ACOPOStrak

Ultimate Production Effectiveness

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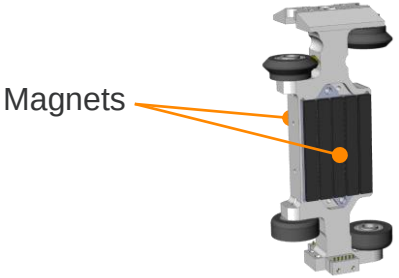
The basics

Operating principle

Shuttles carry permanent magnets

Magnetic flux density B generates attraction F_y toward the stator

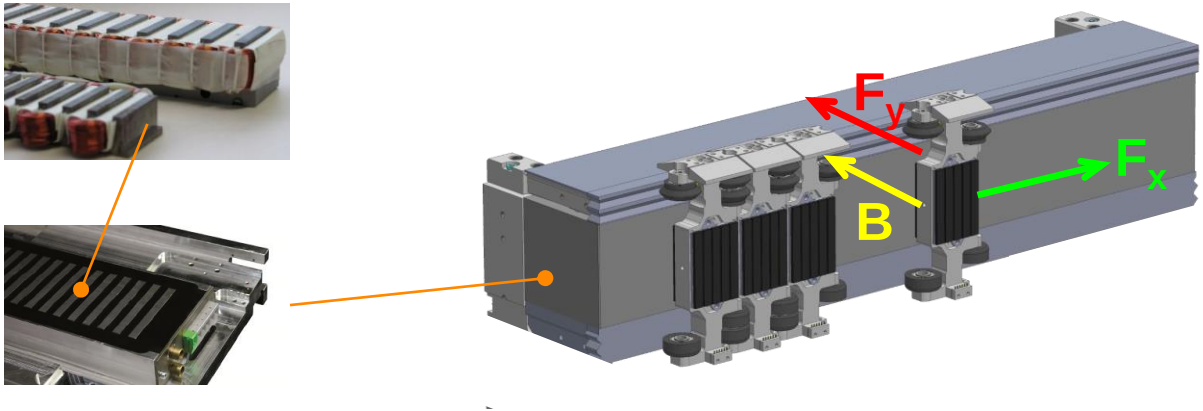


Stator consists of an array of coils

Stator can be very long (hence "long stator")

Current feed into stator coils generates controlled propulsion

$$F_x \sim I \cdot B$$



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7 key product features

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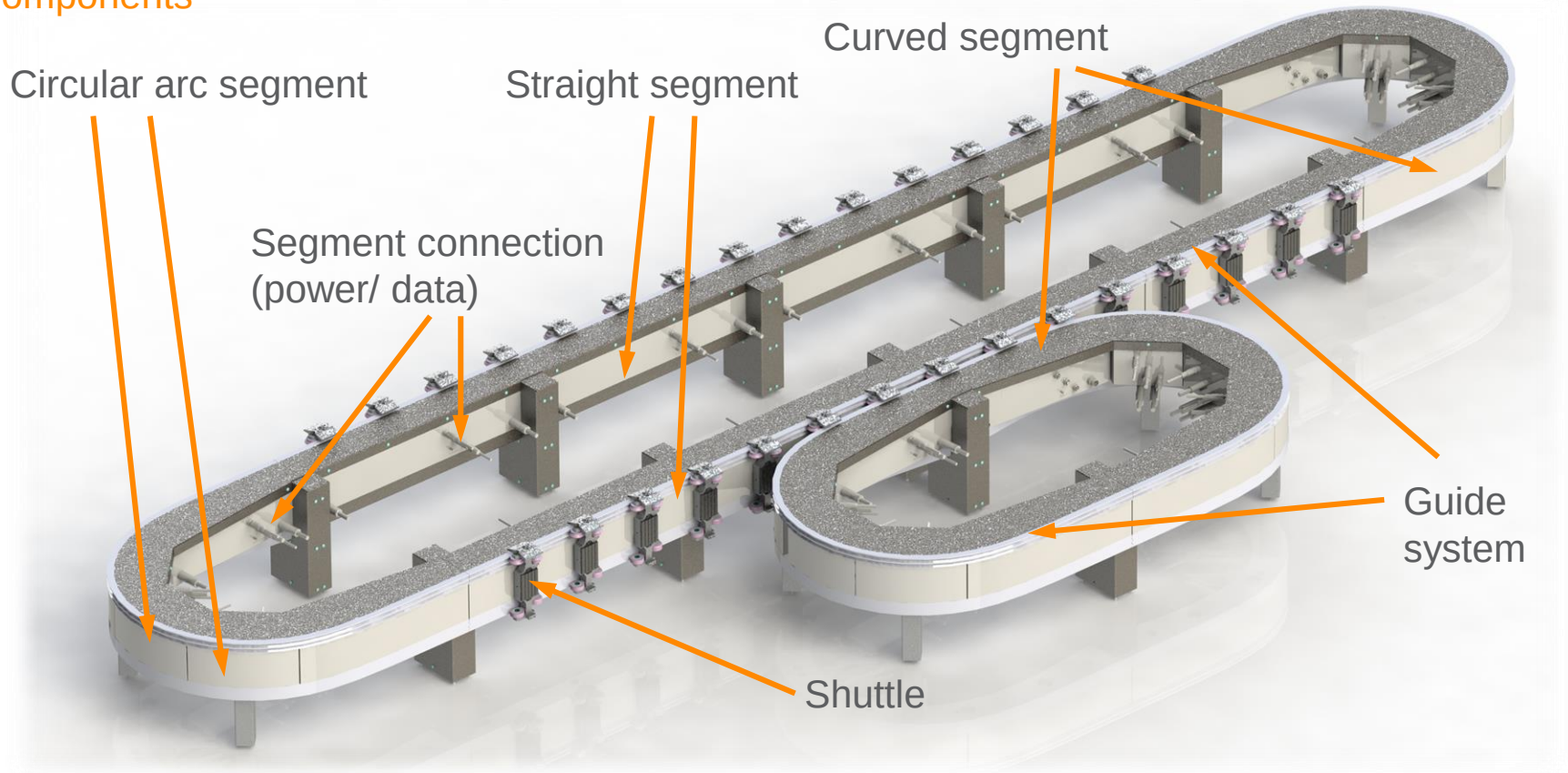
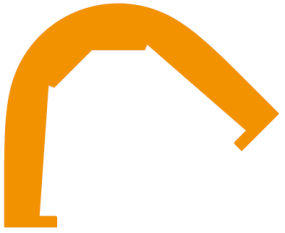
Track design flexibility

1 Track design flexibility

Components


Curved segment
Circular arc segment
Straight segment
Segment connection
(power/ data)
Guide
system
Shuttle

Guide rails

Shuttle	Straight guide	45°	90°	135°	180°
Track length	660 mm	900 mm	1140 mm	1380 mm	1620 mm
					

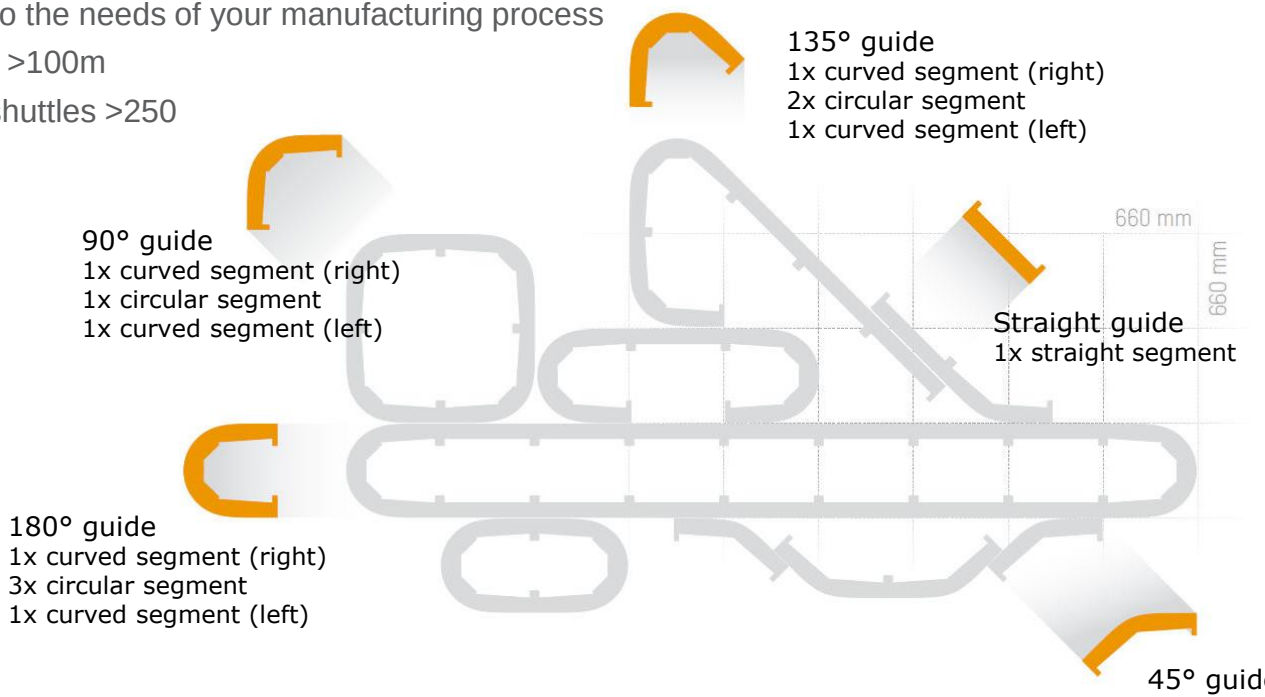
Track design flexibility

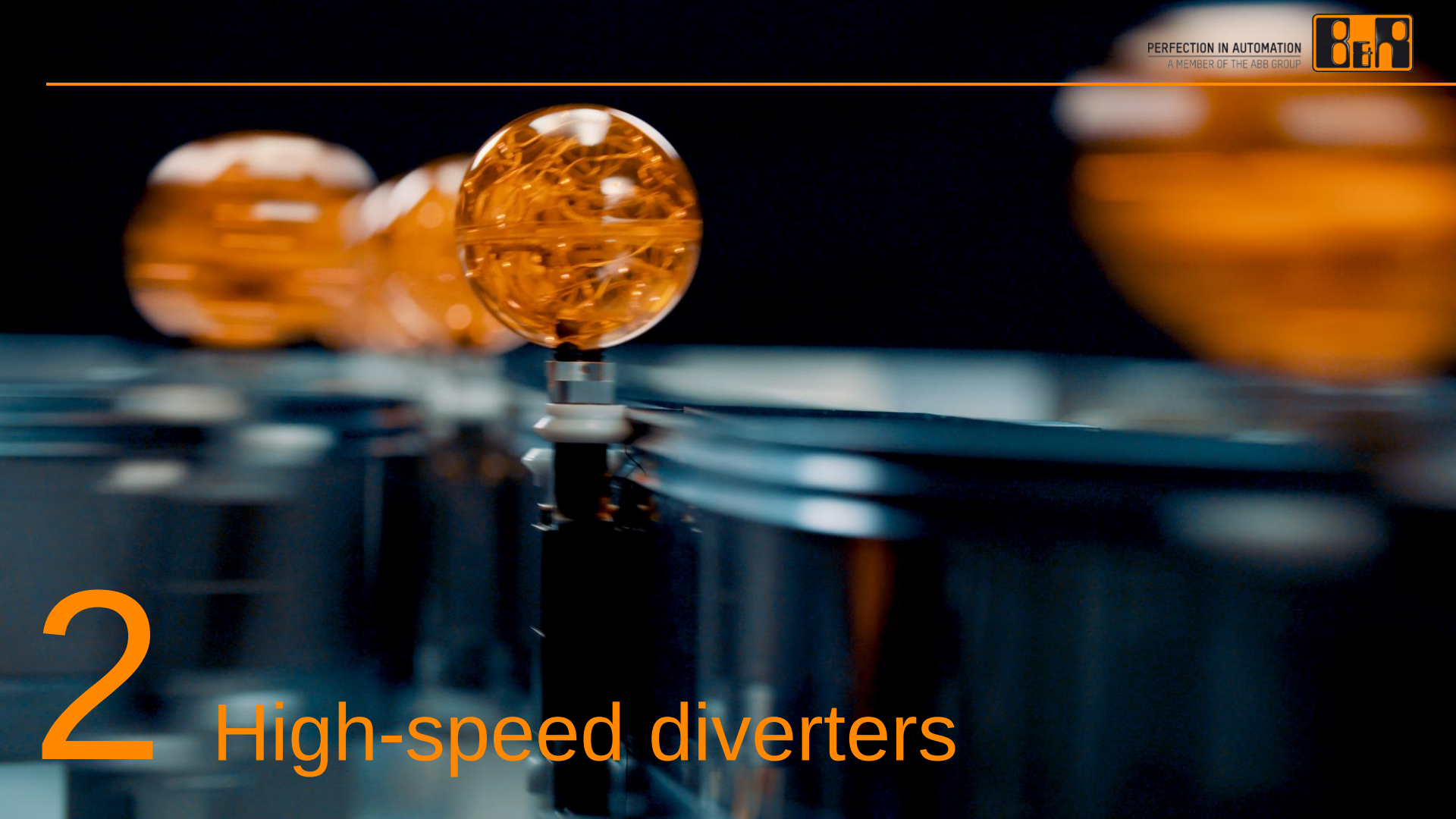
Grid allows maximum morphological degree of freedom

ACOPOStrak adapts to the needs of your manufacturing process

Maximum track length >100m

Maximum number of shuttles >250





2 High-speed diverters

High-speed diverters

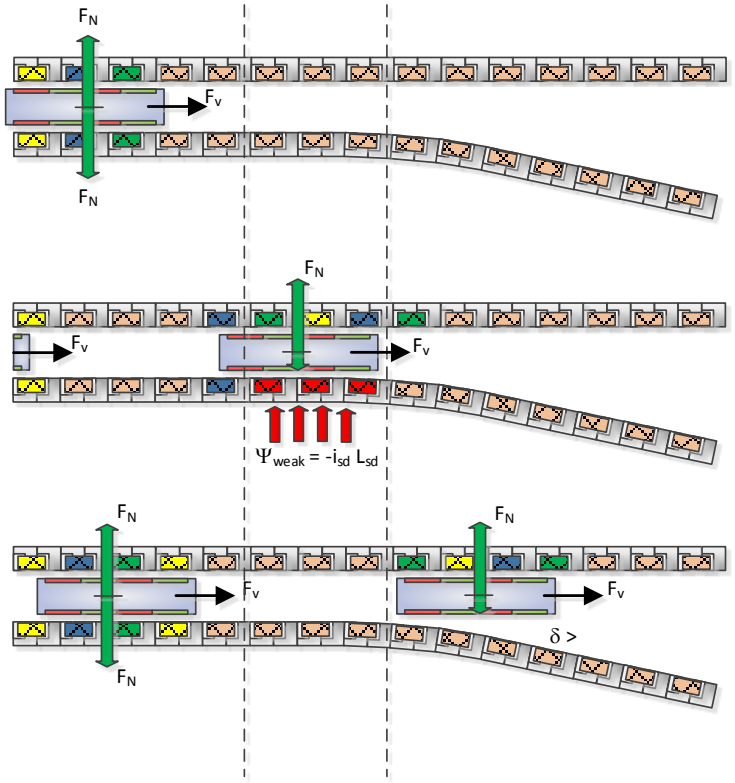
High-speed diverters

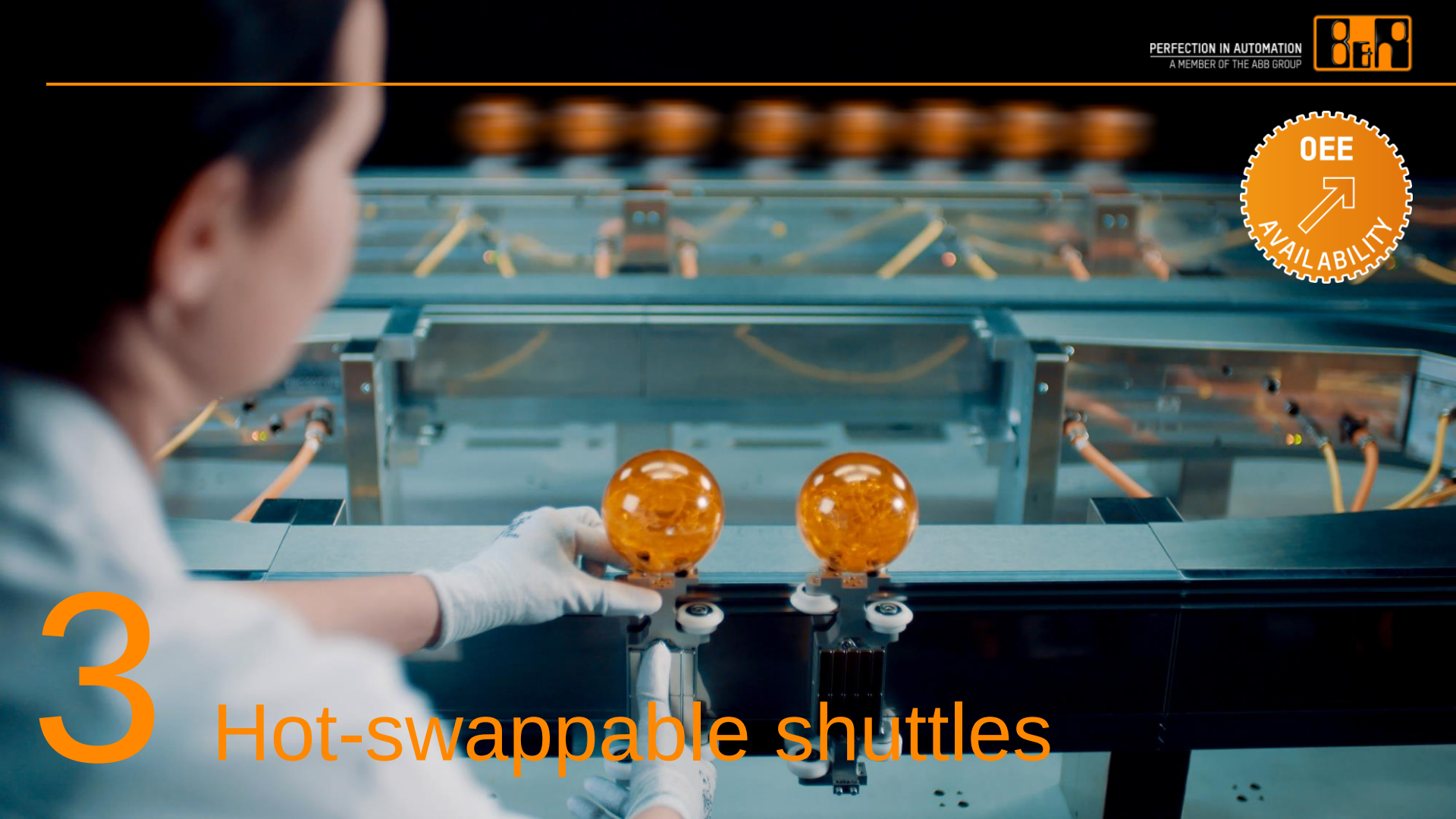
Merge or divide product flows at full speed

Diverters can be created at any position of the track, combining a straight and a curved segment

Fully electronic diverter technology

100% free of wear and maintenance





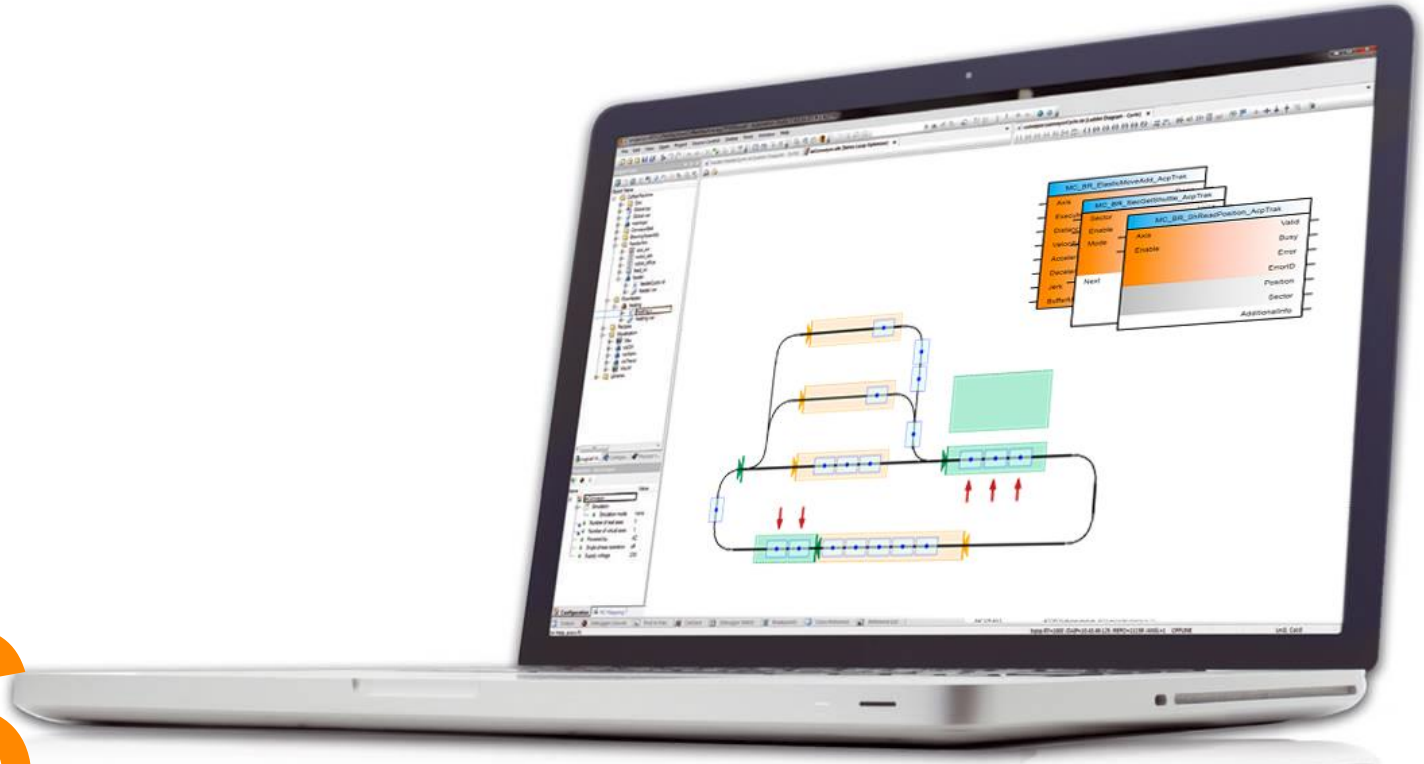
3 Hot-swappable shuttles

4 High-productivity design

High-productivity design

Technical data	Specification
Minimum product pitch	50 mm
Speed	>4 m/s
Acceleration	>50 m/s²
DC bus voltage	60 VDC (energy sharing trough common DC bus)
Mounting orientation	Any (e.g. vertical, horizontal, inclined)

5 Food-grade design



6 Smart system software

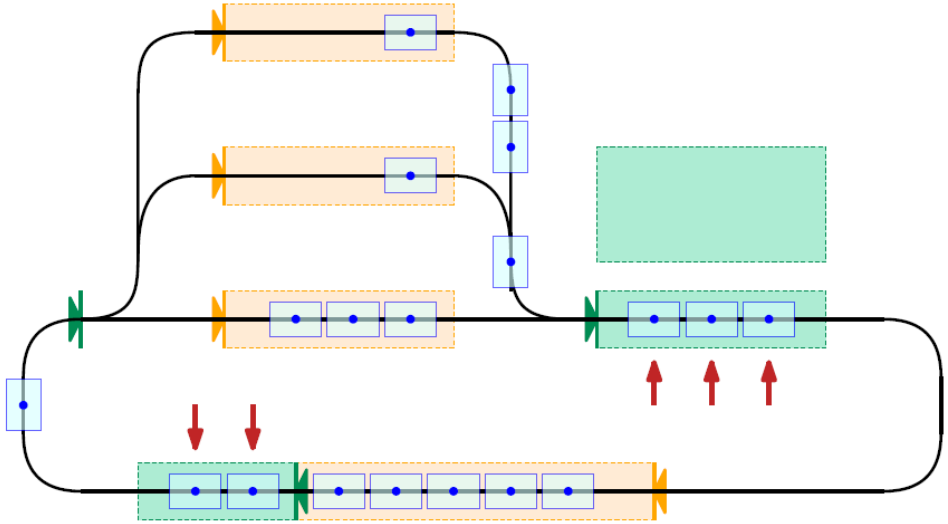
Smart system software

Process oriented programming

Describe the rules that define the product flow on the track

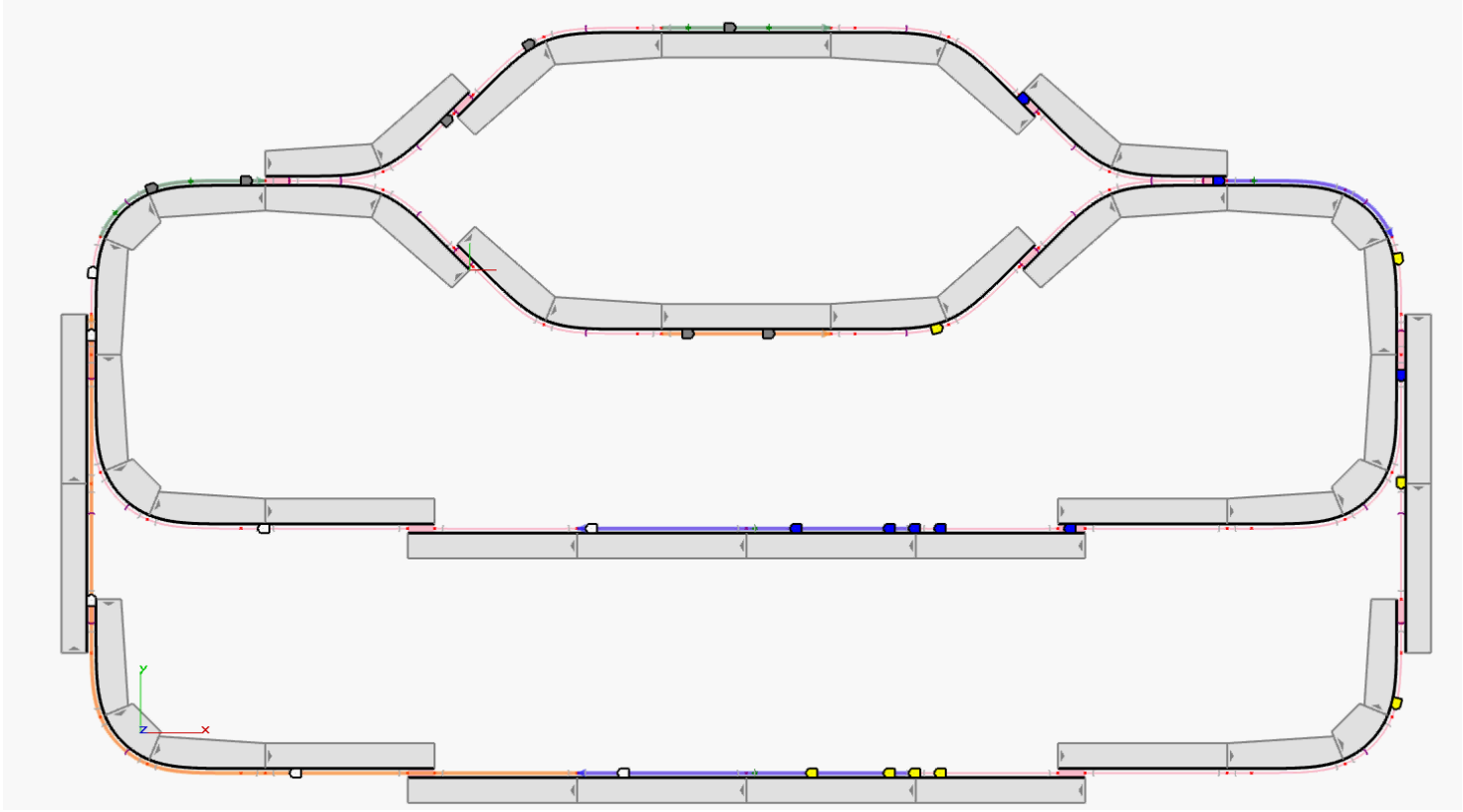
No individually programming of a multitude of axes and shuttles

Integrated collision avoidance



Integrated simulation

Scene Viewer

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7
Interlinking with conveyors

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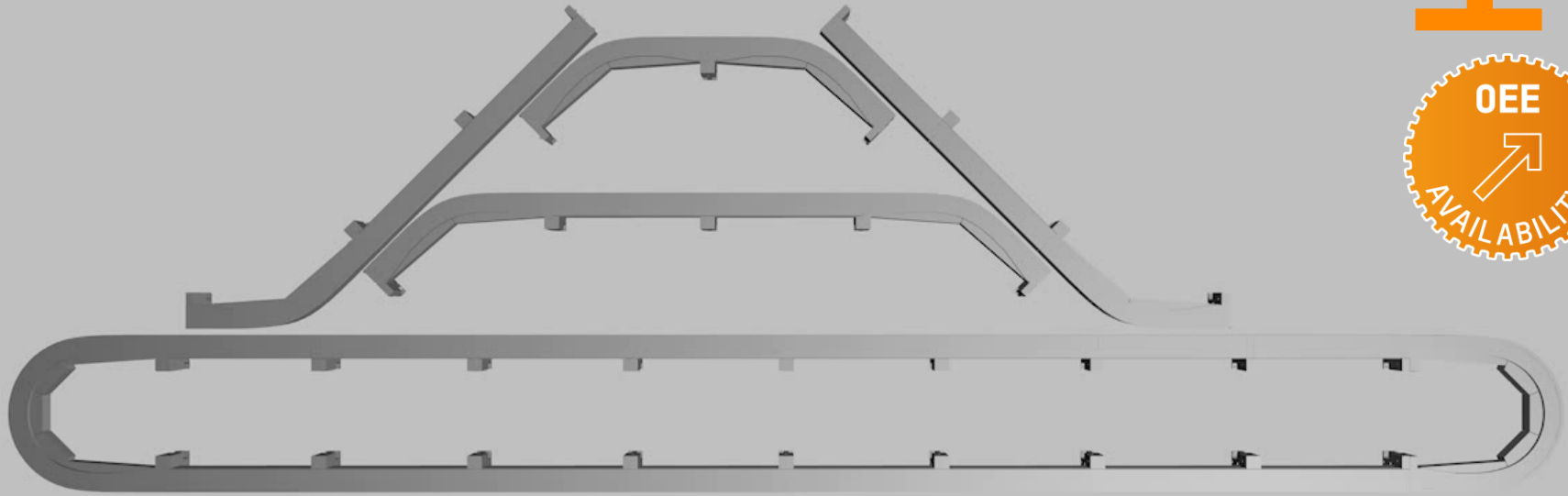
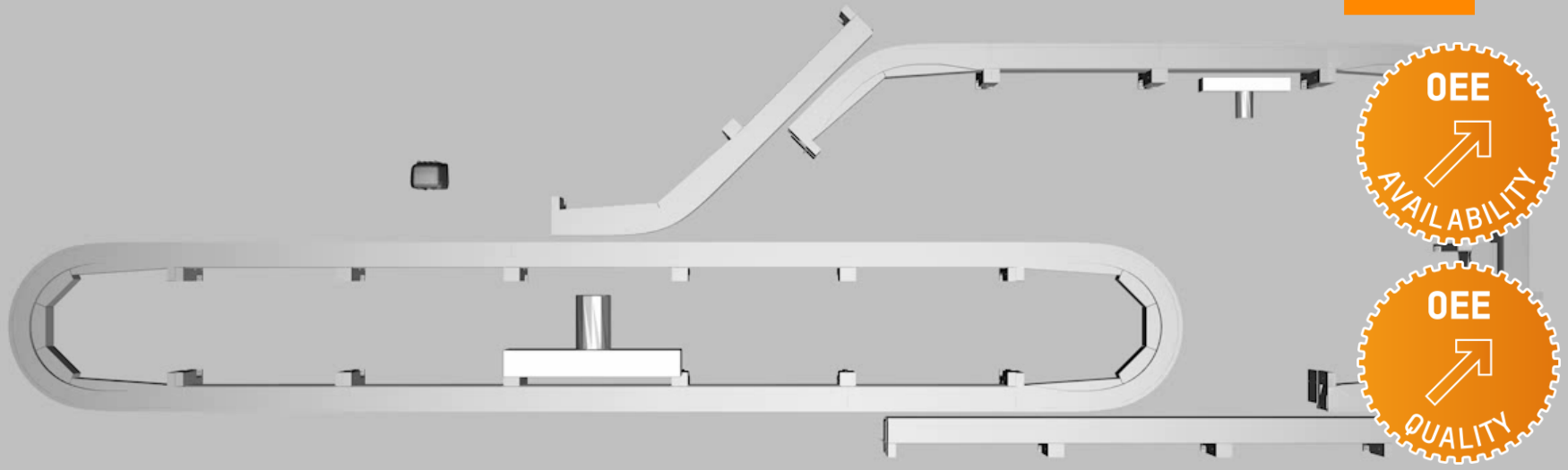
6 technology benefits

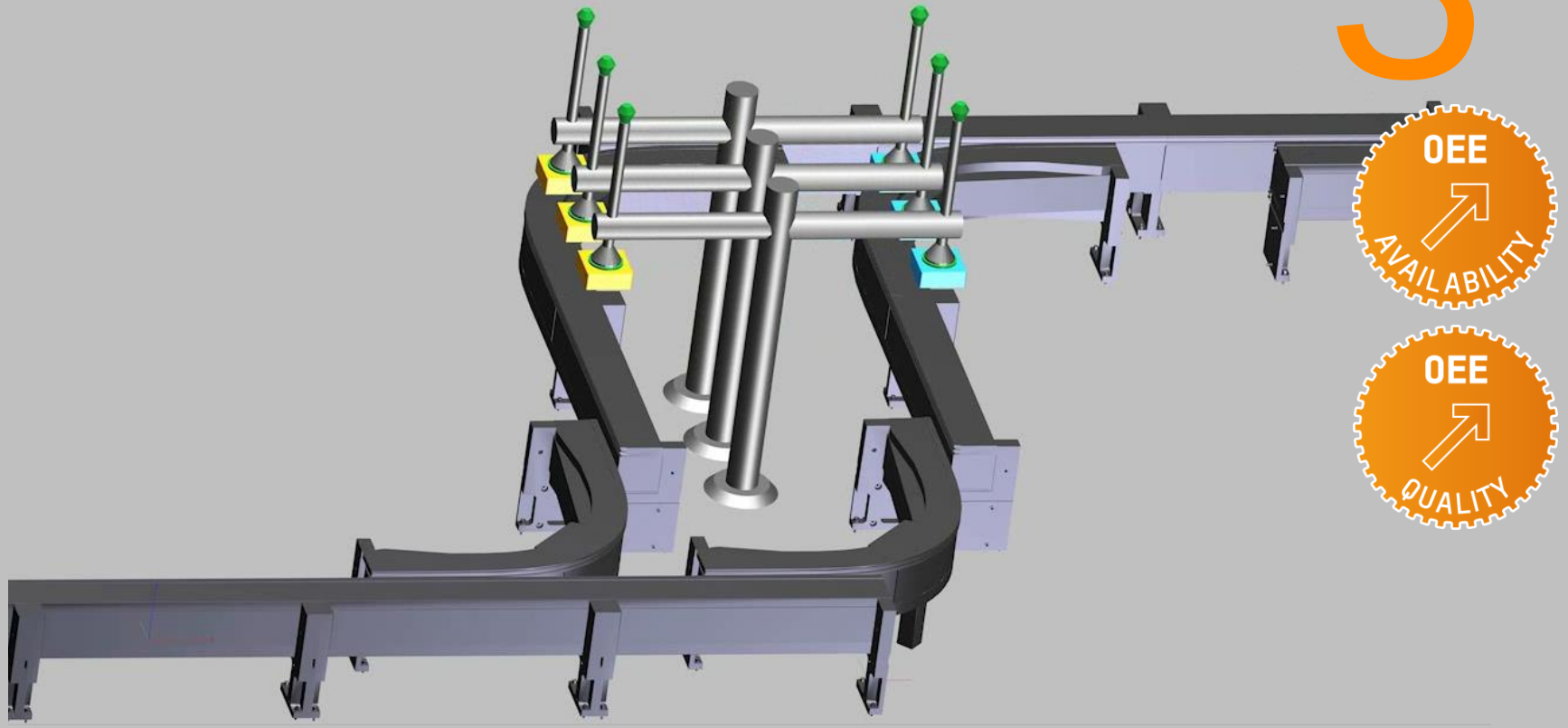
Merging product flows 1



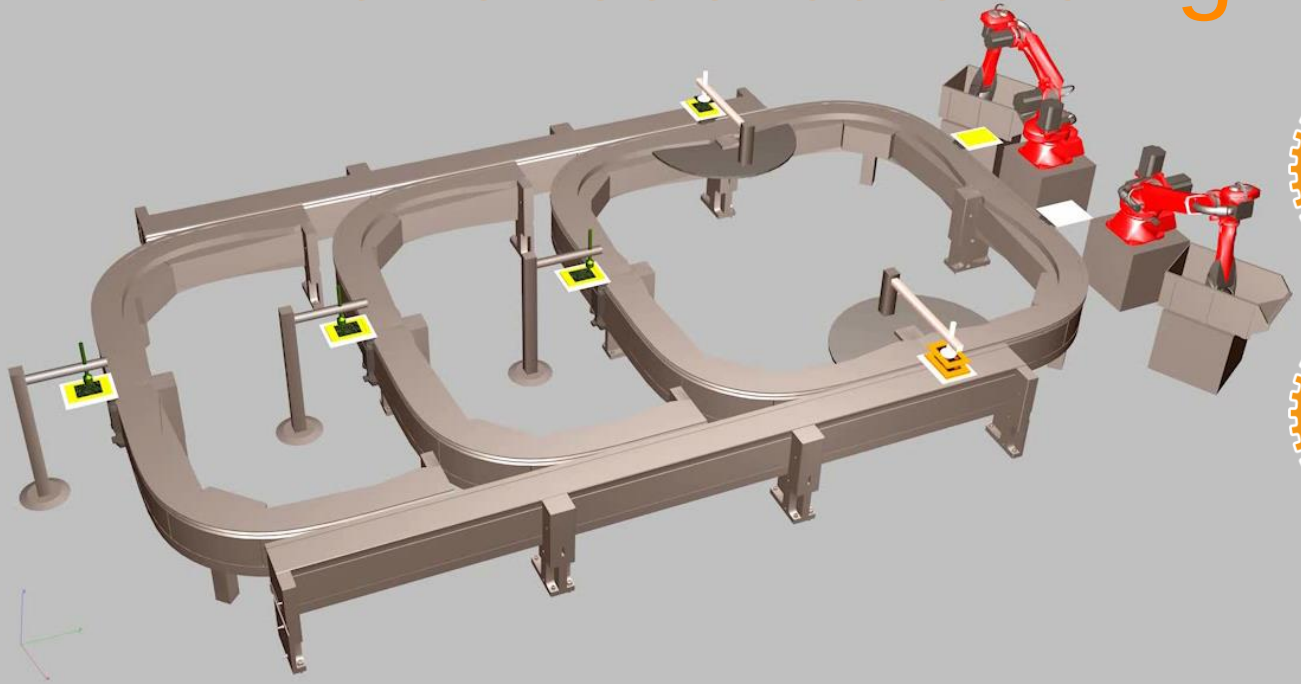
Dividing product flows 2



Improved fault tolerance 3



Parallel processing and load balancing 4



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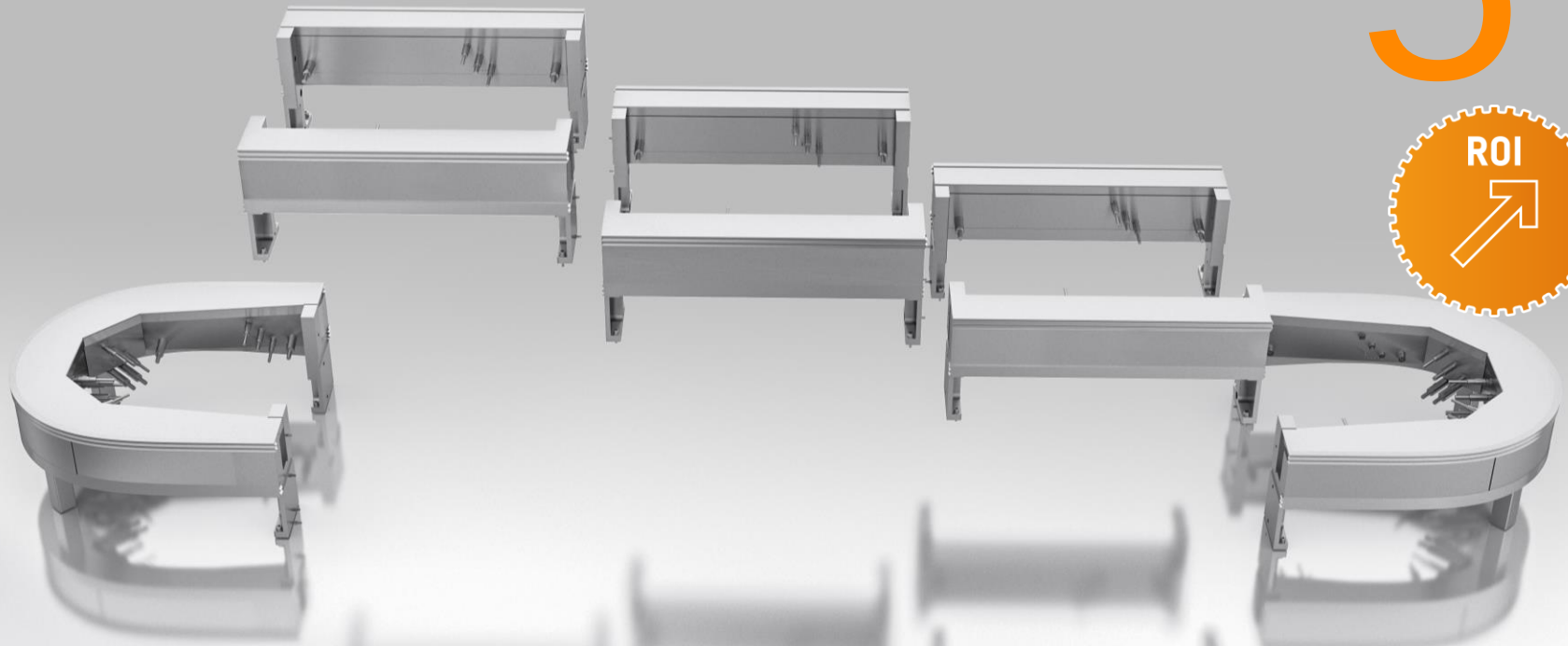
OEE

AVAILABILITY

Scalable machines 5



Reduced machine footprint 6

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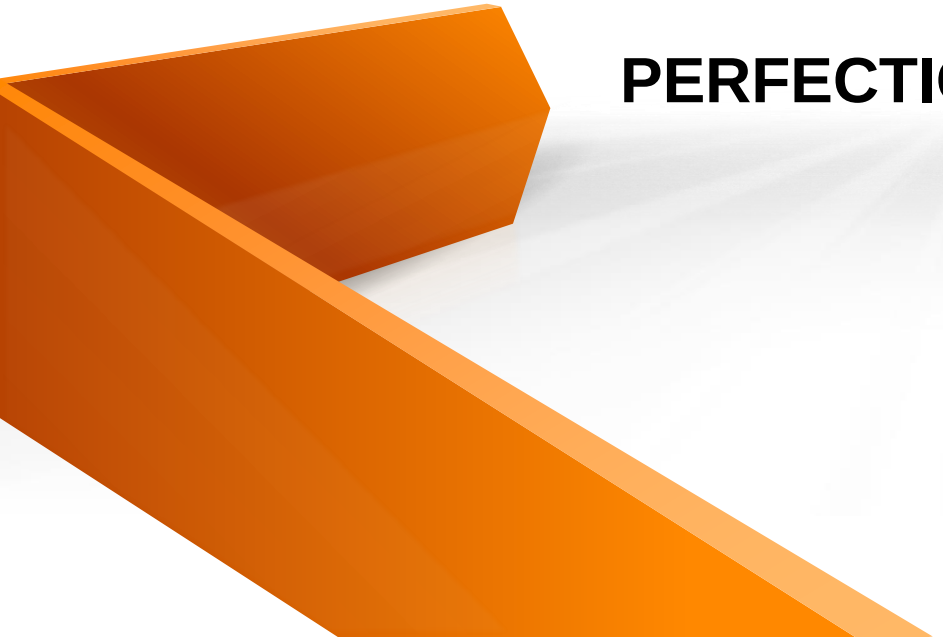

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