
Load slewing device

Compact but rugged

There are a number of reasons why it may be necessary to rotate a load:

- To achieve optimum utilisation of space on a truck, train or ship
- To get high storage density in a warehouse
- To handle different alignment of material in the stock reception area and on the production line
- To align the load for automatic identification devices (e.g. barcode readers) in the stock reception area

Rotating a load during transport can be done in two ways:

- By a slewing crab on the crane
- By a slewing device on the spreader beam or on the magnet itself

Criteria in favour of a slewing crab

Having a slewing crab on the crane rather than a slewing device on the magnet beam reduces deadweight of the beam. This allows a smaller capacity hoist to be used and gives the crane a longer service life.

For very long loads a slewing crab can also make sense for structural reasons and to minimise the weight of the lifting gear.



Figure 1: View of a slewing crab

Criteria in favour of load slewing device

A load slewing device on the spreader beam or on the magnet itself makes sense in situations where the size of the load slewing device has no negative impact on utilisation of space or storage density.

Not every crane is suitable for having a slewing crab and, for structural reasons, not every building permits such an installation.

Another advantage of having a load slewing device on the magnet beam is its proximity to the operator which offers the crane driver a greater degree of control. Slewing done from the crane is less precise due to the rotational movement being transmitted through steel ropes which are prone to swaying.



Figure 2: View of a magnet spreader beam with load slewing device

With a motorised load slewing device the load can be rotated by remote control.

Load slewing devices make it possible to align the load in any direction on the transport vehicle (lorry, train, etc.) or in the storage location.

Load slewing device for individual magnets

For special applications it is even possible to attach a load slewing device to a single magnet. A frequent example is in the case of a coil magnet. This enables coils of up to 32 tons to be rotated by remote control. Power is supplied to the magnets by means of slip rings inside the slewing device. This avoids having to place limitations on the slewing range. It also prevents magnet supply cables from getting tangled or disconnected, an important safeguard against load drops.



Figure 3: Load slewing device in combination with a coil magnet