

## Electro Lifting Magnet for Circular and Rectangular Hollow Sections.

- The SGM magnets designed for this application are very compact in height thus permitting the overall height of the magnetic system to be kept to a minimum.

- The SGM electronic control system for feeding and managing the magnets is able to adjust the magnetic force to multiple levels and check the temperature of the magnets. Provision is also given for controlling motorized telescopic spreader beams and full operation of a 'pantograph' magnet beam.

The SGM electronic magnet control system can be easily integrated in an automated system.



Designed and manufactured according to European standards EN 13155.

USA  
SGM Magnetics Corp.  
Sarasota, FL 34240  
Office: 941/342-8800  
Email: sgm.magnets@verizon.net

Refer to website for your local SGM subsidiary  
[www.sgm-magnetics.com](http://www.sgm-magnetics.com)



## Electro Lifting Magnet for Structural Welded Tubes and Hollow Sections.

**Remote magnet systems for maximum productivity while meeting highest safety standards.**

**Hundreds of magnets supplied worldwide**

### Important references

Marcegaglia (Italy), Arvedi (Italy), Riva Group (Italy), Buysmetalen (Belgium), etc.

### Safety

- With respect to the use of slings and chains, the handling of the bundles 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. In case of fully automated storage facilities, personnel is reduced to minimum and operate from control room.

- Unlike with slings or chains, for which verification of wear

is down to operators, magnet systems require little maintenance with the relative electronic controller continually monitoring the internal temperature of the magnets and the efficiency of the battery back-up system.

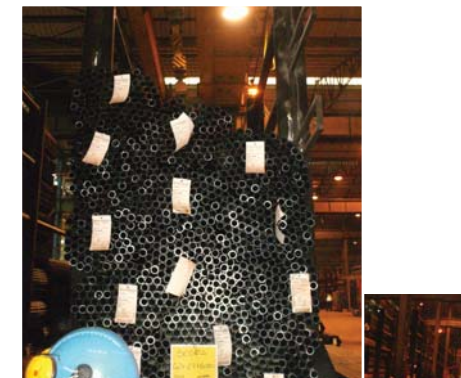
- No need for spacers between bundle/pack layers resulting in no need for operator intervention and a faster operating cycle.

### Productivity: Move more in less time



- Given that all of the handling operations are carried out from the crane cabin or from the ground by remote control, the speed of the handling operations is much faster than when

operators use slings or chains. Trucks are loaded in a matter of minutes.



### Productivity: Move and store more in less space



- The use of magnets allows for the easy storage of bundles/packs in tidy stacks with no limit in man height or truck height and no need for walkways between stacks. This results in significant gain of storage volume (can be over 50% more).
- SGM designs magnet systems that are extremely universal which means they

can handle most of the different shapes of packs with little, if any, exception.

- Magnet solutions are available for the handling of one or multiple bundles/packs at a time. When picking up multiple bundles/packs, the magnet control system allows for partial release of bundles/packs.



An Italian customer has 7 sites producing more than one million U.S. tons of tubes per year with the intention of doubling production by the end of 2011.

The use of magnets at the production site (74 systems supplied by SGM) has led to a 50% reduction in manpower and a 50% increase in storage space.

The new site of an automated warehouse (28 systems supplied by SGM) will lead to a further reduction of manpower equal to 70% with respect to the handling of bundles using slings or chains and a reduction of 40% in terms of time necessary to load a truck.

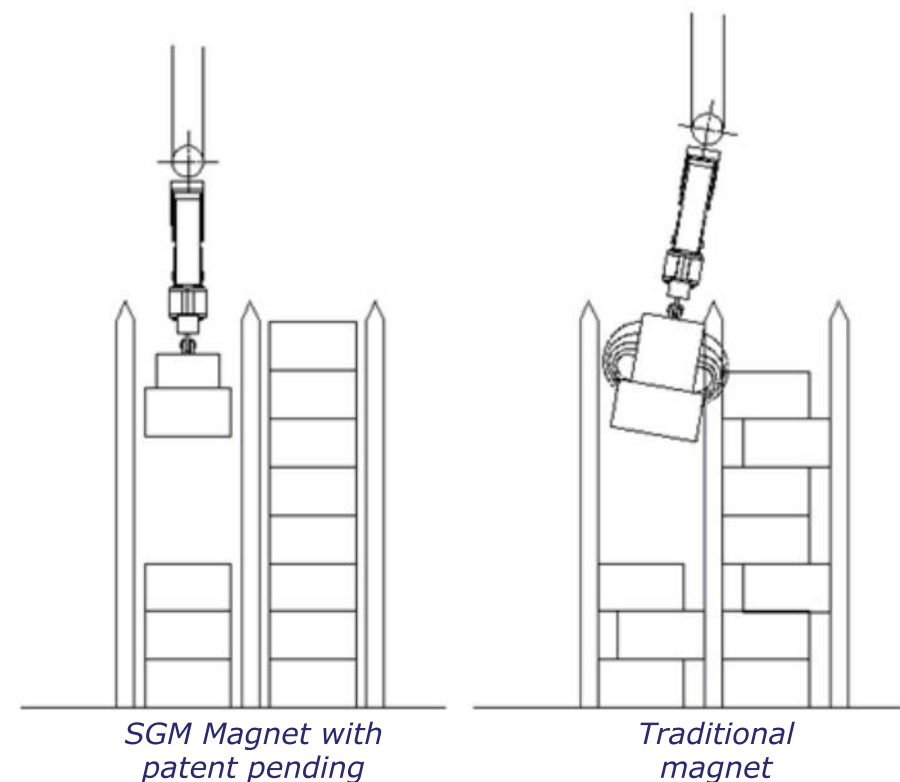


### User friendly

- The use of magnets versus slings or chains results in less damage to the finished products and claims for quality problems are reduced drastically.
- SGM designs and manufacturers magnetic equipment which best fit

customers' needs: fixed spreader beams, manual or motorized extensible spreader beams, mobile magnets.

- Each type of spreader beam can be fitted with the PANTOGRAPH function in order to adapt the position



of magnets to the width of the bundle/pack. It is thus possible to handle bundles/packs with a small diameter or with a large diameter by using the same spreader beam and magnet system.

- A special SGM proprietary magnet design (patent pending) guarantees annulment of lateral dispersion of the magnetic flow.

The result is that magnets do not interact with the columns or other bundles/packs next to the one being handled. Therefore, the withdrawal and warehousing of the bundle/pack takes place without swings of the complete magnetic system allowing for optimum positioning process and the possibility for the storage operations to be fully automated.