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Rotating TSE: Morphological Analysis of a HDPE/PDMS SystemChapter 11. The in situ Compatibilization of HDPE/PET Blends; Chapter 12. Evaluation of Process Aids for Controlling Surface Roughness of Extruded LLDPE; Chapter 13. Evaluation of Scratch and Mar Resistance in Automotive Coatings: Nanoscratching by Atomic Force Microscope; Chapter 14. Study of the Morphology and the Tensile Mechanical Properties of Biaxially Oriented PET/PP Blends; Chapter 15. Improved Barrier and Mechanical Properties of Laminar Polymer Blends Chapter 16. Relative Magnetic Permeability of Injection Molded Composites as Affected by the Flow Induced Orientation of Ferromagnetic ParticlesChapter 17. Processing-Structure-Property Relations in PS/PE Blends: Compression Versus Injection Molding; Chapter 18. Polyetherimide Epoxy-Based Prepreg Systems with Variable Temperature Cure Capability; Chapter 19. CO<sub>2</sub>-Blown PETG Foams; Chapter 20. Tear Strength Enhancement Mechanisms in TPO Films; Chapter 21. Morphological Study of Fatigue Induced Damage in Semicrystalline Polymers Chapter 22. The Effect of Several Kinds of Oils on the Oil Resistance Behavior of Polystyrenic Thermoplastic VulcanizateChapter 23. Visualization of Polymer Melt Convergent Flows in Extrusion; Chapter 24. Evaluation of the Constrained Blister Test for Measurement of an Intrinsic Adhesion; Chapter 25. Fractal Analysis and Radiographic Inspection of Microwave Welded HDPE Bars; Chapter 26. Application of Thermography for the Optimization of the Blow Molding Process; Chapter 27. The Use of Video and the Development of Solids Conveying Theory Chapter 28. Microcellular PET Foams Produced by the Solid State Process

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## Sommario/riassunto

The broad collection of techniques gathered in this book help illustrate material/process/property relationships for a wide selection of materials and processes in the plastics industry. With the recent increases in computing power and scope, as well as advances in software engineering, imaging has already become a universal tool. Image processing and image analysis have become common expressions are widely recognized within the scientific community. The imaging techniques employed range from visible optical methods to scanning and transmission electron microscopy, x-ray, thermal wave

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