

INVENTING TOMORROW

POWER PLAYERS

When it comes to
business, Institute
of Technology
grads have the
right stuff >>



Jim MISHEK

Prototype of an entrepreneur

The next time you go shopping for electronics, hardware, general merchandise, or even groceries, take a look around the store. Take note of the gadgets, widgets, tools, and containers you see.

If the items were made in Minnesota, chances are they have passed through Jim Mishek's plant on their way to a merchandise display shelf near you.

Mishek, a 1974 University materials science graduate, is president of Vista Technologies, a manufacturer of industrial prototypes. With the aid of state-of-the-art milling machines and other computerized production equipment, Mishek and his 27 employees transform the dreams of designers and inventors into three-dimensional working models.

Last year the company, based in Vadnais Heights, Minn., celebrated its ninth anniversary by doing more than \$6 million worth of business.

To describe the company's clientele as varied understates the sheer breadth of human ingenuity required of Mishek and his team. They have produced models of Calphalon cookware, NordicWare Bundt pans and muffin tins, Toro lawn mowers, medical devices from Medtronic and St. Jude Medical, industrial equipment for 3M, a chubby plastic prototype of a squeezable Pillsbury Doughboy syrup container, and a prosthetic jaw ordered by a Duluth surgeon for a cancer patient.

This list doesn't even include what appears to be a man's size-25 shoe produced in special cooperation with the Red Wing Shoe Company for Igor, a young man originally from Ukraine, who stands 7 feet 8 inches in his stocking feet. The shoes were a Christmas gift from Vista Technologies, and Mishek says there wasn't a dry eye in the room when Igor tried them on, turned to his mother, and beamed, "Oh, Ma, this is the best I've ever felt."

Sometimes Mishek and his staff don't recognize

the finished product until it appears on the market months after they've created the prototype.

"We get so many orders, we don't know what we're making sometimes," he says. "We don't want to know. For example, we made the casing for the Microsoft Xbox, but we didn't know what it was." A couple of years later Mishek's employees spotted the Xbox for sale, and that's when the mental lightbulbs went on.



This cell-phone casing is just one of the many recognizable prototypes created by Vista Technologies. The company has produced three-dimensional models of Calphalon cookware, Toro lawn mowers, medical devices for Medtronic and St. Jude Medical, 3M industrial equipment, Pillsbury syrup containers, and much more.

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In a spotless production room at Vista Technologies, three large rectangular machines unencumbered by human attendants are tethered to nearby computer monitors and positioned over vats of costly resin. Known as Stereolithographic Apparatus [SLA] units, they are building layer by layer the first three-dimensional version of a new housing for an electronic gadget.

The prototype will emerge untouched by human hands, and “that’s when my wife takes over,” Mishek said.

Vista Technologies is very much a family company. Two of the Misheks’ three children work for the company—one as sales manager and the other as operations manager. His wife, Lorinda Mishek, who studied design at the University, is “in charge of the arts and crafts side of the business,” he said. She sands, smooths, and finishes the prototype models, an integral part of the company’s work, before the final unveiling.

She’s also the reason Jim Mishek attended the University. “I went to Iowa State for my first year of college, but I had a love interest back in Minnesota,”

he said. “We’ve been married for 32 years.”

Love may have brought him to the University, but it was the quality education that made him stay. “There were only six students in most of my classes [in materials science]. It was very small, very intimate,” he said.

Mishek remembers a class in failure analysis taught by Professor William Gerberich of the chemical engineering and materials science department. The course, structured as a series of case studies, required the students to determine the causes of real-life engineering disasters.

“You had to pull everything together. It was a mystery you had to solve,” he said. “Everybody failed the first case study, though. A soil pipe [had] broken, and we all missed the most obvious fact. There was no flaw in the pipe. It broke because the load was too big.”

The lesson Mishek learned? “Don’t get wrapped up in theory. Look past [preconceptions]. Don’t get tunnel vision,” he said.

To most entrepreneurs, that advice sounds like a prototype for success. ■ JW

When Jim Mishek founded Vista Technologies with his wife, Lorinda, nine years ago, the company had four employees, one prototyping machine, and zero customers. Now the company has 27 employees, state-of-the-art technology, and 600 customers worldwide that generated more than \$6 million worth of business.