

A REVIEW ON APPLICATION OF BIO-GEOGRAPHY BASED ALGORITHM AND OTHER OPTIMIZATION TECHNIQUES

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ABSTRACT

It is well known in this competitive world that cutting condition of the material such as cutting speed, feed rate and depth of cut plays a significant role in the industrial sector for manufacturing process. In this review, a trial has made to identify the issues addressed by the various researchers' works on the machining parameters optimization in multi turning process. This paper highlight the unconventional optimization process like Simulated annealing (SA), Biogeography based optimization (BBO) etc. approach in the turning process and some limitation and advantage are also discussed. Each unconventional optimization process has his own features that perform effectively. The objective of this research is to study the effect of the various cutting parameters like depth of cut, speed and feed rate. In this paper, biogeography based optimization algorithm has been introduced and found that this algorithm is very reliable and effective for optimizing the cutting parameters.

KEYWORDS: Multi-Pass Turning Operation, Cutting Parameters, Bio-Geography Base Optimization