PolySAMPLE EAF + EYE

ROBOTIC SOLUTION FOR THE AUTOMATIC SAMPLE PICKING, TEMPERATURE MEASUREMENT AND FURNACE INSPECTION

PolySAMPLE EAF ●●●

The system is constituted by an heavy industrial Robot, insulated with a stainless steel cover with temperature control.

The six-axis robot provides the measurement of temperature, oxygen and the sample picking.

The cell can has more of one warehouse with 60 sensors in order to work in a totally automatic way, without intervention of operator in front of furnace.

The cell can be equipped with an automatic station to clean sample and transport to operator station.

PolySAMPLE EAF benefits:

Reduction of time and energy for each heating cycle typically from 30" to 2'.
Reduction of the additives in the ladle due to repeatability of measure.
Increased the efficiency of 2 – 4 % .
Heavy-duty stainless steel protection with ceramic fiber insulation.
Dynamic parameterization of inclination, height and speed on molten steel.
Working range up to 3500 mm.
Advanced algorithm for collision detection in order to guarantee the safety of lance and arm.
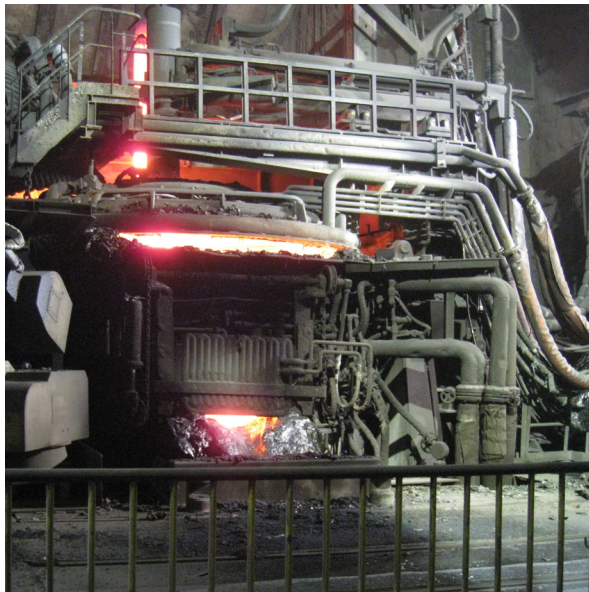Special software functionalities for homing recovery.
Scalability of the product by simple manipulator to fully automated complete laboratory analysis feasible in separate steps.
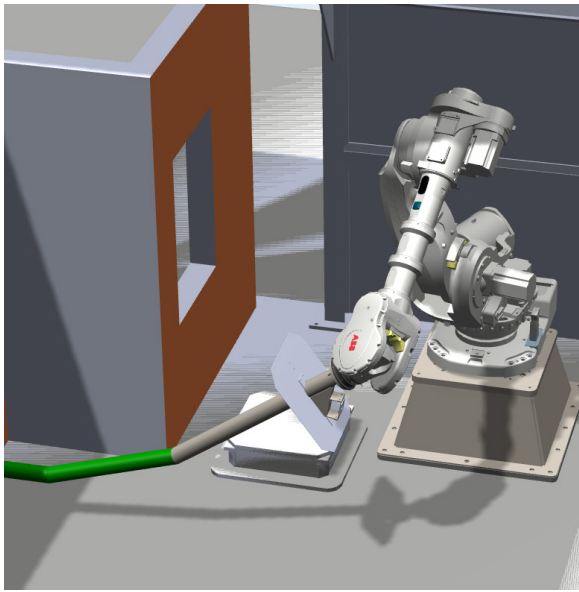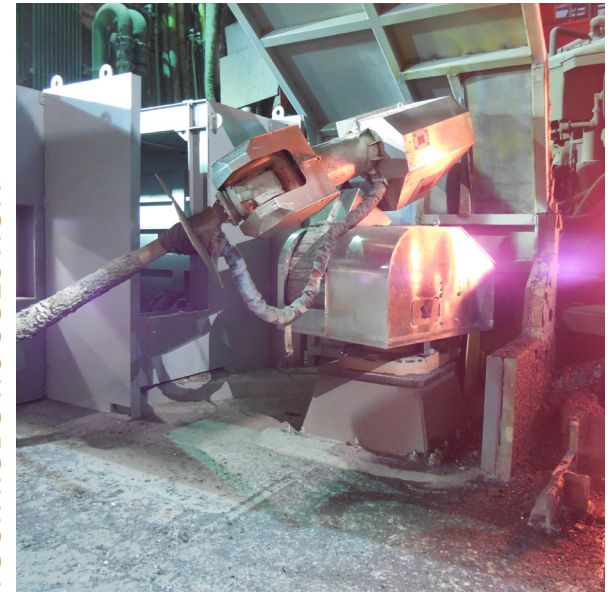
LET'S WATCH THE VIDEO!
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FEASIBILITY STUDY on COSTUMER NEED

DESIGN I SIMULATION I PRODUCTION
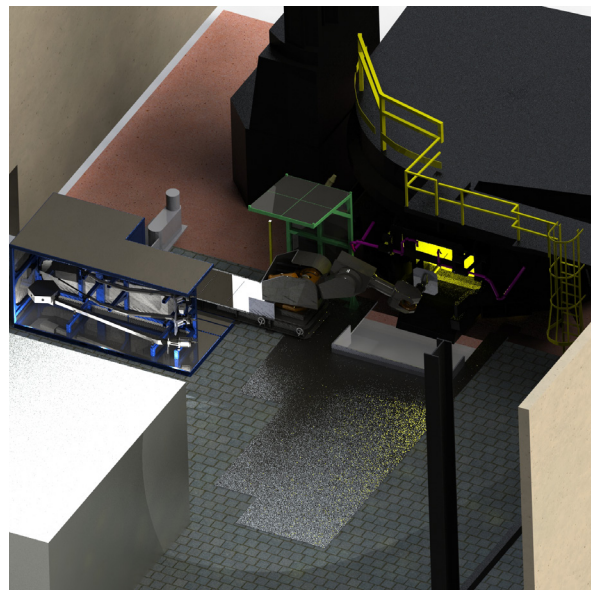
YOUR ROBOTIC SOLUTION

PolyEYE

PolyEYE implements the operations of PolySAMPLE EAF, including a specific lance equipped with 6 cameras, able to enter in the furnace and inspect, with a 360° view, the refractories, burners, injectors and water cooled panels.

The solution automatically manages the temperature measurement, the sample picking and the furnace inspection.

Operator controls the activities through a user friendly interface

LET'S WATCH THE VIDEO!

ENHANCED SAFETY

ZERO DOWNTIME

AVAILABLE SERVICES

Technical Support

Installation and Setup

Maintenance

Application Support

Hardware Support

Guaranteed Warranty

Remote Access via VPN

AVAILABLE SOLUTIONS:

PolySAMPE is composed by:

Robot with manual charge of cartridge. Container with cartridge warehouse (as option).

PolyCLEAN for automatic cleaning sample (as option)

PolyBELT for transportation of sample to laboratory (as option)

PolyLAB for automatic analysis and marking of sample with data and image storage. (see dedicated document)

Robot maximum weight at axis 6	Up to 370 Kg
Robot working range	Up to 3500 mm
Cycle time for cartridge charge	Up to 35 s
Cycle time for sample/temperature	Up to 20 s
Cartridge internal diameter	39 mm
Cartridge external diameter	From 52 to 57 mm
Cartridge lenght	From 1150 to 1310 mm
Cartridge warehouse maximum charge	3 columns /20 pieces per column
Axis temperature monitoring	Optional
PolyCLEAN sample cleaning station	Optional
PolyBELT sample transportation	Optional

PolyEYE

BM GROUP