1. Record Nr. UNINA9910254354403321 Autore Gross Dietmar **Titolo** Statics – Formulas and Problems [[electronic resource]]: Engineering Mechanics 1 / / by Dietmar Gross, Wolfgang Ehlers, Peter Wriggers, Jörg Schröder, Ralf Müller Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2017 ISBN 3-662-53854-7 Edizione [1st ed. 2017.] 1 online resource (IX, 236 p. 462 illus., 460 illus. in color.) Descrizione fisica Disciplina 620.103 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 -- Bibliography, Nomenclature -- 1 Equilibrium.- 2 Center of Gravity, Center of Mass, Centroids.- 3 Support Reactions.- 4 Trusses. - 5 Beams, Frames, Arches.- 6 Cables.- 7 Work and Potential Energy. - 8 Static and Kinetic Friction. - 9 Moments of Inertia. Sommario/riassunto This book contains the most important formulas and more than 160 completely solved problems from Statics. 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: - Equilibrium - Center of Gravity, Center of Mass, Centroids - Support Reactions - Trusses - Beams, Frames, Arches - Cables - Work and Potential Energy - Static and Kinetic Friction - Moments of Inertia.