

---

## Transporting layers of billets

---

### Supporting continuous production processes

---

TRUNINGER magnet systems are used not only in storage applications. They are also used for handling wire coils, round bars or rebars in wire and rod rolling mills.

Transporting layers of hot billets with a temperature of up to 600°C using special hot magnets from TRUNINGER (see figure 1) is an example of such an application. A magnet system ensures that the semi-finished steel gets continuously and safely transported for storage or further processing.



*Figure 1: Hot billets on a pawl conveyor, lifted off in layers by the magnet system*

### Advantages

---

The advantages of using a magnet system are very clear:

- No need for personnel in the vicinity of the hot billets
- Convenient operation of the system from the crane cabin
- No operating assistants required
- No degradation of material quality caused by mechanical lifting devices
- Precise storage and careful stacking of the billets (see figure 2)
- Faster handling speed

### Your benefits

- Fewer accidents and increased safety
- Lower personnel costs
- More attractive working environment (e.g. air-conditioned crane cabin)
- Higher-density storage thanks to more stable and higher stacks

- Shorter cooling lines thanks to faster removal of billets



*Figure 2: Densely stacked, warm billets being lifted in layers into the pusher furnace*

## Features of TRUNINGER design

---

TRUNINGER designs and manufactures special magnet systems for handling billets of all standard sizes.

- Robust spreader beam design and durable magnet construction are features of the magnet gripper designed specifically for such applications
- The design of the magnet spreader beams is adapted to the billet length and the layer width. Possible magnet configurations are individual magnets (see figure 2), simple fixed beams or fixed beams with travelling magnet groups for billets of varying lengths (see figure 3)
- The magnet control system enables the magnets to be moved automatically and thus to be positioned correctly to suit differing material lengths. This minimises any load deflection and guarantees safe transport
- A load slewing device allows spreader beam and load to be rotated (see figure 3), thus enabling the billets to be aligned with the production flow and the stackability of the billet layers to be improved (see figure 2)
- Automatic quick change between magnets for bundles and single billets
- Specially developed magnets with temperature-resistant coils guarantee a long service life under tough conditions
- The magnets are also fitted with a reflection plate which reduces the effect of radiated heat penetrating from the hot product into the magnet coil



*Figure 3: Magnet system with a load slewing device lifting a billet layer off the cooling bed*