Preface

Contemporary manufacturing enterprises aim to deliver a great number of consumer products and systems through friendly and satisfying working environments for people who are involved in manufacturing services. Human-centered design factors, which strongly affect manufacturing processes, as well as the potential end users, are crucial for achieving continuous progress in this respect. Researchers around the world attempt to improve the quality of consumer products and working environments. This book presents the results of their work. We believe that such findings can either inspire or support others in the field of manufacturing to advance their designs and implement them into practice. Therefore, this book is addressed to both researchers and practitioners.

The papers presented in this book have been arranged into six sections.

I. Contemporary Technology Systems
II. World Class Management Systems
III. Digital and Collaborative Technology
IV. Human Factors and Ergonomics in Textile Manufacturing
V. Ergonomics for People with Disabilities
VI. Human Factors Engineering in Composite Manufacturing and Metal Works

The presented chapters depict the influence of worker experience and the technology used to improve work effectiveness. Next, the comparison of non-expert and expert work is studied to find patterns that can be used to improve the technique of performing different tasks by less skilled employees. The third section deals with outcomes ergonomics have on industrial quality and safety, while the fourth and final section of this book is focused on ergonomic design of future production systems.

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