

LINEAR AND NON-LINEAR MODELING OF PRESSURE DIE CASTING PROCESS

(Sponsored by KSCST, Bangalore)

**A project report submitted in partial fulfillment of requirements
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in Industrial and Production Engineering
of Visvesvaraya Technological University, Belgaum.**

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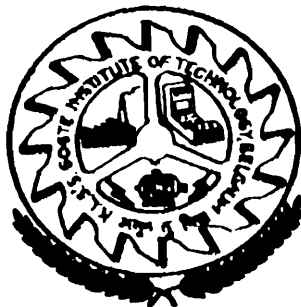
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ABSTRACT

Pressure die casting is an important production process. Due to rapid expansion in the die casting process to produce better quality products in a short period of time, there is ever increasing demand to replace the time-consuming and expert-reliant traditional trial and error methods of establishing process parameters.

In this project we analyze the die casting process parameters involved and their influence on the quality of the castings and develop *Linear and Non-Linear Regression Model*. For the analysis of the same *Design of Experiments (DOE)*, *Analysis of Variance (ANOVA)*, *Response Surface Methodology (RSM)* have been applied.