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Compression Molding

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Preface

Compression Molding is primarily written for engineers, processors, researchers and other professionals with various levels of technical background. It not only serves as an introductory reading for those getting acquainted with compression or injection/compression molding but also as an indispensable reference for experienced practitioners. The book presents a thorough up-to-date view of compression molding processing techniques, with fundamental information on the chemistry, physics, material science, and process engineering. It also covers topics that directly affect the compression molding process, such as molding materials, design, simulation, and troubleshooting.

The book presents a well-rounded overview of the underlying theory and physics that control the various compression molding processes without losing the practical flavor that governs the manuscript between its covers.

The first chapter presents a historical background and the fundamentals, covering the various compression molding processes and materials. Chapters 2 and 3 discuss the materials and processing fundamentals. Here, a unified approach is used pulling in the influence of processing on the properties of a finished product. Chapter 4 covers design of compression molded parts in depth. The last chapter presents extensive process and material troubleshooting procedures that will be useful to anyone in the industry at any stage of process and product design.

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