Record Nr. UNISALENTO991003220809707536 Autore Hudson, John A. Titolo Engineering rock mechanics [e-book]: an introduction to the principles / John A. Hudson and John P. Harrison Tarrytown, N.Y.: Pergamon, 1997 Pubbl/distr/stampa 9780080438641 **ISBN** 0080438644 Descrizione fisica xii, 444 p.: ill.; 26 cm Altri autori (Persone) Harrison, John P. Disciplina 624.15132 Soggetti Rock mechanics Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (p. [393]-397) and index Preface -- Introduction -- Geological Setting -- Stress -- In situ Stress Nota di contenuto -- Strain -- Intact Rock -- Discontinuities -- Rock Masses --Permeability -- Anisotropy and Inhomogeneity -- Testing Techniques -- Rock Mass Classification -- Rock Dynamics and Time Dependent Aspects -- Rock Mechanics Interactions and Rock Engineering Systems (RES) -- Excavation Principles -- Stabilization Principles -- Surface Excavation Instability Mechanisms -- Design and Snalysis of Surface Excavations Underground Excavation Instability Mechanisms Design and Analysis of Underground Excavations References -- Appendices --Index Sommario/riassunto Engineering rock mechanics is the discipline used to design structures built in rock. These structures encompass building foundations, dams, slopes, shafts, tunnels, caverns, hydroelectric schemes, mines, radioactive waste repositories and geothermal energy projects: in short, any structure built on or in a rock mass. Despite the variety of projects that use rock engineering, the principles remain the same. Engineering Rock Mechanics clearly and systematically explains the key principles behind rock engineering. The book covers the basic rock mechanics principles; how to study the interactions between these principles and a

discussion on the fundamentals of excavation and support and the application of these in the design of surface and underground

structures. Engineering Rock Mechanics is recommended as an across-

the-board source of information for the benefit of anyone involved in rock mechanics and rock engineering