Mastercraft Precision Injection Molding & Tooling invests in medical molding

By Roger Renstrom | PLASTICS NEWS CORRESPONDENT
Posted February 1, 2010

PHOENIX (Feb. 1, 1:40 p.m. ET) -- Injection molder and toolmaker **Mastercraft** Cos. is growing, and investing in new equipment, to serve an expanding medical business.

Medical work will account for about 70 percent of the Phoenix firm's 2010 business. The medical work accounted for 55 percent of the business in 2009 and 38 percent in 2008.

In addition to its medical business, the company supplies the industrial, pool and spa, defense, electronics and aerospace markets.

In 2009, the firm's custom injection molding Polycraft Industries division invested about $750,000 for equipment and its toolmaking **Mastercraft** Mold division had capital expenditures of about $100,000. The new equipment included two new Arburg presses in March and, to beat the deadline for taking advantage of a federal tax credit, three 176-ton Arburg 520A Allrounder presses in December.

"All five Arburg machines purchased in 2009 are sold out," said Dale Behm, **Mastercraft** chief operating officer. "This is new business from one of our medical customers."

The new Arburgs range from 100-176 tons of clamping force, Behm said. The clamping force tonnage range for all of Polycraft's 32 presses is 50-500 tons.

Mastercraft had 2009 sales of $10.2 million, up about 12 percent from the previous year.

Behm envisions 20-percent growth this year.

"Most of the new business is booked, and we are building all tooling in our mold division next door to the molding facility," he said. **Mastercraft** Mold division has built seven molds for a key medical customer.

Meanwhile, **Mastercraft** is touting its Signature Technology @ **Mastercraft** processing concept.

In November, **Mastercraft** completed work on several Signature-brand pressure transducer molds moving the firm down the path toward being a scientific molder.

The Polycraft division aims for a minute-to-minute level of molding process control and committed in November 2008 to add transducer technology from RJG Inc., a software module and in-cavity-sensor provider based in Traverse City, Mich.

"The RJG system is very good but in most cases may not be required for all molds," Behm said. "We have chosen to incorporate some of the techniques of RJG into a lower level of control at a lower cost."

Behm likens an individual's signature to the signature for a mold and press.

"When we control what this signature looks like, we control shot-to-shot variation," he said. "Once we identify the signature for a mold and machine, we then can reproduce this on every shot. We set control limits based upon the 'signature' and lock in the process."

Behm noted that process variation has been a long-time issue in the molding of plastic parts. "With this technology, we can greatly reduce variation," he said. "Once we control the process, we also control the quality."