

### Robust electro-magnets for intensive use.

**Hundreds of magnets supplied worldwide**

#### Important references

ABS - Danieli Group (Italy), Dalmine - Tenaris Group (Italy), Corus (U.K.), Donasid - Tenaris Group (Romania), Sonasid (Morocco), Qatar Steel (Qatar), Bhilai Steel (India), Posco (Korea), Deacero (Mexico), etc.

#### Performance and Reliability

- The SGM electro-magnets are designed and sized in all their mechanical and electrical aspects in order to offer the proper response to this very demanding application, often characterized by severe mechanical shocks, high duty cycles and possible high



outstanding heat dissipation capabilities making them extremely performing for high duty cycle and/or high temperature applications.

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

temperatures. The use of anodized aluminum (aluminum strip chemically transformed on its outer surface into an insulation material able to withstand temperatures beyond the melting point of the aluminum itself) as an electrical conductor and specific resins provides the SGM electro-magnets with



- SGM eletro-magnets are designed for easy substitution of the magnet winding (realized to satisfy numerous customers' requests for local reparation possibility).
- SGM magnet control system is from the latest electronic technology including continuous magnet winding temperature control, battery back-up correct functioning check, etc.

The special design of the electro-magnet allows for maximum heat dissipation.

*In 2008 SGM supplied 5 such magnetic systems to Posco in Korea for handling billets up to 1100 °F with a high duty cycle.*

- SGM complete solutions for forklift trucks include spreader beam, electro-magnets and diesel dynamo.

*PD Teesport in the United Kingdom have fitted seven forklifts with SGM electro-magnet systems for the handling of slabs weighing up to 40 U.S.tons. The system was designed to satisfy the request of 20,000 manoeuvres per week.*

*Fork lift truck solutions are designed to manage the dynamic forces that occur from the trucks moving on ground that is often uneven.*



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