

New all-electrics suit Dynamax

By Bill Bregar

October 16, 2009

PLASTICS NEWS STAFF



Dynamax Inc. recently purchased two Engel E-max 55-ton injection molding machines to mold its Nano series of connectors for military and aerospace customers. The presses also could be used for custom molding. (Dynamax Inc. photo)

MUNDELEIN, ILL. (Oct. 16, 4 p.m. ET) -- Dynamax Inc., a Chicago-area connector specialist that does high-precision metalworking and injection molding, has purchased its first all-electric presses.

Both are Engel Machinery Inc. E-max machines with a clamping force of 55 tons.

Dynamax is using the Engel presses to mold its Nano series of connectors, said Richard Mensik, manufacturing engineer in the plastics department.

The demanding application, for military and aerospace customers, has walls as thin as three thousandths of an inch.

"One of the most difficult things is transferring from thick to very thin sections repeatedly, and we're able to that very accurately with these machines," Mensik said.

Dynamax runs 12 small-tonnage hydraulic machines from another supplier at its plastics operation in Mundelein, Ill. All of the presses are less than 100 tons.

Earlier this year, company officials drew up a list of criteria when they began investigating new technologies. Mensik said repeatability was at the top of the list, since Dynamax molds small, precise parts with intricate detail.

Dynamax connectors go into markets such as aerospace, defense,

transportation, medical and the energy sector.

Mensik said repeatability is a strong point for all-electric injection molding machines. "Your stroke control with an electric machine is much greater, inherently," he said.

Dynamax originally looked at 10 brands of machines, and then narrowed it down to four finalists for mold trials. Engel was the winner based on technology, customer support and a strong service organization, according to Mensik.

The entire selection process took about three months. The finalist machine brands had to be good at running thermoplastics, thermosets and silicones.

Larry Davis, Engel's Midwest account manager, said the E-max is a good fit for Dynamax.

"They needed to have a very fast injection speed and still hit extremely tight tolerances. But they were limited on floor space," he said.

Mensik said Dynamax is taking steps to expand from only in-house molding into custom molding, serving markets like medical, electronics, connectors and gears.

"We're in a growth mode and we're looking to bring in outside customers," he said.

Dynamax is in the process of moving its machining operations to a new building it recently acquired in Wheeling, Ill.

That will leave the Mundelein plant dedicated to injection molding, with more room for custom jobs.

Dynamax molds a range of materials, including polycarbonate, polyester, nylon, ABS, silicone and composites.

Mensik said the company is touting its expertise in molding challenging parts such as the Nano connector as a particular strength for its push into custom injection molding.

Mensik, a 27-year veteran of injection molding, said all-electric technology has a bright future.

"I think, in this country, we've seen the vast majority of the commodity molding going overseas. What's left has been primarily the proprietary or precision molding.

"The more precision it is, the more it almost dictates electric technology. I believe the electric market will grow in this country because of that," he said.

The new Engel E-max presses could do custom molding as that business grows. Mensik said Dynamax also could invest in more equipment.

"As far as the future goes, we have our eyes on electric machines," he said.

Entire contents copyright 2009 by Crain Communications Inc. All rights reserved.