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Nota di contenuto	The Combined Finite-Discrete Element Method; Contents; Preface; Acknowledgements; 1 Introduction; 1.1 General Formulation of Continuum Problems; 1.2 General Formulation of Discontinuum Problems; 1.3 A Typical Problem of Computational Mechanics of Discontinua; 1.4 Combined Continua-Discontinua Problems; 1.5 Transition from Continua to Discontinua; 1.6 The Combined Finite-Discrete Element Method; 1.7 Algorithmic and Computational Challenge of the Combined Finite-Discrete Element Method; 2 Processing of Contact Interaction in the Combined Finite Discrete Element Method; 2.1 Introduction
	2.2 The Penalty Function Method2.3 Potential Contact Force in 2D; 2.4 Discretisation of Contact Force in 2D; 2.5 Implementation Details for Discretised Contact Force in 2D; 2.6 Potential Contact Force in 3D; 2.6.1 Evaluation of contact force; 2.6.2 Computational aspects; 2.6.3 Physical interpretation of the penalty parameter; 2.6.4 Contact damping; 2.7 Alternative Implementation of the Potential Contact

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,