1. Record Nr. UNINA9910796771503321 Autore Klemeš Jií Jaromír Titolo Sustainable process integration and intensification: saving energy, water and ressources / / Jiri Jaromir Klemes [and three others] Pubbl/distr/stampa Berlin; ; Boston:,: Walter de Gruyter,, [2018] ©2018 **ISBN** 3-11-053554-8 3-11-053536-X Edizione [Second edition.] Descrizione fisica 1 online resource (324 pages) De Gruyter Textbook Collana Disciplina 363.7 Soggetti Environmental sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Frontmatter -- Preface to the 2nd edition -- Preface -- Contents -- 1. Nota di contenuto Process Integration and Intensification: An Introduction -- 2. Setting energy targets and Heat Integration -- 3. Synthesis of Heat Exchanger Networks -- 4. Total Site Integration -- 5. An Integrated Pinch Analysis Framework for Low CO2 Industrial Site Planning -- 6. Introduction to Water Pinch Analysis -- 7. Setting the maximum water recovery targets -- 8. Water network design/retrofit -- 9. Design of Cost-Effective Minimum Water Network (CEMWN) -- 10. Conclusions and sources of further information -- Index Sommario/riassunto In its second edition, Sustainable Process Integration and Intensification continues the presentation of fundamentals of key areas of both fields. Thoroughly updated and extended to include the latest developments. the reader also finds illustrated working sessions for deeper understanding of the taught materials. The book is addressed to graduate students as well as professionals to help the effectively application in plant design and operation.