

TOOL AND MANUFACTURING ENGINEERS HANDBOOK

DESK EDITION

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DESK EDITION

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PREFACE

This Desk Edition of the *Tool and Manufacturing Engineers Handbook* presents a unique collection of manufacturing information in one convenient source. In addition to three entirely new chapters (robotics, CAD/CAM and flexible manufacturing), this book contains selected information from the five volumes of the Fourth Edition of the TMEH. Those volumes are:

- Volume 1, *Machining*, published in 1983
- Volume 2, *Forming*, published in 1984
- Volume 3, *Materials, Finishing and Coating*, published in 1985
- Volume 4, *Quality Control and Assembly*, published in 1987
- Volume 5, *Manufacturing Management*, published in 1988.

The scope of this edition is multifaceted—authoritative manufacturing information for daily use by engineers, managers, consultants, and technicians, yet it also provides coverage of the fundamentals of manufacturing processes for study by the novice engineer or student. This blend of coverage has characterized the proven usefulness and reputation of SME Handbooks in previous editions (dating back to 1949) and continues in this Desk Edition to provide the basis for acceptance across all segments of manufacturing.

The reference material contained in this volume is the product of incalculable hours of unselfish contribution by hundreds of individuals and organizations who provided reference material for the five volumes of the Handbook. These individuals and organizations are listed at the beginning of this book. No written words of appreciation can sufficiently express the special thanks due to these many forward thinking professionals and their companies. But more importantly, their contributions will undoubtedly serve to advance the understanding of manufacturing by management throughout industry and will certainly help to spur major gains in competitiveness in the years ahead. It should be noted that company affiliations listed with each individual contributor are the contributor's affiliation at the time they donated their expertise to the development of the five volume set.

Further recognition is due to the members of the SME Reference Publications Committee for their expert guidance and support and recognition is due to the members of the Publications Development Department at SME for their efforts on this volume.

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