ELEMENTARY BLUEPRINT READING FOR MACHINISTS

5th Edition

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DAVID L. TAYLOR

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Elementary Blueprint Reading for Machinists

David L. Taylor

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For more information contact
Delmar Learning
Executive Woods
5 Maxwell Drive, PO Box 8007,
Clifton Park, NY 12065-8007
Or find us on the World Wide Web at
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CONTENTS

PREFACE

The reading and interpretation of industrial drawings requires skill development. ELEMENTARY BLUEPRINT READING FOR MACHINISTS helps develop these skills and applies them to the machine trades and related areas.

This edition of ELEMENTARY BLUEPRINT READING FOR MACHINISTS reflects current practices in industry. The material has been organized and expanded to present a sequential learning experience. New information has been added to explain computer-aided design, new dimensioning practices, and assembly drawings. A list of abbreviations commonly used on drawings appears in the Appendix. Also, a section containing a review of fractions and decimals is included at the end of the text.

The text contains twenty-seven units of instruction and a comprehensive review. Each unit consists of instructional material, an industrial print, and assignment questions. Sketching assignments are also included in some of the units.

Instructional Material

New material is presented in a simple, easy to understand way and then applied to a print. Common shop terminology and applications are described. The related information serves as an aid to reading the print supplied in each unit. It may also be used as a resource for future reference.

Industrial Prints

Each unit contains an industrial print which must be read. These prints increase in reading difficulty in successive units of the text. The prints also incorporate elements of the instructional material learned in previous units.

Assignments

The assignment questions test the students' ability to interpret the blueprint. The various lines, views, dimensions, and notes that make up a blueprint must be understood. Each question examines the level of understanding achieved by the student after the instructional presentation.

Many of the questions require development of mathematical skills. The various dimensional location of lines, surfaces, holes, and other parts must be calculated. The student should review the section on fractions and decimals to answer these questions.

Sketching Assignments

Freehand sketches are quite common in machine trades work. The first step in the development of a design usually is a sketch of the desired part.

Some of the units include an assignment that requires the student to sketch an object. This provides an opportunity to apply principles learned in the instructional section of the unit. It also helps develop skill in sketching without the use of instruments.

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About the Author

David L. Taylor is currently an Assistant Principal at Bloomington High School North in Bloomington, Indiana. In addition to being a school administrator, Mr. Taylor is a former Journeyman Tool and Die Maker with more than twenty years' experience in vocational–technical training. He holds a Master of Science degree in Adult Education from Penn State University and a Bachelor of Science degree in Vocational–Technical Education from the State University of New York at Buffalo. Mr. Taylor has taught courses in machine trades, print reading, and design at Erie County BOCES, Lewis County BOCES, Jamestown Community College, and Ivy Tech State College. Mr. Taylor is the author of four blueprint reading textbooks published by Delmar Learning.