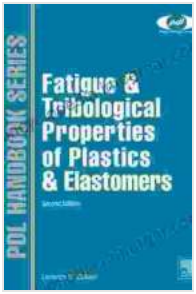
Fatigue and Tribological Properties of Plastics and Elastomers: A Comprehensive Guide for Designers

In the realm of materials science and mechanical engineering, understanding the fatigue and tribological properties of plastics and elastomers is crucial for designing durable and reliable components. This meticulously crafted book, written by renowned experts in the field, provides an in-depth exploration of these essential properties, empowering engineers, designers, and researchers to make informed decisions.



Fatigue and Tribological Properties of Plastics and Elastomers (Plastics Design Library) by Laurence W. McKeen

★★★★★ 5 out of 5

Language	: English
File size	: 82980 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 355 pages

Chapter 1: to Fatigue and Tribology

- Overview of fatigue and tribology concepts
- Importance of these properties in materials selection and design
- Historical perspectives and advancements in the field

Chapter 2: Fatigue Properties of Plastics

- Types of fatigue failure in plastics
- Factors influencing fatigue life, including material composition, processing conditions, and environmental factors
- Experimental techniques for fatigue testing of plastics

Chapter 3: Tribological Properties of Plastics

- Fundamentals of friction, wear, and adhesion
- Tribological behavior of plastics under different contact conditions
- Surface modification techniques to enhance tribological performance

Chapter 4: Fatigue and Tribological Properties of Elastomers

- Unique characteristics of elastomers compared to plastics
- Fatigue failure mechanisms in elastomers
- Tribological properties of elastomers, including wear resistance and friction

Chapter 5: Design Considerations for Fatigue and Tribological Performance

- Materials selection based on fatigue and tribological requirements
- Design guidelines to minimize fatigue failure
- Tribological considerations in component design, including lubrication and surface treatments

Chapter 6: Case Studies and Applications

- Real-world examples of fatigue and tribological failures in various industries
- Innovative solutions and best practices for improving component performance
- Future trends in fatigue and tribology research

With its comprehensive coverage, practical insights, and extensive references, this book is an invaluable resource for anyone involved in the design and analysis of plastic and elastomeric components. Whether you are a seasoned engineer, a researcher seeking cutting-edge knowledge, or a student eager to expand your understanding, this definitive guide will equip you with the knowledge and tools you need to excel in this field.

Don't miss out on this opportunity to unlock the secrets of fatigue and tribological properties of plastics and elastomers. Free Download your copy today and elevate your design capabilities to new heights!

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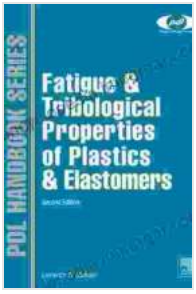

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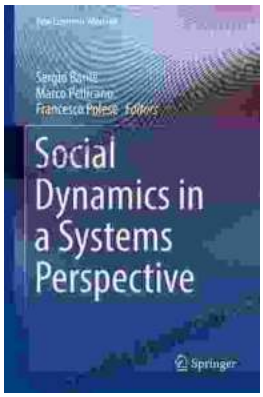

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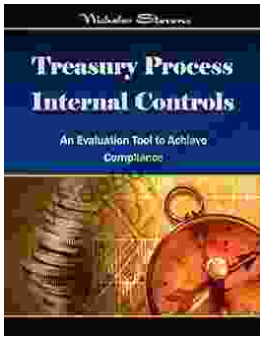

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