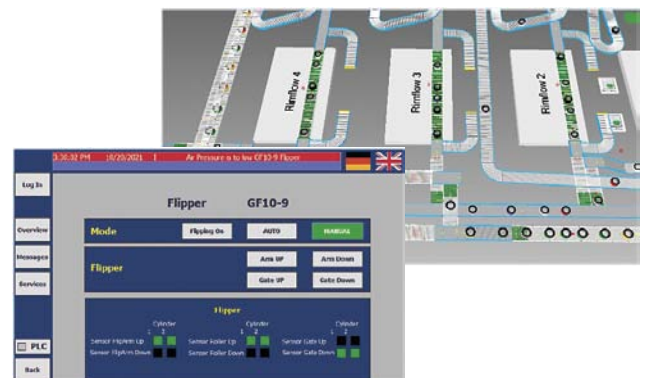
## Hardware and PLC program configuration

Siemens  
Allen Bradley  
Mitsubishi  
Beckhoff



## Transport system visualization projects

HMI  
SCADA

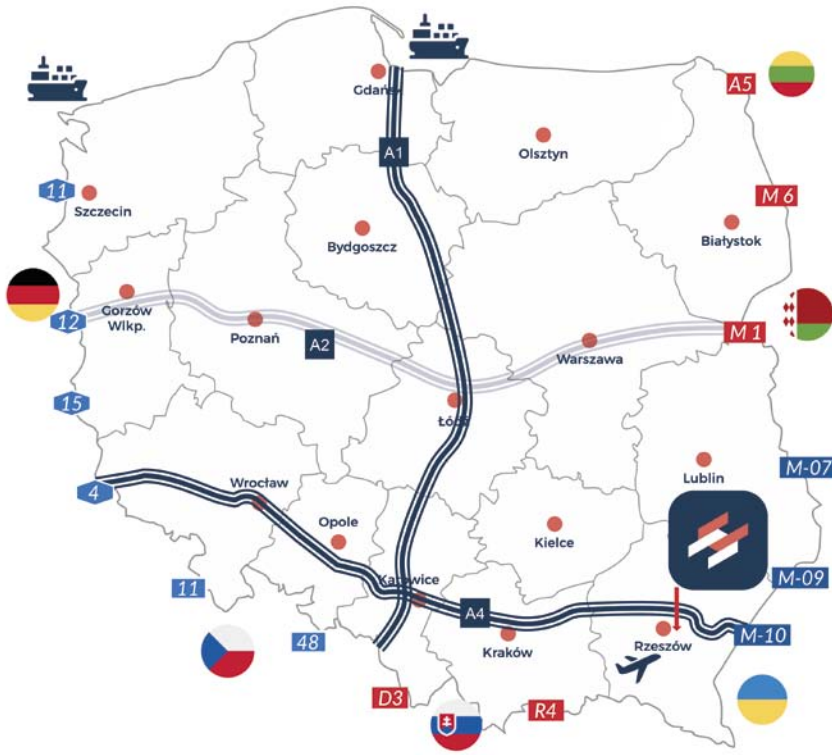


## Standards Software

Issue	Standards and software used																					
	ProSteel	AutoCAD	SolidWorks	Autodesk Inventor	Autodesk Navisworks	Solibri	MicroStation	Robot Structural	IDEA StatiCa	Microsoft Visio	EPLAN Electric P8	SeeElectrical EXPERT	WSCAD ElectriX	Autocad Electrical	Emulate 3D	Siemens	Allen Bradley	Mitsubishi	Beckhoff	HMI	SCADA	
1. Design concepts and layouts	x	x	x	x	x																	
2. Analysis of building and industrial layouts					x	x	x															
3. Analyses of mechanical layouts					x																	
4. Static Calculation								x														
5. Connection statics								x	x													
6. Workshop documentation – drawings	x	x	x	x																		
7. Assembly documentation – drawings	x	x	x	x																		
8. Electrical concept and layout									x													
9. Electrical documentation projects										x	x	x	x									
10. Simulations and emulations														x								
11. Hardware and PLC program configurations															x	x	x	x				
12. Transport system visualization projects																				x	x	

## Welding certificates

Lo.	Certificate	Certificate No.	Certification Body	According to the standard	Is valid to
1.	Factory Production Control (FPC)	2451-CPR-EN1090-2014.0586.011	DVSZERT	EN1090-1:2009 +A1:2011	09-04-2027
2.	Welding certificate – performance class EXC 4	DVSZERT-EN1090-2-SZ-2014.0024.011	DVSZERT	EN1090-2:2008	09-04-2027
3.	Fully quality requirements in welding	D-ZE-16083-01-00-ISO3834-2015.0170.007	DVSZERT	ENISO3834-2:2005	09-04-2027
4.	Quality Management System	PL19/0888	SGS	ISO9001:2015	11-12-2024
5.	Environmental Management System	PL19/0886	SGS	ISO14001:2015	11-12-2024
6.	Occupational Health and Safety Management System	PL19/0887	SGS	ISO45001:2018	11-12-2024



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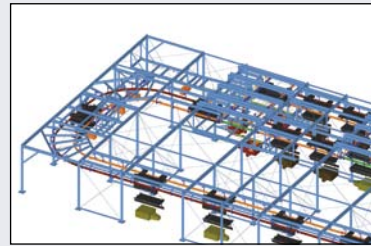
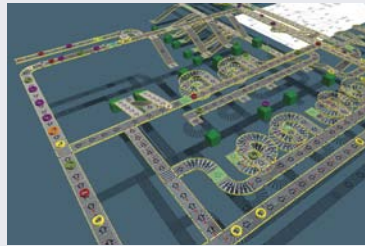
**Steelwork Business Unit (SBU)**

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# We are at your disposal if you have needs in any of the following areas:

## Design work

- Development of a technological transport concept
- Optimization of material flows
- Design of a hall transport system
- Carrying out calculations of steel structures



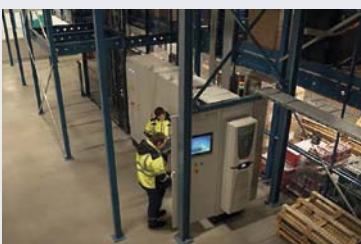
## Production of metal elements

- Production of steel structures with galvanizing and painting
- Production of unusual, large-size steel elements
- Production and assembly of hall transport equipment



## Comprehensive implementations in intralogistics

- Modernization of existing and installation of new hall transport systems
- Implementation of warehouse infrastructure
- Construction of an automated high-bay warehouse
- Production of transport and sorting equipment for warehouses or waste sorting plants





# TRANSSYSTEM

Moving industries forward

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