

Bat Performance Definitions

BESR (Ball Exit Speed Ratio) — This was the longstanding test used to ensure that non-wood bats play similar to wood bats. It tests a bat's "exit speed," i.e. how fast the ball bounces off a composite or aluminum bat barrel. It has been phased out, because it failed to account for how bats would perform after they have been broken in (Composite bats typically improve with use).

BBCOR (Batted Ball Coefficient of Restitution) — This is the new, more-accurate test that is replacing BESR. Like BESR, it is used to ensure that aluminum and composite bats play similar to wood bats, but it also accounts for how bats perform after they've been broken in. That's because it includes the ABI, described below. The new BBCOR stamp looks like this:



ABI (Accelerated Break-In Test) — This is a test performed on bats to simulate heavy use. Composite bats perform better the more you use them, so as part of the BBCOR, the ABI ensures that even with heavy usage, composite bats perform similar to wood bats.

BPF (Bat Performance Factor) — Defined as the increase in the liveliness of a ball hitting a bat compared to throwing a ball against a solid wall. For example, a baseball bat with a BPF of 1.15 would rebound a ball 15% faster than a solid wall would). The new 1.15 BFP stamp looks like this:

