



# Encapsulation (Potting)

CT Production offers a service which makes use of a fast and accurate semi-automatic system to dispense resins for full or partial encapsulation of electronic assemblies. The advantages of this service can be summarised as follows:

- Product is sealed against environmental hazards
- Protection for components
- Security sealed
- Strain relief
- Efficient and clean
- Consistent results using semi-automatic equipment



Encapsulation is employed for products which require sealing from hazardous operating environments or to make them secure against tampering. Typically, this is a PCB mounted in a box, but the process can be carried out like a moulding process to form an outer body.

It is also suitable for strain relief of a product's internal components and cables against physical shock and vibration or for operation in damp or dirty environments. It can also help to render a product suitable to operate in flammable environments where it is required to be intrinsically safe.

The process is used for both low and high volumes, being semi-automatic. It uses two-part epoxy resins and, when triggered, the unit automatically mixes and dispenses a measured amount of encapsulant to where the nozzle is manually positioned. The material normally used at CT simply requires an overnight cure in ambient conditions to set hard, ready for the next stage by morning.

CT Production also offers fully automatic selective conformal coating as an alternative form of sealing, as part of its full range of electronics manufacturing services.

