Handling of bundles

GAUSS MAGNETI designs and manufactures since 1972 special deep field electromagnets for bundles designed according to the customer's requirements for in-plant handling.

They are mainly used for the following applications:

- Bundles unloading from production (also for hot material up to 600°C);
- Loading and unloading of lorries, rail containers, ships;
- Storage in warehouse or depots.

These electromagnets are different from those for flat products because of their deeper magnetic field, able to better support non compact and irregular shaped loads.

Due to their design these magnets are suitable to operate at high temperature. In fact the special thermal insulation and the double bottom plate hamper that the heat from the load reaches the coil assuring then the highest electromagnets reliability.

Magnets can be supplied with lockable and retractable mobile poles for the picking of single pieces or small quantities.

Magnets can be executed for the simultaneous handling of one or more bundles or packs.

The main advantages are:

- Operators can stay away from the hot material avoiding risk of accidents;
- Operators don't have to climb over the piles to slinging the load dramatically increasing the handling safety level and reducing the cost of the personnel;
- No damage to the material due to handling with mechanical lifting systems;
- Faster handling speed with handling cost reduction;
- Better use of the storage areas with the increasing the available space.











The magnets can be used individually or combined under a beam. These can be:

- Fixed or extendable to adapt to the different load length;
- Provided with safety mechanical forks;
- Special execution with cross movement of magnets for the picking of one or more packs or bundles;
- Provided with magnets motorized rotation for the picking of one or two packs or bundles.
 - The electromagnets are fed:
 - From the mains through our electronic equipment with 4-quadrants digital converter allowing magnetic flux setting, counter-excitation for fast load release, coil temperature control by means of thermal probes or amperometric relays (important in hightemperature magnets);
 - In case of power failure, from lead or Ni-Cd batteries with automatic switching and charging system and continuous control of the battery charge condition.

Electronic equipments are provided with excitation time monitoring to avoid coil overheating.

Hundreds of magnetic systems for bundles handling has been sold all over the world.





