Statistical analysis on the quality refractory products

Goal of the project:
The project had two main objectives:
• Determination of the quality characteristics of refractory products used in steel industry;
•Statistical analysis and modeling of the quality characteristics of refractory products.

Short description of the project:
The refractory materials used in steel are in a wide range, both in terms of chemical composition and geometric shapes. Thus it is interesting to establish the interdependency relations of chemical and physical, thermal properties of the refractory products on the behavior of qualitative in the industrial practice.

Project implemented by:
Faculty of Engineering of Hunedoara

Implementation period:
September 2012- December 2012

Main activities:
•Determination of the quality characteristics of refractory products;
•The substantiating of solutions of the material on the use of refractory products in steel industry;
•Implementing the program using the Matllab software, to determine statistical analysis of parameters involved in the analysis of refractory products.

Results:
The program enable determination of the optimal variation of the parameters analyzed (the chemical and physical, thermal proprieties).

Fields of interest:
Steel industry
Refractory products

Financed through/by:
S.C. Centre for research, design and production refractory S.A , Alba Iulia, Al. I. Cuza Str., No. 23, Alba

Research team:
Assistant Professor PhD Stoica Diana, Associate Professor PhD Socalici Ana Virginia, Assistant Professor Lemle Dan

Research centre:
Research Centre for Processing and Characterization of Advanced Materials

Aplicability and transferability of the results:
The results were delivered to the beneficiary and are implemented in practice in the Centre for research, design and production refractory, Alba Iulia, (in micro-production hall).

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