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Autore	Drossel Welf-Guntram
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Nota di contenuto	Part1.Manufacturing Processes and Cutting Tools -- 1.Design of a combination tool for drilling and deburring cross holes -- 2.Influence of coating interlayer and substrate on tool wear progression when turning C45 -- 3.A Framework for Real-time Chatter Monitoring and Deep Learning-based Stability Lobe Diagram Generation -- 4.On-Machine Flank Wear Analysis in Cutting Tools Using Artificial Intelligence -- 5.Wireless determination of mechanical loads during deep hole drilling -- 6.Inverse calculation of cryogenic convective heat transfer coefficient with numerical methods -- 7.Experimental and numerical characterisation of the solubility of a CO2 lubricant mixture for a cryogenic minimum quantity lubrication system -- 8.Influence of external forces on the detectability of the resonance frequency of ultrasonic vibration systems -- 9.Simulation and Experimental Analysis of Particle Dynamics in a Water Abrasive Fine Jet Mixing Chamber --

Part13.Production Management -- 68.Transformation needs adoption: A conceptual framework to develop technology implementation strategies -- 69.Key Performance Indicators For Data-Based Project Management – Transferability of Lean Methods To The Construction Industry -- 70.Data-Driven Demonstrator for Sustainable Production Through Remanufacturing -- 71.Concept for Synchronizing Technical System Models and Organizational Structures for Model-Based Systems Engineering -- 72.Supporting the resilience of communication systems in manufacturing by providing extrinsic resilience from production system entities -- 73.The Impact of Digital Transformation on Smart Manufacturing: A Survey Analysis -- 74.Development of a Multi-Method Analysis for Make-to-Order Manufacturers -- 75.Analysis of the Implementation Process for Subscription Models regarding Enablers for Sustainability.

Sommario/riassunto

This book contains all contributions to the congress, in which both detailed scientific investigations and technological innovations in the process chains of machining and forming are discussed as well as comprehensive, far-sighted overall views on the planning and control of production processes. These approaches are supplemented by more interdisciplinary cross-sectional topics such as robotics, control engineering, automation, materials technology, additive manufacturing and human-centered production. It is particularly striking that the main approaches presented aim to improve efficiency in production using data-driven methods such as machine learning and artificial intelligence. However, the use of measurement results to improve simulations is also frequently addressed. The book proceedings show that transformations can only succeed through the realization of both detailed technical improvements in production technologies and optimized production organization.