

# ENHANCED MATERIAL REMOVAL RATE AND SURFACE QUALITY OF H13 STEEL IN ELECTRICAL DISCHARGE MACHINING WITH GRAPHITE ELECTRODE IN ROUGH MACHINING

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## TÓM TẮT:

Enhanced productivity and workpiece surface quality after electrical discharge machining (EDM) is a concern of many researchers. In this study, the effect of powder concentrations on material removal rate (MRR), surface roughness (SR) and topography surface in powder mixed EDM (PMEDM) was investigated. The experimental studies were conducted keeping the various parameters like current, voltage and pulse time constant while using varying concentrations of titanium powder. Experimental research methods were employed to study performance characteristics in the machining of H13 steel using PMEDM with a graphite electrode. The results revealed that the concentration of titanium powder has a powerful influence on the MRR, SR and topography surface in PMEDM.

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