

# Sharrcem Facts

## THE CENTRAL CONTROL ROOM (CCR)

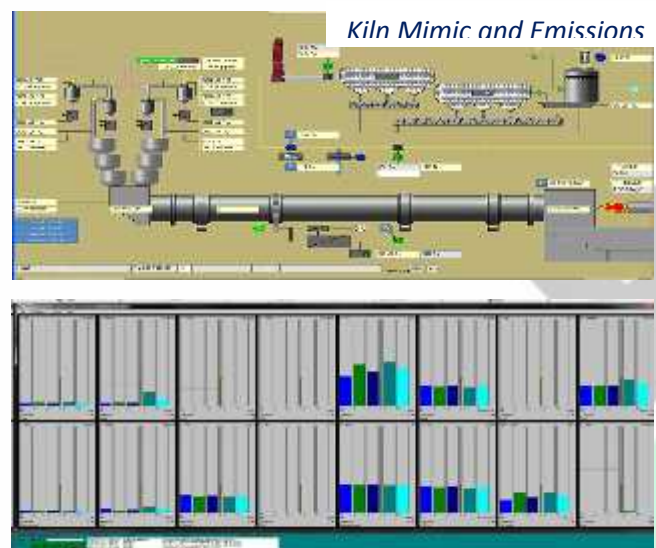
The newly introduced Central Control Room (CCR) enables the monitoring, visualization and control of all equipment on the Production Line. From the Central Control Room the operators can remotely manage the Raw Meal starting from the Weight Feeders of Marl and additives to the Storage Silo, which are part of the Raw Meal operator. The kiln operator can operate from the Rotary Weight Feeders (Kiln Feed) to the Clinker Transport, while the Cement Mill Operator's part starts from the Weight Feeders of Clinker and Additives to the Cement Silos.

The remote management, enabled through the KHD-PRODUX software, provides fast and safe control and supervision of the process by offering an overall, comprehensive and detailed display.

The system can detect misbalances in the production line, such as a leak in the pipelines, at which time it alerts the CCR, assesses if damage occurred and gives practically all the data needed to secure immediate corrective actions.

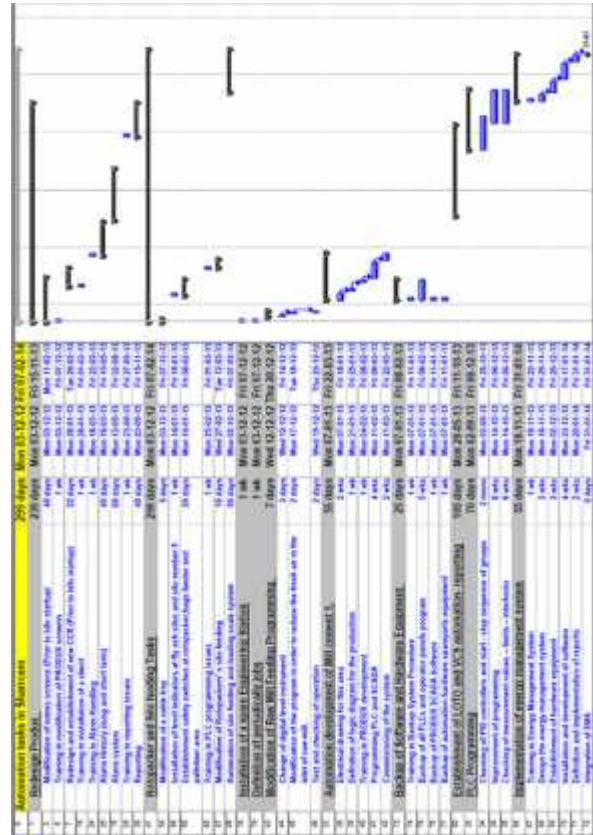


**KHD** PRODUX<sup>®</sup>-PLUS



## AUTOMATION / CCR IN SHARRCEM PRODUCTION

- Re-design, re-engineering and new connections of the Profibus network at Raw mill, Kiln and Cement mill area by using new Profibus – fiber optic cables , repeaters, OLMs and new Profibus connectors.
- Installation of 7 new workstations and a network printer for the new CCR, which monitor and control the entire equipment of the plant.
- Redesign of the data transfer concerning the logic of programming with the proper way.
- Implementation of data (trends) storage with an extended historical period of approximately 3 months instead of 1 day.
- Implementation of interlocks, signals and limiting range for Kiln area and following the same logic for other areas in the next months.
- Implementation of an energy management system which has been initiated in early 2013 in cooperation with the TITAN Group Technical and Engineering department (GEZ).
- The LOTO and VCS automation - (safety) has been established at major (critical) lines in the plant, thus improving the operational health and safety for the employees. Competition expected for early 2014.
- Enabled remote access for the purpose of monitoring and controlling the system from distance at any time.



**SHARRCEM**

TITAN Group Company



Group Corporate Values



INTEGRITY



KNOW-HOW

VALUE TO CUSTOMER



DELIVERING RESULTS

CONTINUOUS SELF-IMPROVEMENT



CORPORATE SOCIAL RESPONSIBILITY