

<<机电一体化及数控专业英语>>

图书基本信息

书名：<<机电一体化及数控专业英语>>

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## <<机电一体化及数控专业英语>>

### 内容概要

本书是针对高职院校机电一体化和数控专业而编写的专业英语教材，内容包括基础模块、机电一体化模块、数控技术模块及应用写作模块。

书中的每个教学单元分为课文和阅读材料两个部分，其中，课文部分中的Text

1侧重于基础知识，Text 2侧重于实践与实验知识，Text 3、Text

4侧重于教学知识的拓展。

每个教学单元都配有针对性的练习，书末附有参考译文及参考答案。

本书在材料选取上十分注重体现教材内容的广泛性、灵活性和实用性，且在编写上把易于教学、讲究实效放在首位。

本书适合于高等职业院校机械设计与制造、机电一体化、数控技术与模具技术等专业作为教材使用，同时也适合成人高校学生以及相关专业人员自学使用。

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书籍目录

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Text 1 Lathe and Turning

Text 2 Vitrified Bond & Vitriified Grinding Wheel

Text 3 Integrated Circuit

Text 4 Heat Treatment of Steel

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Reading Material

1-1 Cutting Processes and Tools

1-2 Properties & Selection of Materials

1-3 Computers

1-4 Tapping Tools and Tapping

Exercises to the material

Practical Skill

Unit 2 Basic Knowledge( )

Text 1 Circuit

Text 2 The Construction and Components of a Typical Electric

Motor

Text 3 DC Motors

Text 4 Transformers

Exercises to the text

Reading Material

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2-2 Electric Motors

2-3 Stepper Motor

2-4 Electrical Circuit of Electronic Photo Flash

Exercises to the material

Practical Skill

Unit 3 CAD and General Knowledge of Drafting

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Text 2 Engineering Graphics

Text 3 Solid Modeling

Text 4 Dimension Tolerances of Parts

Exercises to the text

Reading Material

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3-2 Form of Three-view Drawings

3-3 The User Interface of AutoCAD 2004 System

3-4 To draw the teeth of a Spur Gear

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Practical Skill

Unit 4 Mechanical Design and Machine Parts

Text 1 What Is “ Mechanical Design ” ?

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Text 2 Spur Gears

Text 3 Ball Bearings

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Practical Skill

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Text 4 Touch Screens

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Practical Skill

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Text 2 List of Various Mechatronic Systems

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Text 4 Remote-reading Shaft-revolution Counter and Radio

Telemetry

Exercises to the text

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Reading Material

- 7-1 Levitation Principle of Maglev
- 7-2 List of Mechatronic Systems for Industrial Use
- 7-3 Monitoring System for a Machine Tool
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Practical Skill

Unit 8 CNC Machine and NC Programming( )

- Text 1 CNC and CNC Machine Tools
- Text 2 Product Directions of Component Parts
- Text 3 Company Brief Introduction
- Text 4 Wire Electrical Discharge Machining

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- 8-1 Principles of NC Machines
- 8-2 Preparatory Functions (G Codes)
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Practical Skill

Unit 9 CNC Machine and NC Programming( )

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- Text 2 Writing an NC Part Program
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- 9-1 VMC & HMC
- 9-2 Automatic Tool Changer
- 9-3 Just-in-time Production
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Practical Skill

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- Text 3 Computer-integrated Manufacturing
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Exercises to the text

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Exercises to the material

Practical Skill

Unit 11 English for Job Applying

Text 1 Advertisement

Text 2 Cover Letters

Text 3 Resume

Text 4 Interview

Exercises to the text

Reading Material

11-1 Job Advertisements

11-2 Job Interview

11-3 Student ' s Academic Transcript

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Exercises to the material

Practical Skill

参考译文及参考答案

参考文献

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