

# Hamilton-Senior lab-off-site learning packet day 1

Instructor Mark Hamilton

Date \_\_\_\_\_

Program/Class AEM Sr.

Period 5-8

## State Indicator/Competency:

**Unit 27: Power Saws**

**Competency 27.1: Differentiate between the various types of power saws.**

27.1.2 Identify blade principles and configurations for power saws.

27.1.3 Identify and install the proper saw blade.

## Instructional Objective(s):

1: students will explain what is different about a saw blade designed for heavier cutting 80% accuracy

2: students will describe the signs of a worn saw blade with 80% accuracy

## Materials:

Virtual machine shop

## Method of Instruction:

Research

## Activities:

Read through the hand out and answer the questions

## Closure:

Answer the questions on the last page

## Assessment:

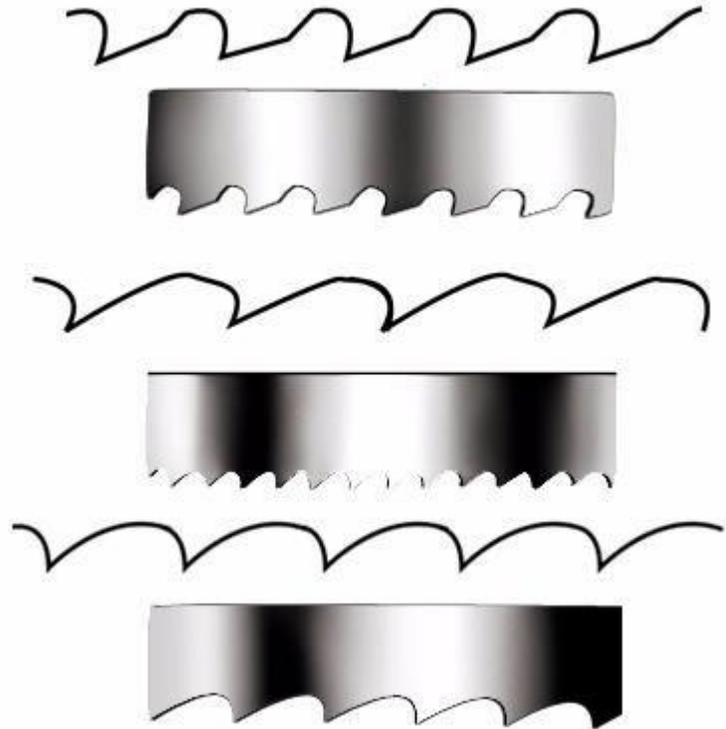
Answer sheet will be collected and is worth 10 points

## Horizontal Band Saw - 5: Cutting Action of the Blade

Some blades are designed for light duty while others are designed for heavier work. This design may show up in saw blade teeth with a strange look to them. Some of the teeth may appear to be straight, while alternating teeth may be slanted to the right or left. This increases the cutting action and longevity of the blade.

Similar to end mill action, the cutting edge of the blade comes in contact with the metal\*, and actually rips material away. Of course, this is on a microscopic level. Each blade tooth removes a small amount, and the next tooth will continue in the cutting action.

Saw blades will wear out, just as any other cutting tool. Examining the blade is critical before beginning any major cutting job. Signs of wear include shiny spots in the otherwise dark metal\* of the blade. The edge of the tooth will be rounded, and there may be broken teeth as well.



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Read through the hand out and answer the questions.

**Questions**

1. What looks different about a blade that is designed for heavier duty work?
2. How does angling some of the saw teeth right and left affect the saw blade?
3. How does a saw blade actually cut a piece of stock in half?
4. What should be done before starting any major cutting job?
5. What would be a sign that the blade is starting to wear out?