



**CAD/CAE OPPORTUNITY IN PRODUCT MODELLING OF COMPLICATED
SHAPE (INTAKE MANIFOLD)**

MOKHTAR BIN HASIM

(98424971)

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**Faculty of Mechanical Engineering
Universiti Teknologi Mara (UiTM)**

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ABSTRACT

Today, the integration of CAD, CAM and CAE system becomes a powerful tool to develop and enhance manufacturing design efficiency, particularly in plastic industries. By using this system, moulders and designer will be able to conduct an analysis in CAE subsequently after completing their design in CAD to determine whether the design is free from errors before the CAM work can take place.

In this project, the main objective is to evaluate the effectiveness of integration between CAD/CAE systems. For the purpose of design, Ideas software was used for the CAD system, Software was used for CAE system. In designing the intake manifold, the implementation of CAD/CAE was fully used. The intake manifold has been designed in such a way to satisfy the required specifications and standard design from Japan.

Through this, the capabilities of CAD/CAE, which can be used directly in design practice. The important gain of this project is to understanding the integration of CAD/CAE, which lead to benefit, especially in design, engineering and manufacturing.

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