
Vertical plate storage

Upright storage is possible

One very interesting TRUNINGER development is the use of magnet systems for vertical plate storage. In warehouses with a very diverse range of material, storing plates this way is a space-saving alternative to horizontal floor storage. Using a single system it is possible to pick up or set down the plates in either the horizontal or vertical positions.



Figure 1: High-density plate storage in upright racks

Very compact storage – short travel distances

Storing plates vertically greatly increases the storage density, shortens access times and enables direct picking from the storage area onto the lorry or into the processing area – and all without the need to use any other lifting devices.

Advantages

- Flat magnet design allows small gaps between individual racks
- As material is sorted by type no rearranging of plates is required
- Picking individual plates is quick and simple

Your benefits

- You can store considerably more material within the same area
- Average crane travel distances are shorter
- Faster picking saves you time
- One system for all transport operations – one size fits all!

Technology born of experience

Tilting magnets allow plates to be picked/transported in the horizontal or vertical positions. The magnets are designed to hang vertically. In this position it is possible to move the crane into a tightly packed vertical plate storage area and select a plate. (see figure 1).



Figure 2: Picking up a load from the horizontal position

It is also possible to pick up a plate horizontally and pivot into the vertical position during lifting. A roll-off mechanism ensures that the magnets pivot into the horizontal position as they are being set down. In order to lift the plate into the vertical position, the magnets must be placed on the appropriate edge of the plate (see figure 2).



Figure 3: Magnets locked in the horizontal position

For horizontal operation only, e.g. clearing off a flame-cutting table, the magnets can be secured using the provided mechanical locking mechanism. (see figure 3). This makes handling the magnets much easier and saves time. For vertical lifting the mechanical locking mechanism must be disengaged

Depending on the crane configuration, different spreader beam designs offer many different ways of transporting plates in the horizontal or vertical positions.

For very wide plates oblique storage is often the only option for transport on lorries or railway wagons (see figure 4).



Figure 4: Unloading a wagon. Picking up a wide steel plate

Specially shaped components, such as reinforced hull plating, can also be easily transported to the assembly area using a TRUNINGER vertical plate lifting system.



Figure 5: Carrying hull plating in a shipyard