


# Lathe and Drill Press Operation eLearning | Manual Machine Tool Skills

**Drill Press Operations - W19002-XX03XEN-E2**

Objective 1: Describe the Function and Operation of Reaming

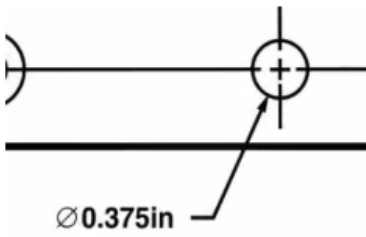
**Reamer Function**



Reaming is the **operation** that is used to machine a hole to a precise size.

A twist drill creates a hole that is slightly oversized and has a rough finish.

In manufacturing, it is sometimes necessary to have a hole that has a precise size and smooth sides.



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## eLearning Course: M19002

Amatrol's Machine Tools 1 Learning System's online training (M19002) includes band saw operation, drill press introduction and operations, manufacturing hand tools introduction, manual milling machine introduction, milling processes, manual lathe introduction, turning operations, and lathe operations. With the addition of the physical learning system, instructors will also require a manual milling machine, manual lathe, band saw, Machine Tools Workstation (15707), Hand Tool Package (94-MTHT-1), and Drill Press Raw Metal Materials Kit (94-RM6).

## Teach Manufacturing Tool Skills

### What is a Manufacturing Process?

Manufacturing is the process of changing materials into usable products at a location designed for that purpose. There are three major steps of manufacturing:

- **Obtain Natural Resources:** The first major step of the manufacturing process is to obtain natural resources. Natural resources include all the raw materials, such as plants, animals, and minerals, used to make products. Natural resources are obtained through a number of methods, including harvesting, drilling, and mining.
- **Produce Industrial Materials:** The second major step of the manufacturing process is to convert the raw materials into a form that can be used to manufacture a product. This form is called industrial materials, or standard stock. The conversion of raw materials into stock is called primary processing. Stock material is provided in many shapes and sizes, including rectangular, flat, round, and tubular.
- **Make Finished Products:** The third and final step of the manufacturing process is to convert the raw material into a finished product. This is called secondary processing, which can include many different types of operations, such as machining. Materials used in the secondary process of manufacturing cover a broad range. Each material has its own unique characteristics and properties.

## Interactive eLearning

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### Lathe and Drill Press Operation eLearning Curriculum Available

Amatrol's [unmatched multimedia](#) utilizes text, audio, and stunning 3D animations that engage learners in both theoretical knowledge and hands-on skills. This thorough, exceptionally detailed curriculum is built to begin with the basics and steadily advance to more complex concepts and skills. Through partnerships with key industry leaders and leading edge educators, Amatrol developed the right balance of knowledge and applied skills needed to train learners to work in their chosen field.

### Additional Info

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#### Requires:

- Computer ([see Computer Requirements](#))

#### Options:

- Machine Tools 1 Learning System (95-MP-1), plus following requirements:
  - Manual Milling Machine
  - Manual Lathe
  - Band Saw
  - Machine Tools Workstation (15707)
  - Hand Tool Package (94-MTHT-1)
  - Drill Press Raw Metal Materials Kit (94-RM6)

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#### Address

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