
Slewing device

Compact but rugged

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

- To achieve optimum alignment 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
- A motorised load slewing device allows the load to be rotated by remote control.

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

Note:

Slewing devices often add significantly to the cost of magnet systems or cranes. If you have the option to plan your storage layout, it is therefore very advisable to consider a fix alignment of material, machines (processes) and loading or unloading. This will not only save investment costs but also cycle time.

Slewing crab on crane

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



Figure 1: Slewing crab on crane

Slewing device on magnet system

A load slewing device on the spreader beam or on the magnet itself makes sense when the footprint of such device does not collide with narrow gaps in the store area.

It often provides the only option when retrofitting an existing crane with a new magnet system.

Another advantage of having a load slewing device on the magnet beam is the better visibility to an operator located on the ground.

It also offers a higher quality of control to the crane driver. Slewing done from the crane is less precise due to the rotation being transmitted to the load via steel ropes, a setup which is prone to rotational swaying.



Figure 2: Magnet spreader beam with load slewing device

Load slewing on magnet

In the example bellow a load slewing device is applied on a coil magnet. Coils of up to 32 tons are rotated by remote control.



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