

DATASHEET

ELECTRO PERMANENT MAGNETS

Plates



SOME REFERENCES



KONECRANES°

posco



Duferco



















SGM

Plates



SAFETY

Resulting from the combination of the SGM electropermanent technology and the SGM safety monitoring device FMD.

The lifting force of the Electro-permanent magnets is independet from external energy sources = no accidental drops of the load as a result of power failure or cable interruption.

The lifting force of the Electro-permanent magnets is constant in time = no accidental drops of the load as a result of a reduction on magnet lifting force.

Prior to every lift, the SGM patented Flux Measuring Device FMD checks the lifting safety conditions under which the electro-permanent magnet is working (contact conditions between surface of the load and magnet polarities).

No need for operator to get in contact with or stay by the plate. Magnet system can be operated from a safe distance using radio control or the control system. No need for slings or clamps.

Technology of the electro-permanent magnet controllers facilitates the creation of safety redundancy.

Special recommendations for the use of electro-permanent magnets is made for locations where sudden interruptions of main electrical power may happen inadvertently.

PRODUCTIVITY

Just a few seconds are necessary to grip and release a plate. Minumum labour requested, no need for people to clamp the plate.

USER FRIENDLY

Operation is typically through radio control or from crane cabin.

Electronic controllers able to work in local or remote mode with a simple transfer of data and interface with other systems (diagnostics).

Unlike electro-magnets, electro-permanents magnets do not generate heat when energised which means that they do not impose limitations on duty cycle.

Even where the system consists in the use of numerous magnets, the electronic controller remains easy to operate and maintain.

The electronic controllers for electro-permanent magnets are technologically less sophisticated than the ones for electro-magnets.

This, combined with the fact that unlike electro-magnets, electro-permanents magnets do not generate heat when energised, makes the electro-permanent magnet technology easier to maintain.

No need for battery back-up.

NOTICE

Electro-permanent magnets can only apply to applications with limitations on plate temperatures.

