



EQUINOX CHEMICALS

MAKING IT HERE

Some **SMALL CUSTOM CHEMICAL COMPANIES** survive the recession and defy the move offshore

MICHAEL MCCOY, C&EN NORTHEAST NEWS BUREAU

WHEN THE LIKES OF Dow Chemical and DuPont respond to the recession by closing facilities in the U.S. and turning their attention to China and other Asian countries, the prospects don't look good for smaller chemical makers that operate only in the U.S.—especially firms that don't manufacture high-priced pharmaceutical chemicals.

A survey recently published by the Society of Chemical Manufacturers & Affiliates, a trade association for small U.S. chemical companies, doesn't brighten the outlook. Only 27% of survey respondents reported a net increase in sales last year, compared with 62% in 2008. Moreover, 40% reported that competitive pressure from China and India contributed to declining sales, compared with 30% in 2008.

Some small companies may not survive the hard times. But others are doing that, or better, at labs and plants in places that many pundits have written off as chemical production locations. Although U.S. manufacturing isn't what it once was, these firms are still attracting customers that need specialized monomers and polymers for high-tech applications in markets as diverse as coatings, medical products, and electronics.

A look at three such companies shows that opportunity can still knock for small U.S. custom chemical makers. The firms

have different strategies and products, but they share an emphasis on distinct technology niches and sharp collaboration with customers.

Mark Grimaldi says his biggest challenge today is keeping up with growth while not losing the qualities that made his company successful in the first place.

Grimaldi is president of Equinox Chemicals, an Albany, Ga.-based developer and manufacturer of organic chemicals for customers in a wide range of industries. He launched Equinox in 2003 after working for 13 years at Merck & Co. in a variety of engineering, technical support, and management jobs.

From a start with just Grimaldi and a partner, Equinox employs 34 people today. Sales doubled in 2009, Grimaldi says, and he expects them to double again this year. Moreover, Equinox is in the midst of a \$5 million expansion that could eventually create 40 more jobs.

Equinox began life as a lab-scale sup-

ADDING MORE Equinox is rapidly expanding its seven-year-old facility.

plier of chemicals to universities and catalog companies. "But we quickly grew into large-scale manufacturing as our customers pushed us into larger and larger quantities," Grimaldi says.

He attributes the firm's success in part to diversity in the markets it serves, which include food, flavors and fragrances, pharmaceutical intermediates, high-purity electronic chemicals, and general industrial applications. Equinox is a partner in Rynex Holdings, the marketer of a dry-cleaning solvent based on dipropylene glycol ethers, and it owns a small stake in a fuel additives company.

Also important is a willingness to do tough reactions. "When we got started, we took all the nasty chemistry no one else wanted to do," Grimaldi recalls. Among the firm's competencies today are acetylene-based chemistry and high-pressure reactions. He also credits the company's location in a Georgia town that "bends over backward to help us out."

Grimaldi acknowledges that timing may be on his side. He says a lot of his pharmaceutical intermediate and flavor and fragrance customers are coming to Equinox as they retreat from outsourcing to China in the wake of quality and contamination scandals there. The fact that companies are becoming risk averse in a soft economy also helps. "The last thing that people need when sales are down is bad public relations," he reasons.

The upshot is that rather than wilt under import competition, Equinox is actually exporting organic chemicals to Europe and Asia. Exports account for about 40% of the company's revenues, an accomplishment that helped it just get selected as Georgia's small-business exporter of the year by the U.S. Small Business Administration.

Young companies such as Equinox are not the only ones to be skirting the rough waters. Monomer-Polymer & Dajac Labs (MPD) just completed the best quarter in its history, according to its chief executive officer, Stephen Bell. And that's without taking into account the firm's 2009 acqui-

Some small companies may not survive the hard times, but others are doing that, or better.

sition of organosilanes maker Silar Laboratories, a move that doubled its manufacturing and laboratory capabilities.

Bell, a Ph.D. chemist, joined MPD two years ago after stints working in oil-field chemicals for Halliburton and International Specialty Products. He was brought on board by Addison Capital Partners, a private equity firm that had just acquired the Treviso, Pa.-based company.

MPD had been around for more than 35 years and was in good shape when he joined, Bell says. "You don't survive the downturns in that period unless you have a real niche," he points out. But Bell and the new owners thought that MPD had the potential to do more.

The opportunity came along just a few months later when Silar Labs became available. MPD's expertise was in acrylates and fluorine chemistry, and Bell saw the opportunity to add a new branch of chemistry with applications in markets his firm already served. MPD conducts research and small-scale chemistry at its Treviso headquarters and does some scale-up in North Carolina. Silar brings an R&D site in Scotia, N.Y., and a manufacturing plant in Acme, N.C.

THE RESULT, Bell says, is that MPD can now offer quantities ranging from grams to multiple tons. "A lot of organizations make that statement, but very few can really do it internally," he notes. More important, the joining of carbon- and silicon-based chemistry has opened up the synthetic possibilities at MPD.

"I've joked with my carbon chemists that we needed to shake up their thinking a little; adding some silane expertise has certainly achieved that," he says.

Indeed, more interdisciplinary research is one of Bell's two main goals for MPD. Soon after the Silar purchase, he says, MPD secured two R&D agreements for new materials that meld silicon and carbon chemistry. The company is already scaling them up. Bell has his eye on yet another chemistry platform, although he won't disclose what it is.

His other big goal is to intensify MPD's interaction with customers. Of course, as an R&D-oriented company, MPD has always discussed projects with its clients. But Bell wants to step it up a notch, opening MPD's doors wider to reveal the 35 years of experience that it brings to bear in the specialty chemical industry.

He's also tweaking the firm's business model so it can better share new product development risk with customers. Basic

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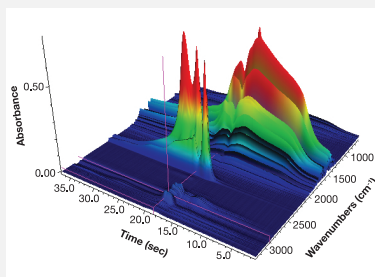
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research will always be on a fee-for-service basis, Bell says, but once a customer's target molecule or application is in sight, MPD is willing to invest to help bring it to market, even if the payoff isn't immediate or a sure thing. "At the end of the day, the long-term reward is well worth it," he says.

That new attitude is one reason MPD is doing business with Swiss American Products, a Carrollton, Texas-based manufacturer of wound care and other medical devices.

The relationship began after Swiss American's scientists came up with an idea for a new wound-care product. The catch, recalls Ede Payne, Swiss American's chief operating officer, was that the product required an organosilane that was not commercially available. The scientists were able to synthesize it in gram quantities, but they needed a contract manufacturer to scale it up.

Swiss American discovered MPD during a database search for potential suppliers. "We were looking for someone to share some of the risk in the development process," Payne says. Unlike some companies Swiss American contacted, MPD didn't require a steep up-front fee just to open discussions. "They were willing to work at a reasonable rate," she says.

Just one year later, a prototype of the new product is in hand, and commercial launch is set for this summer. If Swiss American hadn't discovered MPD, Payne figures, it would have turned to a foreign manufacturer many miles and time zones away. "If we had to go offshore we might still be in the lab," she says.

BESIDES THE wound-care product contract, a payoff for MPD has been the new relationship with Swiss American. Two months ago, scientists and business development people from the two firms got together to brainstorm about additional medical products. They came up with two more ideas. One key to the discussions, Payne recalls, was MPD's ability to blend silicone and acrylate chemistry.

Bell says MPD's new attitude toward collaboration contributed to a 10% rise in sales last year, despite the economic turmoil that was wracking the industry. Given the firm's strong start this year, he anticipates even higher growth in 2010.

Hampford Research, a Stratford, Conn.-based custom chemical manufacturer,

can't claim to have been unscathed by the recession. But the firm's president, Kate Hampford Donahue, says a series of structural changes she had been instituting there helped minimize the damage.

Hampford Research was founded in 1982 by Donahue's father, John E. Hampford. For much of the company's existence,

at Hampford for well over a decade. In fact, three of the firm's five original staffers are still there, including its technical director, Stephen Finson, who is known for his work in photoactive chemistry.

Donahue dropped certain products that were mainstays but losing money. And she streamlined the new product evaluation

process to more realistically determine which projects make sense for the company. "We used to try to do everything. My dad always wanted to make everyone happy," she says.

One result of that process was a decision to pursue customers in the industrial adhesives market. About six months ago, Hampford Sales Director John Jury started knocking on doors and found a receptive audience. One firm was interested in a current Hampford product but required different performance specifications. Hampford's technical staff developed an alternative process that met the customer's needs.

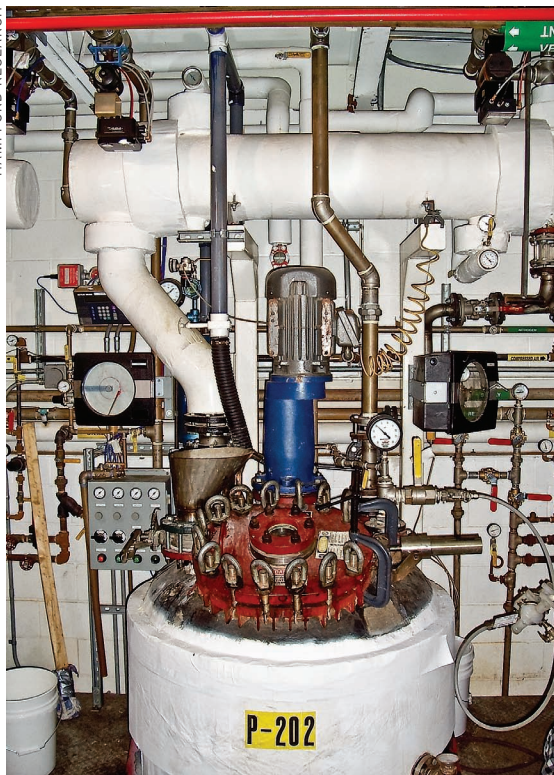
"We just got full approval all the way down the line," Donahue reports. "Orders should be placed in the next week or two." She now has her eye on emerging markets such as three-dimensional television and photovoltaics, where customers, 40% of which are offshore, can take advantage of Hampford's expertise in display materials and photoinitiators.

Donahue explains that she saw the economic downturn coming early in 2008, thanks to contacts developed through Vistage, a chief executive leadership organization she belongs to. She responded by pushing through layoffs in the middle of that year. As a result, in early 2009 when business was cratering everywhere, Hampford went to a four-day workweek for two months but didn't have to let anybody else go. The firm's workforce now stands at 30, off about 20% from its peak.

Personal care and dental product markets held up last year for Hampford, but sales to printing and electronics customers tumbled. Overall, Donahue says, sales fell 15 to 20% in 2009. But on the basis of first-quarter results, she expects sales to rise 25% this year.

"We are a better, stronger company coming out of this and are well positioned for the future," she says. "I'm hoping the company can be handed down to the third generation." ■

HAMPFORD RESEARCH



AT THE READY
Hampford offers multiple reactors at its Stratford, Conn., plant.

Donahue was busy with her own career in cable television programming and had little involvement with the company beyond being on its board. But three years ago her father took ill, and she responded to a call to join the family business.

It's been a steep learning curve since then. Donahue readily admits that she didn't know much about chemistry before joining the firm. "But basic business principles are universal concepts," she points out. And Donahue applied those principles rigorously when she took over, working to shift the firm "from an entrepreneurial mind-set to a more corporate approach," without compromising its historical strengths and institutional knowledge, she says.

For example, she brought in experienced sales and engineering people from big firms such as Wacker Chemie and Dow Chemical. Yet many employees have been