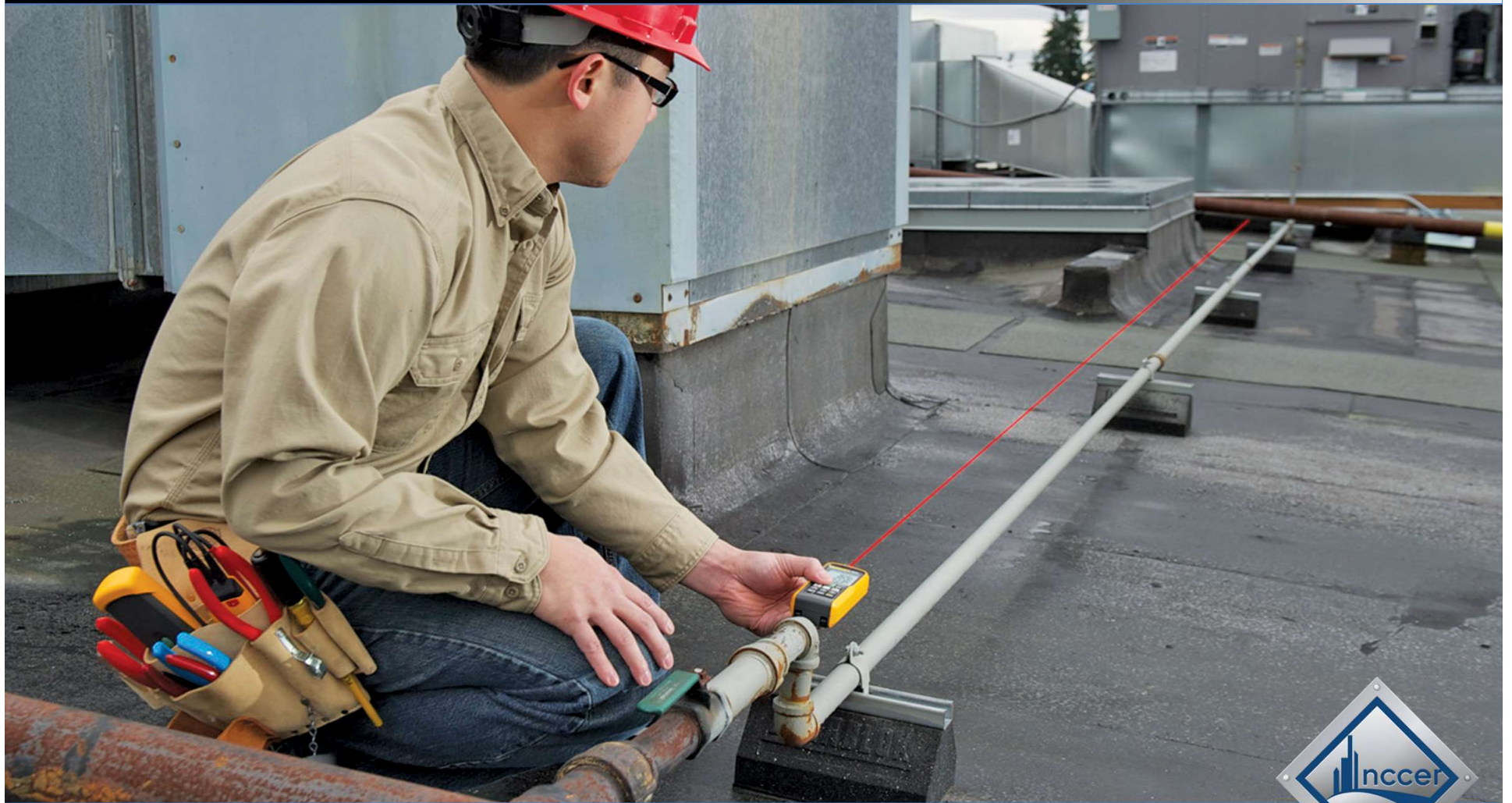


CORE CURRICULUM



Introduction to Hand Tools 00103-15



Session 1: Common Hand Tools



Introduction to Hand Tools 00103-15



Session One Objectives

When trainees have completed this session, they should be able to do the following:

1. Identify and explain how to use various types of hand tools.
 - a. Identify and explain how to use various types of hammers and demolition tools.
 - b. Identify and explain how to use various types of chisels and punches.
 - c. Identify and explain how to use various types of screwdrivers.
 - d. Identify and explain how to use various types of non-adjustable and adjustable wrenches.
 - e. Identify and explain how to use various types of socket and torque wrenches.
 - f. Identify and explain how to use various types of pliers and wire cutters.



Session One Objectives

When trainees have completed this session, they should be able to do the following:

2. Identify and describe how to use various types of measurement and layout tools.
 - a. Identify and explain how to use rules and other measuring tools.
 - b. Identify and explain how to use various types of levels and layout tools.



Session One Performance Tasks

1. Visually inspect the following tools to determine if they are safe to use:
 - Hammer or demolition tool
 - Chisel or punch
 - Screwdriver
 - Adjustable or non-adjustable wrench
 - Socket
 - Torque wrench
 - Pliers
 - Wire cutters
 - Measuring tool
 - Layout tool
 - Level



Session One Performance Tasks

2. Safely and properly use the following tools:

- Hammer or demolition tool
- Chisel or punch
- Screwdriver
- Adjustable or non-adjustable wrench
- Socket
- Torque wrench
- Pliers
- Wire cutters
- Measuring tool
- Layout tool
- Level



Sections 1.1.0 to 1.1.3 – Hammers

Hold the hammer with the end of the handle even with the lower edge of your palm. Keep your eye on the nail head!



00103-15_F01.EPS



Sections 1.1.0 to 1.1.3 – Hammers

Ball-peen hammers should not be used to hammer a nail, since the steel is tough but not as hard.



00103-15_F02.EPS

Sections 1.1.0 to 1.1.3 – Hammers

Sledgehammers are heavy and require a lot of effort to swing. Start with lighter blows until you achieve a rhythm.



DOUBLE-FACE LONG-HANDLED



DOUBLE-FACE SHORT-HANDLED



CROSSPEEN

00103-15_F03.EPS



Sections 1.2.1 to 1.2.3 – Chisels and Punches

Cold chisels are designed for working with metal. Many wood chisels are designed to be tapped with a mallet, but others are designed only for use by hand.



(A) COLD CHISELS



(B) WOOD CHISELS

00103-15_F05.EPS

Sections 1.2.1 to 1.2.3 – Chisels and Punches

Center and prick punches have different tip angles. Pin punches (not shown here) have straight and round shafts and are often used to drive connecting pins out.



CENTER PUNCH



PRICK PUNCH



TAPERED PUNCH

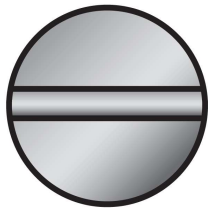
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Section 1.3.0 – Screwdrivers

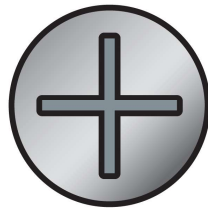
Each screw drive type has its own advantages. Some are popular for woodworking while others have more varied purposes.

1



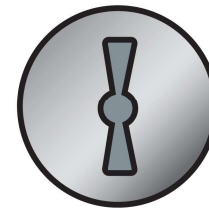
SLOTTED

2



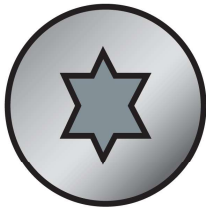
PHILLIPS

3



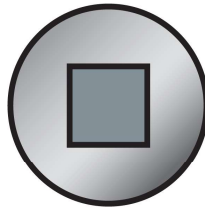
CLUTCH-DRIVE

4



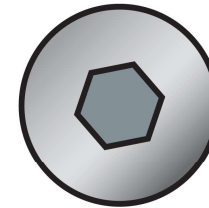
TORX®

5



ROBERTSON®

6



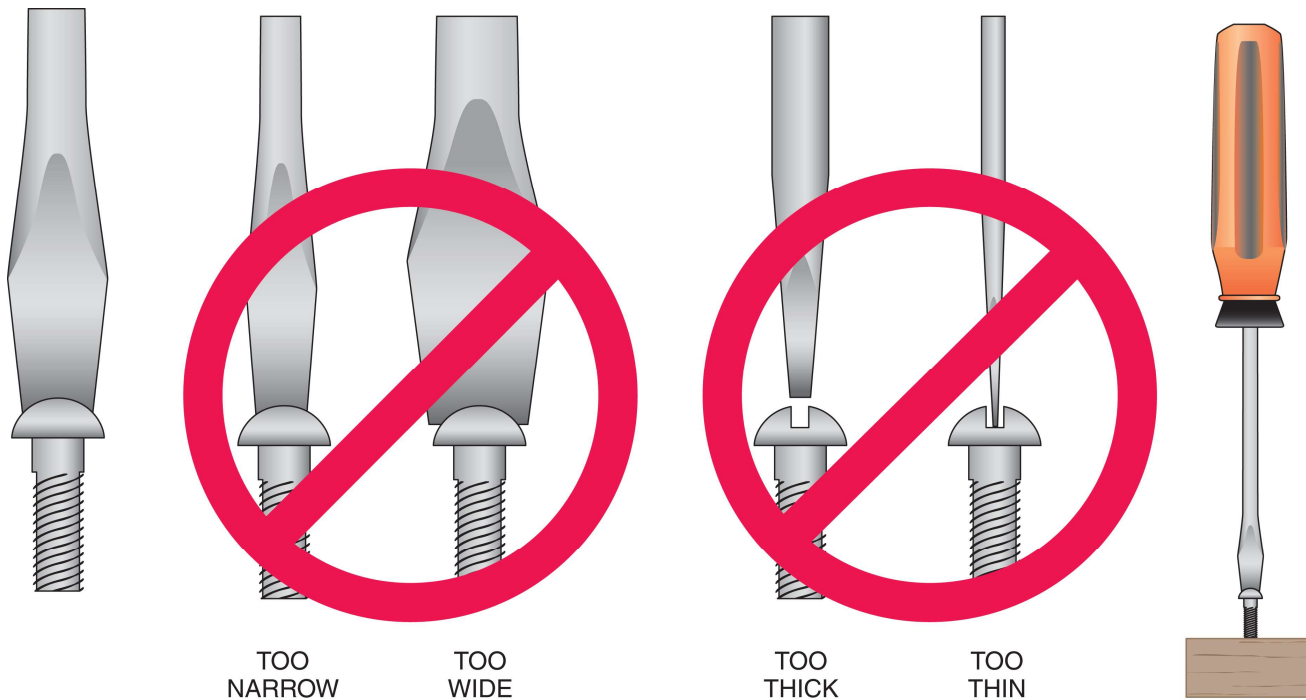
ALLEN

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Section 1.3.0 – Screwdrivers

A slotted screwdriver that does not fit the screw head is likely to result in damage to the screw and possibly the workpiece as well.



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