Purpose: To determine the hardness of a bowling pin coating through the use of a durometer.

Materials:

- Bowling Pin to be tested
- Shore D-Scale Digital Durometer
- Scleroscope Test Stand
- SOP-PIN-13

Procedure:

1. Turn the knob on the right end of the Scleroscope jig to loosen the clamp and pull the spring-loaded right end of the jig to the right and place the bowling pin into the jig.

2. Turn the knob on the right end of the jig to tighten the clamp and secure the bowling pin in the jig.

3. Push the "On/Off" button on the digital durometer.

4. Hold the ribbed portion of the digital durometer under the digital display and orient the durometer so the display can be read properly.

5. Place the tip of the digital durometer (maintaining the same orientation of the durometer from step 4) on the ball zone of the bowling pin and push down and hold so the black collar of the durometer comes in contact with the bowling pin. Continue holding the durometer on the bowling pin until it beeps. For a picture of the location of the ball zone reference Figure 1 in SOP-PIN-13.

6. Record the reading from the digital display in the Shore D-scale.

7. Turn the bowling pin on the horizontal axis one tenth of the circumference of the bowling pin.

8. Repeat Steps 4-7 until a total of 10 hardness measurements have been taken at different points around the ball contact circumference of the bowling pin.