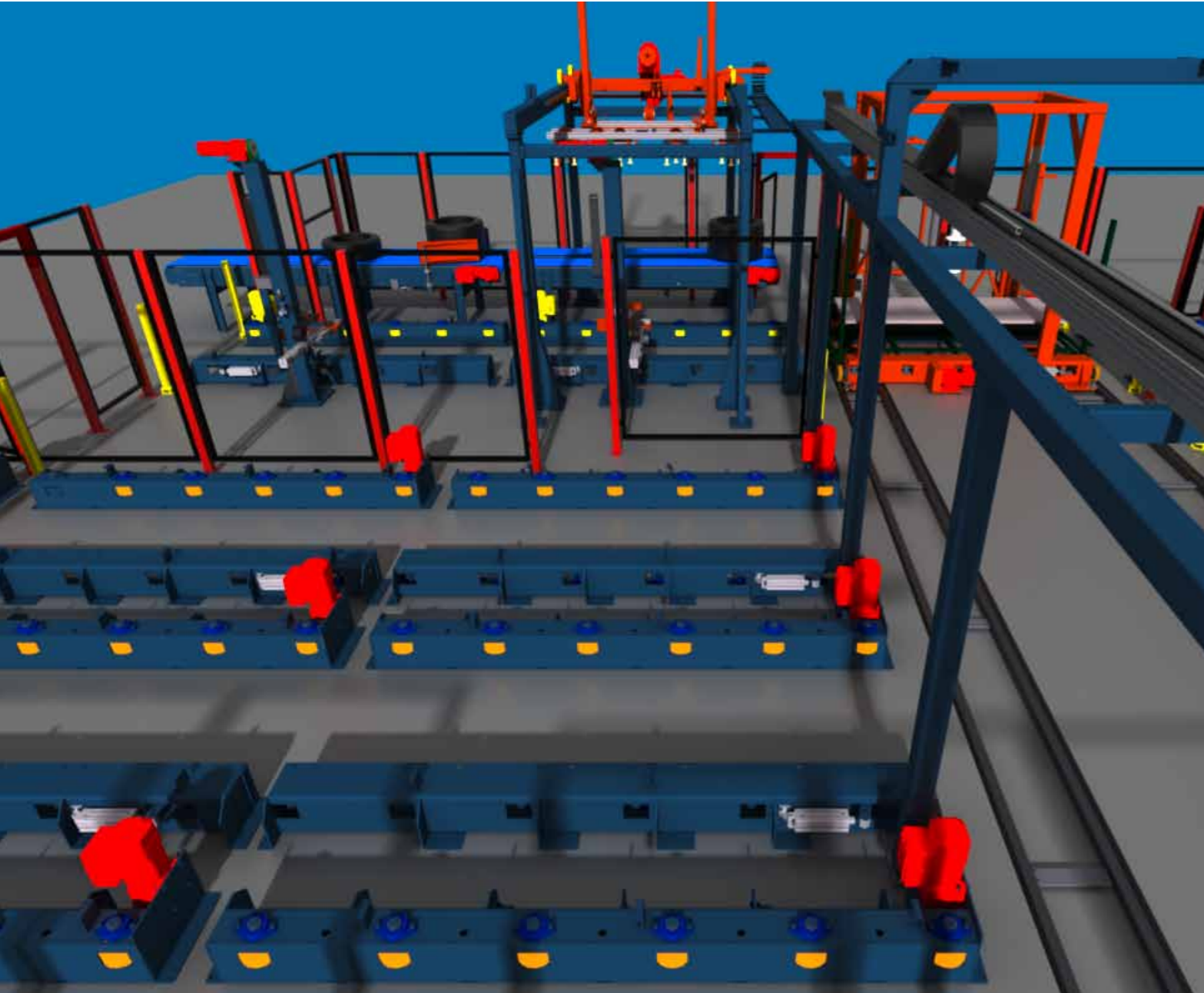


INDIVIDUALITY



PROVEN SOLUTIONS

OUR PRODUCTS:

- Material Handling Equipment
- High-Bay Storage Systems
- Area Storage Systems
- Automatic Storage and Retrieval Systems
- Feeding and Stacking Systems

OUR PRODUCTS FOR THE TYRE INDUSTRY:

- Automatic Tread Booking
- Manual Booking
- Scrap Handling
- Tread Loading at Tyre Building
- Green Tyre Handling
- Tyre Storage and Sorting
- Cassette and Leaf Truck Storage

GREEN TYRE HANDLING

Customer specific solutions



Knowledge ensures movement

SYSTRAPLAN 
Individuelle Materialfluß- und Lagertechnik

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Loading systems meeting highest standards

SYSTRAPLAN 
Individuelle Materialfluß- und Lagertechnik

IMPROVED PRODUCT QUALITY



Reduced Labour Costs and Improved Quality

Tyre manufacturers continue to push for automation of tyre handling, resulting in reduced labour costs and improved quality.

Green tyre handling systems are used to load and unload i.e. spraying lines, to load tyre curing presses or to collect the green tyres from the tyre building machine to ensure a continuous production flow.

SYSTRAPLAN offers adapted gantry systems for automated handling of green tyres.

DISTORTION FREE LOADING

Picking Green Tyres from Inside

After positioning multiple green tyres, the picking device of the handling unit moves the fingers of the picking devices in the centre of the tyres. The picking of the green tyres is carried out by the fingers from the inside, with a planetary gear to open and close fingers via a pneumatic motor.

Gentle Green Tyre Picking and Loading

There is no touching or clamping of the green tyres from the outside. The pressure of the fingers is adjustable. The pneumatic motor ensures a gentle handling from the inside without damaging the inside of the green tyre. During the picking process the tyre is automatically centred by means of the fingers of the picking device. The gantry moves the lot into the opened truck, which is waiting in loading position.

Adapts to the Different Types or Green Tyres

The system automatically adapts to the different types or green tyres specified, without any set up required and no waiting time. The PLC of the green tyre transport system makes the information on type and size of the green tyres to be loaded available. A pneumatic cylinder in horizontal position subsequently folds the next leaf down.

Loading of Multiple Green Tyres with one Cycle

Depending on the lot size, 3 or 4 tyres per level of the green tyre truck can be loaded with one loading cycle. The set-up between the loading modes takes automatically place.

Truck Change without stopping the Production

As soon as all leaves have been loaded in this manner, the truck transport system transfers automatically the filled truck right to the empty despatch position. Simultaneously, the system moves an empty leaf truck standing in waiting position into loading position whilst simultaneously new tyres have been accumulated to a new charge so that a new loading cycle can start.

Buffer for different Type of Trucks

The system has multiple loading slots in order to handle different type of trucks. For each type one slot. An operator, who moves them into one of the feeding slots, inserts the empty trucks manually. From there it is transported automatically to the loading position.

Automatic Leaf Opening before Loading

Depending on the arrival sequence of the green tyre lots, the system automatically selects the correct truck type. A cross cart is taking the right cart and pushes it to the loading position. Whilst travelling on the cross cart the leaves will open automatically.



Advantages of Green Tyre Handling:

- Improved product quality
- Continuous production - increased output
- Reduction in labour costs

Automatic Green Tyre Handling Systems are composed of the following major components:

- Feed with automatic positioning of the green tyres
- Gantry system with single or multiple green tyre picking device
- Leaf truck conveyor system for positioning
- Electrical control system (Allen Bradley, Siemens)

The Green Tyre Picking Device comes with following special features:

- Picking with fingers from the inside via a pneumatic motor
- No touching or clamping of the green tyre from the outside
- Adapts to the different types of green tyres
- Pneumatic motor ensures a gentle handling of any tyre size
- Pressure of the fingers is adjustable according to the tyre size
- Servo drives in combination with standard PLC

The specialists
for material flow technique

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