Air Pollution Control and Design Handbook—Part II


This is the second in a two volume set of books. Part I covered the basic technology of air pollution control, and Volume II is a continuation of the first volume. A total of 22 authors have contributed to the 21 chapters in Part II.

Part II starts out by discussing scrubber theory, and moves into SO2 removal technology and some case histories and special control systems. It then discusses future trends for SO2/particulate scrubber technology and odor control.

Some of the topics are not given complete coverage, such as the chapters on odor control, where the material only includes scrubbing, adsorption, and odor modification. Some of the chapters should have been grouped together, such as Chapter 37 on "pH Controls for SO2 Scrubbers" and Chapter 41 on "How To Avoid Scrubber Corrosion." Chapter 24 on "Packed Tower Absorption Design" and Chapter 25 on "Packed Wet Scrubbers" contain some duplicate material.

The first chapter (24) is a very extensive and well-written chapter on absorption and covers 90 of the 424 pages. The discussions of SO2 removal cover some of the major techniques, but it is not a complete coverage of the topic, nor do they cover some of the other special SO2 removal techniques, such as coated filters.

Chapter 38 on "Gravel Bed Filters" is very timely, well illustrated, and provides an excellent coverage of this innovative control technique. Chapter 39 on "Developments and Trends for SO2 and Particulate Scrubbers" is good but not substantially different from other information found in the literature.

The book has a lot of good, basic information, but is weak in the design and operation and maintenance areas.

Volume II would be useful as a text for community college programs, and as a reference book for plant engineers with specific problems, as well as newcomers to the field of air pollution control.—FRANK L. CROSS, JR., 2713 Timberlake Drive, Orlando, FL 32806.