# <<制造工程与技术>>

## 图书基本信息

书名:<<制造工程与技术>>

13位ISBN编号: 9787111363057

10位ISBN编号:7111363051

出版时间:2012-1

出版时间:机械工业

作者:(美)卡尔帕克杰恩|改编:王先逵

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

## <<制造工程与技术>>

### 内容概要

本影印改编教材《制造工程与技术》取自原版英文教材《Manufacturing Engineering and Technology》(Prentice Hall 2010,第6版,ISBN 978?981?06?8144)中的部分篇章。

针对国内教学课程设置,将原书内容改编为机加工和热加工两册,并分别出版,方便学校选用。为保持书籍内容体系,方便读者查找和了解原书全貌,特别在两册中保留完整的改编目录。内容涵盖切削基础,刀具材料与切削液,回转体与非回转体加工,加工中心,机床结构及机加工经济性,磨削与光整加工,先进加工方法与纳米制造,制造工艺过程自动化、计算机集成制造系统和制造的竞争性。

# <<制造工程与技术>>

## 作者简介

作者:(美国)卡尔帕克杰恩 (Serope Kalpakjian) (美国)Steven R.Schmid (美国)Hamidon Musa 改编:王先 译

# <<制造工程与技术>>

## 书籍目录

### 制造工程与技术——热加工

### 彩印改编版序

### **General Introduction**

- 1.1 What Is Manufacturing?
- 1.2 Product Design and Concurrent Engineering
- 1.3 Design for Manufacture, Assembly, Disassembly, and

#### Service

- 1.4 Green Design and Manufacturing
- 1.5 Selection of Materials
- 1.6 Selection of Manufacturing Processes
- 1.7 Computer-integrated Manufacturing
- 1.8 Quality Assurance and Total Quality Management
- 1.9 Lean Production and Agile Manufacturing
- 1.10 Manufacturing Costs and Global Competition
- 1.11 General Trends in Manufacturing

## Metal Casting Processes and Equipment

## 1 Fundamentals of Metal Casting

- 1.1 Introduction
- 1.2 Solidification of Metals
- 1.3 Fluid Flow
- 1.4 Fluidity of Molten Metal
- 1.5 Heat Transfer
- 1.6 Defects
- 2 Metal Casting Processes and Equipment
  - 2.1 Introduction
  - 2.2 Expendable-mold, Permanent-pattern Casting

#### **Processes**

2.3 Expendable-mold, Expendable-pattern Casting

#### Processes

- 2.4 Permanent-mold Casting Processes
- 2.5 Casting Techniques for Single-crystal Components

. . . . .

### 制造工程与技术——机加工

## <<制造工程与技术>>

### 章节摘录

版权页:插图:Although numerical control of machine tools, beginning in the early 1950s, was a key factor in setting the stage for modern manufacturing, much of the progress in manufacturing activities stems from our ability to view these activities and operations as a large system with often complex interactions among all of its components. In implementing a systems approach to manufacturing, we can integrate and optimize various functions and activities that, for a long time, had been separate and distinct entities. As the first of the four chapters in the final part of this book, Chapter 24 intro-duces the concept of automation and its implementation, in terms of key developments in numerical control and, later, in computer numerical control. This introduction is followed by a description of the advances made in automation and controls, involving major topics such as as adaptive control, industrial robots, sensor technology, material handling and movement, and assembly systems and how they are all implemented in modern production.

# <<制造工程与技术>>

编辑推荐

# <<制造工程与技术>>

## 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