

ICON: Young shop making the right moves

By Clare Goldsberry

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Everyone remembers 2001, and in many ways it was the beginning of mini-recessions that led to the big recession. However for [ICON Injection Molding Inc.](#), a custom molder in Phoenix, AZ, business grew as the three brothers who started the company stuck to their plan. Today, that plan includes expanding the company with a second 20,000-ft² facility across the street from their original location. The new facility will have an 8000-ft², self-contained clean-environment molding area.

The new clean-environment facility, which is being constructed in a way that Icon can easily turn it into a Class 10,000 cleanroom if business dictates, will be used for the company's medical molding customers and for cleanroom assembly requirements. Currently, medical molding represents about 40-50% of Icon's business, says Jeff Davison, the company's general manager. The facility will be ready for occupancy in September.

ICON currently operates in a 20,000-ft² facility with 18 presses—Nissei and Toshiba machines—set up in manufacturing cells that include robotics and individual cooling towers. The presses range from 15-500 tons, two of which are high-speed presses. Icon has in-house mold manufacturing, but also uses outside mold vendors, including partners in Taiwan and China. The company currently has a small clean-environment molding room set up within the production floor space, where it currently does medical molding. Icon also specializes in insert molding.

One of ICON's customers is Taser International, a Scottsdale-based company that designs, develops, and manufactures tasers for use by the military and law enforcement. Taser has worked with ICON since Taser's founding. Recently, ICON worked closely with Taser's design team to develop a new headset for law enforcement that contains a helmet and head-mounted camera that captures all the actions of the police officer when confronting a suspect. This is new technology that will benefit the law-enforcement community as an evidence-gathering tool.



The Axon headband assembly for Taser International contains parts that are molded and assembled by ICON Injection Molding.

According to Danny Kleitsch, one of the three brothers/owners, the headset has 22 parts, both injection molded and metal components, that are assembled to make the finished headset. The helmet-mount for the camera has 19 parts to assemble, which assembly includes sonic welding, gluing, screwing, and adjusting tensions.

Another project that Icon is working on with Taser is the X-REP (Extended Range Electronic Projectiles), a small taser projectile that is essentially a shotgun shell loaded with the taser components that shoots a wireless charge. "It packs twice as much power and has four times the range as the standard Taser guns do," says Kleitsch.

The X-REP's 23 molded parts are extremely small and are packed in close together, meaning that the components have very tight tolerances. For this project, Icon is using an engineering-grade polycarbonate, and molding the components in high-speed machines to fill the small, thin-walled parts very fast.

In addition to assembly, Icon does pad printing, heat staking, and sonic welding. Icon also has two proprietary products: an IV bag hanger and a “Bite Block” used by emergency medical technicians when they have to access a patient’s airway.

“We’ll be moving the clean-environment molding from the production floor in this building to the new building, and that will free up more space for our moldmaking area and give us more overall capacity to handle more clients,” says Kleitsch. —[Clare Goldsberry](#)

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