



图书基本信息

书名: <<锅炉>>

13位ISBN编号:9787560525310

10位ISBN编号:7560525318

- 出版时间:2008-1
- 出版时间:陕西西安交通大学

作者:车得福

页数:602

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前言

It has long been my wish to write a textbook concerning boiler in English for senior col-lege students. There are quite a few reasons for me to write this textbook. Xi ' an Jiaotong University (XJTU) is the first institute in which the specialty of boiler was established in 1950s in Chi-na. Since then, a great number of students have graduated from this university, and they have become and will become the eminent engineers and scientists. Historically, the text-books compiled by the staff of this university have been adapted to the Chinese students. Both the graduates and the textbooks from this university have been widely recognized overthe whole society of China. XJTU should continue to keep the leadership in textbook compil-ation and teaching reforms. English has in fact become a very international language. Thewriting of academic papers and technical reports in English is almost inevitable for the gradu-ates, in particular, as China has become a member of WTO. It will be of great significance for the students to be familiar with the English terminology and expressions related to boileras early as possible. Good English proficiency can be very helpful in job seeking. The Chinese edition of Boilers appeared in 2004. In this English edition, many featureshave been reserved. Nevertheless, the contents associated with material strength of pressurepart, boiler setting and framework, auxiliary equipment have been eliminated, and a newchapter, Operation of Boiler has been added. The notation system throughout this book isretained for convenient reading of Chinese readers. This book can be used as a textbook after the students have learned fluid mechanics, en-gineering thermodynamics and heat transfer as prerequisites. I do not intend this book to bescientifically and technically complete. In particular, neither the correlations and diagramsnor the methods for design or operation of boiler presented in this book are of absolute au-thority. They are not the sole choice whenever a boiler is designed or operated. Any practical design or operation of a boiler shall refer to relevant handbooks or manuals. Besides, English is not my native tongue. Although I have the visiting, studying , working and living experi- ences in English-speaking countries, more or less inappropriate or incorrect expressions might have occurred throughout this book. I am very anxious about any possible misleading and misunderstanding. I am looking forward to having the corrections from all the readers of this book.





内容概要

《锅炉--理论设计及运行》其内容包括:Introduction, Classification, Conditions and Specification, Fuels, Balances of Material and Heat等。





作者简介

Defu CHE, born in 1962, obtained his Bachelor, Master and Doctoral Degrees in Ther-mal Engineering from Xi ' an Jiaotong University in 1983, 1986 and 1990 respectively.During 1989-1990 he studied as a Ph.D.student in Department of Chemical and Materials Engi-neering, University of Auckland, New Zealand.During 1995 ~ 1996 he worked as a visiting scholar in Department of Mechanical, Aerospace and Nuclear Engineering, University of California, Los Angeles, USA.Now, he holds a professorship in Department of ThermalEngineering of Xi ' an Jiaotong University.His research interests include boiler and heat ex-changer design, multiphase flow and heat transfer, combustion of fossil fuels and pollutant emission control, comprehensive utilization of low grade heat energy, CFD and CAD and so on.He is also the author or co-author of over 100 journal and conference papers and seven books_o



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