Safety gripper

Special devices

Our extensive experience of different applications as a magnet system manufacturer allows us to offer solutions for special projects as well as standard applications (see ‘Custom spreader beams’ document). One such solution created in response to customer-specific demands is our safety gripper.

TRUNINGER magnet systems are equipped with every conceivable mechanical and electrical/electronic safety feature as standard in order to achieve maximum safety levels when handling material magnetically.

A load lifted with magnets could actually be secured to the spreader beam with chains. However, this would be very time-consuming and potentially dangerous as workers would have to approach the suspended load to attach the chains. This is why TRUNINGER developed the safety gripper.

Figure 1: Safety gripper with secured load

An open/close mechanism remotely controls the safety gripper. For handling reasons the safety gripper should be only slightly wider than the magnets as any extra width would have a negative impact on storage density, speed of access to material, deadweight, operability, etc. The safety gripper is therefore ideally suited for use with long products.

As the magnets grip and lift the material, the safety gripper is in the open position. Once the load has been lifted, the gripper is closed. The load then continues to be carried magnetically. The safety gripper is only used in an extreme emergency, i.e. in the event of the magnets dropping the load.

If necessary, the gripper can also be coupled to the crane’s operation, i.e. it can be made impossible for the crane to move if the safety gripper is not fully open or closed.