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| Autore                  | Reay D. A (David Anthony)   |
| Titolo                  | Process intensification : engineering for efficiency, sustainability and flexibility / / David Reay, Colin Ramshaw and Adam Harvey  |
| Pubbl/distr/stampa      | Amsterdam ; ; London, : Elsevier/Butterworth-Heinemann, 2008  |
| ISBN                    | 1-281-79609-3<br>9786611796099<br>0-08-055808-9   |
| Edizione                | [1st ed.]   |
| Descrizione fisica      | 1 online resource (xxv, 444 p.) : ill   |
| Collana                 | Butterworth-Heinemann/ICHEME series   |
| Altri autori (Persone)  | RamshawC (Colin)<br>HarveyAdam (Adam P.)  |
| Disciplina              | 660.2815  |
| Soggetti                | Chemical process control<br>Chemical processes - Environmental aspects  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Chapter 1 A Brief History of Process Intensification; Chapter 2 Process Intensification - An Overview; Chapter 3 The Mechanisms involved in Process Intensification; Chapter 4 Compact and Micro-Heat Exchangers; Chapter 5 Reactors; Chapter 6 Intensification of Separation Processes; Chapter 7 Intensified Mixing; Chapter 8 Application Areas - Petrochemicals and Fine Chemicals; Chapter 9 Application Areas - Offshore Processing; Chapter 10 Application Areas - Miscellaneous Process Industries; Chapter 11 Application Areas - The Built Environment, Electronics and the Home; Chapter 12 Specifying, Manufacturing and Operating PI Plant; Appendices; Index. |
| Sommario/riassunto      | Process intensification (PI) is a chemical and process design approach that leads to substantially smaller, cleaner, safer and more energy-efficient process technology. A hot topic across the chemical and process industries, this is the first book to provide a practical working guide to understanding and developing successful PI solutions that deliver savings and efficiencies. It will appeal to engineers working with leading-edge process technologies and those involved research and development of chemical, process, environmental, pharmaceutical, and bioscience systems. Shows chemical and process engineers how to                                 |

apply process intensification to their system, process or operation; A hard-working reference and user guide to the technology AND application of PI, covering fundamentals, industry applications, supplemented by a development and implementation guide; Leading author team, including Professor Colin Ramshaw, developer of the HiGee high-gravity distillation process at ICI, widely credited as the instigator of PI principles.

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