How to mark out discus, javelin and shot put

Discus

Circle dimensions
1. A ring 2.50 metres in diameter with a raised edge approximately 20mm high.
2. The discus is thrown from a circle into a sector of 34.92 degrees.
3. The inside diameter being 2.50 metres.
4. All lines used to mark the area are 5cm wide.
5. A line 75cm long is drawn each side of the circle, extending from a theoretical line through the centre of the circle.
**Shot put**

Circle dimensions
1. A ring 2.135 metres in diameter with a raised edge approximately 20mm high.
2. The shot is put from a circle into a sector of 34.92 degrees.
3. The inside diameter of the circle is 2.135 metres.
4. All lines used to mark the sector are 5cm wide.
5. A line 75cm long is drawn each side of the circle, extending from a theoretical line through the centre of the circle.
6. Fixed to the front is a curved solid stop board. The board shall measure 11.2cm to 30cm wide, with a chord of 1.21m (±0.01m) for an arc of the same radius as the circle and 10cm (±0.2cm) high in relation to the level of the inside of the circle.

**Sector marking out for discus, javelin and shot put**

Ideally, three people will be available to lay out the sector lines, located in positions X, Y and Z. Point X is the centre of the circle. Stretch out the measuring tapes or strings so that they are straight and taut, with the correct XY and YZ lengths. In short the distance between the 2 sector lines YZ is 60% of the length of the sector line XY. This is seen in the table below.

The person in position X will then direct Y and Z to the left or right, in unison, to centre the sector on the throwing circle or runway:
1. For shot put, the centring should be done on the stop board.
2. For discus, the centring can be done relative to the circle dividing lines or the opening of the throwing cage, whichever is more symmetrical and easier to measure from.
3. For javelin, the centring should be done on the points where the foul arc intersects the runway sidelines.

<table>
<thead>
<tr>
<th>XY</th>
<th>10m</th>
<th>20m</th>
<th>30m</th>
<th>40m</th>
<th>50m</th>
</tr>
</thead>
<tbody>
<tr>
<td>YZ</td>
<td>6m</td>
<td>12m</td>
<td>18m</td>
<td>24m</td>
<td>30m</td>
</tr>
</tbody>
</table>
Javelin

Throw sector marking out

1. The length of the runway shall be no more than 36.5 metres but not less than 30 metres and shall be marked by two parallel lines 50 millimetres in width and 4 metres apart.
2. The throw shall be made from behind an arc of a circle drawn with a radius of 8 metres; such arc shall consist of a strip made of paint, wood or metal, 70 millimetres in width, painted white and shall be flush with the ground.
3. Lines shall be drawn from the extremities of the arc at right angles to the parallel lines marking the runway. These lines shall be 0.75 metres in length and 70 millimetres in width.
4. In short the distance between the 2 sector lines YZ is 50% of the length of the sector line XY. This is seen in the table below.

<table>
<thead>
<tr>
<th>XY</th>
<th>10m</th>
<th>20m</th>
<th>30m</th>
<th>40m</th>
<th>50m</th>
</tr>
</thead>
<tbody>
<tr>
<td>YX</td>
<td>5m</td>
<td>10m</td>
<td>15m</td>
<td>20m</td>
<td>25m</td>
</tr>
</tbody>
</table>

* ALL DIMENSIONS IN METRES