

Segmented Turning (The Cliff Walsh System)

Mount the base on the lathe and flatten the surface. Turn a 1mm deep recess of a diameter that will not interfere with the first row of segments.

Use a flattening stick to ensure flatness.

Put a shallow groove into the face, into the wood that will be waste. This will assist with the setout for the segments.

Mark equally-spaced positions on this groove that correspond with the number of segments to be used.

Use a fine tipped pen to connect the positions, with the lines meeting at the centre. Use black on light coloured wood, white on dark wood.

Glue one segment into position, with the edges adjacent to the lines. If you are going to include veneer between the segments, place the segments next to the lines. If there is to be no veneer, split the lines with the segments.

After the glue has had time to grip, usually about five to ten minutes, place the remaining segments, remembering to rub the glue joints to expel air and surplus glue.

When you are confident the glue has dried sufficiently, turn the segments to the required thickness and flatten with the flattening stick.

Place a shallow groove into the waste portion of this row of segments. This will be used to determine the position of row two.

Mark with a dot or line positions that are midway between the segment joints of row one.

Join up these marks with lines that pass over the centre. Of course the lines will only appear on the segments, but the straight edge used will be above the centre of the base.

Glue one segment as before, then the rest after a few minutes wait.

After the glue has dried sufficiently, face off row two and flatten.

While the turning is still on the lathe, use the tool rest as a straight edge and mark with a pen lines that start from the joins in row one and finish on the edges of row two. Join up these marks as before. These lines show where the joints of row three segments should be placed.

Proceed as before, gluing one segment first.

The remaining rows of segments are positioned in the same way as row three. This ensures that the joints in all rows line up correctly.

Remember that the face of each segment must be flat to ensure the best glue outcome. Allowing machining marks to remain on the wood is not desirable.

