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Titolo	The combined finite-discrete element method / / Ante Munjiza
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Descrizione fisica	1 online resource (x, 333 pages)
Disciplina	620.1/123/015118
Soggetti	Deformations (Mechanics) - Mathematical models Finite element method
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 319-330) and index.
Nota di contenuto	Processing of contact interaction in the combined finite discrete element method -- Contact detection -- Deformability of discrete elements -- Temporal discretisation -- Sensitivity to initial conditions in combined finite-discrete element simulations -- Transition from continua to discontinua -- Fluid coupling in the combined finite-discrete element method -- Computational aspects of combined finite-discrete element simulations -- Implementation of some of the core combined finite-discrete element algorithms.
Sommario/riassunto	The combined finite discrete element method is a relatively new computational tool aimed at problems involving static and / or dynamic behaviour of systems involving a large number of solid deformable bodies. Such problems include fragmentation using explosives (e.g rock blasting), impacts, demolition (collapsing buildings), blast loads, digging and loading processes, and powder technology. The combined finite-discrete element method - a natural extension of both discrete

and finite element methods - allows researchers to model problems involving the deformability of either one solid body,
