

USBC Technology Contest Champion crowned

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USBC Equipment Specifications and Certification



Engineer submits winning design for machine that measures friction of bowling lanes

An Indiana engineer is the winner of a United States Bowling Congress technology contest to design a device that will measure the amount of friction on a bowling lane.

Testing the "coefficient of friction" of lane surfaces - the ratio of force between two objects - is important so that USBC can ensure that friction between bowling balls and the lane surface is within standards

for USBC-certified competition.

Gaetan Vich of Goshen, Ind. (pictured), an engineer at an automotive supply company in Elkhart, Ind., submitted the winning design as team "Science Friction" and took home the \$5,000 first prize.

The device Vich designed is called the "Lane Rover," a battery-powered, motorized carriage on four driving wheels. The force of friction is measured and calculated as the 13.5 inch-by-9.5 inch machine pulls a small sled over a wood or synthetic lane surface.

Vich said he became interested in entering the contest after reading an article on bowl.com and researching the specifications of bowling lanes.



"I am very excited, proud and happy," Vich said. "The idea of a contest was interesting. I wanted to see if I could come up with something good. I'm impressed with the extent of research in the sport of bowling."

"Mr. Vich's design was the most practical idea submitted," USBC Research Engineer Paul Ridenour (left) said. "We will look to incorporate elements of his design into a new method of testing coefficient of friction of bowling lanes or other related research and testing."

USBC's objective through the contest was to tap into top engineering minds to explore the possibility of finding an even more streamlined and efficient way to test friction of bowling lane surfaces.

"This is an important test that USBC currently performs on wood and synthetic lanes," USBC Technical Director Neil Stremmel (right) said. "The coefficient of friction is critical to ball motion on the lane. That is why we decided to issue a contest challenge to engineers and bowling technicians across the country. Sometimes you are just too close to a subject to be able to envision different ways to meet a design objective."



Eugene Lucas, a consulting mechanical design engineer with Hayward Engineering & Research Associates in Hayward, Calif., was runner-up in the competition and earned \$2,000.