

Northeast Precast,
Millville, N.J.



BUILDING THE FUTURE OF PRECAST

Building a **new plant** requires plenty of work, but it's also **satisfying and exciting** to shape a space to accomplish your company's goals.

By Shari Held

Constructing a new plant is a huge venture, and the financial expenditure is only one aspect to consider. There's also researching, investigating your options and designing your plant for current and future production. In addition, you'll need to plan a seamless transition from old to new. Four precasters who recently took the plunge provided some insight about their experience building a new plant.

MAKING THE DECISION

Timing is everything, but there's no magic formula to tell you when the time is right to build.

"I don't know if you ever know," said Clay Prewitt, general manager of H2 Pre-Cast in East Wenatchee, Wash. "But in 2007 we didn't have much of a choice. It was either stay there and pile everything 30 feet in the air or move."

H2 Pre-Cast built a 50,000-square-foot, fully enclosed, H-shaped facility. Quality control and reinforcement production occupy the center, flanked by dry cast and wet cast areas. The extra space meant the company could produce larger-diameter

manholes and bigger electrical vaults for its existing product lines. In 2016, the company is adding 15,000 square feet of production space to accommodate increased demand.

Jamie Hodges, president of Seminole Masonry in Sanford, Fla., wanted to add new product lines to the company's portfolio. Unfortunately, the old plant didn't have the necessary capacity or storage space.

Prior to deciding to build a new plant in Sanford, Hodges investigated buying a 35-year-old plant. He looked at everything from available parking space to what it would take to retrofit it to their needs.

"We realized we were going to have a ton of money in something with a bunch of Band-Aids on it," Hodges said. "It was better for us to find the right land at the right location and build our own place, so we could be efficient and use every square foot to the maximum."

For John Ruga, owner of Millville, N.J.-based Northeast Precast, the timing of his decision to build was more of a gut feeling. Northeast Precast has a diverse product line which includes residential, commercial and department of transportation products. In 2005-2006, the company expanded its residential capacity. In 2016, the company is building a 50,000-square-foot plant to handle its DOT and commercial specialty product lines.

"Each time it's a bit of a roll of the dice," Ruga said. "But as long as nothing crazy happens with the economy, we feel our market share is going to increase. We'll need the extra production space."

Increased demand plus a desire to offer more finishes and types to its precast wall panel line prompted Andy Stubbe, president of Harley, Ontario-based Stubbe's Precast, to build his third plant. The 200,000-square-foot, fully automated carousel plant is scheduled for completion in July 2016.

ADDING NEW DESIGNS AND FEATURES

Stubbe focused on achieving better quality, improved product-handling efficiencies and fostering long-term employees.

"Our average employee age is around 24 years," Stubbe said. "I want to make it easier on them so it's something they can do when they're 45 or 50 years old."

In a carousel plant, the product comes to the workers, like the setup in an automotive plant.

"This carousel plant is a different animal,"

"The goal with any expansion should always be to become more efficient in your overall operations."

– John Ruga, *Northeast Precast*

Stubbe said. "You get the equipment and design the plant around that. It takes a lot more planning – two years to plan and one year to build. But I think automated plants are going to gain traction as things evolve."

Northeast Precast broke ground on its new plant in January 2016. Its higher ceilings will accommodate heavier cranes for moving large DOT products. It will feature a vacuum lifter to pick up large panels and a tilt table for rotating them. Currently, the company manufactures large products at another yard. The new facility will allow it to consolidate all production in one location.

"The goal with any expansion should always be to become more efficient in your overall operations," Ruga said. "This expansion was driven by the increase in demand for our products and services. Over the years we've gotten into bigger custom precast products."

H2 Pre-Cast purchased another 13 acres for its 2015-2016 expansion. This will enable the company to move its finished concrete inventory from the existing property to the new, adjacent property. Separating inventory from the manufacturing area will improve efficiencies.

"Step two is to add a 10,500-square-foot manufacturing building, a 15,000-square-foot outside pouring deck and another batch plant," Prewitt said. "The outside pouring deck will allow us to pour the bulk of our large-diameter manholes, large vaults and

three-sided culverts out there. It will make the handling and loading of them much easier."

In Florida, Hodges purchased 18 acres to build his new plant and reserved five acres for future expansion. Seminole Masonry's new plant features an 8,500-square-foot office building, a 15,000-square-foot warehouse for masonry product lines, a 25,000-square-foot precast manufacturing building and an 18,000-square-foot covered casting bed structure. Seminole Masonry built the plant in stages, with the last building completed in November 2015.

The covered casting bed allows the company to cast every day, regardless of the weather. The manufacturing building features a 20-foot-wide, 350-foot-long pit. It houses the battery forms used to produce Aftac wall systems.

"Concrete trucks pull up inside the building and discharge their concrete right into the forms, which are six feet below the pavement," Hodges said. "That's so awesome compared to the way we used to do it."

TRANSITIONING FROM OLD TO NEW

According to Hodges, transitioning from an old plant to a new plant must be done very methodically. Seminole Masonry worked out of the old plant while the new plant was under construction. Once ready, production was moved to the new site.

H2 Pre-Cast's facility was also built in



H2 Pre-Cast,
East Wenatchee, Wash.

Photo provided by H2 Pre-Cast

stages for an easier transition. The wet cast area was built first and the new mixer was then installed.

“As soon as that plant was able to be up-and-running, we started moving all our forms and transitioning from the old plant to the new plant,” Prewitt said. “Within a week or so we were able to start pouring.”

Before the move, H2 Pre-Cast’s old dry cast area ran full throttle, building up inventory in anticipation of the two-month process to get the new dry cast area producing.

Northeast Precast’s new building was built to house its off-site outdoor operations, consolidating all production at one location. For Stubbe’s Precast, no equipment needed to be moved, but staffing required long-term planning for a smooth transition.

“We purchased engineering and management software and hired and trained personnel well in advance of the new startup,” Stubbe said.

Employees will gradually transition to the new plant to begin training with equipment manufacturers.

PARTING ADVICE

Stubbe’s advice is to “plan, plan, plan.” He also recommends hiring a consultant if you feel you’re out of your comfort zone, and dealing with trusted subcontractors.

“There will always be a few surprises,” Stubbe said. “But if everyone works together, it will go smoothly.”

Ruga knows all about surprises. The Thursday before work began, his contractor



*Stubbe's Precast,
Harley, Ontario*

Photo provided by Stubbe's Precast

“We purchased engineering and management software and hired and trained personnel well in advance of the new startup.”

–Andy Stubbe, *Stubbe's Precast*

informed him it would take six weeks to get the building erected. That didn’t work for Ruga. Fortunately, Northeast Precast has a full-scale fabrication shop and was able to erect the structural steel starting on Monday – just three days later.

“You have to be somewhat flexible,” Ruga said.

Ultimately, building a new plant is a leap of faith.

“Sometimes you don’t have all the answers about where the work is going to come from,” Ruga said. “But once you’ve started, you have to move ahead. You can’t look back.”

Hodges recommends asking plenty of questions during the planning process and focusing on future product lines so you can design for the long term. Spending money now can position you to capitalize on future business.

“My whole model is that it takes money to make money,” said Hodges, who expects his new plant to be paid off in 7-to-9 years.

Since opening the new plant, Seminole Masonry has added several product lines. The company also developed a patent-pending precast elevator core. None of these could have been produced in the old plant.

Lastly, Prewitt’s advice summarizes the attitude that ultimately directed each precaster’s decision to build a new plant.

“Follow your gut,” Prewitt said. “You can crunch numbers all day long, and you can manipulate those numbers in a million different ways. But if you feel it’s the right thing to do, then, more than likely, it is.” **PI**

Shari Held is an Indianapolis, Ind.-based freelance writer who has covered the construction industry for more than 10 years.



Photo provided by Seminole Masonry

*Seminole Masonry,
Sanford, Fla.*