<<工程力学>>

图书基本信息

书名：<<工程力学>>

13位ISBN编号：9787040140095

10位ISBN编号：7040140098

出版时间：2004-1

出版时间：北京蓝色畅想图书发行有限公司（原高等教育出版社）

作者：希伯勒

<<工程力学>>

内容概要

《工程力学：静力学（第10版）（影印版）》是典型的美式教材，它具有以下一些特点：基本概念、基本原理的叙述简明、准确、便于掌握，
强调理论应用，配有大量例题和习题，多来自实际问题，有利于应用理论解决实际问题能力的培养，关注学习方法的指导，详尽介绍各类问题的解决思路、方法、技巧，便于自学。

作者简介

作者：（美国）希伯勒（Hibbeler R.C.）

书籍目录

章节摘录

版权页： 插图： Mechanics can be defined as that branch of the physical sciences concerned with the state of rest or motion of bodies that are subiected to the action of forces.In general,this subject is subdivided into three branches：rigid-body mechanics,deformable-body mechanics,and fluid mechanics.This book treats only rigid-body mechanics since it forms a suitable basis for the design and analysis of many types of structural，mechanical，or electrical devices encountered in engineering.Also.rigid-body mechanics provides part of the necessary background for the studyof the mechanics of deformable bodies and the mechanics of fluids. Rigid-body mechanics is divided into two areas：statics and dynamics.Statics deals with the equilibrium of bodies,that is, those that are either at rest or move with a constant velocity；whereas dynamics is concerned with the accelerated motion of bodies,Although statics can be considered as a special case of dynamics，in which the acceleration is zero，statics deserves separate treatment in engineering education since many objects are designed with the intention that they remain in quilibrium.Historical Development. The subject of statics developed very early in history because the principles involved could be formulated simply from measurements of geometry and force. For example, the writings of Archimedes （287-212 B.C.） deal with the principle of the lever. Studies of the pulley, inclined plane, and wrench are also recorded in ancientwritings--at times when the requirements of engineering were limited primarily to building construction. Since the principles of dynamics depend on an accurate measurement of time, this subject developed much later. Galileo Galilei （1564-1642） was one of the first major contributors to this field. His work consisted of experiments using pendulums and falling bodies. The most significant contributions in dynamics, however, were made by Issac Newton （1642-1727）, who is noted for his formulation of the three fundamental laws of motion and the law of universal gravitational attraction. Shortly after these laws were postulated, important techniques for their application were developed by Euler, D'Alembert, Lagrange, and others.

版权说明