

1. Record Nr.	UNINA9910784529903321
Autore	Harrison John P
Titolo	Engineering rock mechanics [[electronic resource]] : an introduction to the principles // John P. Harrison and John A. Hudson
Pubbl/distr/stampa	Oxford, : Elsevier, c1997
ISBN	1-281-05874-2 9786611058746 0-08-053096-6
Descrizione fisica	1 online resource (457 p.)
Altri autori (Persone)	HudsonJohn (John A.)
Disciplina	624.15132
Soggetti	Rock mechanics Civil engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Engineering rock mechanics: an introduction to the principles; Copyright Page; Contents; Preface; Chapter 1. Introduction; Chapter 2. Geological setting; Chapter 3. Stress; Chapter 4. In situ stress; Chapter 5. Strain; Chapter 6. Intact rock; Chapter 7. Discontinuities; Chapter 8. Rock masses; Chapter 9. Permeability; Chapter 10. Anisotropy and inhomogeneity; Chapter 11. Testing techniques; Chapter 12. Rock mass classification; Chapter 13. Rock dynamics and time-dependent aspects; Chapter 14. Rock mechanics interactions and rock engineering systems (RES) Chapter 15. Excavation principlesChapter 16. Stabilization principles; Chapter 17. Surface excavation instability mechanisms; Chapter 18. Design and analysis of surface excavations; Chapter 19. Underground excavation instability mechanisms; Chapter 20. Design and analysis of underground excavations; References; Appendix A: Stress and strain analysis; Appendix B: Hemispherical projection; 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
