

FINAL YEAR PROJECT REPORT
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SHAH ALAM

MOULD DESIGN AND FABRICATION
USING CAD/CAM FACILITIES

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1.0 INTRODUCTION

In the thirty years or so since numerically controlled machines first became practical and reliable manufacturing tools, they have become common place in several industries throughout the world. International competition, inflation and price factors, the high cost of capital due to rising interest rates, the decreased availability of skill labour and the emphasis on quality together with the drastic reduction in the cost of computing and also the creation of software which made it possible to perform the require analysis and simulation on this new generation of affordable computers are forcing manufacturers to automate much of their design and production. That are the factors result the birth of Computer Aided Design and Computer Aided Manufacturing, or CAD/CAM which can also be called Computer Aided Engineering, or CAE. The CAD/CAM system has major growth rapidly at the areas of the 80s and 90s, owing to several related trends.

CAD/CAM, can encompass the entire range of engineering activity. The use of CAD/CAM system allow routine engineering tasks to be perfomed quickly, since they automate the repetitive function, perfoming these tasks more quickly and accurately than would ever be possible by manual methods. Since the information is stored in computer memory instead of hard copy, the transfer of data tends to be quicker, more reliable, and less redundant. CAD/CAM system free from the tedious, time consuming chores that have little to do with