

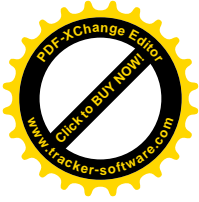
HANDBOOK OF AIR CONDITIONING AND REFRIGERATION

Shan K. Wang

Second Edition

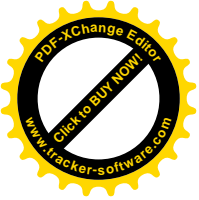
McGraw-Hill

New York San Francisco Washington, D.C. Auckland Bogotá
Caracas Lisbon London Madrid Mexico City Milan
Montreal New Delhi San Juan Singapore
Sydney Tokyo Toronto



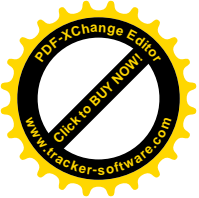
CONTENTS

Preface to Second Edition	xi
Preface to First Edition	xiii
Chapter 1. Introduction	1.1
Chapter 2. Psychrometrics	2.1
Chapter 3. Heat and Moisture Transfer through Building Envelope	3.1
Chapter 4. Indoor and Outdoor Design Conditions	4.1
Chapter 5. Energy Management and Control Systems	5.1
Chapter 6. Load Calculations	6.1
Chapter 7. Water Systems	7.1
Chapter 8. Heating Systems, Furnaces, and Boilers	8.1
Chapter 9. Refrigerants, Refrigeration Cycles, and Refrigeration Systems	9.1
Chapter 10. Refrigeration Systems: Components	10.1
Chapter 11. Refrigeration Systems: Reciprocating, Rotary, Scroll, and Screw	11.1



viii CONTENTS

Chapter 12. Heat Pumps, Heat Recovery, Gas Cooling, and Cogeneration Systems	12.1
Chapter 13. Refrigeration Systems: Centrifugal	13.1
Chapter 14. Refrigeration Systems: Absorption	14.1
Chapter 15. Air Systems: Components—Fans, Coils, Filters, and Humidifiers	15.1
Chapter 16. Air Systems: Equipment—Air-Handling Units and Packaged Units	16.1
Chapter 17. Air Systems: Air Duct Design	17.1
Chapter 18. Air Systems: Space Air Diffusion	18.1
Chapter 19. Sound Control	19.1
Chapter 20. Air Systems: Basics and Constant-Volume Systems	20.1
Chapter 21. Air Systems: Variable-Air-Volume Systems	21.1
Chapter 22. Air Systems: VAV Systems—Fan Combination, System Pressure, and Smoke Control	22.1
Chapter 23. Air Systems: Minimum Ventilation and VAV System Controls	23.1
Chapter 24. Improving Indoor Air Quality	24.1
Chapter 25. Energy Management and Global Warming	25.1
Chapter 26. Air Conditioning Systems: System Classification, Selection, and Individual Systems	26.1



Chapter 27. Air Conditioning Systems: Evaporative Cooling Systems and Evaporative Coolers	27.1
Chapter 28. Air Conditioning Systems: Space Conditioning Systems	28.1
Chapter 29. Air Conditioning Systems: Packaged Systems and Desiccant-Based Systems	29.1
Chapter 30. Air Conditioning Systems: Central Systems and Clean-Room Systems	30.1
Chapter 31. Air Conditioning Systems: Thermal Storage Systems	31.1
Chapter 32. Commissioning and Maintenance	32.1
Appendix A. Nomenclature and Abbreviations	A.1
Appendix B. Psychrometric Chart, Tables of Properties, and I-P Units to SI Units Conversion	B.1

Index follows Appendix B