

Staying in the Game

A NEW FACILITY RUNNING THE LATEST ADVANCED CONCRETE TECHNOLOGIES EQUIPMENT HELPS KEEP CAMP PRECAST COMPETITIVE IN SPARSELY POPULATED VERMONT

With a population just a shade over 627,000 residents, Vermont ranks as the second smallest state in the U.S.; only Wyoming has fewer people. With no major metropolitan areas nearby, and winter weather that can turn cold and snowy for weeks at a time, running a thriving precast concrete business in upstate Vermont is an ongoing challenge.

But that's just what one New England family has done for more than 50 years since Dale and Mary Camp founded Milton, Vt.-based Camp Precast Products in 1968. They made it work by developing a wide range of products over the years, and when they retired and passed the business to their two sons, Kevin and Patrick, the second generation continued to evolve the company. Patrick left in 2005. A few years later, Travis Brousseau, who had previously worked at Camp Precast, rejoined the company as its general manager and eventually became a partner.

As the precast industry grew increasingly more technical, with customers demanding high quality at competitive prices, the principals knew they had to make a move. "I felt like we were either going to make this investment or I might as well just get out of it," says Kevin Camp. "My father built the original building in 1972. The batch plant was a 1960s Johnson model—not ours originally—so we were using a second-hand batch plant that we had dumped a pile of money into that was never intended to be used in cold weather.

"We were very limited. We were pouring outside, and the quality was suffering from having to work in the cold and the snow. There

were many things that came into play. Another was retaining quality employees[:] It's hard when they have to work in that environment."

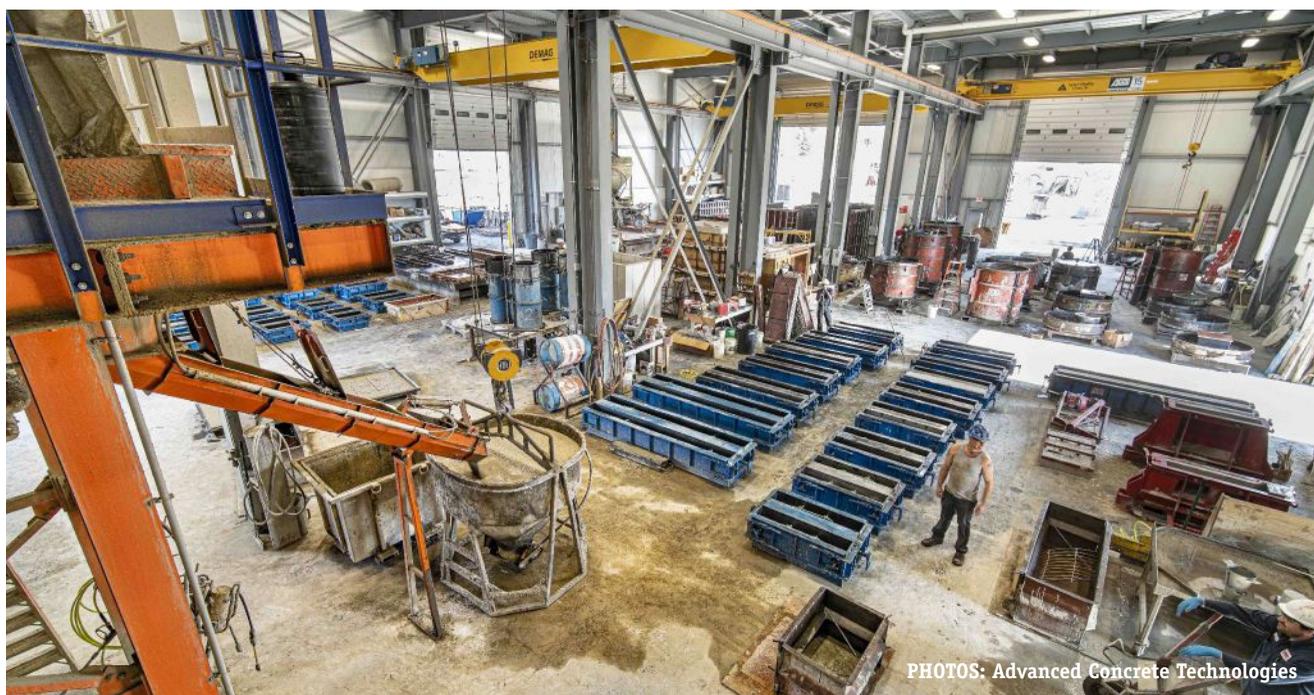
NEW PLANT, NEW TECHNOLOGY

That's when Camp Precast Products took a major step forward, investing in new technology and a new facility—a reimagining of the company that took nearly three years from planning through commissioning of the 14,000-sq.-ft. plant.

Constructed beside the original operation, the new facility opened in February 2017, featuring material handling and mix production equipment from Advanced Concrete Technologies, based in Greenland, N.H. The ACT system solved one of Camp Precast's biggest challenges: Aggregate was stored outside and had to be loaded onto a bucket elevator at the old plant, which slowed production and limited capacity.

"We had a guy operating a loader for a half day, loading up in the morning for two or three hours to get ready for production," Brousseau recalls. "Then we'd pour 30 or 40 yards and we would have to load it again."

Early in the new plant design discussions, Camp pitched an idea for aggregate storage that he learned from another cold weather precast producer, Andy Wieser, president of Wisconsin-based Wieser Concrete Products. ACT made it a focal point of the new design. "They were able to take our concept and custom engineer their equipment layout to fit our needs, and I think they did a really nice job with it," Camp affirms.



PHOTOS: Advanced Concrete Technologies

The 14,000-sq.-ft. operation has enabled Camp Precast to expand its capacity and improve productivity and efficiency.

BUNKER MENTALITY

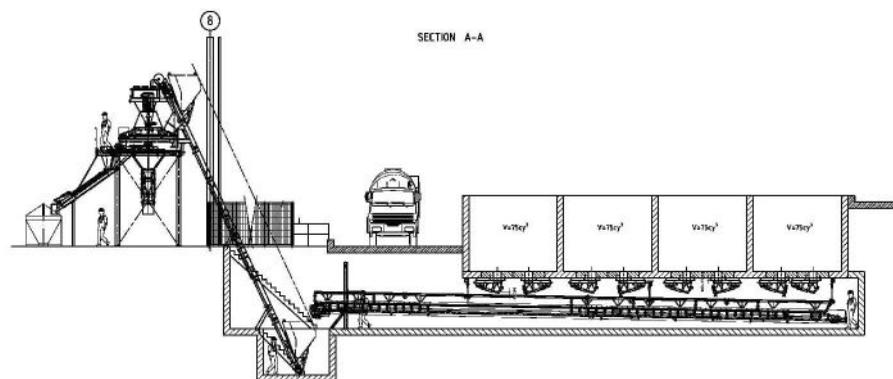
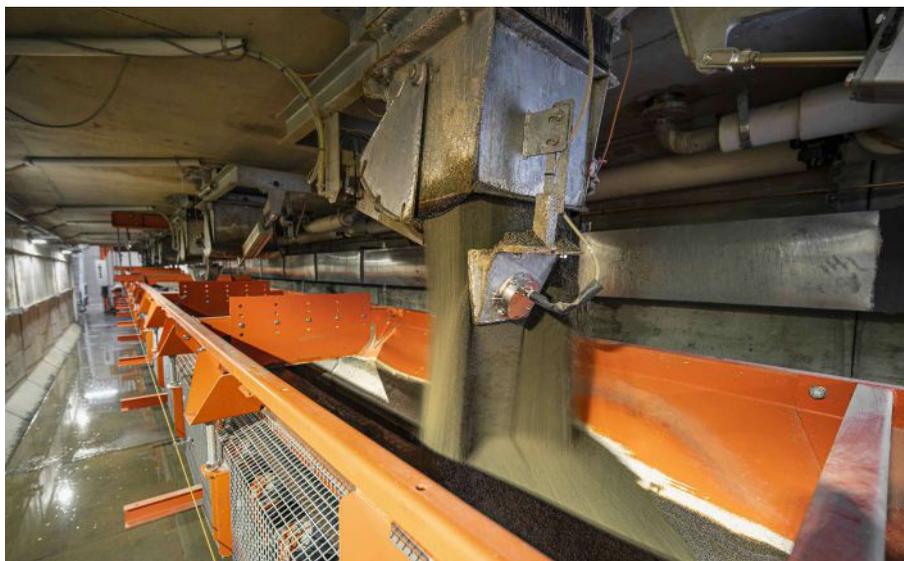
ACT brought in the WiCoMix 2250-4 WCS plant, which features underground precast concrete aggregate bunkers engineered to take advantage of the geothermal warmth below grade. That was a game-changer for the Camp production team, which was plagued with the issue of frozen aggregates every winter. The four bunkers each have about 100 tons of storage capacity. Not only is the aggregate protected from harsh weather, the bunkers will never wear out. The need for an operator to run a front-end loader is eliminated because aggregate deliveries go directly into the bunkers, which are fitted with dual gates for precision batching. Two of the bins include ACT's RADAR Hydrotester; it monitors real-time aggregate moisture and automatically corrects batch weights to deliver a consistent load every cycle.

"One of the biggest benefits of the new facility is the flexibility to produce more and better-quality concrete to expand our product lines. Camp Precast continues to stay competitive in a fairly isolated region because of our range of products," Camp observes. "The biggest way we compete is by being diverse in our product lines. You can't just be a manhole producer in Vermont. You'd go hungry. So, diversity in our product lines enables us to drive sales."

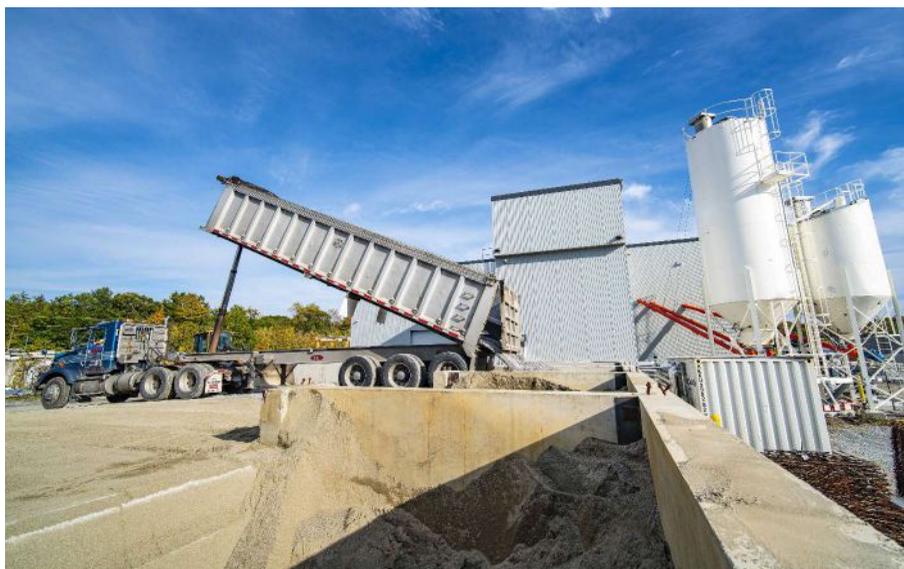
The weather factor has also been removed, he adds: "We can do projects in the wintertime that we could never do before. We did a big pile cap job this past winter that we wouldn't have been able to do in the past. We've done box culverts in the winter that we wouldn't have been able to do in the past. It just opens us up to be able to produce. There's not a lot of good winter work around here, and if you can get something and have the capability to do it, that's a big deal."

The underground bunkers are just the start of the features that ACT brought to Camp Precast. The mixer is a Wiggert high shear planetary model, HPG 2250, which can produce a full 2-yd. batch every three minutes. Integrated with the WCS Control System, it offers a user-friendly, visual control panel that provides real-time access to production statistics. The reporting metrics enable the operator to keep tabs on material consumption, inventory and maintenance schedules. The WCS controls also auto calibrate the HydroMat Moisture Probe in the mixer and provide data for quality control reports.

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The new 40 yd. per hour plant, provided by Advanced Concrete Technologies, is part of Camp Precast's modernization strategy to increase plant capacity and efficiency. The weigh belt, located under aggregate storage bunkers, is equipped with Hydrotester auto moisture probes for fine aggregates. The WCS Control uses this real-time moisture measurement to auto correct batch weights for precise control of the mix design. Aggregate deliveries go directly into the four 100-ton storage bunkers, which removes the double-handling issue and greatly increases efficiency.



TEAM WORKS



Team member Devon Cane (left) finishes a roadside curb from a fresh batch of self-consolidating concrete. The high spread mix design requires little or no vibration. Richard Swann checks production batch tickets for a Department of Transportation job on the ACT/Wiggert WGS Control.



Dennis Alderman secures a load of Camp Precast coated manholes for delivery, while Ethan Camp caps a quality control inspection by stenciling the NPCA certified plant logo onto an electrical vault ready for shipment.

PRECISION AND CAPACITY

Batch plant speed, precision and ease of use have enabled Camp Precast to add more capacity, work more efficiently, and compete for more department of transportation work year-round. The producer can also go after other major projects that may have been out of reach in the past.

"The bottom line is, it's easier," says Travis Brousseau. "It makes a better, accurate batch and keeps our yield right on. There's no question about it ... The ACT system allows us to be more accurate, more hands on. The reporting system is excellent. It gives us monthly and daily reports, and we can give state inspectors what they need too, versus some of the reporting that was done by hand before.

Another big improvement, he notes: There's no down time waiting to refill the aggregate bins. "We have a tremendous amount of capacity now," thanks to batch equipment that "can make concrete faster than we can place it."

The Wiggert HPG 2250 mixer's self-cleaning feature is also a big

bonus. ACT's patented high-pressure cleaning system automatically cleans the mixer in 10 minutes, which makes it possible to run a cleanout cycle during breaks or at lunch to prevent concrete buildup. Hand-operated lances allow spot cleaning plus chute and bucket cleaning outside the mixer at the end of the day.

The new production facility creates an environment that Brousseau wants Camp Precast's production team members to have pride in and maintain. "Like I tell my guys, it should be cleaned like you would clean your Corvette in the garage. Clean it more than you're using it, because without it, we're nothing, guys."

As another winter closes in, he and Kevin Camp no longer have weather worries when they're planning production. In fact, they are considering even more product diversity, looking at additional precast elements or structures that may bring a higher profit margin. With a modern facility, precision production processes, and a dedicated team of employees, Camp Precast Products is setting itself up for the future to stay ahead of the game.



The Camp Precast Products production crew takes a break in front of the ACT batch plant that directly services two new independent crane bays. Quality, safety and productivity take teamwork at the northern Vermont operation.