

Metals and Mining: Manufacturers of Economy

Metals and Mining has provided the answer to the manufacturing and energy needs of the humanity in the past century. Mining community around the world has contributed to the enrichment of the world through industrial development. Minerals are valuable natural resources being finite and non-renewable. They constitute the vital raw materials for many basic industries and are a major resource of development. Minerals constitute the back-bone of economic growth of any nation and India has been eminently endowed with this gift of nature.

India is carrying a valuable amount of metals and minerals in its womb and is fast growing producer of metals like Iron, Crude Steel & Aluminium. It's iron ore production represents about 10% of total world production making it 4th largest and is the 5th largest producer of Steel. India has maintained its lead position as world's largest producer of direct reduced iron (DRI) or sponge iron. Worldsteel expects steel demand in India to grow 13.7% in 2011, following a growth of 7.7% in 2009. The EU steel demand is expected to increase by 4% in 2011 and 2012 driven by the restocking of inventory. Great challenges are faced by the manufacturers in this industrial sector like: Sourcing complexities in wake of globalization, Varied and non-compliant business processes, Lack of automation for planning and monitoring of various functions, High cost structures and Regulatory challenges.

Sarla Technologies can help mitigate the challenges by its wide range of solutions for the metals & Mining Industry. These include:

- Central Data Acquisition with Real-Time System (RTS): Data Acquisition solutions from current as well as legacy systems in real-time enabling

informed decision-making and bottle-neck identification.

- Process control solution to optimize metal & mineral processes and plants.
- Integration of plant control systems, enterprise systems or any home grown MIS systems from plant floor to enterprise level.
- Generating KPIs, real time visibility and reporting from various plant systems.
- Manufacturing Execution System (MES) that includes assessment of manufacturing operational processes, plant floor to enterprise systems integration and support.
- Integration of various manufacturing equipment for deriving Intelligence via dashboards and alerts, with SAP MII.
- Energy monitoring solutions to monitor the energy consumed at different sections of the plant. Energy management solutions are very necessary for the metal & mining industry.

Sarla Technologies has provided PIMS – Plant Information Management System for one of the leading Steel Company's mining section in India. "Our PIMS solutions was based around a plant-wide data system that collected, archived and distributed tremendous volumes of real-time data at high speed significantly improving the visibility of customer operation and the bottom line" Anil Mehta, CEO-Sarla Technologies says.

The solution consisted of hardware & software components including Gateway Servers for connecting to the existing control systems, Database Server for Historian and Real Time Information Portal, Manual data entry Servers etc.

The implementation of this Plant Information Management Solution helped one of the leading Steel

Company in India in the following way:

- Online availability of all production related measurements
- Transparency of data between the departments & historical data of other department.
- Real time data and historical data can be monitored from anywhere, via Internet Explorer.
- Single data repository and common reporting system for the entire department.

We have rendered services like Centralized Data Information Management System, Blast Furnace Information System, HBI SCADA System, Energy Monitoring System, Rolling Mill Level 2 System Automation and Implementation of PIMS in mining section of steel plant in various regions of India. The company has been serving with its automation, manufacturing execution systems (MES) services for the process consultants, system integrators, OEMs and automation companies.

Few of their projects include:

- Automation of carbon anode and cast section plants at a bauxite ore, Dubai
- Commissioning of basic oxygen furnace (BOF) at steel plant, Turkey
- Steel sheet process automation at USA
- Torque control and mill speed control loops at USA

Sarla Technologies draw wide experience of working with giant metal and diversified mining companies to provide you with the best in class solutions.



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