## CASE STUDY:

# **Custom Mold Manufacturing for Infusion Pumps**

### **Engineered to Skip the Finished Paint Process**

An original equipment manufacturer (OEM) of medical equipment wanted to



overhaul the look and style of an infusion pump. The new pump would have a modular design and would include more plastic components than earlier models.

The plastic components would require a complex mix of resins. In addition, the outer surface of the components would need a nice finished look because the manufacturer had

decided to eliminate painting finished units.

### Ferriot Designs 25 Molds and Engineers Surfaces to Go Paintless

Ferriot placed a tooling design engineer in the OEM's facility once a week to help design approximately 25 plastic parts. Working with the OEM's new product development group, we focused on manufacturability, the functionality of each component and the material composition of each.

Working in 3-D space, we rigorously tested each part to see how far we could elevate its design without resulting in flaws.

Once tooling designs were in place, Ferriot selected mold makers from our worldwide network, who then shipped finished molds to Ferriot for inspection and quality testing.

Ferriot created the tools and qualified all the parts, starting with beta units that were testing for functionality on short production runs.

We shipped the parts to the OEM with the nice outer surfaces achieved by our engineers without paint. Ferriot continues to produce subassemblies for the finished modular units.

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#### **About Custom Molding at Ferriot**

At Ferriot, we develop custom molds and we manufacture components from those same molds. *Why does this matter?* It's about accountability. Our productivity as a manufacturer and our ability to turn out superior products depends on ideal mold designs.

Yes, mold design is about 3-D technology. But great designs still depend on experienced engineers and technicians who intuitively know the configurations that will result in both lean manufacturing and quality assemblies. Conversely, these same experts can spot trouble before it happens because fine distinctions can make the difference between excellence and mediocrity in finished products.



Just as importantly, experience matters in choosing the right mix of engineered materials to meet widely different usage requirements.

Whether it's a softer-textured finish for easy handling, or perhaps the rigidity to withstand 200 miles-per-hour winds, Ferriot's engineers help create the "what if" products that change consumer experiences.

Call us with your innovative ideas for transforming - and economizing - the products and equipment of tomorrow.

