Steam Plant Operation 9th Edition
Synopsis

The definitive guide for steam power plant systems and operation—fully updated For more than 75 years, this book has been a trusted source of information on steam power plants, including the design, operation, and maintenance of major systems. Steam Plant Operation, Ninth Edition, emphasizes the importance of a comprehensive energy plan utilizing all economical sources of energy, including fossil fuels, nuclear power, and renewable energy sources. Wind, solar, and biomass power are introduced in the book, and the benefits and challenges of these renewable resources for the production of reliable, cost-effective electric power are identified. Even with these new technologies, approximately 90% of electricity is generated using steam as the power source, emphasizing its importance now and in the future. In-depth details on coal-fired plants, gas turbine cogeneration, nuclear power, and renewable energy sources are included, as are the environmental control systems that they require. Potential techniques for the reduction of carbon dioxide emissions from fossil fuel–fired power plants also are presented. This practical guide provides common power plant calculations such as plant heat rate, boiler efficiency, pump performance, combustion processes, and collection efficiency for plant emissions. Numerous illustrations and clear presentation of the material will assist those preparing for an operator’s license exam. In addition, engineering students will find a detailed introduction to steam power plant technology.

Steam Plant Operation, Ninth Edition, covers:
- Steam and its importance
- Boilers Design and construction of boilers
- Combustion of fuels
- Boiler settings, combustion systems, and auxiliary equipment
- Boiler accessories
- Operation and maintenance of boilers
- Pumps
- Steam turbines, condensers, and cooling towers
- Operating and maintaining steam turbines, condensers, cooling towers, and auxiliaries
- Auxiliary steam plant equipment
- Environmental control systems
- Waste-to-energy plants

Book Information

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Customer Reviews

Very in depth, easy to understand, and is good no matter what level you want to go for. I read it and was able to obtain my power plant operators license with no formal education. This is a great book, I would recommend this to anyone looking to obtain a boiler license

Frequently referred to as the "Bible of Boiler Operators", this one has everything. While some of the more entertaining items from past editions are no longer there, this book is still stuffed with more information than the average person would care for, but the information, tables, charts, etc. are perfect for anyone wanting the absolute last word on boilers. A MUST for anyone preparing to stand for their Stationary Engineering license!!!

In the trade. This is the book for a guy that does this everyday should have on the shelf! If you read carefully it could save your life no joke steam is dangerous and this book is it on details water treatment etc. In schools and state requirements this book is the one they want and there’s a reason.

Good book, talks about many topics of power plant, good reading , I hope that in 10th Edition one more chapter about formulas is added . Thanks

The 9th edition is considerably smaller than the 8th edition and eliminates important information that students need to pass a stationary engineer’s license exam. We have used the 9th edition for two semesters and would gladly go back to the 8th edition if it was available.

This was my most expensive book that i bought to prepare for my MN 1st class, Class A exam. A lot of material is covered here, very well written. I received it in a "as new" condition, I’m very pleased with it.
This is the book and only book I studied in trade school to obtain my steam license in Ohio. I studied with the 4th edition. It helps to know someone in this field to explain some of the equipment.

I bought the 2nd addition and the others to follow. This was the study guide for those taking there high pressure boiler operators and steam engineers exams in Ohio. My wife purchased the 9th addition for me for Christmas. I have looked through the book and can honestly say that I liked the older versions better. The main reason is the older versions covered more on boilers and stationary steam engines and this one does not. Although they do not use steam engines to the extent they once did they are still in operation and few books cover the operation and maintenance of steam engines as the early editions of this book did. Also the older versions showed you how to figure the horsepower of both boilers and steam engines the 9th edition has excluded all of this. I do not care for the so called "green technology". There is not enough room in the USA for all the solar panels and wind turbines for one thing and to generate all the electrical requirements needed in this country is by fossil fuel generating plants or nuclear reactors not solar or wind. I give this book three stars.

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