#### **EXPLANATION STRINGLAB TEST LIST.**

Hereby an explanation of the different values in the stringing test list

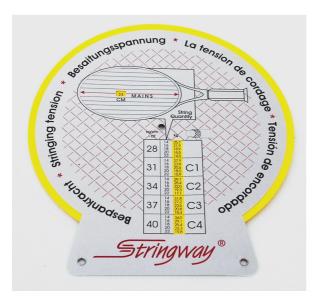
### Temp and humidity.

Synthetic strings are sensitive for temperature and more for humidity. When stiffness values are judged it is important to reckon with this sensitivity.

#### Tension for mains and crosses.

It is important for the minimum stress in the racquet to choose the right difference between the tensions for the mains and the crosses.

It is the intention to create a Tension Advisor for badminton that shows the relation between stiffness and stringing tensions for different types of string.



# Freq en stringing tension.

There are smartphone-apps which can measure the natural frequency of the string bed and even calculate the string-bed-stiffness when the size of the string area and the number of strings is entered into the system.

It would be nice to find a relation between these frequency measurements and the measured SBS with the Stringlab, so that users of the apps can translate their test result into kg/cm SBS.

#### First tension loss.

The Stringlab can measure the relaxation of the string bed immediately after stringing, so that the stringers knows the loss of tension that can be expected from every string. The principle of this test is the following:

- The tension in the string bed is raised above the stringing tension when the Stringlab test is done. This generates remaining elongation of the string at the higher tension and because the string stretches the tension and the SBS go down.

The test is done as follows:

- "Zero" the display in the starting position of the lever.
- Switch the lever to the end position and immidiately read the value and enter it in the column "start", the SBS falls now.
- Read the SBS value when it has become stable and enter it in the column "end".

The Excel sheet will calculate the loss of tension now.

The higher the loss the faster the string will lose tension during play.

# Stiffness after stringing.

Enter the SBS directly after stringing and 5 hrs later in these columns.

# Stiffness after playing.

It is interesting to know how much tension the different string loose during play. Enter the SBS after 2, 5 and 10 hrs play in these columns if the player wants to cooperate with this.

# Bending stiffness of the racquet.

The playability of a racquet depends on the SBS of the string bed and bending stiffness of the shaft. As extra information the stiffness of the frame in kg/cm can be entered in this column, when the stringer has the RS frame of the system.

# Racquet specs.

The relation between SBS and tensions depends on the size of the string area and the number of strings. To find a relation for badminton between SBS and stringing tensions we need the size of the string area and the number of strings. L is the biggest length and B (for width in Dutch) the biggest width.

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