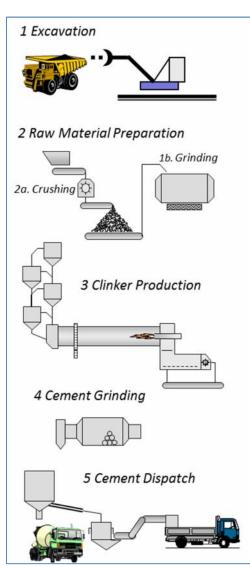
06/2013/Tech

Production

Facts

HOW WE MAKE CEMENT

Cement Production is a complex process which consists of several phases of treatment of the raw materials in a highly controlled environment required by the quality standards.



The production starts with the excavation of the raw materials. The main raw materials for cement production are limestone (calcium carbonate) and other materials as clay. Ideally as in the case of Sharrcem if the raw material is marl which has appropriate contend of limestone and clay and often is called "Natural Cement".

The 2nd phase is the preparation of the raw material which consists of: a. initial crushing and b. grinding of the raw materials

The 3rd phase is the production clinker which is the basic semi-final product of the cement. This is the most complicated phase which happens in the rotary kiln, where the pulverized raw material from the previous phase is burned up to 1.450⁰ C. This is the energy intensive phase of the production and contributes the most in the cost structure of the final product.

The final phase is the grinding of the cement. In this phase clinker is grinded together with gypsum and other additional material as puzzolana, fly ash, limestone, furnace slag, etc., in a finely determined proportion in order to get product which has to comply with a very strict quality standards defined with the European Norms under EN 197-1.

After the cement is produced, the laboratory checks the cement and is the product complies with the

quality standards gives the final approval for packaging and dispatch.

CEMENT TYPES

SHARRCEM produces the following types of cements:

- CEM I 52.5 N, superior cement for very responsible constructions
- CEM II/B-M (P-W) 42.5 R, widly used cement with high strength
- CEM IV/B-M (P-W) 32.5 R, best choice for cost effective construction
- SHARRMALL, masonry mortar

All of them are certified by European Quality Norms EN 197-1

SHARRCEM

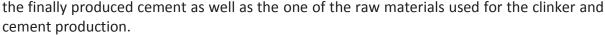
Organization for Se

9001

QUALITY CONTROL

To be able to guarantee the quality of the dispatch cement, Sharrcem has adopted the quality management system ISO 9001-2008, which describes procedures and actions that need to be taken in order to control all phases of the cement manufacturing.

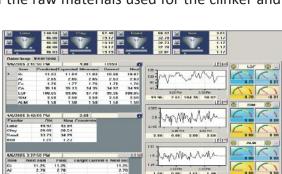
Sharrcem has fully equipped State-of-the-art Laboratory for continuous control of the chemical composition of the samples of

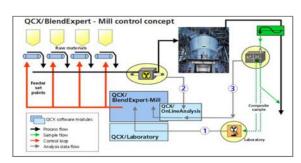


For this purpose from December 2011, the Laboratory was equipped with X-ray fluorescence (XRF) spectrometer Ausmon Max, which gives the quantitative analyses of the materials within 3 min.

Furthermore, the QCX Expert System, based on given tragets and the XRF chemical analyses, automaticaly calculates the material mix and adjusts the material outlets that are feeding the kiln or the cement mills, therefore securing the perfect mineralogical composition of the clinker and cement.

Sharrcem's laboratory is accredited for testing cements in accordance with ISO/ IEC 17025 by the Kosovo Accreditation Directorate, which means obligation to have trained staff and regular calibration of the instruments.















KNOW-HOW

DELIVERING RESULTS

CORPORATE SOCIAL RESPONSIBILITY