

### Tailor made solutions for steel plates from 900 to 5000 mm in width and up to 24 metres 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 electro-permanent 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.



### Productivity

- Requires just a few seconds to grip and release a plate.
- Minimum labour 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 electro-permanent magnet technology easier to maintain.

No need for battery back-up.

*Designed and manufactured according to European standards EN 13155.*

