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Nota di contenuto	1. Coordinate transformation -- 2. Relative velocity -- 3. Centrodes, axodes, operating pitch surfaces -- 4. Planar curves -- 5. Surfaces -- 6. Conjugated surfaces and curves -- 7. Curvatures of surfaces and Curves -- 8. Mating surfaces: curvature relations, contact ellipse -- 9. Computerized simulation of meshing and contact -- 10. Spur involute gears -- 11. Internal involute gears -- 12. Noncircular gears -- 13. Cycloidal gearing -- 14. Involute helical gears with parallel axes -- 15. Modified involute gears -- 16. Involute Helical gears with crossed axes -- 17. New version of Novikov-Wildhaber helical gears -- 18. Face-gear drives -- 19. Worm-gear Drives with cylindrical worms -- 20. Double-enveloping worm-gear drives -- 21. Spiral bevel gears -- 22. Hypoid gear drives -- 23. Planetary gear trains -- 24. Generation of helicoids -- 25. Design of flyblades -- 26. Generation of surfaces by CNC machines -- 27. Overwire (Ball) measurement -- 28. Minimization

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Sommario/riassunto	This revised, expanded, edition covers the theory, design, geometry and manufacture of all types of gears and gear drives. This is an invaluable reference for designers, theoreticians, students, and manufacturers. This edition includes advances in gear theory, gear manufacturing, and computer simulation. Among the new topics are: 1. New geometry for modified spur and helical gears, face-gear drives, and cycloidal pumps. 2. New design approaches for one stage planetary gear trains and spiral bevel gear drives. 3. An enhanced approach for stress analysis of gear drives with FEM. 4. New methods of grinding face gear drives, generating double crowned pinions, and improved helical gear shaving. 5. Broad application of simulation of meshing and TCA. 6. New theories on the simulation of meshing for multi-body systems, detection of cases wherein the contact line on generating surfaces may have its own envelope, and detection and avoidance of singularities of generated surfaces.