

IVP Plastics bounces back after roof collapse, flood

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P.J. Hoerr Inc.: A demolition crew razes the main manufacturing center of IVP Plastics in Washington, Ill., about two months after a heavy late spring snowfall caused the roof to collapse.

March 24 was one of those days where the loss of a \$100,000 free-standing crane was part of the good news for everyone at IVP Plastics in Washington, Ill.

On track for a record year, the custom injection molder was running a part-time shift that Saturday. About a dozen employees were keeping up with increased demand for control handles, levers and instrument panels made from reinforced plastics and specialty materials for the automotive,

agricultural and heavy equipment markets.

Outside, 8 inches of heavy, wet snow piled and then drifted as a spring-time blizzard hammered central Illinois with wind gusts up to 40 mph.

It was all too much for the 26-year-old rounded roof over IVP's main manufacturing building. The arc-shaped structure, where 17 of the factory's 19 presses were housed, caved in.

Employees scrambled to safety, as they had rehearsed in emergency drills, and the roof dropped but did not crash all the way to the ground. No one was injured, thanks to that 12-foot-tall crane with interior rails shouldering the section of ceiling over the core of the manufacturing center.

"As far as we're concerned, that was a godsend," IVP President Daryl Lindemann said in a phone interview. "If the crane system hadn't been in place, the roof

would've come all the way down to the floor and been much more injurious to our employees and possibly destroyed equipment."

The 17 expensive machines were still threatened, however, as a rush of water from busted pipes poured down from the ceiling with no end in sight. The collapse caused the water pressure in the tower system to drop, and to equalize pressure, the system did what it is designed to do. It pumped through more water, flooding the building.

Unfortunately, the utility could not turn off the water right away.

"It pumped 250,000 gallons through our facility, primarily draining a local water tower that's a couple blocks away," Lindemann said. "It absolutely permeated the place. All 54,000 square feet had water — not deep, but it was everywhere."

Top of the to-do list

At the first of many — often twice daily — meetings, IVP staff talked about a long list of priorities to handle what in the end would amount to about a \$5 million loss, according to Lindemann.

"The first thing to do was communicate with our employees and customers so they heard the news from us," he said.

The local media was reporting on the IVP roof collapse as part of blizzard coverage with traffic accidents and road closures. The cave-in affected about 24,000 square feet of the building.

As key IVP stakeholders were notified about the extent of damage, Lindemann said it helped that the company had just moved to a cloud-

based email system because it kept communication lines open.

At that time, IVP had only two presses working — the two that were in another building. The main plant was without power, water and a chiller tower. But damage control was underway.

The next step was to prevent more water from falling on top of the presses.

"We went out and purchased every tarp we could find locally," Lindemann said. "I asked for volunteers to go into the building and cover up every press we could get to, to protect them. We had eight inches of snow on the roof. It was going to melt, and we had rain in forecast."

Employees put in long hours in trying conditions. By the end of the day on March 25, all 17 presses were tarped.



IVP Plastics employees set up a makeshift triage unit for 17 injection molding machines that took a soaking after the roof collapsed and brought down a piping system connected to a water tower.

High-tech triage

Discussions about drying out the equipment were going on concurrently with insurance and machinery experts. A decision was made to shore up the collapsed building and move the presses to a building next door.

Employees made room for the presses in what would become one of their temporary homes.

"We moved 17 presses — two to three a day — until we had all 17 out," Lindemann said. "We had a contractor come in and tent each press individually. Inside that tent we put a fan, a dehumidifier, desiccant bags and a heating element to warm up the air a little." Each press was tented for three days.

"It looked like a triage center in Building No. 2," Lindemann said. After the dry-out phase, the presses were uncovered and their electronics slowly brought back up. "The day our first press started up, we celebrated. That was one of 17,

and we needed to get all of them," Lindemann said. "Thankfully by following that process, they all came back up. It was unbelievable." Each startup was marked by cheers or treats and talk about progress made.

"It was important to encourage people," Lindemann said. "Our management team was really good about letting people know we'd rebuild and be better than what we were before. The intention was to come out of this stronger."

Moving operations

IVP had a few good things going for it: business interruption insurance, a second manufacturing plant in St. Louis and a newly purchased building across the street.

Molds were shipped to the St. Louis facility, and employees there suddenly took on a significant increase of work. They ran at least three presses 24/7 and filled orders with their additional capacity and built-in redundancies.

Back in Illinois, there was another round of cheers when everyone learned they would be paid during the recovery period.

"Telling the employees they won't miss a paycheck was one of those celebratory times," Lindemann said. "We told them, 'Hang in there with us and report every day. We may not have something for you to do or we may, like cleaning presses as they come out of tents.' We had great cooperation from all employees."

Just three months earlier, IVP had purchased a 20,000-square-foot building across the street for an eventual expansion. It was empty and clean and could be used right away for administrative work and meetings.

"It was such a relief that we had a place to go," Lindemann said. "We could sit down in a room and brainstorm and talk about what we need to do. We had electricity and functioning utilities."

Later, some production would also be housed there.



IVP Plastics: After weathering the snow storm that brought down the roof and flooded the IVP Plastics facility in Illinois, employees managed to keep on track for a record sales year and earn industry honors and a certification.

Customers react

With \$21.5 million in annual sales, IVP ranks No. 262 among North American injection molders, according to *Plastics News*' latest ranking.

Founded in 1953 as I-V Die Mold, the company's customers include Caterpillar, Deere & Co., Agco Corp. and Navistar. Some customer representatives showed up in Illinois right after the disaster to work with IVP about which orders needed to be filled first. Others took early delivery on finished goods to let IVP free up its remaining space.

Customers gained confidence as IVP kept promises about catching up on parts production. The company even picked up about 70 new tools for work that is starting to come in now, Lindemann said.

Just 21 days after the roof collapse and flood, six of the 17 presses were running. After 60 days, 14 of the 17 presses were operating.

IVP was rebounding.

"We told people we really need to run 24/7 to make up for time we were down," Lindemann said.

Work was hampered by the loss of the crane system. Mold changes had to be done with forklifts and manual cranes.

"We're a custom shop," Lindemann said. "We don't have large production runs. We're doing 10-20 changes a day typically. Our crane system was very critical to us and we lost it. It saved all the presses because it was in place, but it could not be reused."

Record sales, honors

All the hard work at IVP's Illinois and Missouri facilities is paying off in terms of sales, volume and recognition in 2018.

"Dollarwise, it will be a record year," Lindemann said.

"Volumewise, in terms of parts

being shipped, it will be a record year. We're up 10-15 percent over our previous highs, and to do that when we've lost our main building is a testament to our people and customers who are flexible."

At the start of 2018, Lindemann said IVP's goal was to run 200 machine hours a day in Illinois. It's nearly there, and the company has nearly caught up with customer orders.

Despite all the hurdles, IVP received a quality supplier-of-the-year award from Duluth, Ga.-based Agco, which manufactures agricultural equipment. IVP also became registered by the International Automotive Task Force at IATF 16949, which is a quality management system that emphasizes defect prevention and waste reduction in the supply chain. "Our people are dedicated to the success of IVP Plastics, and it absolutely showed at both our locations during this period of time," Lindemann said.

Under construction

IVP is rebuilding its main manufacturing center with a metal Star Building System. The walls and roof are up and 90 percent of the floor is ready. The plan is to move in equipment starting Dec. 1. The two largest presses also will move there.

"We've gone with a 28-foot ceiling so we can get all of our injection molding under the same roof," Lindemann said. "We believe we'll be more effective and more efficient going forward."

The new facility also will have a restroom that doubles as an emergency shelter, plus an existing outdoor shelter that is rated to withstand tornadoes, which also have threatened the business.

IVP officials are coming out of recovery mode and thanking customers, insurers, contractors and the 114 employees.

"They knew we were going to have a big year this year, and they were as committed as the management team to making sure this company got back on its feet," Lindemann said.