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ANALYSIS OF METHODS FOR TOOL PATH GENERATION USING COMMERCIAL CAM SYSTEMS

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Abstract

Parts with free-form surfaces can be found in a wide range of products and components in almost all industrial segments, including goods, toys, electronic devices, dies and molds, automotive, even in medical and aerospace industries. Today, there are many commercial CAM systems capable for generating G codes for free-form surfaces machining. In this paper, tool path generation is presented using different commercial CAM systems. It is presented differences in machining time in accordance with used machining strategies. Used machining strategies gives different scallop height of machined surface and according to given surface roughness it is used different machining parameters in every used strategy. It is also given differences in machining time in dependence of chosen CAM software. As the conclusion it is given that the different CAM software have implemented different machining strategies and according to this it will generate NC codes which will have different tool path. Difference in tool path has impact on surface roughness and total machining time and according to that impact on final product price.

Keywords

Tool path, CAM, CNC milling

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