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Advanced Concrete Technologies, Inc., Greenland, New Hampshire, 03840, USA

Dalmaray expands product line and market boundaries to achieve best year ever

"Last year, our top three selling products were not even products we were making four years ago," observes Rob Ausen, President of Dalmaray Concrete Products of Janesville, Wisconsin. While many precasters in the area have seen their business wither under the combined pressure of a protracted recession and painfully slow recovery, Dalmaray has continued to thrive. "Fiscal year 2011 has been our best yet," says Ausen, who joined his father—Robert "Bob" Ausen—in the family business in 1982. Dalmaray was launched in 1957 by Ausen's great great uncle. Ausen's father took over the firm in 1971 and today a fourth generation is playing a major role in the company's success, including Ausen's sons Aaron, Craig and Kyle.

■ Hank Giles, Advanced Concrete Technologies (ACT), USA ■

Dalmaray has succeeded throughout the years by listening closely to its customers and adapting its practices and products to match its customers' needs. Strict adherence to quality standards, on-time delivery, and continual innovation in precast technology has enabled the firm to maintain a competitive edge in even tough market conditions. The 15-person firm has found ways to remain profitable despite an historic downturn in housing starts beginning in 2008, compounded by the closing of the General Motors Janesville assembly plant in 2009. One of the keys to maintaining profitability is the fact that it produces its own concrete.

Time to change the mix

Prior to 2003, the firm relied entirely on ready-mix providers to supply its precast needs. "We had great ready-mix suppliers," Rob Ausen is quick to note, "however, the limitations and requirements of those suppliers began to really impact our growth potential. Things like a three-yard minimum, surcharges for weekend or after-hour deliveries, and time wasted waiting for concrete to be delivered cut into our profitability. Not to mention that we were paying about 40

percent more than if we made our own concrete mix." Dalmaray was forced to adapt its business schedule and practices to the restrictions of its ready-mix suppliers. The firm, which began more than fifty years ago producing precast steps, is now one of the larger diversified precasters in Wisconsin. The firm's product line today includes precast utility pads and vaults, window wells, manholes, retaining wall, septic tanks, agricultural structures and many custom products. Ausen's decision to invest in his own batching plant was not easy. "I looked at about eight different suppliers for batch plants and they all asked me a lot of specific questions, many of which I just couldn't answer," he recalls. "I had never owned or run a batch plant before so I didn't know what I needed. Luckily, I found Advanced Concrete Technologies (ACT). Max Hoene, the president of ACT, visited our facility. He and the ACT/Wiggert design team showed us exactly how a batch plant worked and helped us determine the best solution." ACT provided Ausen with engineering and design guidance at every step of the way to ensure the new batch plant would fit in the existing Dalmaray facility on Arch Street. While Ausen also planned a production floor expansion, space was tight for the new batch plant.

One ACT innovation that saved space was the use of an 80-ton split silo as an aggregate storage bin. "They took a huge cement silo and install a wall down the middle to create two vertical aggregate bins," Ausen says. "No other supplier ever suggested this to us and it made perfect sense for our situation. It was like getting hit between



This MobilMat Mo45-2-PCS fully automatic turnkey concrete mixing batching plant from Advanced Concrete Technologies was installed in 2003 at Dalmaray Concrete Products in Janesville, Wisconsin. At left is the mixer platform, which includes a Wiggert HPGM 1125 high shear counter-current planetary mixer and at right a 50-ton cement silo. Dalmaray owner and President Rob Ausen stands in front of the plant control room.



Dalmaray owner and President Rob Ausen uses the ACT Programmable Control System (PCS) to select recipes, track inventory, and monitor system functions. The PC-based system uses a graphical user interface (GUI) for intuitive control.



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the eyes with a hammer; so simple a solution and so creative. That's the kind of out-of-the-box thinking that we get from ACT."

The aggregate storage silo is housed inside the Dalmaray building in order to maintain ideal aggregate temperature, even in the harsh Wisconsin winter.

Dalmaray installed an ACT MobilMat Mo 45/2-PCS concrete batching plant in 2003, which includes the following components:

- Wiggert HPGM 1125 high shear counter-current planetary mixer can produce up to 24 cubic yards per hour and provides optimal cement dispersion promoting higher initial strength and consistent mix production.
- Automatic high-pressure cleanout system that saves end of day cleaning time and increases mixer life. "This washout system paid for itself in about a year and our mixer still looks brand new nine years later," Ausen observes.
- PCS Control System is PC based, providing a user friendly, color coded real-time display of batching progress. The system integrates process supervision, production reporting, inventory tracking, and recipe management, with plant maintenance, and costing functions.
- Hydromat microwave moisture probe in mixer delivers precision water/cement ratio concrete for truly automatic batch water adjustment.
- Hydrotester moisture probes in sand/aggregate bins automatically compensate batch weights for variations in aggregate moisture content.
- Two-compartment aggregate storage silo system, saves floor space and protects the contents from the elements.
- A 50-ton cement silo equipped with a silo probe for accurate continuous 0-100% level indication and user-definable alerts for "low" and "high" silo levels to help in inventory tracking.

Adapting to a new business environment

When the recession struck in 2008, the firm was initially rocked like many others. "We saw a definite drop off in many of our traditional products," notes Ausen. "However, it didn't take long for us to recover or adjust. We discovered new markets we had never considered. We listened closely to what our customers were asking of us and made changes to meet their needs."

One example of this is in the specific sizes of septic tanks the company produced. While sales of its most popular 1,600 gallon residential model declined, contractors began asking for a smaller tank that would still meet their needs but for which they could charge somewhat less to help reduce total costs. Dalmaray introduced a 1,300 gallon model that was readily adopted by builders.

"We knew it would help our customers get more business and, at the same time, provide us with continuing sales as well," Ausen says. "We made a lot of changes to accommodate our customers and it has paid off." As the residential construction market dried up, Dalmaray adjusted its product line-up further to better meet the needs of commercial and agricultural markets. For instance, T and L panels for agricultural storage bunkers became a major emphasis. More recently, the company has become a franchise producer of Recon Retaining Wall and Porta Post systems.

"We just finished a Recon Retaining Wall project that filled 150 flat bed tractor-trailers," Ausen says. "Using our ACT batching system, we have been able to accurately adjust our mix depending on the product specifications to optimize quality, strength and profitability.



Dalmaray Precast casts most products using SCC (Self Consolidating Concrete) for better productivity and superior product quality. The SCC mix is delivered by crane bucket and provides consistent quality without vibration.



Prior to installing its ACT batching plant, Dalmaray relied solely on truck-delivered ready mix concrete. Today, Dalmaray is approximately 30% more profitable thanks to its automated, flexible operations. The firm has grown and thrived even through difficult economic times by continually innovating in the products it produces, delivering top quality products, and through its adoption of state-of-art production practices.



Founded in 1957 by Rob Ausen's great great uncle, Dalmaray is still operated by three generations, including Rob Ausen's father and Rob's three sons: Aaron (standing to the left of his father above), Craig and Kyle.



Below grade aggregate grizzly enables efficient charging of the 2-compartment indoor aggregate silo directly from a truck or frontend loader – no double handling required.

For instance, retaining wall block requires a mix that's about 4,000 psi air entrained concrete, which means we can use less cement, yet maintain quality cost effectively."

Consistent quality pays off

With its own precision batching system, Dalmaray easily and consistently produces SCC (self consolidating concrete) mix, delivering the highest quality without the need for vibration.

"You can't just stick a sand probe into a pile of sand and say 'ok, this pile is all 3 percent moisture content for the day,'" Ausen observes. "Every batch we produce is automatically checked for moisture content of our aggregates to get the water/cement ratio perfect. That level of perfection is reflected in our end product quality and finish, and ultimately in the reputation we

have in the market place. Our customers know that Dalmaray is a quality producer that can be counted on."

Rob Ausen's son, Aaron, a 2006 civil engineering graduate of the University of Wisconsin, has applied his engineering acumen and the firm's computer-controlled ACT batching system to not only improve all existing products, but also develop new precast solutions.

"Our competitors that are still relying on ready-mix or an outdated batching system do not have the control we have over product quality," Aaron Ausen notes. "Many of these firms do not really know what is in their mix. For instance, our 28-day cylinder tests show an average breaking strength of 6500 psi, with a standard deviation of just 1-200 psi, month to month in a 7.5 bag SCC mix. We have no problem promoting our septic tanks, for instance, as the highest

quality available anywhere."

Aaron has led the company's move into custom precast products that replace many poured-in-place alternatives. "Aaron will look at plans for construction projects that call for certain poured-in-place structures and propose precast solutions," Rob Ausen explains. "It could be as simple as a slab or it might be a column or a beam. Our batching system gives us the flexibility and confidence to seek out new opportunities without hesitation."

Ready for the rebound

What about the future? Ausen sees continued growth in fiscal 2012, predicting sales that will at least match 2011. While traditional residential market continues to recover very slowly, Dalmaray is seeing strong growth in its agricultural markets. In fact, he's concerned about how the firm will handle a rapid increase in production, should the need arise.

"We're concerned about the magnitude of any economic recovery and how we will keep up with demand if everything we have started suddenly accelerates," Ausen notes. "This is something we're looking at right now, and that's a good problem to have I guess. We know our ACT batch plant can keep up with whatever we throw at it. We're more concerned with our floor space and storage."

Ausen knows his ACT batching system can be counted on to help the firm shave time throughout the production day. The system's fast mixer, automated washout system, intuitive computer control, and repeatable precision deliver profitable results.

"Installing our own batching system was the smartest investment we ever made," he emphasizes. "We're definitely more profitable – probably 30% more – and we have the capability to meet market needs wherever that may take us in the future." ■

FURTHER INFORMATION



Advanced Concrete Technologies, Inc.
300 Portsmouth Avenue
Greenland, New Hampshire, 03840, USA
T +1 603 4315661, F +1 603 4315547
info@concretebiz.com, www.concretebiz.com