A different kind of engineer

Rory Cleveland



Les Kempers grew up on a family farm with five siblings in Sioux Center, Iowa, with hogs, cattle, chickens, and a square mile of land to produce crops to feed them all. "We learned to fix and repurpose things by necessity, which I always enjoyed, although at that point I thought engineers only drove

trains," he says

After high school, Kempers entered the architecture program at Iowa State University in Ames, where his advisor quickly took note of his strong math background and propensity for building things and encouraged him to consider switching to structural engineering. Kempers ended up earning a BS in civil engineering. "That meeting with that advisor was the most important event in deciding my life's career direction," he says.

In 1977, while working on his MS paper at the University of Colorado in Boulder, Kempers benefited from his advisor's connections to Alex Aswad and F. Jerry Jacques at Stanley Structures, the largest prestressed concrete manufacturer in the United States at the time. "They allowed me to work on the development of double-tee leg daps for my master's paper, but I also had to test every other embed plate that Stanley used at that time," he says. "I had my own forklift and access to the entire production facility. In retrospect, I cannot think of a better opportunity for a new engineer."

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Stanley hired Kempers immediately after he completed the test program, and Kempers progressed from engineering to new product development to managing the company's architectural plant. After Rocky Mountain Prestress acquired Stanley's Denver, Colo., plant, Kempers went into project coordination and then marketing and sales.

In 1999, Rocky Mountain sent Kempers to Hawaii to assess the economic conditions for its plant there, which had opened in 1997. "We had to be doing more than hollow-core and piles; we had to educate the market on how to do all-precast systems, which would open up a much bigger piece of the overall construction pie," he says. What was supposed to be a six-month stint turned into 25 years and counting—he still lives in Oahu, Hawaii, where he is vice president of engineering, marketing, and sales for the company, which became GPRM Prestress after Rocky Mountain merged with Grace Pacific in 2006.

His wife, also a structural engineer that he met in graduate school, worked for an EOR firm and designed 12 total–precast concrete systems during her 11 years with that company. "That team effort is really what made us successful in penetrating the market," Kempers says. Their only son has recently become a senior project engineer for a large general contractor in Hawaii, so it has been a family affair to say the least.

Kempers first got involved with PCI out of a desire to not miss out. "It seemed like a certain group of people were always going to PCI and the rest of us were left behind to hold down the fort. I volunteered to speak on working with architects to develop total-precast systems back in the 1980s and that's how I got my toe in the water," he says. In 2022, he was named a PCI Fellow.

While serving on PCI's Glass Fiber Reinforced Concrete Panels Committee, Kempers helped write the first edition of the *Manual for Quality Control for Plants and Production of Glass Fiber Reinforced Concrete Products*. He has also been a member of the Architectural Precast Concrete, Marketing Communications, Total Precast Systems, and Financial/Risk Management Committees and a consulting member of the Fire Committee.

Kempers was encouraged by the results of the plant tours for engineering and architecture students. He says, "The professors felt the students retained more from the half-day sessions than their entire semester of classes just by seeing the operation in real life." He then helped launch a PCI Foundation studio at the University of Hawaii, which had its first class in 2022.

Kempers has this advice for young people entering the precast concrete industry: "Try to work in many different departments so you understand precast fully. It really doesn't matter what title a person holds; people with questions will gravitate toward the person with a comprehensive knowledge of precast because they know they'll get the best answer. Also, talk to the personnel that are physically doing the work in your plants and really listen to their thoughts and ideas; you'd be surprised at what you may learn from them."