



NCAA BASEBALL BAT TESTING PROTOCOL

GENERAL PRINCIPLES

The NCAA Baseball Rules Committee will require bat barrel compression testing prior to each baseball series or single date of competition for Division I members beginning with the 2020 regular season and for Division II and III members beginning with the 2021 regular season. The purpose of this testing is to ensure that legal equipment is used in competition. Rule 4.4.c requires that coaches confirm that their team is playing with legal equipment.

BARREL COMPRESSION TESTING EQUIPMENT

Barrel compression testing equipment is required to conduct barrel compression testing. It is recommended that testing equipment be purchased from Bat Testing Solutions via www.barrelcompression.com prior to the 2020 regular season (Division I) or 2021 regular season (Divisions II and III).

The following should be purchased:

- G4 SSL Baseball Bat Compression Testing unit (\$1,350)
- Baseball bat ring (\$100)

LOCATION AND TIME OF TESTING

A. Single game, doubleheader or single opponent series.

- a. The location for barrel testing will be determined by the host and will be communicated to participating institution(s) no less than 24 hours prior to the scheduled start of competition.
- b. Testing should occur following each team's practice time or at an agreed upon time by mutual agreement of the participating schools or conference.
- c. Testing must be conducted with representatives from both teams and a site representative present.
- d. Coaches or team designee will bring all bats to the testing location.
- e. Testing should not be conducted in public view or near fans/media.

B. Tournament or multi-team event.

- a. The location for barrel testing will be determined by the host and will be communicated to participating institution(s) no less than 24 hours prior to the team's first competition.
- b. Testing should occur at an agreed upon time with the tournament host prior to the team's first competition.
 - Bat testing is valid through the conclusion of the event.
- c. Testing must be conducted by the host with the team representative present.
- d. Coaches or team designee will bring all bats to the testing location.
- e. Testing should not be conducted in public view or near fans/media.

BAT TESTING PROCEDURE

Bat testing consists of three parts. The first part is a visual inspection of the bat. The second part is a ring test to verify the maximum diameter and that the barrel is not misshapen. The third part is a barrel compression test to verify the compression level in two locations on the barrel in the process described below.

1. Visual Inspection of the Bat

- Ensure that the bat model appears on the [approved bat list](#)
- Ensure the bat does not have a predominantly white barrel.
- Ensure the bat does not have flat spots.
- Ensure the bat does not have audible rattle.
- Ensure the bat does not have cracked or loose knob or end caps and attachments. *(By NCAA rule, attachments are not permitted on the end cap or knob of the baseball bat.)*

2. Ring Test

- Place the bat end cap on the ground and place the bat ring over the knob letting it fall.
- If the ring passes over the bat from gravity alone (without force), the diameter passes.
- If the bat passes through the ring, it proceeds to barrel compression testing.
- If the ring does not pass over the bat, the bat is unacceptable for play and is surrendered for the duration of the game/series.

3. Barrel Compression Test Procedure

- **Calibrate fixture** - It is important to check the calibration of the bat testing fixture before testing occurs. To check the calibration of the device, insert the calibration cylinder (provided with the tester) just as you would a bat. Be sure to center the cylinder under the anvil. Turn the gauge until it reads "0 lbs." and pull the cam level. The compression should meet the tolerance engraved on the cylinder. If the device is not calibrated, contact the LV Sports customer service line with any questions.
- **Barrel compression test.**
 - Each bat will be tested approximately six (6) inches from the end of the barrel. The bat will then be rotated 90 degrees and tested again.
 - Bats will be tested a maximum of three times, until it receives two passing results or two failing results, whichever comes first.
 - If after tests:
 - a. The bat has two passing results, the bat will be considered approved for competition.
 - b. The bat has one passing result and one failing result, the bat will be removed from the machine and be visually inspected for cracks. If no cracks are found, the bat will be tested a third time for a final result.
 - c. The bat has two failing results, the bat will be considered unacceptable for play and is surrendered for the duration of the game/series.

- Bats passing both tests shall be identified as approved with the opposing team's, or tournament/event or conference's tamper proof sticker at the taper, the area at the bottom of the barrel, just above the handle.

Bats Exempt from Barrel Compression Testing

- **Mizuno Maxcor:** The Mizuno Maxcor model is exempt from compression testing.

Lowest Passing Barrel Compression Results

- **Metal bats:** 1250 lbs.
- **Composite bats:** 1000 lbs.
- **Non-linear*:** 800 lbs.

*The Rawlings Quatro and Rawlings Quatro Pro models are currently the only BBCOR non-linear bat.

Maximum Barrel Compression Results

- There is no maximum compression for metal and composite BBCOR baseball bats.

PROCEDURE FOR FAILED BATS

Bats that have two failing results or that have failed the ring test shall be surrendered to game management and be retained for the duration of the game or series for being unacceptable for play.

TESTING QUESTIONS

Member institutions and conferences should contact Ben Brownlee (bbrownlee@ncaa.org) regarding questions about the NCAA bat testing process (Rule 1.12.g).

CUSTOMER SERVICE

How to videos on how to calibrate the testing The Bat Testing Solutions staff can be reached at www.barrelcompression.com, and via email at G4battesters@gmail.com.

STICKERS

Bat stickers shall made of a destructible material, so that the stick is not transferrable from one bat to another. The NCAA uses [JB Graphics](#) to create destructible stickers for the postseason. Bats that pass the testing process shall be identified with the opposing team's sticker for the single game, doubleheader or single opponent series throughout the season. Bats that pass the testing process shall be identified with the tournament/event or conference's sticker at for tournament or multi-team events. The sticker shall remain visible during the contest, series or tournament.

The sticker shall be placed at the taper, the area at the bottom of the barrel, just above the handle.