a representative group of laser technologies in surface engineering was chosen to demonstrate the method of presenting the development directions of the phenomena for the mesolevel, and laser remelting and alloying with special stress focus on hot-work alloy tool steels was chosen for the microlevel. A development forecast of laser technologies in materials surface engineering was established based on the results of the e-Delphix method differing from the classical Delphi method in that experts are surveyed electronically and in that the level of generality for the questions asked to the experts is growing along with the subsequent iterations of the research. The results of the foresight research are provided graphically in a bar chart. In order to identify the strategic position of the relevant groups of the critical laser surface treatment technologies against the thematic area of "Laser technologies in surface engineering", each of the groups was placed into a matrix of strategies for technologies. In addition, a chart was prepared presenting, in percents, the values of the predicted growth, stabilisation and decrease in the importance of the individual critical technologies as projected by the experts. The results of the materials science-foresight research concerning laser remelting and cladding of hot-work alloy tool steels with special emphasis laid on the results of materials science investigations and the strategic position of the specific analysed technologies was presented in the matrix of strategies for technologies. The forecast strategic development tracks of the relevant, specific technologies were next entered into the matrix. Technology roadmaps and information sheets were also prepared for the groups of the critical technologies and specific technologies.

The approach discussed allows to present the development directions of materials surface engineering according to the level of generality and according to the influence intensity of the phenomena analysed on other phenomena. A hybrid was created to fulfil this task. The hybrid embraces a collection of analytical methods and tools including: the scenario method, artificial neural networks, e-Dephix method, statistical lists as bar charts, foresight matrices together with technology development tracks, technology roadmaps and technology information sheets. Moreover, the results of the classical materials science methods are taken into account at the microlevel.

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