Determining your IBSSN

International Bowling Skill Score Number

A way to compare bowlers worldwide?

In this article, I share with readers a newly conceived International Bowling Skill Score Number (IBSSN). Readers will have the opportunity to evaluate themselves with a skill-based bowling assessment outlined in this article. The IBSSN evaluation will provide readers with a specific method to determine their areas of strength and weakness as well as allow the international bowling community a systematic method to compare any two bowlers in the world with an International Bowling Skill Score Number.

I first conceived of such a rating system nearly five years ago. In 2003, I published an article in another bowling magazine outlining these initial ideas and asking readers the simple question, “How good are you?” In this article, I proposed the creation of a bowler rating system to enable bowlers and coaches to complete a more accurate evaluation of bowler’s skill level as well as enable comparisons between bowlers. In my opinion, a bowler rating system would offer the international bowling community a more accurate comparison of individual skill. I argued then and I argue now, averages in isolation are not a good indication of ability or a vehicle to offer an adequate comparison of bowlers.

The genesis for a revision of the bowler rating system emerges from a recent visit to The International Tennis Federation (ITF) website to see a relatively new initiative, the International Tennis Number concept. Specifically, the ITF developed the ITN, in 2004, to assess individual players around the world and assign each with a unique number based on
their current skill set. This idea was similar to what I had envisioned in 2003. The International Tennis Number is derived from an on-court assessment conducted by a trained assessor measures hitting depth, volleying, accuracy, serve and mobility. Each of these assessed skills is viewed as critical for a player to succeed at the elite level. Most importantly, this is a way for a tennis coach or player to compare a player/themselves to any other player in the world, at their level of a higher level. As the International Tennis Federation articulates:

The ITN is an international tennis number that represents a player’s general level of play. In time it is hoped that every tennis player worldwide will have an ITN. To facilitate the rating of tennis players the ITF have developed a Description of Standards and an objective On Court Assessment both of which can be used to rate tennis players in the absence of competition results.

This is truly a global initiative with ITN assessors in 109 countries. And, on the ITN site’s online database, a graphic representation of a player’s skills in each of the evaluated areas is shown or the option for several players’ data to appear simultaneously can be chosen. Users can see the data of any player in the database, allowing comparisons with those in the same age-group or those at the top level.

Can you imagine comparing your Bowling Skills Score Number with the number for Norm Duke or Pete Weber? Or, think about the possibility of a youth bowler whose high aspirations are comparing herself with a player on Junior Team USA? This would instantly offer an unbiased assessment of ability leading to desire to improve in areas of weakness.

Developing the skill domains of the International Bowler Skill Score Number

In 2000, the World Tenpin Bowling Association’s Technical Committee defined what characterized the best bowler. From this committee, they defined a skilled bowler as one who possesses versatility, accuracy, power, repeatability and knowledge.

Using this definition, I categorized the assessment into the following four domains: accuracy, versatility, re-
peatability and power. Each domain has two to four skill sets, for a total of 10 measurable areas of a bowler’s skill. These are consistent with the WTBA definition of a skilled bowler and technology tools are available to assess bowlers in these areas.

**Accuracy (40 Points)**
- Target Accuracy, 15 Feet
- Pocket Percentage
- Single-Pin Spare Conversion %
- Multiple-Pin Spare Conversion %

**Versatility (20 Points)**
- How quickly to hit the Pocket
- Lane Adjustment to Pocket

**Repeatability (20 Points)**
- Ball Speed Consistency/variance
- Entry Angle into pocket

**Power (20 Points)**
- Ball Speed at Release
- Rev Rate

**Assessing the International Bowling Skill Score Number**

With today’s available technology solutions, it is rather easy to collect data to conduct such an evaluation. In conceptualizing the IBSSN, I utilized Computer Aided Tracking System data domains to help define a performance point rubric. Most importantly, the C.A.T.S. data set is large enough to be statistically significant. I used the actual C.A.T.S. data to determine performance points in the assessment rubric.

The assessment data points of a bowler’s IBSSN can be done at a location with C.A.T.S. or locally with BowlersMAP and DigiTrax together. With DigiTrax, a bowler or coach can determine the following: launch speed, entry angle and the board at the arrows. In addition, Bowlers-MAP can measure rev rate. So, with these two programs, at a local site, a bowler’s IBSSN can be assessed.

In addition to the data collected with technology solutions, I added several skills that could be assessed visually by a coach, assessor or player. These include pocket percentage, single-pin spare conversion percentage and multiple-pin conversion percentage.

Are you ready to determine your IBSSN? First and foremost, the assessment should be conducted on two lane conditions, short and long, that have a 1-to-1 ratio: 34 feet and 45 feet. For the IBSSN assessment, you will need three pairs. First, your will need a warmup pair, with the short pattern on one lane and the long pattern on the other. This would be used for the 10-minute warm-up session. Then, you will need one pair for the assessment of skills on the short pattern and one pair for evaluation of skills on the long pattern. The bowler should warmup for 5 minutes on each pattern.

Here are the evaluation points assigned to specific performance levels. After you complete the assessment of each of the bowling skill sets, determine your performance number for that area. A score sheet and performance chart is available below to record your performance level.

**Accuracy domain**

**Target accuracy.** The average accuracy, at 15 feet, for 20 shots (10 on each pattern). Throw 10 shots on each pattern. Calculate the average difference in the target actually hit at the arrows. Then, collect the points that correspond with this value.

**Pocket percentage.** The pocket percentage of 20 shots. Throw 10 shots on both the short oil pattern and the long oil pattern. Calculate the overall pocket percentage and collect the points corresponding with this value.
**Single-pin spare conversion percentage.** The overall spare conversion percentage for single-pin spares. Throw two sets of the following spares in order: 2 pin, 3 pin, 4 pin, 5 pin, 6 pin, 7 pin, 8 pin, 9 pin, 10 pin. You will shoot each of these spares on both patterns. Calculate the overall conversion percentage.

**Multiple pin spare percentage.** The overall spare conversion percentage for multiple-pin spares. Shoot 2 sets each of the following combinations, one on the short pattern and one on the long: 4-7, 6-10, 3-6-10, 2-4-7, 2-8, 3-9, 3-6-9-10, 2-4-7-8, 2-4-5, 3-5-6

**Versatility domain**

**How quickly to the pocket?** How many shots on each pattern does it take to hit the pocket? When you are throwing your initial 10 shots on each pattern, how many throws does it take to hit the pocket?

**Lane adjustment to pocket.** After throwing your first 10 shots on each pattern, you will then move 3-boards with your feet and attempt to hit the pocket. How quickly does it take to hit the pocket after making an adjustment? After attempting to hit the pocket, with the 3-board move, you will adjust 5 more boards inward with your feet and attempt to hit the pocket again. So, you will have 4 sets of lane adjustment data (2 sets on the short and 2 sets on the long). How many shots, on average, for both patterns, does it take to hit the pocket? This will show your versatility of release.

**Repeatability domain**

**Entry angle into the pocket.** The angle in which the ball enters the pocket. Calculate your average entry angle of the 20 shots thrown (10 on the short and 10 on the long).

**Ball speed consistency.** The consistency of ball speed as measured by all of the throws. This is determined by calculating the range of ball speeds over your 10 shots on each pattern. Calculate the ball speed consistency by averaging the range on both the short and long oil.
Power domain

Ball speed at release. The ball speed measured at the point of release. This will be the average ball speed as measured in 20 shots (10 on each pattern).

Rev rate at release. The actual rev rate applied at the point of release. This is the average rev rate, at release, for 20 shots (10 on short and 10 on long)

International Bowling Skill Score Number Assessment Score Card

<table>
<thead>
<tr>
<th>Power</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
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<tr>
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</table>

After you have completed your assessment, you can then chart your scores on the graphic version of your International Bowling Skill Score Number. (see IBSSN Graph, above)

A better method

The IBSSN will offer coaches and players a more accurate method of determining strengths and weaknesses. And, most importantly, the IBSSN will provide a consistent international method to compare any player in the world. When you know what areas are preventing you from becoming a better player, you will focus more practice time in these areas.

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