

APICHART ASAVATEVAVITH : CONVERSION OF GRAPHIC INFORMATIONS FROM
A COMPUTER-AIDED DESIGN PACKAGE TO DATA FOR AN ANALYSIS PACKAGE.
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The conventional method of designing a machine element has been done by creating a computer model with a computer-aided design (CAD) package. When the model need to be analysed with an analysis package such as Finite Element Method (FEM) program, the model has to be created again in the analysis package. Most of the analysis packages usually do not have sophisticate graphic feature for helping to create a computer model. With the help of finite element modeling package such as "PATRAN", we can write pre and post processing for converting graphic informations of a CAD package to be a finite element model. These finite element model informations can be used as the input to the FEM package. In addition, the results from the FEM package can be converted back to the finite element modeling package for displaying graphic results.

This interface program is written specially for "PATRAN" interactive graphic program by "PDA Engineering" (July, 1987) and "SAP IV" structural analysis program by "K. J. Bathe, E. L. Wilson, F. E. Peterson at COLLEGE OF ENGINEERING UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA" (June, 1973).