THE APPLICATION OF COMPUTER AIDED DESIGN AND MANUFACTURING (CAD/CAM) FOR TEACHING AID

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Abstract

The use of Computer Aided Design and Manufacturing (CAD/CAM) in industry will result in an improve productivity, saving time, increase in machine utilization and etc, or in other words it is substantially better than the conventional techniques. This Advanced Diploma project is an attempt to develop an integrated computer programs to facilitate the design of products, the production aspect and as well the production planing.

This project also include the algorithms to improve the efficiency of machining which in an extension of the primitives CNC procedures. The software was written in AutoLISP (Artificial Intelligent) to transfer part programming with interactive CAD. The system also automatically produces tapes for conventional NC machine tools, which are used as teaching aid for the undergraduate students to study NC part programming and familiarize with interactive graphics on CAD. This package enable the user to design and manufacture parts easily because it is an interactive package and menu driven.

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