

3D PRINTING

3DPRINTUK

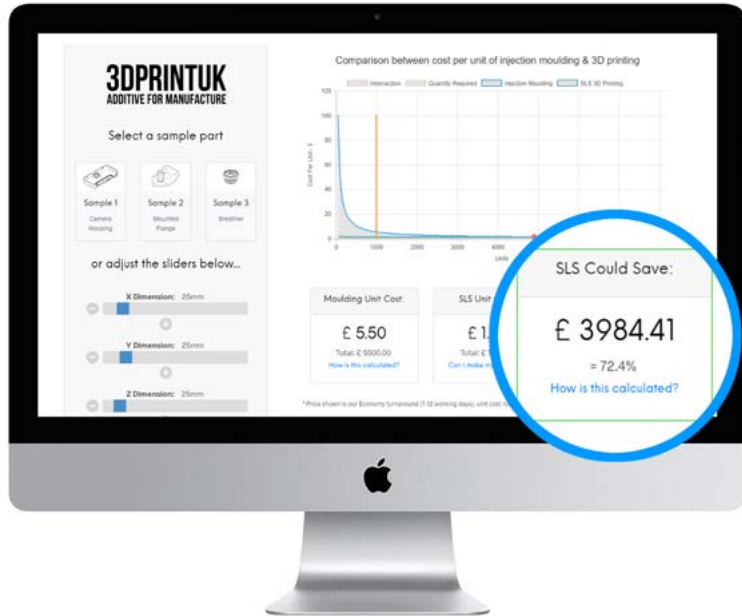
3DPRINTUK-low volume calculator

AN ALTERNATIVE TO INJECTION MOULDING

How many times have you needed to produce just a few hundred small parts? What are your options? CNC? Vacuum casting? Rapid injection moulding? If you haven't done so before, it's time you added 3D printing to that list.

Typically, injection moulding can be quite expensive due to the necessary tooling costs, resulting in both SME and global corporations opting for cheaper alternatives that are still high quality and durable. 3DPRINTUK are specialists in low volume production using state of the art SLS 3D printing systems, with the aim of bridging the void between prototype and injection moulding.

SLS 3D printing is ideal for smaller parts and allows 3DPRINTUK to produce parts for as little as 20p each. With no tooling cost this mean there is no financial barrier to entry other than the unit cost. This technique also offers additional design freedoms and scope for complexity. Parts can be as complex as you want. Unlike with moulding, milling or cutting, there is near complete design freedom. As long as everything is above approximately 1mm thick, it will print. One huge benefit to this is where complexity previously required a product to be made up from two or more parts that were each moulded, finished and assembled; you can now make that in one part, saving on multiple tooling and unit costs.



Playerdata - custom cases



Suss my bike - production part

Is your part viable? Additive manufacturing is not suited to every application and establishing if it is a viable option requires you to look at several factors.

1. How big is your part? Pricing is based on size. The larger the part, the less viable it is, but small components such as jigs, fixtures

and fittings can be extremely viable.

2. How complex is the design? Complexity is no issue for 3D printers; however, it is for injection moulding. This means that the more complex the part, the higher the tooling cost, and therefore the greater the viability of additive manufacturing.

3. How many do you want? If you're looking for tens of thousands, then injection moulding is a better option. If you need a few hundred, or low thousands, and the parts are small, then you're in the right place.

If you already have a moulding quote, 3DPRINTUK has a handy comparison tool on their website. Simply input the tooling cost and the moulded unit cost, along with the XYZ dimensions of the part, and it will produce a graphical cost comparison. Essentially, the smaller and more complex the part is, the greater the viability of additive manufacturing.



bloc blinds - custom parts