

<<机械CAD/CAM>>

图书基本信息

书名：<<机械CAD/CAM>>

13位ISBN编号：9787562921295

10位ISBN编号：7562921296

出版时间：2004-6

出版时间：武汉工大

作者：胡红舟 著

页数：154

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

前言

It is widely recognized that the development of mechanical engineering technology nowadays depends strongly on computer technology. The development of computer aided design (CAD) and computer aided manufacturing (CAM) technology services as a typical result of application of computer technology in mechanical engineering. Despite the fact that more and more areas are being influenced by computer technology, CAD and CAM technologies consist of the most important fundamental knowledge for mechanical engineers and researchers. Thus, the basic topics on CAD/CAM should be of general interests to all students in mechanical engineering area no matter what kind of future they are looking for. CAD/CAM technology in mechanical engineering has experienced a development history over thirty years. Great achievements have been made in both research and application of the technology. However, this book will not be written as a comprehensive textbook including all the topics for some reasons. First of all, the purpose of the book is to provide an introduction with reasonable depth and breadth for bilingual teaching. Secondly, the space of the book would not allow too many subjects with sufficient depth and breadth. In addition, the authors' knowledge and ability are also limited. Thus, selection of the topics of the book is based on the authors' judgement on basic needs for students in their immediate application after graduation.

<<机械CAD/CAM>>

内容概要

This book gives an introduction to CAD/CAM techniques. It is organized in the following way : Chapter 1 introduces the basic concepts and a brief history of CAD/CAM. Chapter 2 to chapter 4 introduce the mathematical description of curves,surfaces and solids. Chapter 5 discusses geometry transformations and various visual techniques. Chapter 6 introduces some popular methods for graphical manipulations and editings provided by commercial CAD/CAM systems. Finally Chapter 7 describes basic technology in CAM.

书籍目录

Chapter 1 Introduction1.1 What is CAD/CAM1.2 Development History of CAD/CAM Technology1.3 Basic CAD/CAM Hardware1.4 Common CAD/CAM SoftwareChapter 2 Curves2.1 Introduction2.2 Curve Representation2.3 Parametric Representation of Analytical Curves2.4 Parametric Representation of Synthetic Curves2.5 Curve ManipulationChapter 3 Surfaces3.1 Introduction3.2 Surface Representation3.3 Parametric Representation of Analytical Surfaces3.4 Parametric Representation of Synthetic Surfaces3.5 Surface ManipulationChapter 4 Modelling of Solids4.1 Introduction4.2 Solid Representation4.3 Boundary Representation4.4 Constructive Solid Geometry4.5 Sweep Generation4.6 Modelling of Analytic Solid4.7 Solid ManipulationChapter 5 Basic Graphics Concepts5.1 Introduction5.2 Geometry Transformation5.3 Mapping of Geometry Models5.4 Projections of Geometry Models5.5 Hidden Surface Removal5.6 Shading and ColouringChapter 6 Graphical Manipulations and Editings6.1 Entity Attributes6.2 Entity Selection Methods6.3 Manipulation Operations6.4 Editing Operations6.5 Dynamic Drawing6.6 Assembly Manipulations and EditingsChapter 7 Part Programming and Manufacturing7.1 Introduction7.2 Manufacturing Procedure7.3 Manufacturing Processes7.4 Process Planning7.5 NC Programming7.6 Tool Path Generation and Verification7.7 Engineering ApplicationsBibliographyReferences

章节摘录

插图：

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>