

Design IV – Design Drawings

Manufacturing Plan

3D printing can be used for the rapid prototyping and testing stage. However, because of the cost of 3D printing $90 \times 2 = 180$ side inserts, it is more economical to use injection moulding when the full pack is ready to be produced. The cost of the moulding tool and the will be cheaper than 3D printing all the Plastic parts and if we want to make a standby battery box (to implement the proposed fast change battery feature), the presence of the moulding tool makes it astronomically cheaper the second time around (this shall be explored further in the Cost Report)

The copper busbars will be cut from 2mm thick rectangular Copper bars using water jets.

The battery box will be made from 6061 Aluminium sheet metal