



Ball Hardness Check for USBC Masters at World Series of Bowling

Summary

As the National Governing Body for bowling, the United States Bowling Congress (USBC) is responsible for governing the rules and specifications of the sport. USBC conducted a ball hardness field test at the U.S. Open in February. The goal was to collect data on ball hardness and verify that players' urethane balls met USBC specifications. Results of the test are published on BOWL.com.

In order to continue its research, USBC will conduct a similar test in advance of the 2020 USBC Masters. To streamline the process, the test will take place at the 2020 World Series of Bowling at the South Point Bowling Plaza. This test will include reactive and urethane balls. USBC requests all balls except for plastic be tested. This includes balls already tested at the U.S. Open.

USBC Masters competitors who are not participating at the 2020 World Series of Bowling will have equipment tested in Reno, Nevada, ahead of the competition.

Test Overview

USBC Field Specifications for bowling ball hardness can be found in the USBC Equipment Specifications Manual.

Below are detailed steps of the testing procedure which will be used at the World Series of Bowling.

USBC Ball Check at World Series of Bowling Ball Hardness Check Process

Equipment Affected

1. All reactive resin, urethane, and composite balls will be tested. *This includes equipment tested at the U.S. Open.*

Inspection Sheet

1. Players will obtain a Ball Inspection Form from the Ball Counter located in the back of the Squad Room.
2. Players complete sheet providing Brand, Ball Name and Serial number.
3. USBC employee verifies information is correct and obtains player signature.
4. Balls are placed in secure room to be brought to appropriate temperature for testing.

Ball Hardness Check – All balls will be field tested in accordance with USBC field-test specifications for hardness. The test detailed below is copied from the manual:

“Ball is to be tested at room temperature (70-77 degrees Fahrenheit) with a clean surface, and in compliance with ASTM 2240-15, using a certified D-type durometer with test stand.

1. *A ball must be acclimated to the test environment before testing (may require several hours), and the ball surface temperature should be verified with an infrared temperature gauge.*
2. *Balls should be cleaned with isopropyl alcohol (rubbing alcohol) before testing.*
 - a. *The ball must have an average hardness from 10 readings of at least 68D. The difference between the field specification and the manufacturing specification is due to variation between durometers documented by both the tool manufacturer and ASTM.*
 - b. *A ball found to be outside of the field test specification could result in that individual ball being disqualified from that competition and may lead to a spot check.”*

For reference, a link to USBC Standard Operating Procedure for testing hardness of a bowling ball can be found [here](#):

If a ball passes the hardness check:

1. A ball which passes the hardness field check will have a mill hole drilled and an identifying mark for this test.
2. The competitor then will be notified by either email and/or text that his/her equipment is ready for pickup at the BBE counter located near the top of the escalator in the Bowling Plaza.
3. If a player has designated his/her balls to be loaded on transport, USBC personnel will load the equipment on the PBA transport trailer.

If a ball fails the hardness check:

1. If a ball fails the hardness check, the Senior Director of Tournament Programming shall be notified.
2. The Senior Director of Tournament Programming will verify the results were properly recorded.
3. The player will be notified the ball failed the initial test and offered the opportunity to watch a confirmation test.
4. The ball will be re-tested to confirm the initial results.
5. If the ball passes the re-test, it will be marked as stated above and returned to the competitor.
6. If the ball fails the re-test, it will not be permitted for use during the USBC Masters and may be indefinitely confiscated by USBC for additional review.

TIMELINE:

Tue., 3/10, 8:30 PM-10:30 PM – Competitors may bring their equipment to the check-in counter at the back of the squad room for testing. Testing will be conducted as needed for those leaving the next morning.

Wed., 3/11, 10:00 AM – Drop off counter opens in Squad room for bowlers to drop off equipment. BBE, located near the Bowling Plaza elevators, will be open for those competitors needing to pick up equipment.

Wed., 3/11, 10:30 PM – Drop-off counter and BBE close for the evening.

Thur., 3/12, 10:00 AM – Drop off counter opens in Squad room for bowlers to drop off equipment. BBE, located near the Bowling Plaza elevators, will be open for those competitors needing to pick up equipment.

Thur., 3/12, 10:30 PM – Drop-off counter and BBE close for the evening.

Fri., 3/13, 10:00 AM – Drop off counter opens in Squad room for bowlers to drop off equipment. BBE, located near the Bowling Plaza elevators, will be open for those competitors needing to pick up equipment.

1:00 PM – All equipment must have been submitted for testing.

Fri., 3/13, 10:30 PM – BBE closes for the evening.

Sat., 3/14, 9:00 – Noon – Balls can be picked up or will be loaded on transport.