## Tailor made solutions for steel plates from 3 to 16 feet in width and up to 80 feet in length.

## **Absolute safety**

Resulting from the combination of the SGM electro-permanent magnet technology and the SGM safety monitoring device FMD.

- The lifting force of the Electro-permanent magnets is independent 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 magnet is constant in time = no accidental drops of the load as a result of a reduction in 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 from crane cabin. No need for slings or clamps.
- Technology of the electropermanent magnet controllers facilitates the creation of safety redundancy.



 Special recommendation for the use of electro-

permanent magnets is made

for locations where sudden

interruptions of main

electrical power may happen

inadvertently.

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## **Productivity**

- to grip and release a plate.
- Requires just a few seconds
  Minimum labor requested, no need for people to clamp the plate.





## **User friendly**

- Operations are typically carried out through the use of a radio control or from crane cabin.
- Electronic controllers able to work in local or remote mode with simple transfer of data and interface with other systems (diagnostics).
- Unlike electro-magnets,

electro-permanent 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-permanent magnets do not generate heat when energised, makes the electropermanent magnet technology easier to maintain.

No need for battery back-up.

Designed and manufactured according to European standards EN 13155.



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