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Chapter 16: Projects

Student Projects

Preface

AUTODESK INVENTOR 10

Autodesk Inventor, developed by Autodesk Inc., is one of the world's fastest growing solid modeling software. It is a parametric feature-based solid modeling tool and it not only unites the 3D parametric features with 2D tools but also addresses every design-through-manufacturing process. The adaptive technology of this solid modeling tool allows you to handle an extremely large assembly with tremendous ease. Based mainly on the solid modeling users' feedback, this solid modeling tool is remarkably user-friendly and it allows you to be productive from day one.

This solid modeling tool allows you to easily import the AutoCAD, AutoCAD Mechanical, and Mechanical Desktop files with an amazing compatibility. The parametric features and assembly parameters are retained when you import the Mechanical Desktop files in Autodesk Inventor.

The 2D drawing views of the components are automatically generated in the layouts. The drawing views that can be generated include orthographic view, isometric view, auxiliary view, section view, detailed view, and so on. You can use predefined drawing standard files for generating the drawing views. You can retrieve the model dimensions or add reference dimensions to the drawing views whenever you want. The bidirectional associative nature of this software ensures that any modification made in the model is automatically reflected in the drawing views and any modification made in the dimensions in drawing views automatically updates the model.

Autodesk Inventor for Designers is a book that is written with an intent of helping the people who are into 3D design. This book is written with the tutorial point of view with learn-by-doing as the theme. The mechanical engineering industry examples and tutorials are used in this book to ensure that the user can relate his knowledge of this book with the actual mechanical industry designs. The salient features of the book are as follows:

- **Sheet Metal Module**

This is one of the very few books that includes the complete coverage of the Sheet Metal module of Autodesk Inventor. Fifty-six pages of heavily illustrated text on Sheet Metal module has each and every tool of this module discussed in detail.