Record Nr. UNINA9910788255003321 Autore Robbins Lanny **Titolo** Distillation control, optimization, and tuning: fundamentals and strategies / / Lanny Robbins Boca Raton:,: CRC Press,, 2011 Pubbl/distr/stampa 1-000-21862-7 **ISBN** 0-429-10729-3 1-62870-490-X 1-4398-5800-4 Descrizione fisica 1 online resource (144 p.) Disciplina 660/.28425 Soggetti Distillation Separation (Technology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover; Contents; The Author; Chapter 1. Introduction and Overview; Chapter 2. Distillation Control Variables; Chapter 3. Separation Power: Chapter 4. Distillate/Feed Material Balance Split: Chapter 5. Distillation Control Strategies; Chapter 6. Constraints; Chapter 7. Optimizing Product Quality Performance; Chapter 8. PID Feedback Control Loop: Chapter 9. Closed-Loop Tuning of Controllers: Chapter 10. Open-Loop Testing of Process Response; Appendix: Solutions to Chapter Exercises; Back cover Sommario/riassunto With a focus on the fundamentals and strategies of distillation columns, this book covers the process variables for continuous distillation columns, as well as four basic control strategies and the typical cases in which they are used. The author defines the inlet and outlet streams and process variables for a distillation column and then explains the overall concept of the separation and purification that is performed. Performance and product quality are described in terms of specification requirements, and tools and techniques for the optimization of quality performance are provided. Figures and graphs are included within the

reference to illustrate concepts--