Theory of regulation of stabilization of quality of ore products during production

Professor A. Kurmankozhayev, Doctor of Technical Sciences

The recommended blending theory is intended for increase of extraction, decrease of loss of metal, and improvement of technical and economic indicators of mining and concentrating, and metallurgy facilities. The essence of the theory is establishment of a concept basis for controllable parametric standards of regulation of blending of ores with different quality to ensure actual and effective stabilization of their quality, as well as qualimetric compliance of ore product indicators with technical market requirements. This theory deals with the following main spatial and statistical quality indicators: mode and amplitude of distribution of metals that have different theoretical and applied importance and are based on their higher information value and functional interrelation with basic quality forming indicators of production, and strong indicator properties ensuring fullness and reliability of indication of changes and required degree of transformation of natural genetic law of distribution of metal obtained after blending; the implementation of the theory allows to avoid estimation of stabilization of production quality based only on statistical value of change of averaged variable value that potentially results in approximate outcomes incompliant with technical indicators of supply of product, and sometimes, erroneous conclusions.

Key words: theory, quality, averaging, regulation, qualimetry, production.