Record Nr. UNINA9910807279203321 Autore Krizan Peter Titolo The densification process of wood waste // Peter Krizan, managing editor, Elisa Capello; language editor, Mary Boyd Pubbl/distr/stampa Warsaw, [Poland];; Berlin, [Germany]:,: De Gruyter Open,, 2015 ©2015 **ISBN** 1-5231-0473-2 3-11-044002-4 Descrizione fisica 1 online resource Disciplina 674.835 Wood, Compressed Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Front matter -- Contents -- Abbreviations -- Foreword -- 1 Nota di contenuto Introduction -- 2 Analysis of the densification process -- 3 Pressing Stand and Methods of Processing Measured Data -- 4 Design of Application Software for Setting Technological Parameters and Briquette Quality Estimation According to the Configured Parameter -- 5 Experimental Research in the Densification of Wooden Waste -- 6 Describing the Significance of the Results in Order to Optimize the Structure of the Pressing Chamber -- 7 Summary of the Experimental Research and Results with Suggestions for Practice -- Bibliography --Index Sommario/riassunto This book examines the very current issue of wood waste treatment to a solid biofuel for energy recovery. The book is dedicated to research in the densification processes of wood waste and its mathematical description for uniaxial densification into compact biofuels briquettes. This monograph, derived from an experimental research of densification process in laboratory conditions and also in real technologies in practice, provides a thorough understanding of the influencing parameters impact during densification of wood waste into solid biofuel. The book shows the experimental strategy to determine the effects of individual parameters and specifies their impact on the

resulting density of the briquettes. The publication also defines the level of importance of the results in terms of optimization of the

densification machine's pressing chamber. Using a designed mathematical model, which was a result of experimental research and which can serve to predict the density of briquettes for some predefined densification conditions and can aid in the design of densification machines, the author has made this topic accessible beyond his discipline, biofuels producers and the academic community.