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2.6.2 Meshing of Rack Cutter with Work Piece, Basic Dimensions of Gear 2.6.3 Tooth Thickness at Arbitrary Circle; 2.6.4 Tip Circle Diameter; 2.6.5 Profile Boundary Point; Tooth Root Undercutting; 2.6.6 Effect of Profile Shift on Tooth Geometry; 2.6.7 Gear Control Measures; 2.6.7.1 Chordal Tooth Thickness on the Arbitrary Circle; 2.6.7.2 Constant Chord Tooth Thickness; 2.6.7.3 Span Measurement; 2.6.7.4 Dimension Over Balls; 2.7 Parameters of a Gear Pair; 2.7.1 Working Pressure Angle of a Gear Pair; 2.7.2 Centre Distance; 2.7.3 Gear Pairs With and Without Profile Shift
2.7.3.1 Gear Pairs Without Profile Shift 2.7.3.2 Gear Pairs with Profile Shift; 2.7.4 Contact Ratio; 2.7.5 Distinctive Points of Tooth Profile; 2.7.6 Kinematic Parameters of Toothing; 2.8 Basic Parameters of Gears Generated by the Fellows Method; 2.8.1 Pinion-Type Cutter; 2.8.2 Dimensions of Gears Cut by Pinion-Type Cutter; 2.8.3 Undercutting the Tooth Root; 2.8.4 Geometry of Internal Gear Toothing; 2.9 Interferences in Generating Processes and Involute Gear Meshing; 2.9.1 Interferences in Tooth Cutting; 2.9.1.1 Tooth Root Undercutting 2.9.1.2 Overcutting the Tooth Addendum (First Order Interference) 2.9.1.3 Overcutting the Tooth Tip Corner (Second Order Interference); 2.9.1.4 Radial Interference (Third Order Interference); 2.9.1.5 Null Fillet; 2.9.2 Interferences in Meshing the Gear Pair Teeth; 2.9.2.1 Gear Root Interference; 2.9.2.2 Interferences of Tooth Addendum; 2.9.2.3 Radial Interference; 2.10 Choosing Profile Shift Coefficients; 2.10.1 Choosing Profile Shift Coefficients by Means of Block-Contour Diagrams; 2.10.2 Choosing Profile Shift Coefficients by Means of Lines of Gear Pairs; 2.11 Helical Gears
2.11.1 Basic Considerations

| Sommario/riassunto | Understanding how gears are formed and how they interact or 'mesh' with each other is essential when designing equipment that uses gears or gear trains. The way in which gear teeth are formed and how they mesh is determined by their geometry and kinematics, which is the topic of this book. Gears and Gear Drives provides the reader with comprehensive coverage of gears and gear drives. Spur, helical, bevel, worm and planetary gears are all covered, with consideration given to their classification, geometry, kinematics, accuracy control, load capacity and manufacturing. Cylindric |