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Descrizione fisica	1 online resource (250 pages) : illustrations, photographs
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Soggetti	Aerospace engineering Astronautics Machinery Manufactures Aerospace Technology and Astronautics Machinery and Machine Elements Manufacturing, Machines, Tools, Processes
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Digital modeling for turbine blade -- Turbine blade investment casting die cavity design -- Design technology of blade investment casting die base -- Deformation simulation and die cavity optimization of turbine blade -- Turbine blade investment casting die manufacturing and prototyping -- Turbine blade investment casting experiment and measurement evaluation.
Sommario/riassunto	Focusing on the theory and techniques of digital design and manufacturing for turbine blade investment casting, this book systematically summarizes the advances in applications in this field. It describes advanced digital design theory and methods and provides practical technical references for investment casting die design and manufacturing. The theories, methods and cases presented here are largely derived from the author’s practical engineering experience and the research he and his team have carried out since the 1990s. It includes academic papers, technical reports and patent literature, and provides a valuable guide to engineers involved in the die-design

process. Given its comprehensive coverage, the book makes a significant contribution to investment-casting die design and aero-engine blade manufacturing, while at the same time promoting the development of aero-engine manufacturing technologies.