1. Record Nr. UNINA9910823185103321 Autore Singh R. Paul Titolo Introduction to food engineering // R. Paul Singh, Dennis R. Heldman Pubbl/distr/stampa Amsterdam:,: Elsevier,, 2014 ©2014 **ISBN** 9780124016750 0-12-401675-8 Edizione [Fifth edition.] Descrizione fisica 1 online resource (xxiii, 867 pages) : illustrations Collana Food science and technology international series Disciplina 664.02 Soggetti Aliments - Indústria i comerç Food industry and trade Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Introduction -- 2. Fluid flow in food processing -- 3. Resource sustainability -- 4. Heat transfer in food processing -- 5. Preservation processes -- 6. Refrigeration -- 7. Food freezing -- 8. Evaporation --9. Psychrometrics -- 10. Mass transfer -- 11. Membrane Separation --12. Dehydration -- 13. Supplemental processes -- 14. Extrusion processes for foods -- 15. Packaging concepts -- Appendices. Sommario/riassunto "Long recognized as the bestselling textbook for teaching food engineering to food science students, this 5th edition transitions with today's students from traditional textbook learning to integrated presentation of the key concepts of food engineering. Using carefully selected examples, Singh and Heldman demonstrate the relationship of engineering to the chemistry, microbiology, nutrition and processing of foods in a uniquely practical blend. This approach facilitates comprehensive learning that has proven valuable beyond the classroom as a lifetime professional reference. Key features in this edition: key concepts now communicated using audio, video, and animations: integrates interactive tools to aid in understanding complex charts and graphs; features virtual experiments of selected food processing operations; videos demonstrating key processes and engineering in practice; presents a practical, unique and challenging blend of

principles and ap plication for comprehensive learning. Authors Singh

and Heldman use their many years of teaching to present food engineering concepts in a logical progression that covers the standard course curriculum making it easily adaptable for each classroom" -- Page 4 of cover.