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## Transport of beam and profile bundles

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### Quality assurance and safety

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Logistics companies are the link between steel mills and steel distribution centres. Their job is the distribution of the products from the steel mills. They undertake the unloading, storage and loading of the products and ensure that they reach the end customer in perfect condition.

In this process the steel products are often moved around, bundled or packed together. The large number of different products with varying lengths, sizes and weights calls for a lifting and transport system suitable for universal use. The lifting system used must be able to carry heavy loads safely and guarantee that the material's quality is preserved.

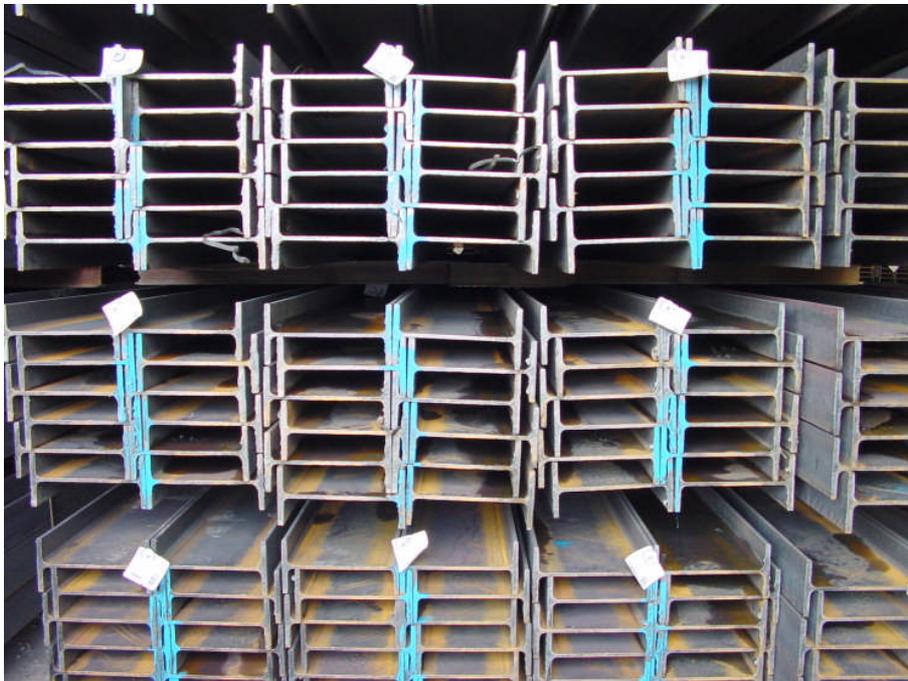


Figure 1: Typical storage of beam bundles

One alternative to using pure mechanical lifting methods, such as belts and chains, is to employ magnet lifting systems.

### Magnet systems for beam bundles

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Using a magnet system for handling beam bundles and profiles offers the following advantages.

#### Advantages

- No need for people in the material handling area
- No need to climb onto stacks of material
- No risk of injury from handling sharp-edged materials
- No aisles required between stacks
- No wooden spacers needed between bundles

- Easy operation of the system via cabin or remote control
- No operating assistants required

### Your benefits

- Fewer accidents and increased safety
- More compact storage
- Faster handling speed
- Lower personnel costs
- More attractive workplace



Figure 2: Magnetic transport of H-shape beam bundles

## Beam bundles up to 24m long

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TRUNINGER designs and builds special magnet lifting systems for handling all standard length beam and profile bundles.

- The design of the magnet spreader beams is adapted to the lengths of the material and the nature of the bundles. Solutions used here include fixed spreader beams with travelling magnets, two independent spreader beams (see figure 3) and, quite frequently, an active telescope (see figure 2).
- The magnet control system enables the magnets to be moved automatically and thus to be positioned correctly to suit different material lengths. This minimises any load sag and guarantees safe material transport.
- Magnets that can be slewed or moved to the side to adapt to different bundle widths.
- Automatic quick change between magnets for bundle and single beam transport
- Specially developed magnets with a deep magnetic field guarantee safe transport of the beam bundles and relieve the strain on the steel strapping.
- The magnets are fitted with variable contour poles that can adapt to the different shapes of the items being carried (see figure 4).



*Figure 3: Two independent spreader beams with quick change systems unloading a railway wagon*



*Figure 4: Finger poles adapt to the shape of a bundle of angled sections*