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Nota di contenuto	Preface -- Chapter 1 Introduction -- Chapter 2 State of the art -- Chapter 3 Rebalancing an assembly line with disruptions -- Chapter 4 Two-sided assembly line balancing under uncertain task time attributes -- Chapter 5 System reliability optimization under uncertain task time attributes -- Chapter 6 Assembly line balancing under task learning and uncertain demand -- Chapter 7 A joint assembly line balancing and lot-sizing problem under uncertain demand -- References.
Sommario/riassunto	This book introduces several mathematical models in assembly line balancing based on stochastic programming and develops exact and heuristic methods to solve them. An assembly line system is a manufacturing process in which parts are added in sequence from workstation to workstation until the final assembly is produced. In an assembly line balancing problem, tasks belonging to different product models are allocated to workstations according to their processing times and precedence relationships among tasks. It incorporates two features, uncertain task times, and demand volatility, separately and

simultaneously, into the conventional assembly line balancing model. A real-life case study related to the mask production during the COVID-19 pandemic is presented to illustrate the application of the proposed framework and methodology. The book is intended for graduate students who are interested in combinatorial optimizations in manufacturing with uncertain input.