



STRING PINSETTERS FREQUENTLY ASKED QUESTIONS

April 27, 2023

USBC has concluded a comprehensive research study on string pinsetters. The USBC Equipment Specifications Committee has approved the final specifications based on the research.

- USBC will certify string pinsetters and string pin bowling as an independent category of equipment effective August 1, 2023, for the 2023-2024 season.
- USBC will conduct additional bowler tests with the objective of determining whether string averages can be used the same as free fall or whether a conversion can be created.
- USBC will provide an update on the additional testing and potential for conversion in advance of the 2024-2025 season.

FAQs

1. Why is USBC certifying string pinsetters?

String pinsetter manufacturers requested USBC investigate a certification standard for these machines. For the past two years, the USBC equipment specifications staff has been conducting research into the use of string pinsetters and how they affect the sport of bowling.

At the end of 2021, USBC released its initial findings along with a list of preliminary specifications for the string pinsetter manufacturers to target with the goal of better aligning string pinsetters with free-fall pinsetters. The final specifications adjusted string length and some other items to improve scoring and split conversion rates compared to free fall.

2. How do string pinsetter machines affect scoring differently than free-fall pinsetters?

USBC's research data indicates strike percentage on string pinsetter bowling under the final specifications will be 7.1% less than in free fall. This could result in average differences as large as 10 pins or more. Additional testing is needed to understand the scoring differences more completely.

3. We have seen unusual spare conversions occur frequently with string pinsetters. How has this been addressed?

USBC's certification specification requires a string length of at least 54 inches. With this length, unusual spare conversion rates have been nearly eliminated.

4. Can string pinsetter averages be converted to a free-fall average?

No. Additional bowler tests are needed to better determine if a conversion between string pinsetter competition and free fall is reasonable.

AVERAGES

5. Will string pinsetter averages be listed on BOWL.com's Find a Member search?

Yes, averages established on string pinsetter machines will be displayed on USBC member's bowling records. The averages will be clearly marked as bowled on string pinsetters.



- 6. What average would a member use in a tournament conducted on string pinsetter machines?**

For members who have established an average on string pinsetter machines and on free-fall machines, the member would enter the tournament with the highest string pinsetter machine average. We would suggest you use either all string pinsetter averages or all free-fall averages and those who do not have such an average would bowl scratch.
- 7. In a tournament conducted on string pinsetters, can we allow those who have string pinsetter averages to use those averages, and those who do not to use averages established on free-fall machines?**

USBC rules do allow a tournament to utilize such an entering average rule. However, we would caution against this since USBC is still collecting data to determine how these averages compare to each other. We would suggest you use either all string pinsetter averages or all free-fall averages and those who do not have such an average would bowl scratch.
- 8. Can a tournament conducted on free-fall machines use averages established on string pinsetter machines?**

No. USBC is certifying the competition on string pinsetter machines and allowing averages to be established for use in other competitions utilizing string pinsetter machines. USBC is still collecting data to determine how these averages compare to those established with free-fall machines.
- 9. Our center converted over to string pin machines. Can we use last year's ending average in our league for an entering average this season?**

Yes. Using everyone's average established on free-fall machines for entering purposes is allowed.
- 10. Should leagues bowling in a center that recently converted to string pinsetter machines establish their averages the first night instead of using last season's average?**

The league should discuss this option at the organizational meeting. With the averages now being established using string pinsetter machines, the league could decide to start everyone out with an average established on the new machine.
- 11. Our center is converting to string pinsetter machines during our league season. What must we do in order to stay a certified league?**

In short, the league would need to recertify as a string pinsetter league and re-establish averages. To help leagues and associations with this transition, we will be publishing a document to be available prior to the 2023-2024 season.
- 12. Will centers with string pinsetter machines be certified like free-fall centers?**

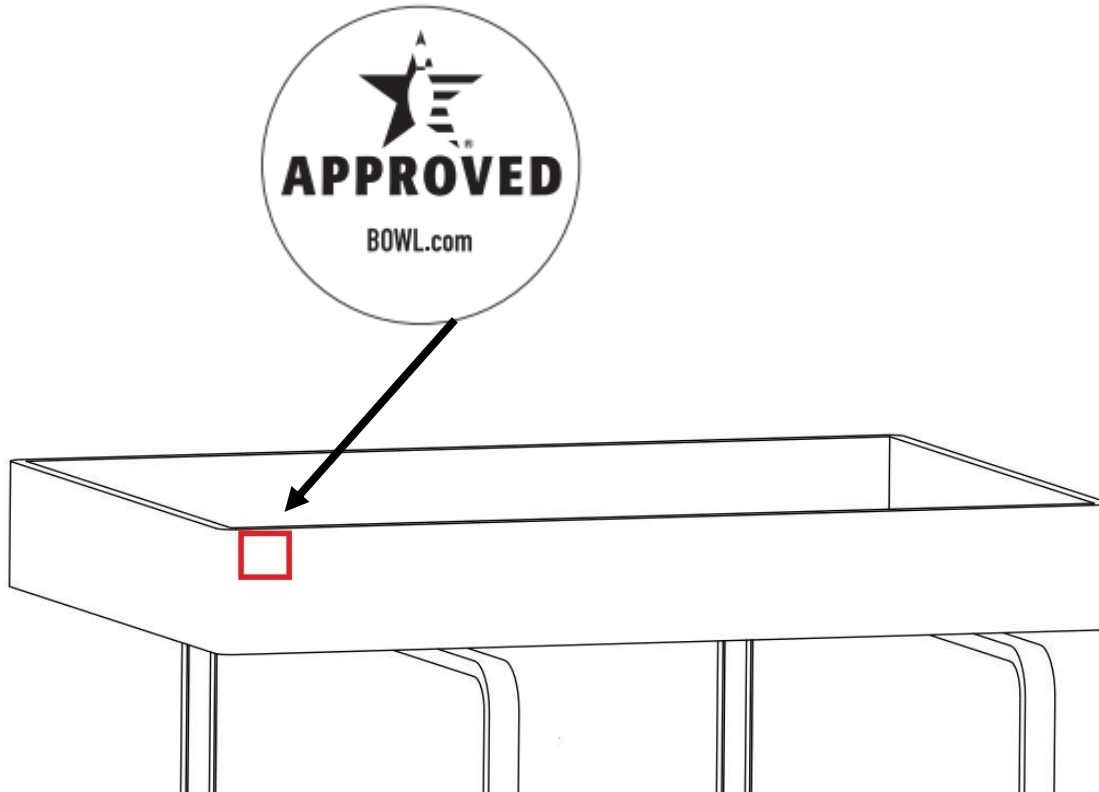
Yes. The lanes are required to meet all the same certification specifications as existing USBC certified lanes.

SPECIFICATION QUESTIONS

- 13. Some centers had string pinsetter machines installed a few years ago. Will these be certified?**

Not all older string pinsetter machines meet the new string pinsetter machine requirements. All centers must be inspected to determine if they pass certification requirements by the USBC Certification Department before being certified. Centers can contact the certification department (certifications@bowl.com) to arrange an inspection.

String pinsetter machines that meet the new specifications will have a USBC approval logo on the back of the machine on the 7 pin side to identify them as complying with the new specifications.



14. What pins are allowed to be used in string pinsetter machines?

All USBC approved pins can be used with string pinsetter machines. There are specifications for the hole size to attach the string. The goal of these specifications is to minimize the amount of wood removed to create the hole to maintain the original pins dynamic properties.

15. Is the pit depth still a specification for string pinsetter machines?

Yes. The pit depth used for free fall is still required for string pinsetter machines. Pit depth must be a minimum of 4-3/4" deep from the top of the pin deck to the pit floor or carpeting.

16. If a center has string pinsetter machines but has shorter lanes than the normal 60-foot requirement, can these be certified?

No. The lane and approach must meet the basic lane dimensions before being certified.

17. Free-fall pinsetters have a minimum 25-inch distance from the end of the lane to the ball stop. Is this the same for string pinsetter machines?

No. After two years of testing, it was determined the string pins can bounce off objects in the pit and the string can pull the pin back onto the pin deck to convert spares. Moving stationary objects in the pit further back reduced rebounding pins. Therefore, for string pinsetter machines the minimum distance from the end of the lane to the nearest point of the ball cushion shall be 35 inches. This measurement includes the width of the tail plank, which officially is not part of the lane. The ball cushion shall be located and constructed to deter pins from rebounding off the cushion and back onto the pin deck.

To further reduce rebounding pins from the pit, each automatic string pinsetting device shall be equipped with a curtain or other pin-arresting device. The pin curtain shall be located between 14-18 inches from the end of the lane (not including the tail plank). The pin curtain shall be located and constructed to deter pins from rebounding off the curtain and back onto the pin deck.

18. Some older string pinsetters have thin kickbacks on the ball door side and thicker kickbacks on the common kickback. Is this allowed?

No. Testing determined the pins did not rebound as hard off the thinner kickbacks. To maintain the same pin action on the 7 pin and 10 pin sides, USBC specifications require string pinsetters have the same thickness kickbacks with a 2-3/4" thickness.

19. It appears someone could modify the string material used in string pinsetters to help the pins bounce out of the pit to knock down more pins. Is this legal?

No. Only string material used in the original design can be used with certified string pinsetter machines. Additionally, the string length must be at least 54" long at all times.

PINFALL QUESTIONS/RULINGS

20. With free-fall bowling, when a pin moves off spot and stands up, the machine re-spots the pin where it stands. Will this be the same for string pinsetter machines?

This is one area where free fall and string pinsetter machines differ. Free-fall machines pick up the pin where it stands and then replaces it in the same location. String pinsetter machines only detect if a pin is standing or has fallen. If standing, the machine lifts the pin back into the stabilizing ring and replaces it on spot. It has no mechanism to place a pin back to its final standing location.

21. If a string is seen to interfere and aid during a pin falling, does it need to be re-spotted?

No. The pin is counted as legal pinfall if the string aids in the process of the pin falling.

22. If a pin slides off the pindeck and stands in the gutter, is it legal pinfall or not?

This is the same as with free-fall machines. If a pin leaves the pin deck, it is legal pinfall if it is still standing in the flat gutter. If the automatic scorer registers it as standing, a score correction is needed.

23. If a pin is in the act of falling and is at some angle to the normal vertical, upright direction of a standing pin, how is it scored?



With free-fall machines, the pin is counted as fallen if the pinsetter does not touch it. If the pinsetter touches the pin, it is counted as standing. Score corrections are made if it is scored incorrectly. With string pinsetter machines there is no pinsetter to contact the pin. The string just pulls the pin back up. If the string moves a certain distance, the string pinsetter machine will detect this and register the pin as fallen. If a pin is in the act of tilting, bowlers cannot definitively determine if it will fall or stand back up. So, for string pinsetter bowling, the automatic scoring will determine if the pin has fallen or should be re-spotted.

24. A pin slides off spot and remains in the upright position. The string pinsetter considered it legal because it detects pinfall by the movement of the string. Is the pin re-spotted or is it legal pinfall?

Just like with free-fall machines, standing pins on the pin deck are scored as standing. If this occurs on the first ball, the pin must be re-spotted. If this occurs on the second ball, the pinfall does not count. Score corrections must be made if necessary.

25. If a pin does not move, but is registered as falling, what happens?

Sometimes one string or pin might move the string of another pin far enough to register the pin as fallen, but it might not even move the pin. Once again, a standing pin is counted as standing. A score correction must be made if necessary.

26. If a pin rebounds out of the pit and knocks standing pins down, does that count as legal pinfall?

This is consistent with how it's scored with free-fall machines. Pins rebounding out of the pit and knocking standing pins over count as legal pinfall. While string machines must be designed to minimize pins bouncing out of the pit and back onto the pin deck, it can happen occasionally and counts as legal pinfall.

27. What USBC software will be updated for string pinsetters and when?

String pinsetter competition will be certified starting on August 1, 2023, for the new season. USBC associations with string pinsetter centers will see this option in Winlabs. BOWL.com will display string pinsetter averages. USBC certification forms will include options to identify certified string pinsetter centers.