Surface Finishing Technology and Surface Engineering

Description: Selected, peer reviewed papers from the International Conference on Surface Finishing Technology & Surface Engineering (ICSFT2008), 20 – 21 September, 2008, Taiyuan, China

Enhancing the surface finish and integrity of engineered components is increasingly important; particularly for the parts used in electronic and optical devices and systems. Significant progress has been made, in recent years, in developing new and advanced surface-finishing technologies as well as acquiring a fundamental understanding of the surface finishing technologies in order to predict, control and optimise surface-finishing processes.

The aim of this special volume was to bring together the latest know-how of academic researchers and industrial engineers and present the latest developments and applications in advanced precision surface finishing and de-burring technologies.

The topics covered include: Modelling and simulation of super-finish surfacing processes and mechanisms, Advanced de-burring techniques and theories, Precision and super-precision grinding and finishing techniques for advanced materials, Advanced techniques/technologies and fundamental studies for enhancing component surface properties and characteristics, Super-finish surface topography, integrity and characterisation, Advanced abrasives and equipment for surface finishing processes.

This book therefore provides a valuable reference resource for researchers, in the fields of surface-finishing and de-burring technologies, who wish to understand better the underlying mechanisms and create new and practical technologies, systems and processes. It will also be particularly useful to practising engineers in precision manufacturing who are responsible for designing efficient and effective operations.


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