

7th International Multidisciplinary Conference on Current Research Trends-2023

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Optimization of Turning Process Parameters for Surface Roughness and Material Removing Rate by Using Taguchi Method

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ABSTRACT: In recent times, turning operation is one of the most essential machining operations performed in innumerable manufacturing industries. Selecting cutting parameters for ensuring high cutting performance is really a significant task to achieve. Everything has its own function, like for example; the machining process enhances the surface finish and deals with material removal rate. We need affordable and effective machining for maximum material removal rate. One of the best is the Taguchi method for optimization of various machining parameters and it has a great benefit of reducing the number of experiments. Therefore, Taguchi method is found to be super useful for designing the experiments and optimization of turning parameters.

KEYWORDS: Optimization, MRR, Surface Roughness.