Record Nr. UNINA9910583488603321 Automation in garment manufacturing / / edited by Rajkishore Nayak, **Titolo** Rajiv Padhye Pubbl/distr/stampa Duxford, England:,: Woodhead Publishing, an imprint of Elsevier,, 2018 ©2018 **ISBN** 0-08-101133-4 0-08-101211-X Descrizione fisica 1 online resource (428 pages): illustrations, tables The Textile Institute Book Series Collana Disciplina 677.028 Soggetti Textile industry - Automation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction to automation in garment manufacturing -- Automation versus modeling and simulation -- Automation in production of yarns, woven, and knitted fabrics -- Automation in fabric inspection --Artificial intelligence and its application in the apparel industry --Automation in spreading and cutting -- Automation in material handling -- Application of robotics in garment manufacturing --Automation in sewing technology -- 3D body scanning -- Computeraided design: garment designing and patternmaking -- Advancements in production planning and control -- Use of advanced tools and equipment in industrial engineering -- automation in quality monitoring of fabrics and garment seams -- Recent developments in the garment supply chain. Automation in Garment Manufacturing provides a systematic and Sommario/riassunto comprehensive insight into the multifaceted process of how technological improvements are transforming all aspects of garment manufacturing, allowing manufacturers to meet the growing demand for greater productivity, efficiency, and flexibility. The first chapter covers the role of automation in design and product development, including color matching, fabric inspection, 3D body scanning, computer-aided design and prototyping. Part II covers automation in

garment production, from handling, spreading and cutting, through to finishing and pressing techniques. The final chapters discuss advanced tools for assessing productivity in manufacturing and for logistics and supply-chain management. This book is a key resource for all those engaged in textile and apparel development and production, and is also ideal for academics engaged in research on textile science and technology.