Electro Discharge Machining Process- A Review

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Abstract

The invention of EDM has changed the manufacturing industry and brought about revolutionary technology that has been highly effective. The idea behind the EDM machine was to exploit the destructive effects of electrical discharges and their use to manufacture high-precision workpieces. Components made out of conductive materials can be manufactured with high precision, which is required in industries like aerospace and automotive. Technology advancement has helped the industry overcome manufacturing problems such as difficult-to-machine materials like ceramics, superalloys, and composites. Many variants of EDM such as wire EDM, die-sinking die-sinking EDM, micro EDM, and dry EDM have been developed lately, which are discussed in this review work. Further, an effort is made to elaborate on components of EDM, its working principle, different types, advantages and disadvantages, and future directions.

Keywords
Electro Discharge Machining, Material removal rate, Surface roughness, Tool, Workpiece.

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