

LATERAL WYE

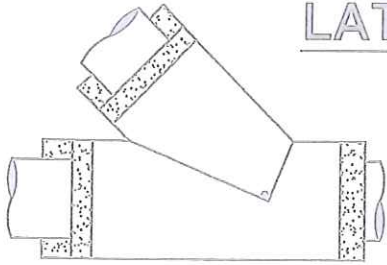


Figure 1:

1. Draw a $\frac{1}{4}$ of a circle (*Red arc*).
2. Divide the arc into 4 equal parts and draw vertical lines on each division (*Green lines*).

Figure 2:

3. Take the measurement from one end of the arc to the other. Transfer the measurement to the top and mark (*Blue mark*). (See dividers.)
4. Draw a line from the blue mark towards the bottom of the arc (*Blue line*).

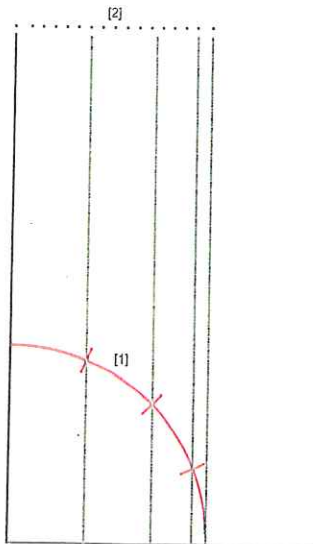


Figure 1

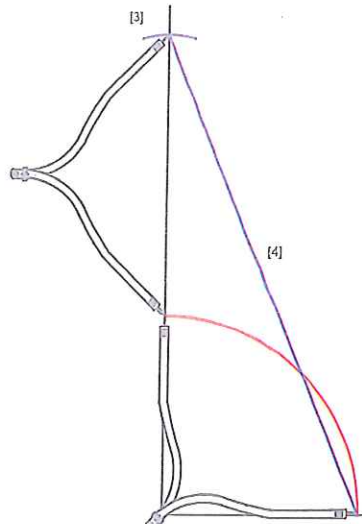


Figure 2

Figure 3:

5. Draw a mark on the outer right green line with the insulation diameter measurement (*Blue mark*). (See divider.)
6. Draw a line between both blue marks (*Red line*).

Figure 4:

7. Number intersections just like in figure 4.

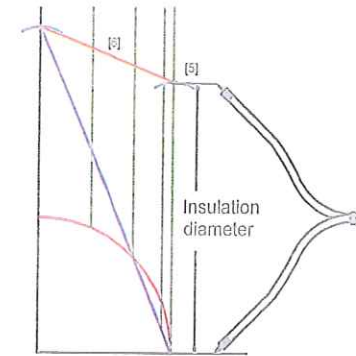


Figure 3

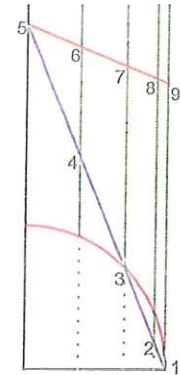


Figure 4

Figure 5:

8. In a different area draw a line with half the circumference and divide into 8 equal parts.
9. Draw vertical lines in each division.
10. Transfer the measurements of the lines from figure 4 to figure 5 according to their number.

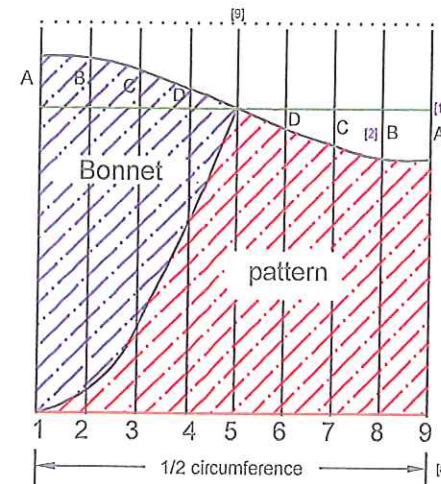


Figure 5

Note: To the left you will see a pattern for the bonnet.

1. Draw a horizontal line that passes thru the tip of the original pattern (*Green line*).
2. Transfer the measurements from lines #6 thru #9 towards lines #1 thru #4. See the example of the letters.

UNEQUAL LATERAL WYE

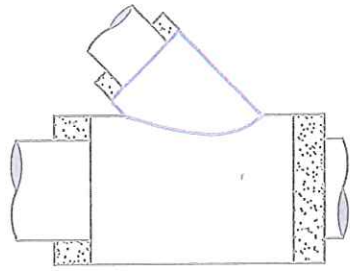


Figure 1:

1. Draw a $\frac{1}{4}$ of a circle of the smaller insulation and divide it into 4 equal parts (*Blue arc*).
2. Draw vertical lines on each division (*Green lines*).
3. Draw a mark on the last green line to the right with the diameter measurement of the smaller insulation (*Blue mark*).
4. From the blue mark, draw a line in 45° towards the top part of the arc, then towards the bottom of the arc (*Red lines*).

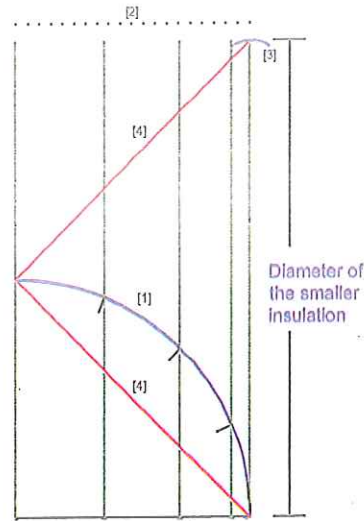


Figure 1

Figure 2:

5. With the measurement of the radius of the bigger insulation, draw an arc on the right of the blue arc (*Black arc*).
6. Transfer all of the divisions from the smaller arc towards the bigger arc (*Red dashed lines*).

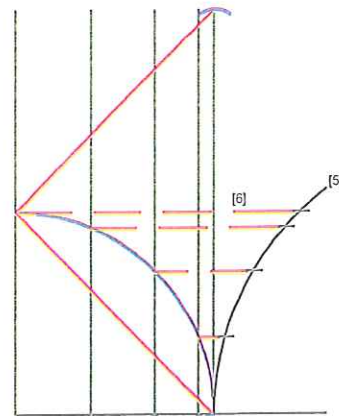


Figure 2

Figure 3:

7. From the divisions of the bigger arc, draw lines in 45° towards the green line (*Blue lines in 45°*).
8. Transfer the measurements of the blue lines in 45° towards the green lines. Make sure you start on top of the red lines and number according to figure 3.

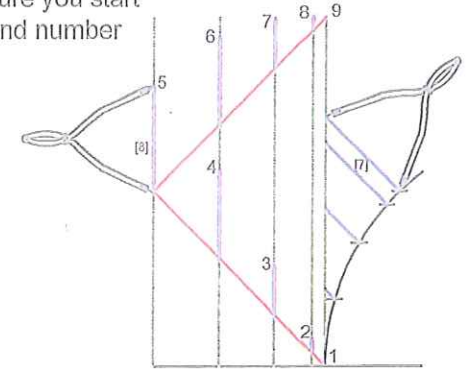


Figure 3

Figure 4:

9. In a different area draw a horizontal line with the length of half the circumference of the smaller insulation and divide it into 8 equal parts.
10. Draw a vertical line on each division (*Green lines*).
11. Transfer all 9 measurements of the blue lines from figure 3 to figure 4. Start from the black line to the numbers. Connect intersections.

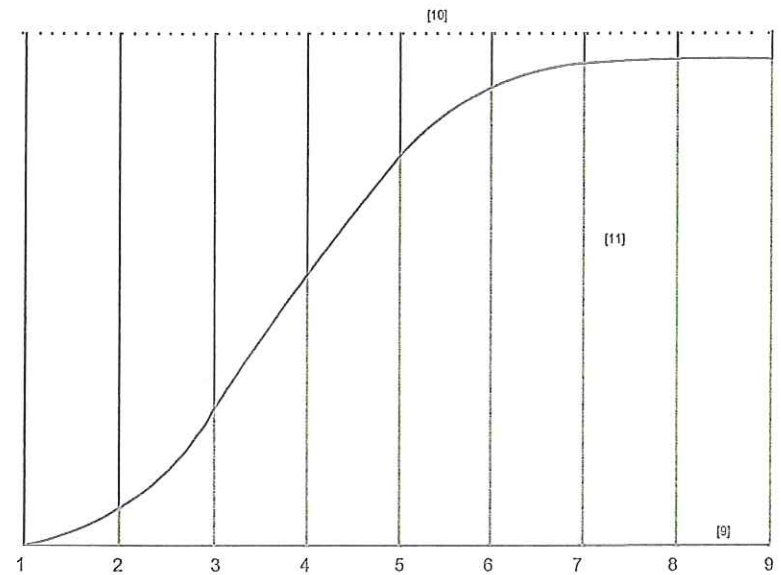


Figure 4

BONNET FOR UNEQUAL LATERAL WYE

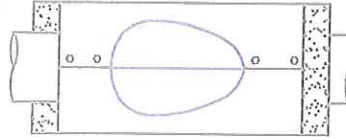


Figure 1:

1. Draw a $\frac{1}{4}$ circle with the measurement of the insulation diameter (Green arc).
2. Divide the arc into 4 equal parts and draw vertical lines on each division (Green lines).

Note: You can also use the first two figures of the original pattern.

3. Starting from the green line on the left side draw an arc to the right with the measurement of the radius of the larger insulation (Red arc). Make sure this arc is at least 1" above the green arc.
4. Draw an arc with the measurement of the radius of the bigger insulation to the right of the smaller insulation (Blue arc).
5. Transfer all the divisions from the smaller arc to the bigger arc (Red dotted lines / Green marks).
6. From the intersections of the blue arc draw lines down to the right in 45° (Blue lines in 45°)

Figure 2:

7. Take the measurements of the blue lines and draw marks on the green lines towards the top and bottom of the red

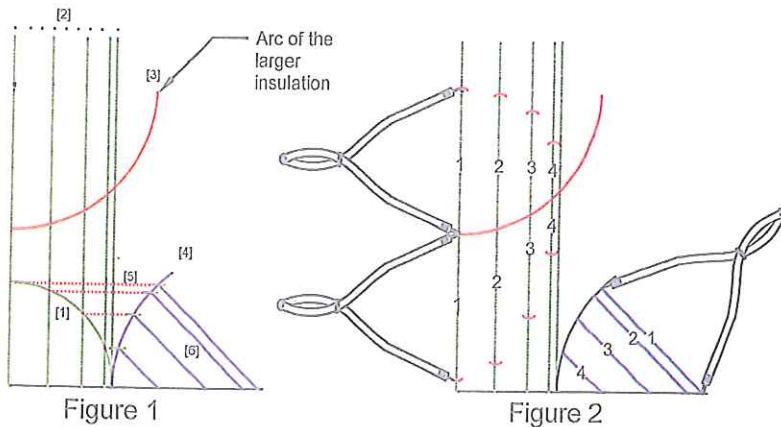


Figure 3A and 3B:

8. In a different area, draw a horizontal line (Red horizontal line in figure 3B). Pass the measurements from blue arc of figure 3A to this line. (See dividers.)
9. Draw vertical lines on each division (Blue lines).

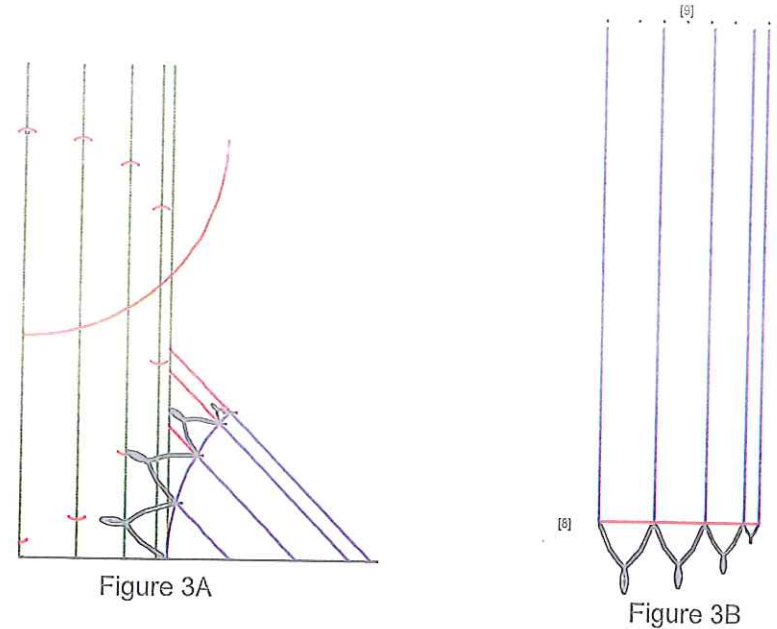


Figure 4A and 4B:

10. With a divider transfer all the measurements from figure 4A towards figure 4B.

