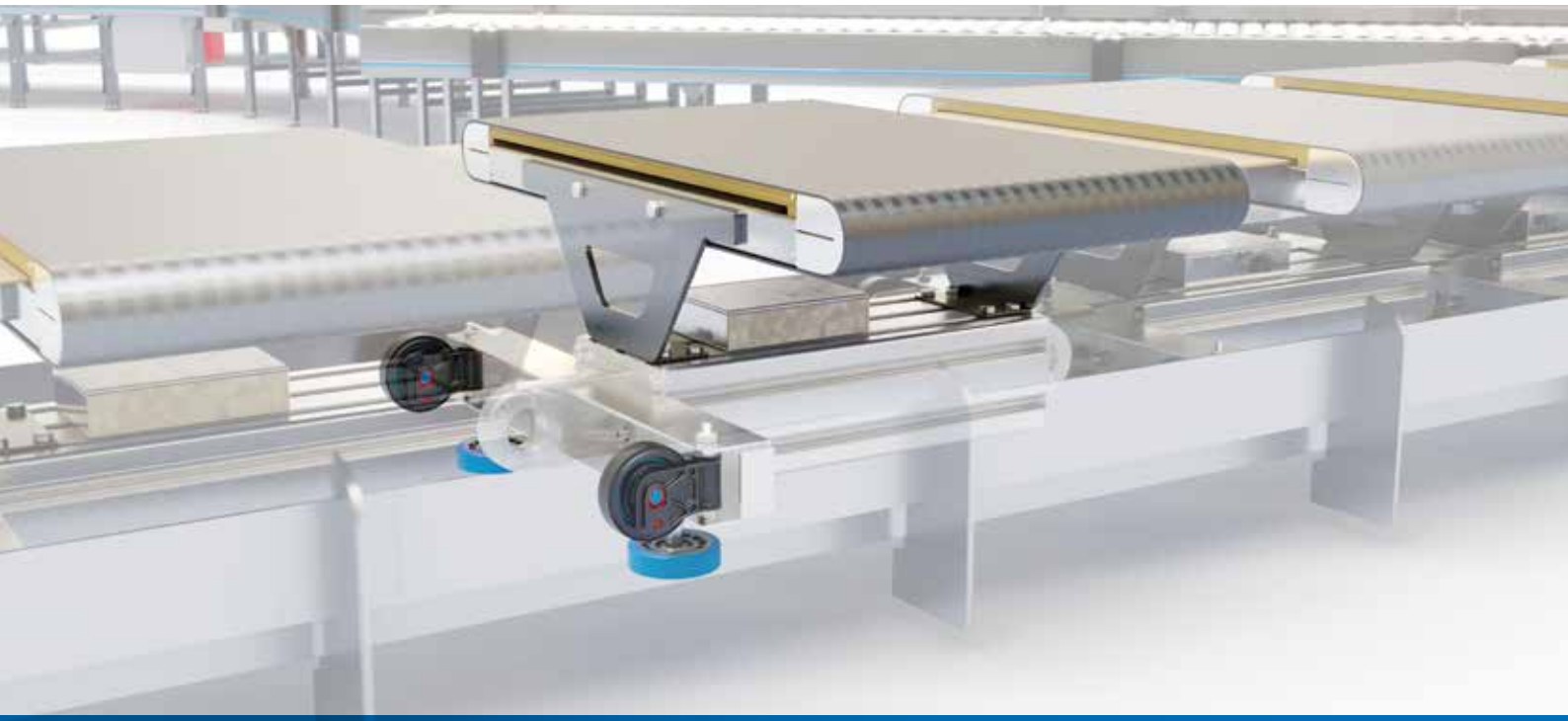

Wheel holders

Application / Challenges

Wheel holders are part of the carriers used in parcel sortation and baggage handling systems. Due to the kinematic effects generated during cornering, the running wheels on the carriers need to be fitted in such a way that they can swivel. Conventional wheel holders are usually made from steel or aluminium. They have to bear the weight of the carrier and the load, and they are exposed to shocks and centrifugal forces when taking corners.

Even when the wheel holders are carrying significant loads, deformation has to be kept to an absolute minimum to stop the carrier from dropping. The pivot bearings need to be play-free and silent, and to work reliably during their long service life.

Another key requirement is acoustic decoupling of the wheel and the carrier, in order to minimise the transfer of vibrations and noise.

Solution Concept / Material

faigle wheel holders are made entirely of plastic, meaning that their weight is only a fraction of that of comparable steel and aluminium solutions.

Thanks to its high-strength design featuring highly rigid, impact-resistant, fibre-reinforced polyamide, the wheel fork is ideally suited to withstand heavy loads.

The plastic wheel shaft is so stable that it far exceeds the load-bearing capacity of the ball bearing. The shaft is fitted in damping bushings and securely fixed in the wheel fork using a clip system. It can be attached and detached without using tools.

Made from a type of plastic specially developed by faigle, with optimised tribological properties, the plain bearing that allows the wheels to swivel does not require any lubrication during the service life of the wheel holder.

faigle's ready-to-install wheel holders are supplied with fully assembled running wheels.

Customer Benefits

- Lightweight design helps to cut drive power
- Effective vibration dampening cuts operating noise
- Shock absorption extends the ball bearings' service life
- Ready-to-install module reduces assembly time
- Excellent load-bearing capacity and rigidity thanks to high-performance plastics and optimised design
- Quick-change system for rapid, tool-free wheel changes

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