

# Plastic injection moulding for electronics parts

Plastic injection moulding is a key part of the electronics manufacturing process, as most devices require a highly aesthetic casing which has stringent tolerances and functional requirements. Manufacturing key components for the scientific instrument market, through to medical devices and personal electronics means we have in-depth experience.

### Committed to supporting our customers

- Material selection specific to the device application
- DFM best practices to optimise BOM
- Value added pre or post moulding assembly to maximise supply chain efficiency
- Component integrity testing and analysis

#### Value added services include

- Product end-item assembly
- Product sub-assembly
- Primary and secondary packaging
- Sterilisation prepping and configuration
- Silk screening, pad printing and laser marking

#### Bespoke stocks to logistics supply solutions

- Fast lead-time response
- Stock call-off
- Turn-key response
- Direct to line
- Kanban stock
- Stock holding finished product
- Stock holding raw materials
- Fully traceable, auditable process









Tex Plastics are a technical plastic moulder used to working to high precision and we can deliver the care and attention necessary when working with sensitive electronics. We're very experienced with extremely small precision mouldings, as well as insert and overmouldings, and can make products from 1mm in size.

We understand the importance of IP in the electronics industry and have confidentiality agreements in place with numerous customers. Our engineering team are expert in advising on the most cost effective route of getting a product off the drawing board and into production. Our post moulding solutions include electronic testing and radio-frequency interference (RFI).



Retro gaming unit with 'tomorrows world' look and ergonomics

Having input in the design process helped incorporate best moulding practices and enabled the consolidation of parts into a single injection mould tool. Through careful selection of an advanced technical polymer, resulted in enhanced aesthetics and finishing costs minimised. Plastic component assembly costs were reduced through clever fixing techniques and this also streamlined the clients inventory.



Robust 'fish-finder unit' designed to withstand challenging elements

Develop a casing to house a digital video camera and highly sophisticated electronics is one thing. Making it so it can withstand being violently launched through the air, crashed down into subzero water with no opportunity to cushion the fall.

From selection of the technical polymer to the design of the injection mould tool, plastic component manufacturers, Tex Plastics delivered the combination of strength and light weight the brief requested, to the ultra thin product moulding which hit the usability requirements. Tex Plastics were able to help the designers enhance the manufactured product so it could meet the extremely demanding environmental and usage requirements.



Hi-tech solution to pollination crisis

Working with Sony Europe B.V.'s UK Technology Centre, and their client who is a cutting-edge tech company. The challenging brief the three companies collaborated on was to deliver a smart sensor unit and pod to monitor bee activity in the hive. Tex Plastics were involved in the manufacture of the sensor housing for this product, which is designed to help track the hive health and pollination progress in almost real time.



Personal Emergency Response Device

Working closely with the client, the designers and injection mould toolmakers at Tex Plastics were able to add value to the process with expert polymer selection and an over moulding manufacturing process. Understanding the importance of comfort influenced the moulding and fixing techniques to contribute to the award winning wristband.



Antenna Design Refresh
Cost Reduction

With a redesign of injection mould tooling combined with the change of polymer resulted in ultra thin moulding to hit the clients usability requirements. The precision plastic moulding was developed to facilitate a streamline plastic component assembly. This enabled different fixing techniques to be adopted further reducing finishing costs. These changes impacted upon the clients inventory, which could be reduced and their supply chain shortened - further reducing the manufacturing costs.



Emergency Position Indicating Radio Beacon (EPIRB)

The redesign incorporated an 'over moulding' technique which had the added benefit of eliminating several areas of waste identified within the current assembly process.

Although the Tex Plastics designed part was more expensive 'piece per part moulded' the total manufacturing cost of the completed product was significantly less. This was because reviewing the whole manufacturing process identified the most significant cost savings were to be made by reducing assembly times. The redesigned mouldings and change of polymer also improved the part quality to a 100% pass rate.

# More than just a moulder

Our development and manufacturing services range from product concept, through prototyping, mould making, validation and into high volume production.

Call +44 (0)1332 363249 or +44 (0)1271 378528





















Let us help you to streamline your component supply chain, reduce lead times and maximise the cost-effectiveness of the component produced with our extensive post moulding operations. Our free audit process reviews your plastic parts manufacturing and supply chain and we'll point out any operational inefficiencies so you can make savings whether you use us or not.





The Free Audit will provide you with a 'no-obligation' 360 analysis of your product and supply chain. TEX pursues optimum streamlining throughout the entire manufacturing process by eliminating non-value added services and enhancing your manufacturing process. This will be under a Non Disclosure Agreement so that you can be assured of complete confidentiality.



Call us with your component needs and we will provide a rapid estimate of what we feel your product could be produced for. If you decide this is of interest then we will proceed to produce a Quick Quote, which will provide you with a binding contracted production price for a set period.















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