Effects of Depth of Cut on Cylindrical Milling Process in Steel Casting: A Numerical Study

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Abstract: The complexity of the milling process has led us to study different parameters, among which are the cutting speed, feed speed, chip volume, cutting time and associated costs, which are the focus of this study. For this purpose, a calculational algorithm was designed in which fixed parameters were left and the cutting depth was varied from 2 to 8 mm. This resulted in an increase in process times and costs, which was expected due to the removal of more material and a negative impact on the surface finish of the part.

Keywords: Milling, chip, speed, cutting, depth.

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