

FreeForm Modelling System Increases Productivity and Reduces Costs

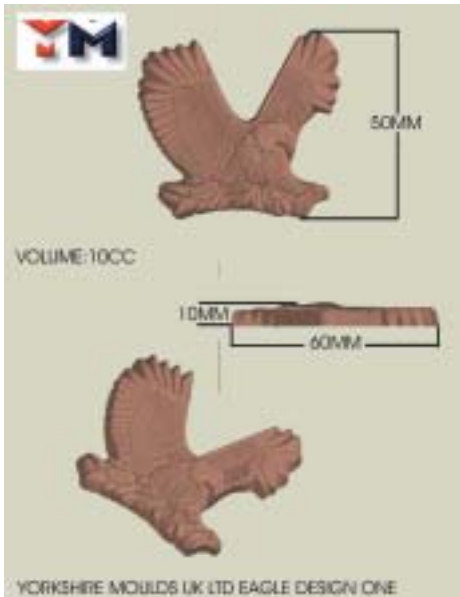


Photo of confectionery eagle moulds.



Mould trays.



FreeForm modeling system user shot.

Yorkshire Moulds UK, a leading producer of confectionery moulds for more than fifty years, has used a combination of the FreeForm modelling system from SensAble Technologies and Delcam's PowerMill software to dramatically improve the way that the company produces 3D and relief chocolate moulds. The new process that has been incorporated has proven to be faster, cheaper and able to more efficiently accommodate customer design approvals and changes.

The FreeForm modelling system has allowed Yorkshire Moulds to completely transform the way that it creates moulds. By providing a touch-enabled interface to a digital modelling tool, modellers and sculptors at Yorkshire Moulds are now able to very quickly create complex and highly detailed mould cavities that previously could only be made by hand. Used in conjunction with the PHANTOM Desktop force-feedback interface, the system is as intuitive and expressive as physical modelling, yet has all the productivity advantages of a digital tool.

Yorkshire Moulds' traditional time-consuming method of hand carving the models in plasticine and taking repeated castings would often take several weeks. However, using the FreeForm system, the company is now able to produce models in only a few days — resulting in enormous time savings.

One of the most important benefits of incorporating the system for Yorkshire Moulds has been the ability to speed up the customer approval process. Instead of using the time-consuming and expensive process of booking couriers to physically carry models back and forth to customers, Yorkshire Moulds can now instantly share their digital models electronically via email or the Internet. With this new digital process, Yorkshire Moulds is

able to dramatically shrink the customer approval process, which has had the effect of reducing cycle times yet further.

Once the mould designs are finished and have been approved, Yorkshire Moulds can take them directly downstream for production. The models are exported as STL files from the FreeForm system to PowerMILL, which generates flawless CNC tool paths directly from the polygonal data, which Yorkshire Moulds then uses to machine the mould tooling — in brass, aluminium or steel. The modelling flexibility of the FreeForm system and the machining strengths of PowerMILL allow Yorkshire Moulds to develop complex, highly detailed chocolate moulds using a seamless, digital pipeline.

John Oczabruk, Senior Modeller at Yorkshire Moulds, commented on the implementation of the system, "The FreeForm modelling system has revolutionised the way that we design and manufacture confectionery moulds. It has completely replaced the traditional modelling techniques that we used previously and we now use it for 100% of the projects that are undertaken here."

Yorkshire Moulds' best-in-class tools and processes have reduced time-to-market and development costs, while improving long-distance collaboration. In this way, the company continues to deliver the sweet life for major blue-chip clients worldwide. Customers include Barry Callebaut, Cadbury, Hershey, Kraft Foods, Mars and Nestlé, in addition to a host of other large and small companies.

* For more information on these products, go to www.sensable.com or www.delcam.com

Experience FreeForm Modelling at the Delcam stand at TCT 2002
MICC, Manchester, UK. 16-17th October 2002