Mathematical Model of a Rating Estimation of Competitiveness of Production on an Example of the Mountain Enterprise

P. Burkov, V. Burkov, A. Grigoryeva, and A. Grigoryeva

Yurga Institute of Technology of Tomsk Polytechnic University, Yurga, Russia k0ri0n@ya.ru

Model of a rating estimation of competitiveness of production, realised by means of a method of definition of degrees of an accessory. As the factors influencing acceptance by the expert of the decision on assignment of a rating estimation of production, the same criteria, as in other models are considered: quality of production which it is possible to estimate an indicator «the importance of the technical decision», a financial priority from output, criteria of a production efficiency, and production sale. Necessity of creation of the given model is caused by that she allows to compare simultaneously some alternatives with the assistance of a commission of experts that gives the chance to solve problems of decision-making of various classes, both individual, and a group choice in conditions многокритериальности and uncertainty.

On the basis of the given method the software product "Rating" [56] is created.

Program functional purpose: input of estimations of criteria; input of estimations of compatibility of alternatives with criteria; reception of a matrix of preferences of alternatives; calculation of a threshold of preference; calculation and a conclusion of rating estimations of alternatives.

Requirements to the computer and the software. **COMPUTER type - IBM PC AT Pentium 100**; **Language - Delphi 3**; **OC - Windows 95**; **program Volume - 366 Kb.**

Scope. The program "Rating" is a component of the software of system of support of decision-making on competitiveness of high technology production and is intended for definition of rating estimations of alternatives. As alternatives the enterprises, investment projects can act production.