

Purpose: To cut an AMF bowling pin into discs so individual sections can be analyzed.

Materials:

- Bowling Pin to be cut
- Band Saw
- Bowling Pin Horizontal Cutting Jig

Procedure:

1. Place the bowling pin into the horizontal cutting jig.
2. Supply power to the band saw.
3. Set the jig so the labels for the head of the bowling pin, neck and ball zone are on the top. Cut the bowling pin on the band saw using the red lines as the designated cut lines to obtain the proper slices of the bowling pin. See figure 1 for a visual of the portions of a bowling pin in the cutting jig and the red lines that are used as cutting guides to obtain slices of the pin for analysis.

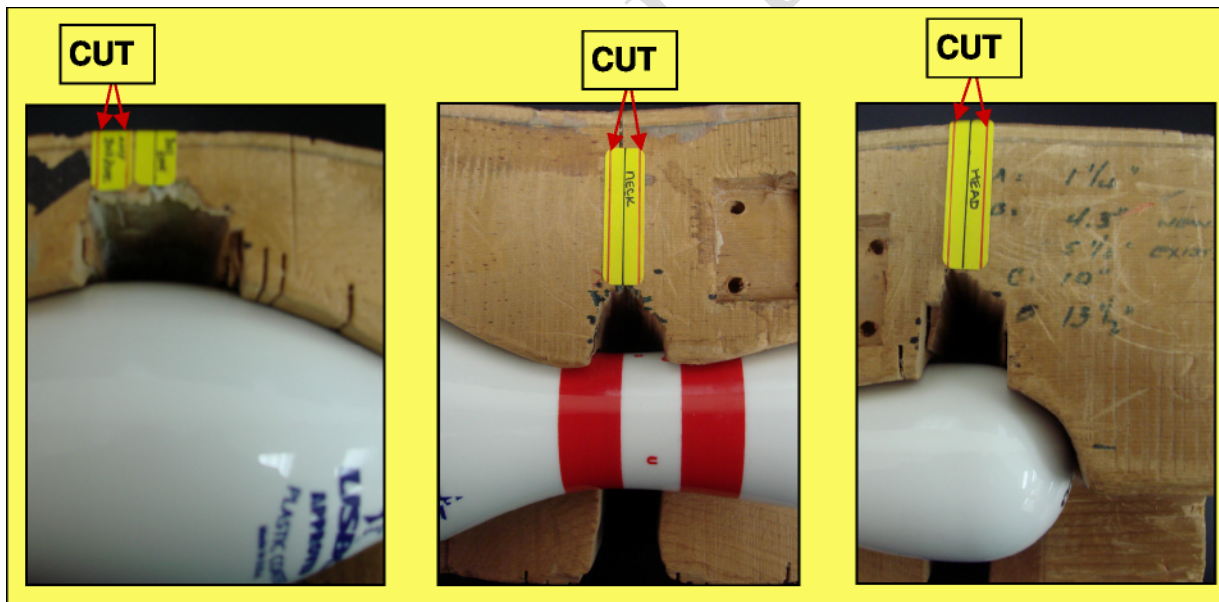


Figure 1 – The 3 slices that are cut using this side of the jig. The red lines indicate where the cuts are made to obtain slices of the bowling pin.

4. Turn the jig so the label for the base cut is facing upwards.
5. Make the cuts at the base of the bowling pin using the red lines on the label as guides for the cut lines. See figure 2 for a visual of the bowling pin in the cutting jig rotated so the base label is on top. The red guide lines for obtaining a slice of the bowling pin at the base are shown.

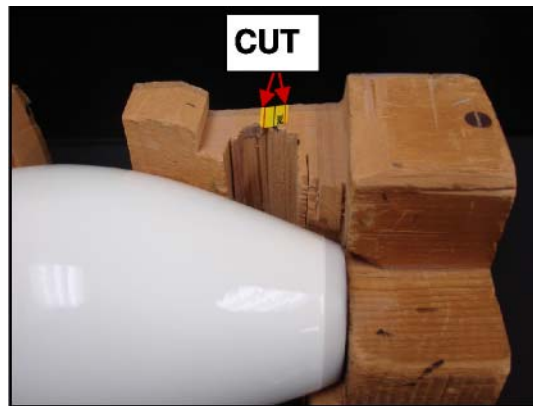


Figure 2 – bowling pin in cutting jig. The jig is oriented so the label for the base of the pin is upwards. The two red lines are indicated as where the cuts should be made to obtain the proper slice of the bowling pin.

6. Remove the cut pin segments and slices that were cut from the cutting jig.
7. Take a slice/disc of the bowling pin and place it flat on the band saw table. Make a small inlet cut into the edge of the slice deep enough to cut through the coating on the bowling pin slice. Repeat for the remaining slices/discs of the bowling pin
8. Power down the band saw.
9. Using the inlet cut made in Step 8, pry the strip of the bowling pin coating off the slice of the bowling pin. Be sure to know which slice of the bowling pin the coating strip belongs to.