

"Both conditions have advantages and disadvantages. Incoe has been successful with the partnership approach where we, and they, benefit from the expertise of the partners but allow autonomy and strength of core competency we in a combined effort can offer our customers."

Incoe and Beaumont Technologies, Inc. (Erie, Pa.) recently entered into an agreement that allows each company to sell the other's products. Beaumont Technologies offers rheologically balanced melt management system designs and inserts for cold and hot-runner applications.

Adds Bob Starr, director of global marketing with DME Co. (Madison Heights, Mich.), "There will be more consolidation. We've seen smaller, regional players coming into the market, but with an accelerated demand for better value—including delivery and pricing—and a more challenging economic environment, there will be a natural shake-out of the number of offerings."

DME has its own alliance with Polimold Industrial SA of Brazil, which supplies mould bases and hot-runners to the world,



A 16-drop version of DME's cold-deck system for liquid silicone rubber.

and offers an attractive pricing option in markets where low cost combined with quality are key drivers.

His colleague Craig Kovacic, manager of hot-runner systems, observes, "At Chinaplas, for example, you are amazed at the number of machinery and hot-runner suppliers exhibiting there that you've never heard of. We've seen the competition in the Asian market increase, not decrease."

Martin Baumann, Husky's business development manager, hot-runners, says there are over 40 brand name hot-runner suppliers, and new names are emerging in Europe and Asia. There is also still a significant number of mouldmakers who manufacture their own hot runners.

"The key shift for all hot runner suppliers has been the rapid growth in Asia," he says. "As a result, many major players

FLEXIBLE ROBOT EASES MOULD CHANGES

Injection moulders are constantly looking to speed mould changes. A new concept from a Montreal firm might help.

The ANATERGOARM is a manual, modular, ergonomic snake-arm made by Robotics Design Inc., (Montreal) for mould handling and transportation due to the patented ANAT technology it uses. Attached to a base, its arm is composed of identical modules which function like cells of the body, working together to accomplish goals.

These modules are U and H shaped, a design that distributes weight evenly between them, allowing the arm to carry heavy loads and withstand impacts. Modules can easily be replaced with identical ones, and additional modules can be added or removed to make the arm longer or shorter.

According to Steve Scanlan, head of marketing and communications, modules fold and bend along each axis,

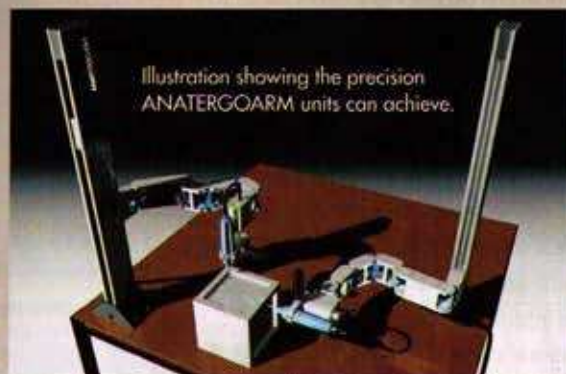


Illustration showing the precision ANATERGOARM units can achieve.

allowing the arm to be used in limited work-spaces and avoid obstacles. The arm is kept perfectly balanced on the horizontal plane with a no-gravity load design.

"It is operated by pushing the arm manually while the operator grips a handle," he says, "and manipulation of moulds of up to 1,000kg with the ANATERGOARM MMA-500 is performed by a single operator. The system is also very user-friendly, and moving objects with the arm is done by a simple hand motion, so chances of accidents are reduced." Power consumption is kept at a bare minimum, as moving the ANATERGOARM horizontally is done completely manually, the arm moving up and down along the base's rail activating the electric or pneumatic motor. The modular design of this arm allows it to move far more efficiently than a standard jib crane, because while moving a mould from one end of the factory to the other with the crane would force its arm to cover 180 deg., the modules of the ANATERGOARM only have to bend several degrees each, optimising allocated space and reducing power costs.

Robotics Design Inc.

514-223-2450

www.roboticsdesign.qc.ca