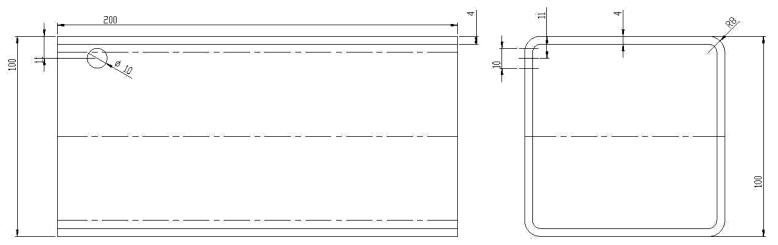
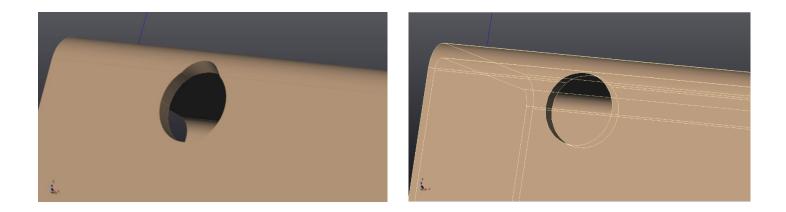


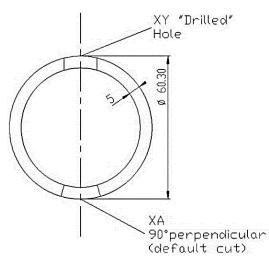
## **Tube Laser Customer Information**



When a hole is cut into the radius of a box section the cutting head cuts perpendicular (XA) when the material is rotated the laser causes an eyedrop effect where the radius of the box section is (below left). The cutting head can be manipulated in the B axis to cut (XY) avoiding the eyedrop (below right), this process takes a longer time and cannot always be achieved. **Programmers default to hole cutting as XA**, XY needs to be specified at the point of quotation.







**Tube Laser Customer Information** 

Cutting holes XA is most common way as it is most efficient, keeping the beam perpendicular to the material increases cutting speeds lowering costs.



XY holes need to be specified at the point of quotation, if holes require an additional process XY is recommended. XY hole cutting cannot exceed 2/3 of the tube diameter and takes longer to process.

Below left shows parts as most commonly drawn "sawcut". When cutting around a radius with the laser head at 90° the path creates a "snub nose" effect, shortening the overall material length but retaining the materials correct centreline length. Programmers will default cutting this type of part (below left) with the laser head perpendicular to the material to create, (below right) unless specified.

The Tube Laser can offer "saw cut" finishes no greater than 45°. This process takes a longer time to cut and can cause quality to suffer as a consequence of cutting through more material (below left)

