

## **EFFECT OF VARIATION IN INTER-ELECTRODE GAP ON MRR FOR ELECTROCHEMICAL MACHINING: AN EXPERIMENTAL STUDY**

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### **Abstract**

The machining of complex shaped designs was difficult earlier, but with the advent of the new machining processes incorporating in it chemical, electrical & mechanical processes, manufacturing has redefined itself. This paper intends to deal with one of the revolutionary process called Electro Chemical Machining (ECM) which is unconventional process. New materials which have high strength to weight ratio, heat resistance and hardness and also complex shapes and need for accuracy demand newer type of machining process. These processes are called unconventional machining processes. ECM removes material without heat. Almost all types of metals can be machined by this process. In today's high precision and time sensitive scenario, ECM has wide scope of applications. The said paper is a experimental study of effect of voltage variation on MRR for Stainless steel EN Series 58A (AISI 302B) A comparative study of calculation for MRR on theoretical as well practical basis are given in tabular format with graphical representation. The said experimentation is carried out at Micromachining Cell I I T Bombay in the month of Dec 2008.

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