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Connectors; 3.8 Rigid Locating Features (or Locators) for Elastic Snap-Fit Assembly; 3.9 Joint and Attachment Feature Permanency; 3.10 Summary; References; 4 Elastic Integral Mechanical Attachments or Interlocks; 4.1 How Elastic Interlocks Work; 4.2 Sub-Classification of Elastic Interlocks; 4.3 Elastic Integral Snap-Fits Used in Assembly of Plastic Parts; 4.4 Design Analysis for Snap-Fits 4.5 Combining Assembly Motions for Snap-Fit Assembly Security4.6 Snap-Fit Feature Enhancements; 4.7 Hook-and-Loop Attachments; 4.8 Other Elastic Attachment Methods; References; 5 Plastic (Formed-In) Integral Mechanical Attachments or Interlocks; 5.1 How Plastic (Formed-In) Interlocks Work; 5.2 Sub-Classification of Plastic (Formed-In) Interlocks; 5.3 Setting and Staking; 5.4 Metal Stitching and Metal Clinching; 5.6 Crimping and Hemming; 5.7 Thermal Staking; 5.9 Summary; References; 6 Integral Mechanical Attachment Classification Revisited 6.1 Comparison of Methods: Relative Advantages and Disadvantages6.2 Classification of Integral Mechanical Attachment Methods; 6.3 Correlations Between Joint Materials and Attachment Methods; 6.4 Summary; 7 Metal Attachment Schemes and Attachments; 7.1 Properties of Metals That Facilitate Integral Mechanical Attachment; 7.2 Sheet-Metal Attachment Schemes and Attachments; 7.3 Casting Attachment Schemes and Attachments; 7.4 Extrusion Attachment Schemes and Attachments; 7.5 Forging Attachment Schemes and Attachments; 7.6 Machined Attachments; 7.7 Summary; References; Bibliography 8 Polymer Attachment Schemes and Attachments

Sommario/riassunto

Integral Mechanical Attachment, highlights on one of the world's oldest technologies and makes it new again. Think of buttons and toggles updated to innovative snaps, hooks, and interlocking industrial parts. Mechanical fasteners have been around as long as mankind, but manufacturers of late have been re-discovering their quick, efficient and fail proof advantages when using them as interlocking individual components as compared with such traditional means of joining materials like welding, soldering, gluing and using nuts bolts, rivets and other similar devices. For many years, it
