



Big Ten Conference

2020 Baseball Bat Testing Protocol

GENERAL PRINCIPLES

- Big Ten Conference institutions will test bats prior to each conference series during the 2020 baseball season for the purpose of ensuring that legal equipment is used in competition.
- Coaches and administrators of Conference institutions are reminded that they are obligated by the NCAA Baseball Rules to play with legal equipment and to remove any illegal equipment from play.
- Barrel compression testing (BCT) will be conducted prior to each of the nine (9) Big Ten weekends during the 2020 conference regular season. Testing will occur prior to the first game of each series.
- Each institution is required to use the G4 SSL baseball bat testing machine for the 2020 Big Ten baseball season. A G4 SSL tester was provided to each school by the Big Ten prior to the 2018 season. More information on the tester is available at www.barrelcompression.com.

EQUIPMENT TO BE USED

The home team's machine is used for testing.

- If the home team does NOT have a working BCT machine but the visiting team does have a working BCT machine, the visiting team will travel with machine to the series and the visiting team's machine shall be used for testing.
- If neither the home team nor visiting team has a working BCT machine, the home team will make every attempt to borrow a machine.
- If neither team has a working BCT machine AND the home team cannot borrow a machine – the home team will notify Gil Grimes at the Big Ten office and the visiting team's head coach and baseball sport administrator no later than 48 hours prior to the first game of the series. In this instance, bat testing will not take place. However, institutions are reminded that all NCAA baseball playing rules (including playing with legal equipment) must be followed.

LOCATION AND TIME OF TESTING

- The home team shall designate the sport administrator, event manager or other administrative designee to oversee the administrative process of the testing (e.g., conducting and overseeing the testing and filling out any necessary documentation).
- The head coach (or one of the full-time assistant coaches or other staff member appointed by the head coach to represent the team) will be responsible for actually testing his team's bats (e.g., physically placing the bats in the machines). The home team's administrator, event manager, or other designee will serve as the observer and record the results.
- Both coaches (or appointed designee(s)) will bring all bats to the testing location, as well as their teams' stickers provided by the Big Ten.
- Bat testing must be conducted prior to the scheduled start time of the first game of the series.



Testing should take place at a time mutually agreed upon by the two institutions and may take place on the day prior to the first game of the series.

- Location of the testing will be determined by the home team and communicated via email to the visiting team's head coach or designee no later than 48 hours prior to the first game of the series.
- Umpires do not have to be present during testing but should be made aware of when/where testing will take place.
- Testing shall not be conducted in public view or near fans/media.

TESTING PROCEDURE

1. RING TEST

- A ring test will be conducted to verify the maximum barrel diameter. The bat must pass through a ring that is 1 inch long and of inside diameter of 2.658 inches.
- A testing ring has been provided to each school by the Big Ten.
- To test for barrel diameter, place the bat vertically on the ground, with the knob up. Place the ring over the knob, and let it fall.
- If the bat does not pass through the ring, the bat is surrendered and will not be returned for use.
- If the bat passes through the ring from gravity alone (not forcing), the diameter passes and it proceeds to barrel compression testing.

2. BARREL COMPRESSION TESTING

- A bat tester instruction manual can be found at the end of this document. It is critical that these instructions are followed closely to ensure accurate and consistent measurements. Also, for a video that provides instruction on using the bat testing unit, go to <http://barrelcompression.com/info%202.0.html> and click on "Baseball Bat Compression Test."
- On the G4 SSL fixture:
 - 1250 psi shall be the lowest passing score for metal bats.
 - 1000 psi shall be the lowest passing score for composite bats.
 - 800 psi shall be the lowest passing score for non-linear bats.

*The Rawlings Quatro model is currently the only BBCOR non-linear bat.
- At the time of the testing, each team should provide to the home team event manager its Big Ten Baseball Test Reporting Form with the first four columns already filled out. This will expedite the test recording process.
- Each bat will be tested approximately 6 inches from the end of the barrel. The bat will then be rotated 90 degrees and tested again. This constitutes one complete BC test. The highest score of the two measurements will represent the score for each complete BC test.



- Each bat will be tested a maximum of three times, until it receives two pass results or two fail results, whichever comes first.
- If after the first two tests:
 - the bat has two pass results, the bat receives the appropriate sticker and is ready to be used in competition;
 - the bat has two fails, the bat is considered unacceptable for play and must be surrendered and will not be returned for use;
 - the bat has one pass result and one fail result after the second test, the bat will be removed from the machine and inspected for cracks. If no cracks are found, the bat will be inserted into the machine and tested a third and final time.
 - if the bat has a second pass result, the bat will be identified as passed and the sticker affixed.
 - if the bat receives a second failed result, the bat will be deemed unacceptable and surrendered to the testing team.
- Bats passing both tests will receive a tamper-proof sticker to be placed on the taper of the bat so that it is easily visible.
- The opponent's sticker will be placed on bats that have passed (e.g., if Illinois is playing Purdue, the Illinois sticker is placed on the passing Purdue bat and the Purdue sticker is placed on the passing Illinois bat.)
- The visiting team shall always travel with its own stickers to be used during the testing. The home team is not responsible for stickers of the opposing teams.
- The stickers should be removed after the series has been completed.
- The Big Ten office will purchase each institution's stickers and ship to each baseball sport administrator prior to the start of Big Ten play.

REPORTING PROCEDURE

- The home team event manager (or administrative designee) will complete the Big Ten Baseball Bat Test Reporting Form. The form should be submitted via email no later than noon CT Monday after completion of bat testing for the series to Gil Grimes (ggrimes@bigten.org) at the B1G office.

PROCEDURES FOR FAILED BATS

- A bat that fails the BCT testing prior to a series will be deemed illegal and remain in the immediate possession of the home team's event manager until the end of the series.
- The home team's sport administrator, event manager or appointed administrative designee will return a visiting team's illegal bat to the visiting team head coach at the conclusion of the last game of the series.
- The home team's sport administrator will maintain possession of a home team's illegal bat.
- It is the responsibility of the head coach to give the failed bat to his/her baseball sport administrator upon the team's return to campus.
- All failed bats shall not be used in any subsequent game.



IMPORTANT: FIXTURE CALIBRATION

It is important to check the calibration of the bat testing fixture before the season and periodically during the season. To check calibration of the device, insert the red calibration cylinder (that came with the tester) just as you would a bat. Be sure to center the cylinder under the anvil. Preload to 0lbs as usual and pull the cam lever. Your compression should meet the tolerances engraved on the cylinder. If the device is not calibrated, contact the Big Ten office and/or the LV Sports customer service line.

For a video that provides instruction on checking the calibration of the bat testing fixture, go to

<http://barrelcompression.com/info%202.0.html> and click on “Compressing calibration cylinder.”