
Active telescope

Multifunctional all-rounder

An active telescope is mounted on two suspension points of a crane system.

The spreader beam is fitted with a motor drive for varying the distance between the magnets. In contrast to a passive telescope, all the magnets remain equidistant to one another, which is particularly important for non-rigid material (see also 'Load deflection').

- Benefit 1: Adjustment of magnet spacing means only minor load deflection



Figure 1: Active telescope carrying a single plate

Simple control of the active telescope via an operator station enables the magnets to be positioned correctly on the load, thus reducing any load deflection and optimising the load distribution between the magnets. Having many powerful magnets does not necessarily guarantee adequate lifting capacity; good load distribution is one of the most important safety factors.

- Benefit 2: Lifting capacity is spread equally across all magnets



Figure 2: Two active telescopes transporting long rebar bundles

The spreader beam is rarely longer than the material to be lifted. This makes it easier to load and unload material in the vicinity of obstacles such as walls, uprights, warehouse bays, lorries, railway wagons or ships.

- Benefit 3: Active telescope guarantees compact storage



Figure 3: Active telescope unloading rebar bundles from a ship

Criteria for choosing an active telescope

Active telescopes are a good solution for steel handling processes where the following conditions exist:

- The material to be handled:
 - varies considerably in length
 - is relatively pliable (e.g. rebars or sheet metal)
- Two crane suspension points are available for the active telescope
- The material's lengthways axis:
 - runs either parallel to the crane bridge
 - or parallel to the crane runway
- The material is to be slewed during transport using a rotating hoist or a load slewing device