Simulation based CAD/CAM model for extrusion tools

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A B S T R A C T

The specifics of tool making companies are that one can state if a tool is adequate only after it had already been made. The irregularities that have been found, lead to repairs of the already existing tool or even to making a new tool, which causes extensions of order delivery terms and additional expenses. This deficiency should be eliminated or at least reduced by introduction of computer simulations into the tool constructions for extrusion process. A new optimizing circle in the construction section is presented in this article. A comparison between old and new construction process is shown schematically. The applied value of simulations is shown on a practical example – based on the calculated results we optimized the shape of the tool for extrusion. It is proved that simulation results are comparable to experimental results.

References