

# ELECTRO LIFTING MAGNETS

## Steel Plates



Our customer Centri Servizi Navali (Italy) maximize the productivity handling a precise quantity of plates and taking into account various possible plate thickness and temperatures.

SOME REFERENCES



## Steel Plates



Our customer Huludao (China) handles its single plate products thanks to 16 SGM electropermanent magnets EPR40/75-8P. Max weight: 22.400kgs Width: 1.800-4.500mm Length: 12.000-22.500mm

### SAFETY

The pick-up of one or more plates is done with partial and variable magnet force. Once the picking operation is complete, and in order to optimise safety during transportation phase, 100% full force is automatically generated.

With respect to the use of slings, chains and clamps, the handling of plates with electro-magnets can be carried out by a single operator from the crane cabin or from the ground at a safe distance from the load by remote control. Unlike with slings and chains for which verification of wear is down to operators, magnet systems require little maintenance and their electronic controller continuously monitors the correct functioning of their battery back-up system.

No need for spacers between plates resulting in no need operator intervention and faster operating cycle.

Continuous monitoring of magnet internal temperature allows operator to be informed of any critical thermal situation for the proper functioning and integrity of the magnets.

Possibility of providing magnet systems with double independent cable path to magnets.

SGM takes special care in designing for each customer application the proper magnet system solution that

will cover the whole range of specified plates including multiple lengths, widths and thickness combinations. The number of magnets selected, the appropriate depth of the magnetic field and the design of the SGM spreader beams make that the right magnets will always be in the right position to ensure the flexing of the plate(s) are under control and that the plates do not peel off.

### PRODUCTIVITY

Because all handling operations are carried out from the crane cabin or from the ground by remote control, the speed of magnet(s) picking and releasing times is much faster than when operators use slings, chains or clamps.

SGM magnet control systems offer the possibility of partial magnet energising. This allows for selective pick-up of plate quantities, even with thin gauges.

The SGM feathering options on the magnet control system allows for partial release of plates on different stacks.

Storage capacity is increased noticeably when using magnets: it is not necessary to leave additional spaces between stacks for forklift or personnel to pass through.

With the use of magnets, dents/scratches caused by slings or chains are eliminated resulting in a drastic reduction in customer claims for quality problems.

