

1. Record Nr.	UNINA9911001465103321
Titolo	Advanced Finishing Technologies for High Performance Manufacturing / / edited by Jiang Guo, Chunjin Wang, Nan Yu, Chi Fai Cheung
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9619-00-9
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (VIII, 502 p. 379 illus., 332 illus. in color.)
Collana	Springer Tracts in Mechanical Engineering, , 2195-9870
Disciplina	620.11
Soggetti	Materials Production engineering Thermodynamics Heat engineering Heat - Transmission Mass transfer Materials Engineering Mechanical Process Engineering Engineering Thermodynamics, Heat and Mass Transfer
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Bonnet Polishing Technology -- Double-sided Lapping -- Abrasive Belt Grinding -- Abrasive Flow Machining -- Magnetorheological Finishing.
Sommario/riassunto	This book comprehensively explores various facets of the polishing field, spanning from traditional techniques to the latest advancements in ultra-precision polishing methods. It provides an updated perspective on the current state of research, covering different ultra-precision polishing technologies, tool applications, process evolution, and future prospects. The content is structured into chapters contributed by subject matter experts worldwide, offering an authoritative overview of recent developments in ultra-precision polishing technology. The book addresses diverse levels of understanding, from foundational concepts to advanced applications. Part I focuses on finishing techniques based on polishing tools, while Part II explores fluid-assisted finishing methods. Part III discusses

high-energy beam finishing techniques, and Part IV introduces other emerging finishing approaches. Finally, Part V is dedicated to the applications and developmental trends of ultra-precision polishing technologies. Each part systematically presents a specific polishing technique or application, providing the reader with a step-by-step understanding of this complex and evolving field.

---