USBC Equipment Specifications and Certifications Committee adopts new specification
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USBC Equipment Specifications and Certification

**Raises the allowable lower-limit radius of gyration (RG) measurement**

The USBC Equipment Specifications and Certifications Committee has adopted a new specification for all bowling balls approved for competition on or after July 1, 2010. The new specification will raise the allowable lower-limit radius of gyration (RG) measurement to 2.460 inches up from 2.430 inches.

Raising the lower-limit RG specification will delay and weaken overall ball motion, thereby decreasing the amount of inherent aggressiveness bowling ball manufacturers can infuse into their bowling ball product lines.

This specification change, and others that have been recently adopted, which include Surface Roughness - Ra, lane surface hardness and lane conditioner viscosity, is aimed at reestablishing player skill as an equally if not more important factor than technology in determining bowling ball motion.

"Our sport incorporates a multitude of variables relating from the ball to the bowler to the lane and beyond. This new RG specification should be supported by league and tournament players alike because it is another step that USBC is taking to bring results back in line with player performance," USBC Technical Director Steve Kloempken said.

"We will continue addressing this issue and investigating possible specification changes until we get back to the point where player skill is as important as, if not more important than, technology in determining success on the lanes."
The realization that a new lower-limit RG specification was needed came about after USBC Equipment Specifications and Certifications team members conducted exhaustive analysis of the Ball Motion Study, a two-year, joint research venture conducted by USBC in cooperation with bowling ball manufacturers.

The study, (click here to read the full version), examined and ranked how 18 different variables affect bowling ball motion. The study was completed in March 2008.

Since that time, the USBC Equipment Specifications and Certifications Committee has evaluated the results and used the findings to establish and/or modify specifications limiting a bowling ball’s Surface Roughness - Ra and, now, lower-limit RG standard.

All bowling balls approved before the deadline will be grandfathered in under the current RG specifications, making them legal for future USBC-certified competition. The specification change will only apply to balls approved on or after July 1, 2010.

"One of the important things to consider is how research and this new specification benefits our members," Kloempken said. "Between 2005 and 2008, we gathered critical knowledge and data from the Ball Motion Study. Using that data to modify current specifications like this is critical to educate our members and uphold the credibility of the sport. It is all done in an ongoing effort to balance player skill and technology, and you as a USBC member are a part of it."