

Department : **Mechanical**

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Guided By

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Project Title

**MODELING AND OPTIMIZATION OF PLASMA ARC CUTTING
PROCESS PARAMETERS FOR M.S (IS2062)**

Abstract:

This report deal with analysis, optimization and modeling of plasma arc cutting process paramaters for getting maximum material removal rate and minimum surface roughness produced by plasma arc cutting machine. The experiments have been designed to show effects os various input parameters on the response parameters on M.S (IS2062). The response parameter like surface roughness, material removal rate and kerf width is dependent on the input parameter like cutting speed, current flow rate, air pressure and arc gap. For this study an orthogonal array L16, Regression model and Analysis Of Variance (ANOVA) were employed to investigate the optimum range of paramaters.

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