Record Nr. UNINA9910254354203321 Autore Gross Dietmar **Titolo** Mechanics of Materials – Formulas and Problems [[electronic resource]] : Engineering Mechanics 2 / / by Dietmar Gross, Wolfgang Ehlers, Peter Wriggers, Jörg Schröder, Ralf Müller Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 2017 **ISBN** 3-662-53880-6 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (IX, 212 p. 448 illus.) Disciplina 620.11292 Soggetti Mechanical engineering Civil engineering Electrical engineering Mathematical physics Mechanical Engineering Civil Engineering Electrical Engineering Theoretical, Mathematical and Computational Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface -- Literature, Notation -- 1. Stress, Strain, Hooke's Law.- 2. Tension and Compression in Bars. - 3. Bending of Beams. - 4. Torsion. - 5. Energy Methods.- 6. Buckling of Bars.- 7. Hydrostatics. This book contains the most important formulas and more than 140 Sommario/riassunto completely solved problems from Mechanics of Materials and Hydrostatics. It provides engineering students material to improve their skills and helps to gain experience in solving engineering problems. Particular emphasis is placed on finding the solution path and formulating the basic equations. Topics include: - Stress - Strain -Hooke's Law - Tension and Compression in Bars - Bending of Beams -Torsion - Energy Methods - Buckling of Bars - Hydrostatics