



# GEARS

## Industrial Gearing Training Course

REVISED EDITION

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## Instructions to Student

You can learn this subject . . . and it's not hard.

Even if you're not mechanically inclined, or if you were never good at math, or if you disliked science subjects in school . . . you can still learn from this course.

What you learn here will be yours forever. No one can take it from you. It will make you forever after a little more knowledgeable, a little more confident, a little more capable.

Taking this course can be fun . . . Don't rush yourself, and don't worry about getting a wrong answer on the self study questions.

Start at page 1 and work forward page by page. Take your time. Read **slowly** and carefully.

### **Speed is not helpful.**

Write answers to all self study questions in the space provided. If you don't know the answer, make your best guess. It's a good idea to cover the self study answers with a blank sheet of paper while you work on the questions. Don't peek at the answers until you've written down your best guess. If you have incorrect answers, look back in the text and re-study the part that gives the answer. You will need a pocket calculator for some questions.

The self study questions in each section are to help you learn, not to measure or prove how smart you are. One of the great teachers of ancient times, the Greek philosopher Socrates, taught by simply asking his pupils one question after another. Questions make you think, and thinking makes you learn. Furthermore, getting the wrong answer is as useful as being correct, provided you think through the answer yourself. When you finish each set of questions, look up the answers and figure out where you went wrong. Drawings or sketches can be done free-hand. Just be as neat and careful as you can.

The course is divided into sections for convenience, but you can schedule study time to suit yourself. You don't have to finish any certain number of pages at each sitting.

We would like to hear your questions, comments or criticisms about the course. Please let us know by mail, phone, e-mail or fax.

Thank you for using our course. We hope you will find it interesting, useful, enlightening, and fun.

## Instructions to Supervisor

You do not have to spend your valuable time teaching elementary subjects, definitions, trade practices, and basic methods.

This course will do it for you.

It is a beginners course for anyone wanting to become familiar with industrial gearing practices in the United States. It should be useful to sales persons, drafters, buyers, machinists, assemblers, supervisors, office workers, advertising managers and others. The course is for complete beginners in the gear industry. Others may profit from it, but it is not for advanced gear designers.

The course includes eight sections, a final test, and final test answers.

To learn from this course a student needs to know only a little high school math and be able to read carefully. The course requires very little supervision. A student should be able to work on his or her own.

Do not rush a student. Let him or her work slowly and carefully at a desk or table with good light, a pencil, eraser, scratch paper, a pocket calculator, and time enough to work slowly. Time can be scheduled as you wish. A student does not have to finish any certain number of pages at each sitting.

Final test answers are on separate pages. You can grade a student's final test yourself to measure what he's learned, or let him do it.

The self study questions in each section should be answered by the student as she proceeds through the course.

We would like to hear your questions, comments or criticisms about the course. Please let us know by mail, phone, e-mail or fax.

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