

### Introduction

An Umpire's kit is as individual as the person who owns it. However, there are a number of basic items of equipment that should be present in every kit; these are often referred to as First Choice equipment. The EBUA has always prescribed to the principle of using "first choice" equipment as defined by World Bowls. Additional gadgets, spare measures and odds and ends will be collected over time and this is why no two kits are identical. Basic kits are available to purchase from reputable suppliers and are a good starting block for new Umpires or for clubs to own.

As we are all aware there are several different models of measuring equipment available on the market and being used by officials in the UK and overseas.

World Bowls do not "approve" or "endorse" measuring equipment. If an item complies with the Laws of the Sport, then it is for the Member National Authorities (MNAs) to approve the types of measuring equipment for carrying out umpire duties as stated in Law 54.9

The manufacturer, Bowlsline, market their measures "as approved by World Bowls". In its guidance of October 2020, the World Bowls Laws Committee stated, "The World Bowls Laws Committee does not need to give permission for new measuring devices (each MNA has this authority), but the LC will comment if they do not comply with the Laws of the Sport."

#### Laser Measures

In recent times models of Laser measure have appeared on the market. There has been a great deal of discussion about the use of Lasers and these have now been included in the EBUA Officiating Manual as an option. However, there are significant differences in the quality and tolerances between models. Documentation on this can be found on the World Bowls website.

The most accurate laser measure is the Bowlsline model, and this is the one recommended for use by EBUA umpires.

We appreciate that these models are expensive, and this reflects their accuracy.

### **Box Measures**

A new model of box measure has appeared on the market. The Bowlsline String measure is, by design, a box measure and so would fit into the description of box measure as first choice equipment.

However, it should be noted there is a design that incorporates an "L" plate attached to the string. In our opinion that presents several significant limitations to its use when determining close measures compared to a string with a pointer and we therefore strongly recommend that the "L" plate be replaced with a pointer.

The Bowlsline String measure with a pointer is the only approved version of this model to be used by EBUA officials.

Law 23.5 provides the flexibility required to enable an umpire to determine which type of flexible or string measure to use 'wherever' possible.

Due to the design of this box measure, there is a belief that it may be used for conducting measures between objects on the rink and objects in the ditch as the Box can be placed against the jack and also the bowl. It is our firm belief that box measures **should not** be used when a bowl or a jack are in the ditch. Therefore, only a long string measure (peg measure) should be used for such scenarios.

# EBUA Equipment

The following pages outline the essential items of equipment to have in your umpire and marking kit. There is also a list of alternative equipment that may be used including the Laser measure

### The Umpires' Kit

### **Box String Measure**

There are many different models on the market and you should use the measure with which you feel most comfortable. Metal Tapes can be used but are not ideal. We recommend a String Measure with a pointer such as the one shown. These are suitable for distances of between 20 cm and 3 metres. It is worth keeping two measures in your kit in case you need a spare.



### **Callipers**

Spring callipers are available in a range of sizes but the most suitable sizes for Umpires kits are 20 to 30 cm (8 to 12 inch) versions. Ensure that you obtain the internal versions. Good quality engineer's callipers will last a long time and are worth the extra investment. They can be used for measuring distances of 1 cm to 30 cm. Keep two or three different sizes.



Avoid using the small callipers attached to a String or Tape measure, as they are difficult to control.

# Wedges

Wedges can be purchased from Bowls suppliers, made from off cuts of wood or made from Erasers. Rubber wedges have better holding power especially on indoor carpets. Aim to keep at least 4 wedges in your kit but you can never have too many. A set of 4 small round rubber wedges together with a pair of jack wedges are available as a kit and are excellent for awkward spaces.



# 30 metre tape

A nylon or metal long tape is essential for measuring rinks and jack lengths etc. A retractable 30 metre metal tape is commercially available and is one of the most popular types. A nylon version is ideal in wet weather as it will not rust.



# **Long String**

A simple string measure is cheap and effective for distances up to 5 metres. A chalk plumb line, similar to the ones shown, can be purchased and the string substituted by fishing tracer or other non-stretch cord. A string of at least 40 metres will double up as a boundary line if needed and will cope with the longest measure you are likely to encounter.



### Set Square

A combination square containing a small level, as in the photo; will be ideal for the awkward occasions when jack or bowls are in the ditch. A Carpenter's Set Square will be sufficient for most kits.



### **Feeler Gauges**

A small set of feeler gauges will be sufficient for a basic Umpires Kit. Remember that the largest width you can measure with feeler gauges must be greater than the smallest width you can measure with your callipers. It is worth investing in a good engineering set and looking after them.



# White Strips

Pieces of white card or plastic approximately 2 cm x 15 cm will be ideal for sliding under very close bowls before commencing a feeler gauge or close calliper measure.

### Chalk

Always carry some chalk for checking Bowls and for marking touchers during singles. A chalk puffer is recommended but be aware that some indoor clubs do not allow their use.



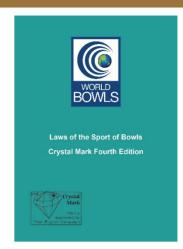
# Pen & Notepad

Pen and paper are essential for making notes, recording times etc.

# Laws of the Sport and Competition Rules

Always carry your Law book in your case and don't be frightened to use it to answer questions. You are not expected to learn all the Laws of the Sport "parrot fashion" and it would be more embarrassing to quote a Law incorrectly than to refer to the book.

Also carry copies of the local competition rules; the current National Handbook is often a good reference.



### The Markers' Kit

As a Marker in a game of singles you will need some basic equipment. The following are the items that you should carry as a Marker:

# **Box String Measure**

Carry a small box string measure like the one shown in the photo. Don't forget that the players have the right to measure any shots and it will be useful if you have a measure they can use if needed.



## Wedges

Always carry wedges when marking. You may be asked to secure any bowls that are leaning, and you will need to wedge any bowls before you measure. It is also helpful to wedge bowls for the Umpire before he is called.



### Chalk

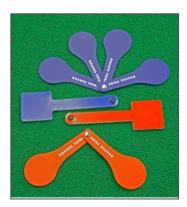
A chalk puffer is highly recommended for marking touchers to avoid contact with a bowl.

#### Card Holder & Pen

To keep the scorecard neatly, you may wish to carry a scorecard holder. Keep them securely in a pocket. Keep a pen and a spare just in case. It is also a good idea to have a pencil as a spare and in case it rains.

# Lollipops

You may be required to use Shot indicators or Lollipops, and although it is perhaps not essential it is a good idea to acquire red and white sets of your own.



#### Coin & Watch

Keep a coin in your pocket for the toss at the start of the game and wear a wrist Watch with a second hand or a digital second counter.

# **Alternative Equipment**

A range of different equipment items is used locally and in different countries. These are often termed Second Choice equipment.

### **Boundary Scope**

A boundary scope is a rifle sight mounted on a stand that is placed behind the boundary peg. It can be operated by one person and is quick and accurate.

This equipment is suitable for determining whether a bowl or the jack is "in" or "out" of bounds. The bowl or jack may be on the green or in the ditch.



### Mirrors and Squares

Mirrors and squares are used together. There are many and varied types of both but all have the same general principles. Some mirrors are very poor quality. A good mirror would have a very fine line etched on its back surface to avoid a line reflection. The mirror should also be long enough to stand in the ditch and reach the top of the bank or the boundary marker.



# **Telescopic Measure**

These small expandable, pen like, measures are ideal for keeping in your pocket. However, they are difficult to master and fiddly to use. The downside to these is that they have no fixed object resting on the green and rely on a steady hand for stability.



# Long Tape

Tapes such as this can be used to measure bowls or jacks in the ditch. They have a base that can be pegged to the green, a locking device to clamp the tape firm and a screw adjuster at the end of the tape.



#### **Laser Measures**

The laser measure may be used as an alternative to the box measure, Due to a variation in tolerances among laser measure models and as they do not measure directly between the nearest points of the jack and a bowl, there is a recommended minimum distance for their use of 300 mm.

The maximum distance for using a laser measure can vary, depending on the ambient lighting conditions, the measuring range of the laser beam, and the reflectivity of the target. For example it is unlikely that a commercially available measure will be powerful enough to be able to measure a minimum jack length or determine a line bowl or jack.

There are now several models of available laser measures for bowlers. Each model has a unique design and instructions on their use. Laser measures should be used with a degree of caution. All laser models display metric units to three decimal places (i.e. 1 mm), but their technical specifications indicate various levels of typical measuring accuracy, ranging between +/-1 mm and +/-3 mm.

Another limitation of any laser measure is that it can only be used when the jack and all bowls are on the green, and nothing is in the ditch. The laws state that any measurement involving the jack or a bowl in the ditch must be carried out using a flexible or string measure whenever possible.



