

The logo for 3MINDS, featuring the word '3MINDS' in a stylized, bold, sans-serif font. The '3' is larger and more prominent, and the letters are white with a blue outline, set against a blue background that is part of a ribbon-like graphic.

Developing  
your  
business,  
by design.

## 1. Be Design Efficient

Are your products designed to take advantage of the most appropriate methods and technologies for their sales volume and target market? It is common for products to be designed with these elements in mind but frequently volumes aren't as they were initially conceived or market expectations simply move on. It is therefore crucial that the design of products is kept under review to maximise margins and return your investment even if that means redevelopment.

In the Medical Industry for example, laboratory products are usually low volume but expectations of quality are high and so RIM (Reaction Injection Moulding) is often used. With this process unit costs are greater than conventional injection moulding but tool costs are usually significantly lower. These trade-offs are decisions that design consultants can help you make whatever market you are in.

Keeping up-to-date with new developments in manufacturing and knowledge of leading edge suppliers also helps keep to the most design efficient methods for building your products, whether in the UK or Overseas.

## 2. Develop Economies of Scale

Economies of scale are easy if your product volumes are high but they can still be achieved even if they are not! If you produce a range of products, then modularity may provide an opportunity to save on assembly time as your assemblers will be familiar with common components that also provide a reduction in your stock values. There is a hidden benefit too, as producing a family of products that share a look and feel will help you build a coherent brand which is an invaluable sales driver.

Where are your components and products currently manufactured and assembled? Outsourcing is a strategic decision but most products have sub-assemblies that could be built faster and more efficiently by an external supplier that has the necessary expertise, pcb population and test for example, under one roof.

An increasing number of UK primary part suppliers, keypad manufacturers and sheet metal companies for example, are offering sub-assembly services. They are achieving economies of scale that you may not be able to gain alone and as well as taking responsibility for your quality issues can usually offer cost benefits..

We have good links with UK based and offshore suppliers. Our offshore suppliers can offer low cost and high quality tooling services and/or components through established UK brokers who regularly visit and manage the quality and process.

## 3. Use Time Reduction Strategies

We all know that time is money and getting your product to market quickly and reducing manufacturing lead times will both impact on costs. The time taken to assemble products is usually the main cost driver and by looking at every aspect of how your product is assembled, can lead to substantial savings. For example, if unit volumes will be high then rapid to assemble, snap fit enclosures may well justify the additional tooling costs. Using adhesives too can have benefits providing the solution is robust enough and that disassembly of the product at its end of life is considered.

Can you pass on any part of the assembly to the customer? This is common in the toy and home furnishings markets and clearly reduces your time and cost! With large products it also offers the benefit to reduce package sizes and drive down transportation costs.

Finally do you use tools and jigs to allow your production staff to use their time efficiently, again design can prove to be a very powerful tool here.

For more information on 3Minds design services please call us on 0845 680 1024.

