



## Manufacturing Engineering, 1/e

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### About the Book

This book is designed to provide basic technical knowledge about tools, gadgets, instruments and other devices used during the manufacture of workpieces by machining. It also deals with the machining operations and their physical principles. It includes the manufacture of workpieces on the machine, with the measuring and testing of these parts with necessary calculations involved.

The book is intended for those who are directly occupied with machine tools, but particularly for those connected with the metal trade, who are, however, not supposed to know all details about the machining operations, but they should have working knowledge about machine tools, cutting tools, their design and performance.

Moreover the students entering polytechnics in mechanical engineering branch, whose field of activity predominantly comprises machine tools and appliances, must be well acquainted with the ways of manufacture.

This book mainly covers the theory of manufacture and not the description of the skill itself, as the skill can only be acquired in the workshop and practical experience.

More than 1000 line diagrams is the most important feature of this book.

### Salient Features

- ▶ The book is divided into two parts and comprises 21 chapters on tools, gadgets, instruments, and workpieces and so on.
- ▶ Imparts working knowledge of various types of tools used in manufacturing, and their design, performance and maintenance.
- ▶ Discusses various machining operations and manufacturing of workpieces in great detail.
- ▶ Has dedicated chapters on measuring tools and measurement.
- ▶ Profusely illustrated with labeled line diagrams for better understanding of the concepts.

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### **About the Author**

**K. Hiraniya Singh** :- had obtained his bachelor's degree in Mechanical Engineering from the then Mysore University. He was a fellow of The Indian Institution of Industrial Engineering. He was trained in Germany in reputed organizations like Bosch, Festo, and REFA Institute and had served Southern Railways with the responsibility for modifications and alteration of loco, carriage and wagon parts. He was responsible for designing, developing and executing curricula in Foremen Training Institute.

Dr K Hiraniya Singh had an experience of more than 30 years in teaching. He was an adjunct faculty of engineering colleges in Bangalore. He retired as a Joint Director Foremen Training Institute, Bangalore, a Government of India/Ministry of Labour, DGET.