
Two individual spreader beams

An all-purpose design

If a crane has two suspension points per trolley, then a magnet system with two individual spreader beams represents a particularly flexible, robust and inexpensive solution. One magnet spreader beam is reeved into each trolley.

The distance between the two independently controllable magnet groups can thus be adapted to different material lengths. There is no connecting beam between them.

- Benefit 1: Simple design and efficient operation



Figure 1: Two individual spreader beams carrying a long beam

Short material and off-cuts can be lifted using just one magnet group. In this case the length of the magnet beam never exceeds the length of the material to be lifted. This makes it easier to work near to obstacles such as walls, uprights and warehouse bays as well as loading and unloading lorries and railway wagons.

- Benefit 2: Compact design and high-density storage



Figure 2: Lifting pipe bundles out of uprights using two individual spreader beams

The almost direct line of force from the magnets onto the crane ropes permits a very lightweight spreader beam design with a good ratio of lifting power to dead weight.

- Benefit 3: Lightweight design and less wear



Figure 3: Two individual spreader beams lifting a long, thin plate

The individual spreader beams are usually designed as low-cost fixed beams. However, they can also be fitted with travelling magnets (see figure 3) or used as active telescopes.

Simple operation by means of a control unit enables correct positioning of the magnets on the load, thus reducing any load deflection.

Criteria for choosing two individual spreader beams

Two individual spreader beams are a good solution for steel handling processes where the following conditions exist::

- The material to be handled
 - varies considerably in length
 - and is relatively rigid
- Two suspension points per trolley are available
- The material's lengthways axis runs parallel to the crane bridge