

Bowling ball science on National Public Radio

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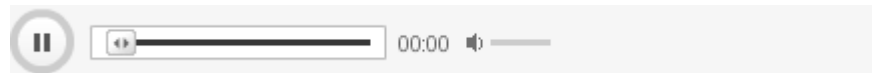
USBC Equipment Specifications and Certification

The USBC bowling ball motion study is the subject of a National Public Radio (NPR) story. Listen (and read) as **USBC Research Engineer Paul Ridenour** explains how the study is helping maintain bowling's integrity by striking a delicate balance between player skill and technology.

Two years ago, the United States Bowling Congress began a complex study of bowling ball motion. It studied the outsides of balls, the insides of balls, and even the temperature in the room to see what has the greatest impact on bowling success.

To do that, it had to eliminate a variety of variables — most important, the bowlers themselves.

Space-Age Balls Worry Bowling Purists



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Technology and sports smashing up against each other can be heard in each ping of an aluminum bat, thwack of a graphite golf club, and, yes, gavel of a congressional hearing investigating steroids and baseball.

Add to that list the sound of a newfangled space-age bowling ball, a ball so advanced that some bowling purists are worried the game is becoming more about equipment than skill.

So two years ago, the United States Bowling Congress began a complex study of bowling ball motion. It studied the outsides of balls, the insides of balls, and even the temperature in the room to see what has the greatest impact on bowling success.

To do that, it had to eliminate a variety of variables — most important, the bowlers themselves. Enter Harry, a 7-foot-tall ball-throwing machine that the USBC uses at its testing facility. (See video of Harry in action to the left.)

So what did the USBC find? Well, in general, the outside porousness of a ball has much more impact than anything on the inside, and the room temperature has barely any impact at all. As a result of the study, starting in April 2009, the USBC will not approve balls if their texture is greater 50 microinches. (Old balls will be grandfathered in.)

So, which ball is best? Well, as USBC research engineer Paul Ridenour explains, it depends on the type of lane you're bowling on. You see, bowling lanes are oiled in different patterns. Pro tournaments choose from The Shark, The Cheetah, The Viper, The Scorpion, and The Chameleon.

But in general, more porous balls absorb more oil, which makes them more effective. And can you tell how porous a ball is just by touching it? "Not really," says Ridenour. "I guess that's why they pay me the big bucks."