A TEXTBOOK
OF
PRODUCTION TECHNOLOGY
(MANUFACTURING PROCESSES)

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PREFACE TO THE EIGHTH EDITION

The printing of the eighth edition of the book has provided me with an opportunity to completely go through the text. Minor additions and improvements have been carried out wherever needed. All the figures have been redone on computer to make clear and sharp.

I am really thankful to the management and the editorial team of S.Chand & Company Pvt. Ltd., New Delhi for doing an excellent job in publishing the latest edition of the book.

Pointing out of errors and misprints in the text will be highly obliged and thankfully acknowledged. Any suggestions for further improvement of the book will be highly appreciated.

Dr. P.C. SHARMA

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PREFACE TO THE FIRST EDITION

The book ‘‘A Textbook of Production Engineering’’ by the author has been very popular with the readers, for the last fourteen years. The readers have been writing to the author to bring out a book exclusively dealing with manufacturing processes. The author feels very happy to bring out this book A Textbook of Production Technology to meet the long standing demand of the readers. It has been author’s intention to provide a broad-based introduction to a wide variety of manufacturing processes. The text is designed to be used by engineering (Mechanical, Production, Industrial and Aeronautical) students. The book will also be useful to students appearing in various professional and competitive examinations (AMIE, Engineering Services, Administrative Services, GATE, etc). The author hopes that practicing engineers too will find the book useful.

My sincere thanks are due to the publisher S. Chand & Company Ltd. for the excellent work done in publishing this book at a reasonable price, and for bringing out the book in a record time and such a nice format. I am also grateful to Managing Director, Shri Rajendra Kumar Gupta and Director, Shri Ravindra Kumar Gupta for showing personal interest.

Finally, I sincerely hope that the book will meet the needs of the readers. All the suggestions to improve the text of the book will always be welcomed.

P.C. SHARMA
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Production Technology (Manufacturing Processes)

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Production engineering is a combination of manufacturing technology, engineering sciences with management science. A production engineer typically has a wide knowledge of engineering practices and is aware of the management challenges related to production. The goal is to accomplish the production process in the smoothest, most-judicious and most-economic way.