
Passive telescope

Driveless telescopic beam

A passive telescope is used on a crane equipped with two independent trolleys.

A three-part telescopic beam connects the two sub-spreader beams and ensures proper alignment and stability of the magnet groups.

- Benefit 1: Stabilised magnet position when picking and lifting loads.



Figure 1: Swing-free order picking from a cassette

The distance between the magnet groups can be adjusted, to the corresponding material length, by moving the crane trolleys. Usually the overall beam length does not exceed that of the load.

- Benefit 2: Using a passive telescope you can safely transport material of differing lengths (see also 'Load deflection').

The telescopic arms are guided by rollers. This results in less friction and smooth operation when moving the magnet groups.

- Benefit 3: Accurate positioning and less wear

Positioning the passive telescope at a slight angle enables the operator to lift short material lengths using only one magnet group. This is advantageous, for example, when lifting material at sawing stations.

- Benefit 4: Flexible material handling with optimum storage density



Figure 2: Lifting a short beam with a single magnet group

Criteria for choosing a passive telescope

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

- The material to be handled:
 - has an approximate length ratio of 2:1
 - is sufficiently rigid
- Two crane suspension points are available for the passive telescope
- The lengthways axis of the material runs parallel to the crane bridge



Figure 3: Passive telescope with two magnet groups lifting a bundle of hollow sections