Ref. 621.194 SPR 2d ed.

CONTENTS

Chapter 1 Boiler Systems, Classifications by Use, and Regulations	1
Chapter 2 The Metallurgy of Steel and Material Selection	27
Chapter 3 Welding and Nondestructive Testing	52
Chapter 4 Strength of Materials and Stress Analysis	86
Chapter 5 Fire-tube Boilers	115
Chapter 6 Watertube Boilers	147
Chapter 7 Coil, Electric, Cast-Iron, and Special-Application Boilers	173
Chapter 8 Nuclear Power Plant Reactors and Pressure Vessels	203
Chapter 9 General Construction and Stress Calculations	223
Chapter 10 Boiler Connections, Appliances, and Appurtenances	257
Chapter 11 Fuels, Firing, and Controls	293
Chapter 12 Operating Problems, Cause of Failures, Water Treatment, and Repairs	345
Chapter 13 Inspection, Maintenance, and Boiler Plant Management	396
Appendix 1 Glossary of Boiler Terms and Definitions	418
Appendix 2 Boiler Scale: Data on Water Treatment	444
Appendix 3 Riveted Joints	448
Appendix 4 Boiler Safety Rules	456
Selected Bibliography	458
Index	459