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Descrizione fisica	1 online resource (X, 167 p. 86 illus., 71 illus. in color.)
Collana	Lecture notes in mechanical engineering
Disciplina	670.42
Soggetti	Manufacturing processes Industrial engineering Production engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Micro-milling of Selective Laser Melted Stainless Steel -- Integrating machine scheduling and transportation resource allocation in a job shop: a simulation approach -- Toolpath optimization for 3-axis milling of thin-wall Aul components -- Energy efficient state control of machine tool Aul components: a multi-sleep control policy -- Micro-EDM machining of ZrB <sub>2</sub> -based ceramics reinforced Aul with SiC fibres or whiskers -- Air jet cooling applied to Wire Arc Additive Manufacturinga hybrid numerical-experimental investigation -- Evaluation of the shear properties of long and short fiber Aul composites using state-of-the art characterization techniques -- An approximate approach for the verification of process Aul plans with an application to reconfigurable pallets -- Study of Selective Laser Melting process parameters to Aul improve the obtainable roughness of AISi10Mg parts -- Surface modifications induced by roller burnishing of Aul Ti6Al4V under different cooling/lubrication conditions.
Sommario/riassunto	This book presents selected contributions on a wide range of scientific and technological areas covered by AITeM (the Italian Association of Manufacturing). It discusses the following topics: additive manufacturing, advanced and unconventional machining and processes, material removal processes, foundry and forming, tools and

machine tools, assembly/disassembly, joining materials and material properties, quality metrology and material testing, manufacturing systems engineering, sustainable manufacturing, smart manufacturing and cyber-physical systems, education in manufacturing and human factors, industrial applications. Written by young AITeM associates, the contributions reflect the multifaceted nature of the research in manufacturing, which takes advantage of emergent technologies and establishes interdisciplinary connections with various scientific and technological areas to move beyond simple product fabrication and develop a complex and highly interconnected value creation processes ecosystem pursuing high-value-added products to compete globally.

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