

Dynamic Plastics

Rapid Short-Run Production Rushes Unique Product to Market

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— Tom Prebelich
Tooling Foreman
Dynamic Plastics

Dynamic Plastics owners Joe Doss and Jim Connell tell a story typical of many niche moldmakers: he started in a garage, invested in quality CAD/CAM/CNC software, took increasingly complex rush-delivery jobs, hired, trained, and expanded his workforce. That was 11 years ago.

Now Dynamic Plastics employs 12 moldmakers, 8 molders, and 5 support/management staff. "We're always being pushed to get things 'today' at production quality," says Tooling Foreman, Tom Prebelich.

The American-made Segway® Human Transporter (HT) is a prominent example of excellence assisted by American moldmaking skill. It's the first of its kind - a self-balancing personal transportation device designed to give riders the ability to move much faster than walking, and to carry more. Users commute, shop, and run errands more efficiently while adding a little fun to their day. It also makes businesses more productive by allowing workers greater visibility, versatility, mobility, and carrying capacity.

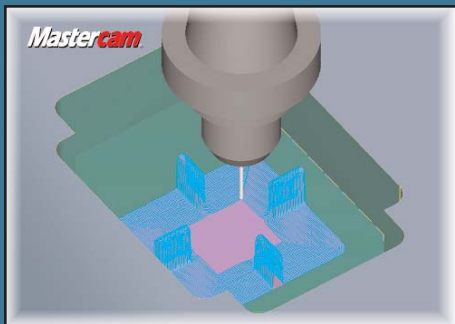
The manufacturers and design engineers of the Segway HT, seeking to shorten time-to-market without sacrificing quality, found some key time- and cost-saving benefits in the emergent field of rapid injection molding. The combination of Segway engineers' use of 3-D CAD and Mastercam®-created high-speed machining toolpaths lets the Segway engineers expect super-fast turnaround from 3-D CAD drawings they sent via the Web to Dynamic Plastics.

Dynamic Plastics co-owner Jim Connell credits Mastercam-driven design and toolpathing for DP's accurate-the-first-time machining in high-quality aluminum. Since Mastercam features associative toolpathing, (the software automatically adjusts all pertinent toolpaths to conform to the changes in the geometry) DP technicians either modified the mold tooling or created new tooling as necessary with drastically reduced turnaround.



Mastercam®

Dynamic Plastics



Tooling Foreman, Tom Prebelich, says, "The mold parts must fit right the first time out. For the overmolding step, cutting accuracy has to be absolutely precise so the face of the tooling shuts off, leaving just the "bumps" without getting Texin all over the face. Using Moldplus, an add-on for Mastercam, we copy the run-off and parting line surfaces for the cavity mold into the core mold layer for that perfect fit. In the seven years we have used Mastercam's Moldplus add-on, it has given us a time savings of up to 70% on the most complex jobs."

"Our technicians can take virtually any kind of file into Mastercam," Prebelich observes, "and move the job right along. In a real rush situation like this, we'll separate the customer's model, design the cavity mold, and hand that off to another operator so machining begins on the job even before the whole mold is designed."

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And the customers are happy. They get rapid prototyping at first-line production quality and production runs that suit their startup needs, all from a single, low-cost mold. Betsy Weichel, Dynamic Plastics' QC manager consistently confirms that their products meet customers' quality specifications. Escalating offshore market competition is driving customers' demand for higher quality, economy, and faster turnaround. Flexible, knowledgeable niche shops like Dynamic Plastics are already good to go!