



FXM ENGINEERING & DESIGN

## BOOK INFORMATION SHEET

- TITLE:** **The Pilot Plant Real Book, 2nd Edition**  
A Unique Handbook for the Chemical Process Industry
- AUTHOR:** Francis X. McConville
- PUBLISHER:** FXM Engineering & Design  
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SAN 254-721X
- CATEGORY:** Chemistry / Chemical Engineering / Reference (BISAC REF028000)
- PUBLICATION DATE:** January 2007
- PRICE:** \$US 114.95
- No. PAGES:** 320
- FINISHED SIZE:** 8.5 x 11 inches
- BINDING:** Lay-Flat Perfect
- ISBN:** 0-9721769-2-6
- LCC:** 2006931624
- ILLUSTRATIONS:** Over 200 2-color charts, graphs and illustrations
- BACK MATTER:** Bibliography, recommended reading, index
- DESCRIPTION:** A unique and highly practical handbook for chemists, chemical engineers, technicians, and students preparing to enter industry. It is designed for those working in chemical process development, or tech transfer to pilot or commercial plants. Contents include physical property data for chemicals, solvents, gases and materials; concise monographs on key concepts such as heat transfer, temperature control, agitation, distillation, crystallization, and process safety screening; equipment data; safety information; important pointers and guidelines for developing scalable reactions; tips and techniques for effective process development.
- INTENDED AUDIENCE:** Practicing chemists, chemical engineers and technicians, as well as students and graduates preparing to enter the fine chemical industry.
- AUTHOR'S BACKGROUND:** Francis X. McConville holds a BS in Chemistry and MS degrees in both Biotechnology and Chemical Engineering from Worcester Polytechnic Institute. He has been involved in the chemical and related fields for nearly 30 years, including 14 years as a process engineer at Sepracor, Inc. He has helped scale up chemical and biochemical processes in Asia, Europe and North America. He works as a consultant and training instructor and lives with his family in Massachusetts.
- DISTRIBUTION:** The Pilot Plant Real Book is available directly from the publisher and from select vendors of scientific books. Dealer inquiries welcome.

Pilot plants are often indispensable in scaling up small scale experiments to the actual plant, and a process involving units such as multiphase reactors, crystallizers, and in general any solids processing units cannot be reliably designed without pilot plant testing [Bisio and Kabel, 1985]. Yet, little is covered in a design course, leaving a large gap between school and practice that has to be filled on the job [McConville, 2002]. A number of reference books on various practical issues are available [Mansfield, 1993; Woods, 1995]. Beyond Process Design: The Emergence of a Process De...<sup>Â</sup> Control and data collection for the flow plant is done using Distributed Control System (DCS) in real time.