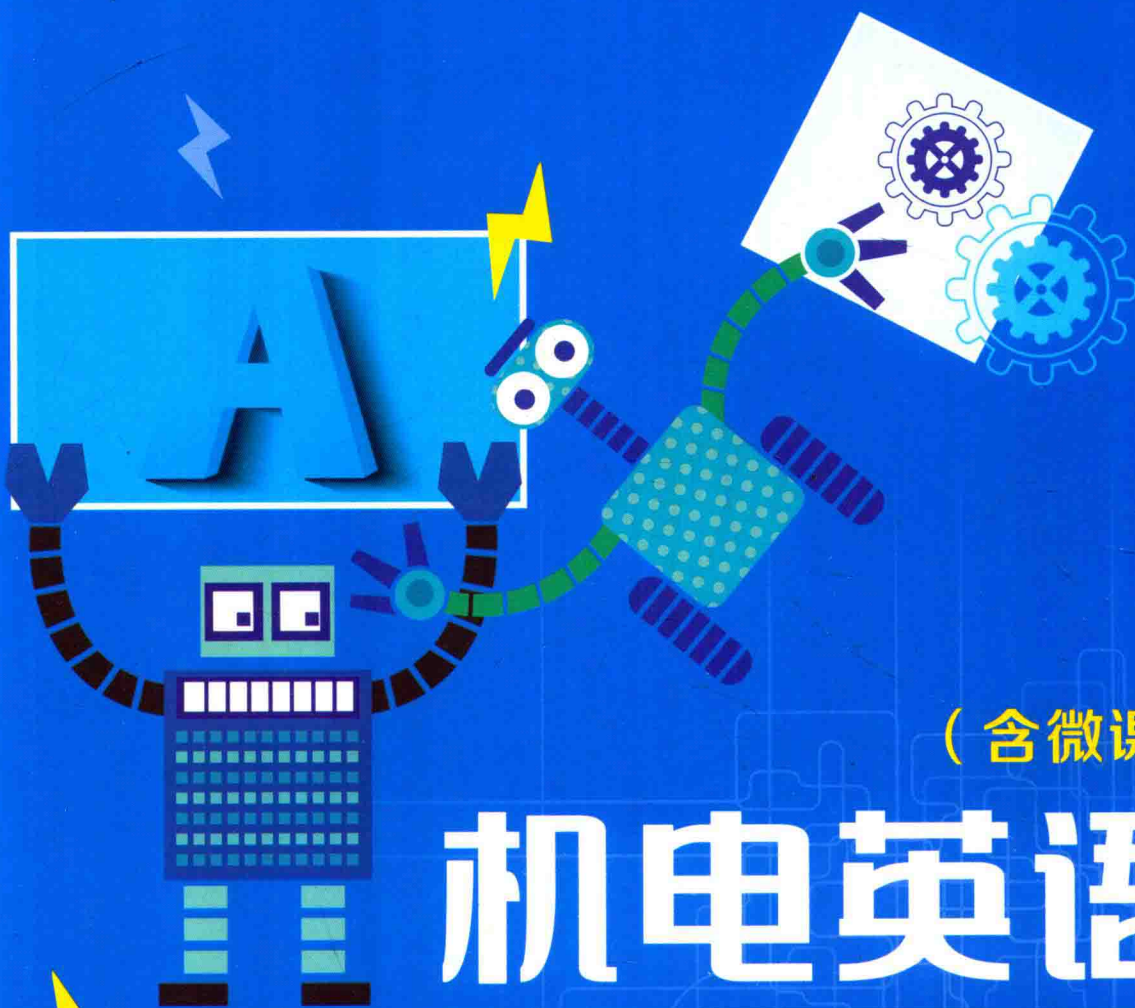




机电专业“十三五”规划教材



(含微课)

机电英语

English for Mechanical & Electrical Engineering

主编 田青 洪梅 马强

机电专业“十三五”规划教材

机电英语

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内 容 简 介

本书共包括八个单元,每个单元包括听说、阅读、翻译、写作、语法和轻松时刻六个模块,内容涵盖机械类、机电类、电类专业的基础专业英语,以及部分基础英语——听说、写作和语法,旨在为机电行业的学生打造更加适合课时缩减情况下专业英语阶段的教材。

本书具有专业性、实用性等特点,适合作为机械类、机电类、电类专业学生的专业英语教材,也可供从事机电专业工作的工程技术人员参考使用。

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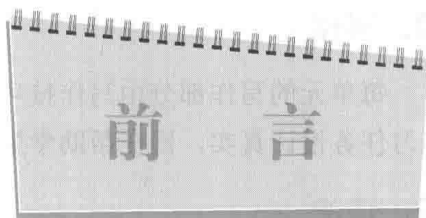
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高职英语由基础英语和专业英语两个部分组成,专业英语是大学英语的高级阶段。在高等职业教育阶段开展专业英语教学是为了促进“专业+外语”复合型人才的培养,提高毕业生的质量和就业竞争力。

专业英语不只是基础英语学习的简单延续,其课程目标是扩展学生在本专业方面的英语词汇量,熟悉本领域的英文术语,了解专业领域英语文献的表达特点,并掌握一定的专业英语翻译技巧,提高英语的阅读能力、口语表达和写作能力。

随着经济全球化的快速发展和国际合作的不断加强,不同国家之间的技术交流也日益频繁。机电专业的高职学生要想成为一流的技术人员,就必须具备一定的专业外语素养,从而及时准确地了解、学习和借鉴国外的先进技术和管理经验。

为了配合高等职业机电专业英语教学,培养“专业+外语”复合型人才,我们编写了这本《机电英语》。本教材包括以下六个模块:

一、听说

口语部分通过英文电影激发学生的学习兴趣,并帮助其学习真实地道的英语口语。听力部分针对高等职业学生参加高等学校英语应用能力考试(PRETCO)的需要,每个单元对常见考试题型及相关技巧进行汇总,并提供相应练习。

二、阅读

每单元阅读部分由三篇文章组成,分别是机械英语、电子英语和电信英语,不同专业学生可根据具体情况选用。每篇课文后附有生词、练习和译文,以帮助学生理解文章内容、检查对所学知识的掌握情况。

三、翻译

翻译部分在分析文章长难句的基础上,总结了一些翻译标准、步骤和常用技巧,旨在把理论知识融于练习,应用于实践,配合阅读部分,培养和提高学生翻译专业英语文献资料的能力。

四、写作

每单元的写作部分由写作技巧和相应的练习组成，既有具体范例，又有常用句型，且练习任务设计真实，旨在帮助学生掌握日常生活和工作中常用的应用文写作技巧。

五、语法

语法部分的每个语法知识点都充分体现在有趣的英语对话中，旨在将语法教学与语境相结合，一方面培养学生的语法运用能力，一方面又有利于发展其语言交际能力。同时，该部分解析了考试中常见的语法考点、难点，并提供了专项语法练习，不仅能帮助学生有针对性地学习，还能帮助其有效巩固所学。

六、轻松时刻

每个单元都配有一幅漫画欣赏，语言活泼生动，富有生活气息，可使学生在轻松的语言氛围中体会学习英语的乐趣。

本书由田青、洪梅、马强担任主编，蔡潇雨、卢娜、陈玉婷担任副主编。

由于水平有限，时间仓促，书中不足和错漏之处在所难免，祈望读者不吝赐教。

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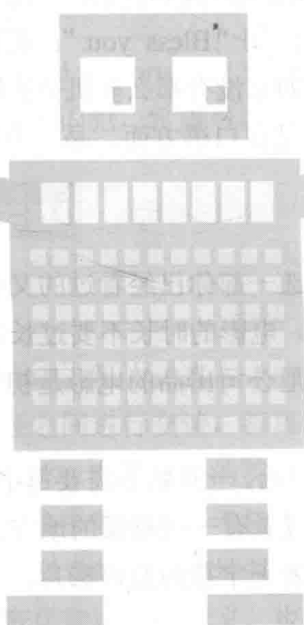


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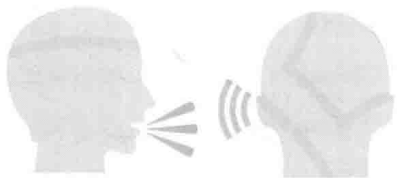
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Unit 1



Section I Speaking and Listening



A. Speaking

欧美电影的受众不是“英语学习者”，而是面向以英文为母语的国际市场。因此我们听到的电影台词基本是比较“真实”的，比较接近现实生活，包括用法习惯、语气语调语速等方面。电影里的用语往往比书本里的更本土、更地道。譬如现在欧美人之间互相打招呼很少说“How do you do?”，而是一般会说“How are you doing?”“How’s it going?”“What’s up?”等。回复一般也不会是“Fine, thank you, and you?”而是“Pretty well.”“Good.”“Not too bad.”“Same as usual.”之类的。有时候书本在语言学习上不如电影灵活，甚至很多东西在英文课或辅导班上也很难学习到，譬如俚语、本土用语习惯、讲话方式等。举个例子，打出租车到目的地了，怎么说？“Stop here, please.”虽然也可以这么说，但是其实听上去很不地道，也不是很礼貌，不妨说“Can you drop me off here?”之类。或者一些小习惯，比如在英国听到别人打喷嚏一般会跟对方说一句“Bless you.”，在讲到一个不怎么好的事情的时候会“touch wood”以防不幸言中。如果没有那么多机会去欧美国家身临其境地体会地道的英语表达，看电影学习英语，尤其是在口语方面，是一个很好的途径。看电影学英语应该注意以下几个方面。

一、选电影

如果你是初学者，或者英文基础比较薄弱，建议选一部你已经看过的又非常喜欢的电影。试着把注意力放在英文上，而不是研究琢磨剧情。电影的时长不要过长，最好是内容轻松愉快，偏日常生活，剧情简单明朗的电影。迪士尼公司出品的电影是初学者的首选。

二、看字幕

如果基础还不是很扎实，可以先从中英双语字幕开始。一开始不需要每字每句都抓住，可以跟得上大致速度就行。有几段如果实在跟不上，或者有一些难懂的地方，可以回放几遍。如果你已经有较好的基础，可以选择英文字幕或者无字幕的原声影片。

三、反复听

选一个或多个自己特别喜欢的片段，慢慢地试着跟着角色读台词。反复听，反复读，直到完全可以脱离字幕进行配音。也可以约几个朋友进行角色扮演来增强趣味性。

四、记笔记

俗话说好记性不如烂笔头，在听到一些运用程度较高的词句时，暂停电影，把它们记录下来。平日抽空复习，并试着去造句，然后慢慢在现实生活中运用。

Exercises

Directions: Read the classic film clip and try to recite them.

1. A man can be destroyed but not defeated.

— *The Old Man and the Sea*

一个人可以被毁灭，却不能被打败。

——《老人与海》

2. I'm only brave when I have to be. Being brave doesn't mean you go looking for trouble.

— *The Lion King*

我只是在必要的时候才会勇敢，勇敢并不代表你要到处闯祸。

——《狮子王》

3. It takes a strong man to save himself, and a great man to save another.

— *The Shawshank Redemption*

坚强的人只能救赎自己，伟大的人才能拯救他人。

——《肖申克的救赎》

4. I figure life is a gift and I don't intend on wasting it. You never know what hand you're going to get dealt next. You learn to take life as it comes at you.

— *Titanic*

我觉得生命是一份礼物，我不想浪费它，你不会知道下一手牌会是什么，要学会接受生活。

——《泰坦尼克号》

5. Fear can hold you prisoner. Hope can set you free.

— *The Shawshank Redemption*

恐惧让你沦为囚犯，希望可以感受自由。

——《肖申克的救赎》

B. Listening

PRETCO 听力理解题型

在日常交际中，听力一直占十分重要的地位，人们无论是看电影、电视，听广播、演讲、报告，相互之间进行交谈，都离不开听力，“听”是用语言交际所必须掌握的一项最基本的技能。因此，在国内外的英语教学和各种英语考试当中，无不把听力作为一项重要内容。听力考试的主要目的是考核学生通过耳朵获取有声信息的能力，听力理解能力的强弱不仅取决于听音者能否熟练地掌握必要的词汇和语法知识，以及在听的过程中能否敏锐地辨析语音的变化和语调的含义，也涉及听音者对所听内容背景知识的了解，以及结合所获取的信息进行加工处理的能力。多年的实践表明，听力的提高是比较困难的，也历来是中国学生学习外语的薄弱环节。因此，有针对性地进行适当的训练，对提高听音者的听力理解能力不无好处。英语考试中听力成绩的提高，不仅取决于基础语言技能的掌握，而且

涉及熟悉题型，掌握技巧。目前，面向高职、高专层次的高等学校英语应用能力考试（Practical English Test for Colleges，以下简称 PRETCO）的听力理解部分已被采用或可能被采用的主要题型有以下几种：① 简短对话（Short dialogue）；② 会话（Conversation）；③ 短文理解（Short passage）；④ 听写填空（Spot dictation）。

PRETCO 的听力理解部分考查学生对所听对话、会话和简单短文的理解能力。听力材料的语速为每分钟 100 词左右，词汇或短语不超过《高职、高专英语课程教学基本要求》所规定的范围。

Exercises

Directions: This part is to test your listening ability. It consists of 3 sections.

Section A

Directions: This section is to test your ability to give proper answers to questions. There are 5 recorded questions in it. After each question, there is a pause. The questions will be spoken two times. When you hear a question, you should decide on the correct answer from the 4 choices marked A, B, C and D.

Example: You will hear:

You will read: A. I'm not sure. B. You are right.
C. Yes, certainly. D. That's interesting.



From the question, we learn that the speaker is asking the listener to leave a message. Therefore, "C. Yes, certainly." is the correct answer.

1. A. I work in a factory. B. I read newspaper.
C. I have bought something for you. D. I am very busy now.
2. A. Frank is a fast runner.
B. Nobody runs faster than Frank.
C. Frank is one of the fastest runners.
D. Frank runs as fast as all the others.
3. A. Buses are too few.
B. People like to ride bicycles more than take buses.
C. More bicycles than buses are seen in this city.
D. There are more buses and bicycles in this city than cars.
4. A. I did English assignments only.
B. I did maths assignments quickly.

understand short dialogues. There are 5 recorded question. Both the dialogues a question, you should decide on the

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ed short passage. The
ds or phrases missing.

one can find almost any kind of

_____ in restaurants of larger cities. As the result of American's passion for _____, fast food shops have become widespread and _____ in the U.S., such as McDonald's and Kentucky Fried Chicken. There are also drive-in fast food restaurants.

Section II Reading



Passage 1

Kinds of Steel

There are two general kinds of steels: carbon steel and alloy steel. Carbon steel contains only iron and carbon, while alloy steel contains some other "alloying elements" such as nickel, chromium, manganese, molybdenum, tungsten, vanadium, & etc.

1. Carbon steels

(1) Low carbon steel containing from 0.05 to 0.15 percent carbon. This steel is also known as machine steel.

(2) Medium carbon steel containing from 0.15 to 0.60 percent carbon.

(3) High carbon steel containing from 0.6 to 1.50 percent carbon. This steel is sometimes called "tool steel".

2. Alloy steels

(1) Special alloy steel, such as nickel, chromium steel.

(2) High-speed steel also known as self-hardening steel.

The properties of carbon steels depend only on the percentage of carbon they contain. Low carbon steels are very soft and can be used for bolts and for machine parts that do not need strength.

Medium carbon steel is a better grade and stronger than low carbon steel. It is also more difficult to cut than low carbon steel.

Heating it to a certain temperature and then quickly cooling in water may harden high

carbon steel. The more carbon the steel contains and the quicker the cooling is, the harder it becomes. Because of its high strength and hardness, this grade of steel may be used for tools and working parts of machines. But for some special uses, for examples, for gears, bearings, springs, shafts and wire, carbon steels cannot be always used because they have on properties needed for these parts.

Some special alloy steels should be used for such parts because the alloying elements make them tougher, stronger, or harder than carbon steels. Some alloying elements cause steel to resist corrosion, and such steels are called stainless steels.

Heat-resistant steel is made by adding some tungsten and molybdenum, while manganese increases the wear resistance of steel. Vanadium steels resist corrosion and can stand shocks and vibration.

Tools made of high-speed steel containing tungsten, chromium, vanadium, and carbon, may do the work at much higher speeds than carbon tool steels.

New Words & Phrases

carbon	['kɑ:b(ə)n]	n. 碳
nickel	['nik(ə)l]	n. 镍
chromium	['krəʊmiəm]	n. 铬
manganese	['mæŋɡəni:z]	n. 锰
molybdenum	[mə'libdənəm]	n. 钼
tungsten	['tʌŋst(ə)n]	n. 钨
vanadium	[və'neidiəm]	n. 钒
harden	['hɑ:d(ə)n]	v. 硬化; 淬火
bolt	[bəʊlt]	n. 螺栓
gear	[ɡiə]	n. 齿轮
bearing	['beəriŋ]	n. 轴承
shaft	[ʃɑ:ft]	n. 轴
corrosion	[kə'reʊz(ə)n]	n. 腐蚀
stainless	['steɪnls]	adj. 不锈钢的
alloy	['ælɔɪ]	n. 合金 vt. 把……铸成合金
medium	['mi:diəm]	n. 中间物, 介质 adj. 中间的, 中等的, 半生熟的

fine	[faɪn]	<i>adj.</i> 细, 纤细, 纯粹; (金银等) 纯净的; 精炼的; 含量高的
vibration	[var'breɪʃ(ə)n]	<i>n.</i> 振动, 颤动
heat-resistant	['hi:tri,zɪstənt]	<i>adj.</i> 耐热的, 抗热的
tool steel		工具钢
heat-resistant steel		耐热钢
self-hardening steel		自硬钢
high-speed		高速的
high-speed steel		高速钢

Exercises

I Answer the following questions.

1. What is called "carbon steel"? What about "alloy steel" ?
2. What methods are available for improving the hardness of high carbon steel?
3. What are the machine parts that do not need strength made of ?
4. Why do the alloying elements such as chromium and tungsten increase the hardness and strength of steel?
5. What is heat-resistant steel? What about stainless steels?

II Place a "T" (true) or an "F" (false) beside the following sentences according to the text.

1. High-speed steel is sometimes called self-hardening steel.
2. Alloys having more than 0.6% carbon are called high carbon steels.
3. Alloys containing 0.15% (or less) carbon are called low carbon steels.
4. Steels contain more carbon than cast irons.
5. Low carbon steel is harder than high carbon steel.
6. The properties of carbon steels depend not only on the percentage of carbon they contain, but also on the alloying elements.
7. Tools made of High-Speed steel do the work at much lower speeds than carbon steels.
8. Stainless steels contain some alloying elements, which cause steels to resist corrosion.

III Fill in the blanks with the proper words given in the brackets, changing the form if necessary.

1. High-speed steel is also _____ (know) as self-hardening steel.
2. The more carbon the steel contains and the _____ (quick) cooling is, the _____ (hard) it becomes.
3. High carbon steel may be _____ (harden) by heating it to a certain temperature and then quickly cooling in water.
4. Heat-resistant steel is made by _____ (add) some tungsten and molybdenum.

IV Translate the following sentences into Chinese.

1. Carbon steel contains only iron and carbon, while alloy steel contains some other “alloying elements”.

2. Special alloy steel, such as nickel, chromium steel.

3. High carbon steel containing from 0.6 to 1.50 percent carbon, this steel is also named “tool steel”.

4. Tools made of high-speed steel containing tungsten, chromium, vanadium, and carbon, may do the work at much higher speeds than carbon tool steels.

参考译文

钢的种类

钢分两大类：碳钢与合金钢。碳钢只含有铁和碳，而合金钢则含有某些其他“合金元素”，比如镍、铬、锰、钼、钨、钒等。

1. 碳钢

低碳钢（含碳量=0.05%~0.15%），这种钢还称为“结构钢”。

中碳钢（含碳量=0.15%~0.60%）。

高碳钢（含碳量=0.60%~1.50%），这种钢也称为“工具钢”。

2. 合金钢

（1）特种合金钢，如镍钢、铬钢。