

# **HOW TO RUN A LATHE**

**SOUTH BEND LATHE, INC.**

## **PREFACE**

**O**NE of the great needs of industry today is well trained workmen who are skillful with their hands and also trained to think about their work, diagnose troubles and suggest improvements. No man can hope to succeed in any line of work unless he is willing to study it and increase his own ability in it.

It is the purpose of this book to aid the beginner or apprentice in the machine shop and the student in the school shop to secure a better understanding of the fundamentals of the operation of a modern Screw Cutting Engine Lathe. In illustrating and describing the fundamental operations of modern lathe practice, we have made an effort to show only the best and most practical methods of machine shop practice in use in modern industries in the United States.

We are indebted to so many manufacturers, engineers, authors, educators, mechanics and friends for assistance in the preparation of this book that it would be impossible to give them individual mention here. However, we wish to express our appreciation for the cooperation that has made this work possible.

### **55th Edition of "How to Run a Lathe"**

This 55th edition of the book "How to Run a Lathe" is printed in English. Other editions are printed in Spanish and Portuguese. The first edition, in English, was printed in 1907. Each succeeding edition has been revised and improved.

**SOUTH BEND LATHE, INC.**

# **How to Run a Lathe**

REVISED EDITION 55

## **The Care and Operation of A Screw-Cutting Lathe**

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## How to Become a Machinist

1. Keep your cutting tools sharp.
2. Look at your drawing carefully before starting your job.
3. Be sure your machine is set up right before starting the work.
4. Take your measurements accurately.
5. Keep your machine well oiled, clean and neat. Personal neatness will give you personality.
6. Take an interest in your job; don't feel that you are forced to work.
7. Learn the fundamentals of mechanical drawing.
8. Keep your belts tight and free from oil.
9. Take as heavy a cut as the machine and cutting tool will stand until you are near the finished size; then finish carefully and accurately.
10. Try to understand the mechanism of the machine you are operating.
11. Hold yourself responsible for the job you are working on.
12. Keep your eyes on the man ahead of you; you may be called on to take his place some day.
13. Have a place for everything, and keep everything in its place.
14. Read one or two of the technical magazines relating to your line of work.
15. If a boy learns a trade properly he becomes a first-class mechanic, but if he has ability he need not stop at that. Henry Ford, George Westinghouse and others got their start because they were mechanics.
16. If you have spoiled a job, admit your carelessness to your foreman, and don't offer any excuses.
17. Before starting to work on a lathe, roll up your sleeves and remove your necktie—safety pays.

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