

<<机械制造技术基础>>

图书基本信息

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前言

It is now three centuries since Abraham Darby began smelting iron with coal in Coalbrookdale in England, two and a half centuries since Benjamin Huntsman began making crucible steel in Sheffield, the City of my birth, two centuries since Henry Maudslay created the first powered lathe and in America, Eli Whitney created the first powered milling machine. And it is a century since Frederick Taylor in America examined the high speed cutting performance of the new tool steels coming from Sheffield, and opened up the path to higher performance in machining processes. Since then there have been many steps in the development of understanding of tool materials, tool shape, machine design and machine control, and there is more to come. It is not just that engineers make things. A machining process is like a dance. In a well designed and well executed machining process there is music, timing, rhythm, flow, co-ordinated movement, precision, energy and breath-taking beauty. In every generation the experts the ones who move the story on-live and breathe the technology until they understand every tiny detail so well that they can dance the dance to perfection. Then they start to write new music.

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## 内容概要

This book is one of the “ serial bilingual textbooks of the mechanical engineering program ” . The course of “ Fundamentals of Machine Manufacturing Technology ” is the necessary and main professional fundamental module subject required for training modern senior mechanical manufacturing professions and management talents. This book has covered the basic knowledge,theory and skill of the machine manufacturing technology. Written under the guideline of “ emphasize the foundation,lower the barycentre,expand the knowledge,cut down the lecture hour,refine the content and widen the adaptability ” ,it has mixed and optimized the knowledge of the original six courses,including Metal Cutting Theory and Cutting Tool,Machine Tool and Fixture,and Mechanical Manufacturing Process. In this book,the metal cutting theory has been treated as the foundation,the manufacturing Process. In this book,the metal cutting theory has been treated as the foundation,the manufacturing process has played the rule of the main clue,and the knowledge of the process equipment and machine tool has also been concerned. The authors have paid much attention to the new development of the theory and technology in this subject,and made an introduction to the non-conventional machining technology and modern manufacturing technology. This book has been written for those who are intended to develop bilingual teaching for the students in mechanical engineering program. A companion Chinese textbook with the similar content and structure,entitled as Fundamentals of Machine Manufacturing Technology,composed by Zeng Zhixin,Ly Ming,published by Wuhan University of Technology Press,awarded as 21th century oriented series,can be used as the Chinese reference in teaching. This book can be used as the professional textbook of mechanical engineering and similar mechanical engineering for universities and colleges,it can also be used as a reference for engineers or technicians who are engaged in mechanical manufacturing technology or engineering management.

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