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Collana	Advances in Intelligent Systems and Computing, , 2194-5365 ; ; 793
Disciplina	610.28
Soggetti	Manufactures Computer-aided engineering User interfaces (Computer systems) Human-computer interaction Engineering design Control engineering Robotics Automation Computer simulation Machines, Tools, Processes Computer-Aided Engineering (CAD, CAE) and Design User Interfaces and Human Computer Interaction Engineering Design Control, Robotics, Automation Computer Modelling
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## Nota di contenuto

Part I: Human Aspects of Advanced Manufacturing and Production Planning -- Analysis and transfer of human engineering skills for adaptive robotic additive manufacturing in the aerospace repair and overhaul industry -- Evaluation of order picking processes regarding the suitability of smart glasses-based assistance using Rasmussen's skills-rules-knowledge framework -- A test platform for the evaluation of augmented reality head mounted displays in industrial applications -- Sociotechnical design of industrial transport vehicle and its interaction with humans in manufacturing systems -- Human factor in maintenance management -- MPE- Mental Protective Equipment for a shared perception of occupational disease prevention -- Physical work intensity of in-plant milk run operator. Part II – case study -- Beyond imaging - Interactive tabletop system for tomographic data visualisation and analysis -- Part II: Human Factors in Complex and Large Scale Manufacturing Systems -- Addressing uncertainties in complex manufacturing environments: A multidisciplinary approach.

## Sommario/riassunto

This book discusses the latest advances in manufacturing and process control, with a special emphasis on digital manufacturing and intelligent technologies for manufacturing and industrial processes control. The human aspect of the developed technologies and products, their interaction with the users, as well as sustainability issues, are covered in detail. Development of new products using 3D printers, rapid prototyping systems, remote fabrication, and other advanced techniques, is described in detail, highlighting the state-of-the-art and current challenges. Other key topics include digital modeling systems and additive manufacturing, together with their applications in a number of fields, e.g in bioengineering/biomedicine, in the aerospace, maritime and military fields or for archeological and historical purposes, such as preserving structures, but not limited to this. The book is based on three AHFE 2018 affiliated conferences i.e. the AHFE 2018 International Conference on Advanced Production Management and Process Control, the AHFE 2018 International Conference on Human Aspects of Advanced Manufacturing, and the AHFE 2018 International Conference on Additive Manufacturing, Modeling Systems and 3D Prototyping, which were held on July 21-25, 2018, in Orlando, Florida, USA.