

# REFERENCES

## INDUSTRIAL AUTOMATION

## STEEL INDUSTRY

# Steel Industry | Ontario - Canada



**Industrial Sector:** **Steel Industry**

**Application:** Cranes

**Products:** Sinus Penta

**Connection date:** 2009

**Customer:** Gerdau Ameristeel

**Key Notes:** The Santerno inverters allow the full control of the crane ensuring safe operation of it.

The result is smooth, 'Bump-Less' starts and stops and variable speed make positioning of steel ingots easier for the operator.



# Steel Industry | Lima - Peru



Industrial Sector:	<b>Steel Industry</b>
Application:	Fan
Inverters:	Sinus Penta 45kW, 440VAC
Connection date:	2008
Customer:	Siderperu, Empresa Siderurgica del Peru S.A.A. (Grupo Gerdau)

**Key Notes:** SIDERPERU is the steel manufacturer's most biggest and prestigious in Peru.



# Steel Industry | Soacha - Colombia



Industrial Sector:	<b>Steel Industry</b>
Application:	Cranes
Inverters:	Sinus M 7.5HP y 2HP, High Torque
Type:	<b>Drive + RGN</b>
Connection date:	2009
Customer:	SAC Estructura Metalicas S.A.

**Key Notes:** Engineering sector industry leader in the construction of metal structures for roofing.

- Up to 4 drives to control the motion in master-slave, 1 regenerative drive: when the load goes down the inverter feeds the grid with the energy which will be dissipated on clamps or break resistors

**SAC** ESTRUCTURAS  
METALICAS S.A.





# Metal Structures Industry | Callao - Peru



**Industrial Sector:** **Steel Industry**

**Application:** Crane

**Products:** Sinus M

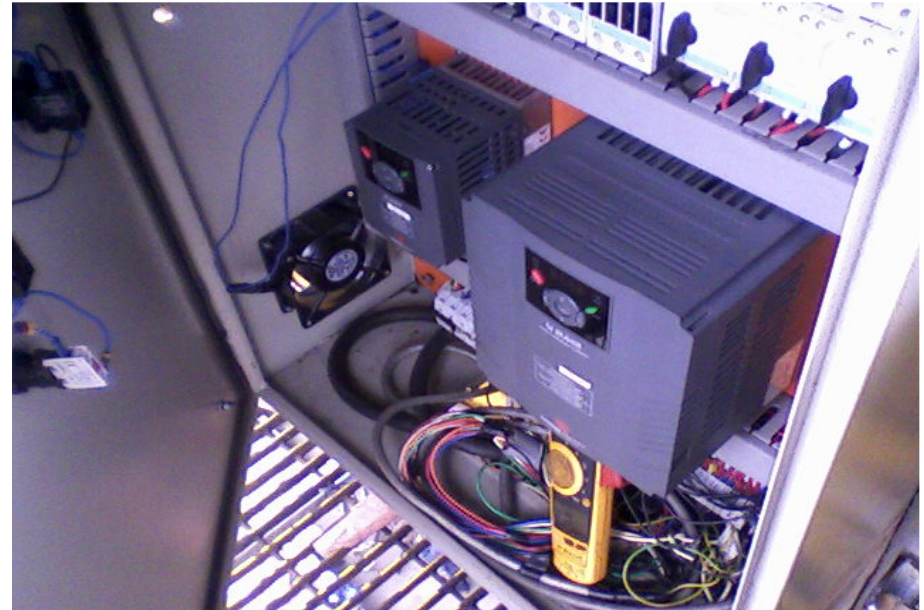
**Connection date:** 2010

**Customer:** Esmetal S.A.C.

## Key Notes:

Esmetal is the biggest manufacturer of metal structures in Peru.

They work in the mining sector, energy, refinery, infrastructure, trade and industry in general. They are specialized in manufacturing process and storage buildings for mining, on & off shore structures to liquefaction plant and oil refinery, power plants buildings, structures for springs, beam bridges, tanks and boilers.



# Steel Industry | Arequipa - Peru



**Industrial Sector:** **Steel Industry**

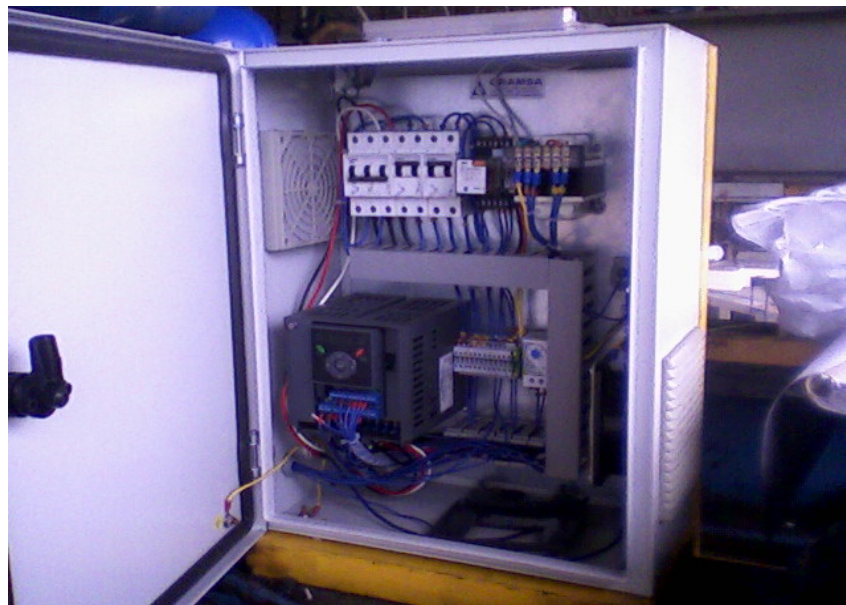
**Application:** Cranes

**Products:** Sinus M

**Connection date:** 2007

**Customer:** Corporación Aceros Arequipa S.A.

**Key Notes:** Steel producers





# Casting | Callao - Peru



**Industrial Sector:** **Steel Casting**

**Application:** Regenerative Crane

**Inverters:** Sinus Penta

**Type:** Drive + RGN

**Connection date:** 2008

**Customer:** Fundicion Callao S.A.

## Key Notes:

Fundicion Callao is a foundry with more than 60 years of experience serving the mining, cement, agricultural and minerals processing industry. Our company provides castings as spare parts for all types of machinery, having specialized in the mining and cement industry.

- The SINUS M drives feature the Regenerative function and Fall prevention of connected load. This allows operating under totally safe conditions.



# Magnetic Lifting | Brescia - Italy



**Industrial Sector:** **Steel Industry**

**Application:** Magnetization and demagnetization electromagnets

**Products:** Sinus Penta from 5,5 kw to 75kw  
AC-DC converters DCREG4

**Connection date:** 2007

**Customer:** SGM Gantry SpA

## Key Notes:

SGM has continuously been developing its magnetic equipment technology by closely working with and being highly sensitive to the needs of steel mills all over the world.

This close relationship with the steel industry has permitted SGM to become a leader in lifting magnets and magnetic separation equipment.

- Steel bridge cranes with lifting electromagnets equipped with AC-DC mod. DCREG





# Lifting and Transport Systems | Verona - Italy



**Industrial Sector:** Steel Industry

**Applications:** Cranes

**Products:** Sinus Penta from 15 kw to 315 kw

**Connection date:** 2008

**Costumer:** CPM Milano

**Key Notes:** CPM is an engineering company specialised in the lifting and transport systems sector. Is one of the big italian company for industrial cranes.



[www.santerno.com](http://www.santerno.com)