
Slewing magnets

Flexibility and safety

Flexible movement makes it possible for the magnet spreader beam to be adapted to users' varying requirements. Magnet slewing plays a central role in this.

Slewing magnets are used not only because of their great adaptability, but also because they play an important part in magnet systems' ability to handle materials safely.

The magnets are slewed, either manually or via a motor, before they are set down on the load. Slewing magnets are extremely useful in the following situations:

Many different materials – one magnet system

It is often necessary to lift varying loads of differing dimensions using one and the same magnet system. A typical case of such use would be handling steel bars and sheet metal in the same bay of a warehouse. In such situations the magnet spreader beam needs a high degree of flexibility in order to enable it to be adapted to the varying dimensions of the different material.

For steel bars the magnets are positioned parallel to the load, while for carrying sheet metal they are slewed by 90 degrees.



Figure 1: Magnets slewed by 90° on a pack of sheet metal



Figure 2: Magnets turned parallel to the load, lifting a bundle of pipes

Varying material widths – high-density storage

A profitable warehouse succeeds by having a good range and mix of products. Consequently material of different shapes, lengths and widths are found in the storage area and each makes different use of the space. The warehouse will yield high returns only if everything is stored as compactly as possible and only if the product mix does not consume too much space.

Slewing magnets help to increase storage density by adapting to the width of each different material. For narrow loads or individual bundles the magnets are placed parallel to the load. For wide loads or for lifting more than one bundle at a time the magnets are slewed.



Figure 3: Slewing magnets lifting 3 bundles of pipes together

Safety when lifting wide loads

The magnets used in section warehouses are very slim, allowing work to be done even in narrow gaps. Spaces between material stacks and between aisles are deliberately avoided in order to reduce cost.

In section warehouses with a high stock density the material stored includes sections of many different sizes. Sections of both 100 and 1,000mm in width may be found. With a wide load, setting the magnets down in the middle is difficult. Positioning the magnets at an angle prevents the load from tilting about the long axis when not lifted centrally.

Slewing magnets are thus a basic requirement for transporting the load safely!



Figure 4: Slewing magnets set at a slight angle on a wide load