

<<土力学>>

图书基本信息

书名：<<土力学>>

13位ISBN编号：9787114050534

10位ISBN编号：7114050534

出版时间：2004-7

出版时间：人民交通

作者：施建勇

页数：342

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<土力学>>

内容概要

教育部倡导在具备条件的高等院校中进行双语教学，许多院校都做了有益的探索和尝试。

有些院校直接采用外文原版书进行教学，反馈意见各不相同。

由于我国土木工程专业高等教育模式与国外存在较大差别，编制适合国内学生特点的本土英文版教材，成为国内院校的迫切需要。

基于此，河海大学土木工程学院的几位教授在国内土力学教材的基础上，参照国外英文版图书的编写方式和风格，同时考虑国内学生的使用特点，精心编译而成此书。

本书共分八章：第一章 土体的物理性质和岩土工程的分类；第二章 渗流；第三章 地基中的应力；第四章 地基的压缩和固结；第五章 土的抗剪强度；第六章 土压力理论；第七章 边坡稳定分析；第八章 地基承载力。

每章后均附有习题、符号说明和部分专业英语词汇的汉译，供学生在使用本书时练习、参照。

本书可供高等学校土木工程专业及相关专业在开设土力学双语教学课程时使用。

书籍目录

CHAPTER 1 PHYSICAL PROPERTIES AND ENGINEERING CLASSIFICATION OF SOIL 1.1 Formation of Soil 1.2 Components of Soil 1.2.1 Solid Phase 1.2.2 Liquid Phase 1.2.3 Vapor Phase 1.3 Soil Fabric 1.3.1 Interaction between Soil Particles 1.3.2 Soil Fabric 1.4 Physical Features and Indexes of Soil 1.4.1 Basic Physical Indexes 1.4.2 Calculated Physical Indexes 1.4.3 Conversion between Physical Indexes 1.5 Relative Density of Cohesionless Soil, Consistency of Cohesive Soil and Soil Compaction 1.5.1 Relative Density of Cohesionless Soil 1.5.2 Consistency of Cohesive Soil 1.5.3 Soil Compaction 1.6 Soil Classification

CHAPTER 2 WATER FLOW THROUGH SOIL 2.1 Introduction 2.2 Driving Potential—Total Head 2.3 Darcy's Law 2.3.1 Darcy's Law 2.3.2 Validity of Darcy's Law 2.4 Determination of the Coefficient of Permeability 2.4.1 Empirical Relationships for k 2.4.2 Determination of k in the Laboratory 2.4.3 Pumping Test to Determine k in the Field 2.4.4 The Coefficient of Permeability of Soil Layers 2.5 Two-Dimensional Flow of Water through Soil and Flow Net 2.5.1 Laplace's Equation for Two-Dimensional Steady Flow 2.5.2 Flow Net 2.6 Effective Stress and Pore Water Pressure in soil 2.6.1 The Principle of Effective Stress 2.6.2 Effective Stresses due to Hydrostatic Stress Fields 2.6.3 Effects of Seepage 2.7 Seepage Force and Critical Hydraulic Gradient 2.7.1 Seepage Force 2.7.2 Heaving, Boiling, and Piping 2.7.3 Critical Hydraulic Gradient

CHAPTER 3 STRESSES IN SOIL 3.1 Introduction 3.2 Effective Overburden Pressure in the Ground 3.3 Contact Pressure between the Foundation and the Ground 3.3.1 Contact Pressure due to Vertical Centric Load 3.3.2 Contact Pressure due to Vertical Eccentric Load 3.3.3 Contact Pressure due to Inclined Eccentric Load 3.4 Stress Increase in the Ground 3.4.1 Stress Increase in Spatial Problems 3.4.2 Stress Increase in Plane Problems 3.4.3 Effective Overburden Pressure of Embankment and Contact Pressure between Embankment and Ground

CHAPTER 4 COMPRESSION AND CONSOLIDATION OF SOIL 4.1 Introduction 4.2 Soil Compressibility Characteristics

CHAPTER 5 SHEAR STRENGTH OF SOIL

CHAPTER 6 EARTH PRESSURE ON RETAINING STRUCTURES

CHAPTER 7 SLOPE STABILITY

CHAPTER 8 BEARING CAPACITY OF FOUNDATIONS

REFERENCES

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>