

USBC adopts Lane Hardness Specification

06/05/07

USBC Equipment Specifications and Certification



The **United States Bowling Congress** has added a new specification relating to the hardness of a synthetic lane surface. All new synthetic surfaces submitted to USBC for testing and approval must meet a **minimum Sward Hardness reading of 35**.

All samples not meeting a minimum average of 45 will require additional samples. All previously approved surfaces currently in play remain certified by USBC. A Gauge R & R study, a statistical method recommended by the American Society for Quality, was used to determine the minimum limits.

The specification, recently approved by the USBC Equipment Specifications and Certification Committee, goes into effect immediately.

This is the first time USBC or its predecessor organizations have developed a specification for the hardness of a lane surface.



"The Sward hardness test is a simple yet unique test that inherently includes things like surface friction and bowling ball footprint size in its' readings," said USBC Technical Director Neil Stremmel (pictured).

The specification is a result of a new testing procedure developed by the USBC Specifications and Certifications team. USBC research engineers use a **Gardner/Sward Hardness Rocker** to test lane samples to determine compliance with the new specification.

The instrument - a metal, wheel-shaped device that is four inches in diameter - rolls back and forth on a lane sample. The cycles are electronically determined and registered on a liquid crystal display monitor to obtain a hardness reading.