

EQUIPMENT SPECIFICATIONS AND CERTIFICATION COMMITTEE REPORT

***Purpose:** Based on USBC strategic planning, this committee shall set direction to maintain and protect the integrity and credibility of the sport of bowling.*

To uphold this purpose, the Equipment Specifications and Certification (ESC) Committee remains guided by the USBC Vision “to be the leading authority to the sport, servicing the needs of bowling.” The committee is responsible for reviewing and making final decisions regarding new items of equipment on which USBC approval is requested. The committee also is responsible for setting policies and procedures regarding equipment and specifications and for granting, withholding, suspending, withdrawing, or otherwise regulating bowling center certificates.

As the National Governing Body for the sport of bowling, USBC executes its mission to “provide benefits and services, resources and standards for the sport.” Translating these bold statements into reality means engaging a world-class ESC Team at the International Bowling Campus, USBC’s home in Arlington, Texas. Our team of research engineers and research technicians invest significant resources in a continual effort to make sure your bowling experience is as fair as it is enjoyable, and that bowling’s future is ensured through thoughtful research, planning, and delivery.

A significant part of the groundwork performed by the ES group is behind the scenes. In 2017, USBC:

- Tested and approved **347 bowling balls**
- Tested **36 additional bowling products** (cleaners, polishes, lane surfaces, ball plug, lane conditioners, lane decals, embedded warnings)
- Issued **33 bowling pin permits**
- Issued center certificates to date for **4,077 centers** comprising **85,572 lane beds**

Staying abreast of evolving and emerging technologies in our sport requires vigilance and nonstop research. Some highlights and notes detailing progress and changes across the past 12 months:

- **Lane Certification and Lane Inspection Program** – Following a comprehensive study of Lane Topography and the Lane Inspection Program, significant changes to both lane specifications and the lane certification process were announced. New lane installations, including overlays, will see a change in crown/depression and crosswise tilt measurements to +/- 0.030” from +/- 0.040”. The inspection process also will see an increase in measurements to five locations on each of the five synthetic panels found on most modern lanes. This process begins with baseline data collection in 2018-2019 and an official launch in the 2019-2020 season. Our team currently is working with an outside vendor to develop a new certification form (target availability April 2018) for local associations and has produced educational material to assist with the transition.
- **Oil Absorption Project** – As previously reported, lane oil absorption is one of the key factors affecting ball reaction. While this area is a facet of the Bowling Technology Study (below), it is a pioneering approach that merits independent mention. Sustainability and the integrity of our playing surface (and pinsetters, ball returns, etc.) relies on applying oil in amounts that will endure varying degrees of usage. A model of oil volume throughout history indicates an increase in the average volume each decade, from 8mL in 1980-1989 to 24mL in 2010-2017, and a forecast that this trend will continue. It is understood that modern ball coverstocks absorb oil and there are currently no existing specifications to control the absorption rates. However, in recent months, USBC has developed a repeatable and reproducible Oil Absorption Test verified by an

independent expert using Gauge Discrimination and Percent Contribution. Equipped with a Standard Operating Procedure including this new test, it is now possible to look toward establishing a specification in previously uncharted territory.

- **Bowling Technology Study** – More than two years of dedicated research comprise this examination of the impact modern bowling ball cores and coverstocks have on the playing environment – specifically, RG, Differential RG, balance holes, and oil absorption. This study includes technical analyses, results of independent surveys, focus groups and informal polls, and even details a four-day league simulation representing a real-world scenario impacted by various pieces of available ball technology. It is a tremendous product of hard work and the insights gained will serve to help demystify the technological nuances present in our sport to the general populace. Furthermore, the data derived will assist the ESC Committee in investigating and pursuing future specifications pertaining to one of the most complex and visible variables in bowling.

The full report can be found here: www.bowl.com/BowlingTechnologyStudy

On a personal note, I would like to offer a few words of gratitude to Chad Murphy, Danny Speranza, and the entire ESC staff for their passion and influential work on the incredibly complex science of bowling. Also, to the ESC Committee and USBC Board under Frank Wilkinson, who afford us the commitment and latitude to fulfill our committee charge with confidence.

And finally, to the USBC members, for entrusting us with governance of our sport as we continue to shape a sustainable future.

Respectfully submitted,

USBC Equipment Specifications and Certification Committee

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