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Soggetti	Manufactures Measurement Measuring instruments Surfaces (Technology) Thin films Microtechnology Microelectromechanical systems Machines, Tools, Processes Measurement Science and Instrumentation Surfaces, Interfaces and Thin Film Microsystems and MEMS
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Nota di contenuto	Introduction of precision machines -- General manufacturing processes -- Precision turning -- Single point diamond turning -- Precision milling -- Precision grinding -- Manufacturing processes of metallic materials -- Manufacturing processes of brittle materials -- Manufacture of large-size components -- Manufacture of small-size components -- Control and measurement of surface and sub-surface damages -- High-speed grinding of advanced materials -- Polishing technologies and their applications in artificial implants -- Manufacture of precision rollers -- Ultra precision machining of polymeric materials -- Integrated manufacturing of ultra-precision freeform optics -- Ultra-smooth surface formation of polycrystalline copper by ultra-precision diamond cutting -- Manufacture of anti-reflection silicon

	microstructures by nanosecond pulsed laser micromachining -- Micro-nano fabrication technology -- The future of precision manufacturing technologies.
Sommario/riassunto	The aim of this handbook is to provide a comprehensive summary of integrated machining processes and technology for precision manufacturing of large-size and small-size components. It presents state-of-the-art of precision machining processes such as precision and single point diamond turning; precision milling, grinding and lapping/polishing, control and sensing technology; precision machining of ductile and brittle materials, measurement technology and integration of the machining processes for precision manufacturing. The information provided in the book will be of interest to industrial practitioners and researchers in the field of precision machining processes and technology. This volume is part of a multi-volume handbook series that covers a comprehensive range of scientific and technological matters in ‘Precision Manufacturing’, for more information please view this link- https://www.springer.com/series/15575.