Innovative Solutions

HK COMPOSITES HAS MADE A NAME FOR ITSELF WITH ITS TECHNOLOGY. BY ALAN DORICH

For more than two decades, HK Composites has grown a loyal client base for its wall ties used in insulated concrete sandwich panels. “Sixty to 70 percent of our work is repeat business,” Vice President Jordan Keith declares. “We’re also seeing a lot of new business coming in the door.”

His father, President and Chief Engineer David Keith, founded the Lehi, Utah–based HK Composites in 1993 after seeing a need for more economic sandwich panels. A veteran of the aerospace industry, “My dad is a composites expert,” the younger Keith states.

The company utilized an injection-molded polymer connection system as an alternative to more expensive and less efficient systems. Since its start, HK Composites has poured more than 25 million square feet of insulated sandwich panels around the world for projects such as wineries, factories, warehouses, stores, prisons, distribution facilities and houses.

Today, it serves a customer base that primarily consists of pre-casters and tilt-up contractors in the concrete industry. “We also do work with a lot of general contractors because they often times self-perform their concrete work,” Keith adds.

Product Pride

HK Composites’ products set it apart in a market where it has fought an uphill battle, Keith says. “Our competitors have definitely done a good job at branding and advertising their product,” he says. “We had to show the science in our product and that you have a great injection molded connector tie that performs well in this application.”

The ties, which are made from engineered reinforced thermopolymers, are designed to resist impact and shock loads during transportation and erection of precast and tilt-up panels. They also must pass tests for long-term alkaline resistance, fire, cyclic fatigue and building codes.

The company’s insulated panels consist of extruded polystyrene (XPS) or polyisocyanurate foam insulation, sandwiched between two layers of concrete. Along with the ties, the insulation can bring green building benefits and contribute to buildings earning LEED certification.

HK Composites offers a composite action connector tie, Keith notes. “This allows the concrete walls to be thinner and more economical for pre-casters,” he says. “They can tie two of the concrete layers together to get a more structurally efficient wall panel.”

Meeting Requirements

HK Composites has a strong presence in the tilt-up industry, Keith says. “We were very influential with the 2012 energy codes that mandate continuous insulation used in the buildings,” he recalls. “We help clients meet the requirements.”

Only a handful of firms offer this service because of the expertise required, Keith notes. “We get a lot of calls from architects who aren’t familiar with insulated sandwich panels,” he says. “We have a pretty good impact on these niche markets in the industry.”

As states have continued adopting the energy codes, “We’re seeing a big uptick in our business,” he adds. “We have outside sales reps all over the United States that we work with.”
Above and Beyond

HK Composites’ key partners include Hunter Panels, which has worked closely with the company to create an energy-efficient polyiso-insulation option specifically designed for its business. HK Composites uses a polyiso core to achieve superior R-values while managing overall thickness of the wall design.

Given that the polyiso is sandwiched between layers of concrete in these designs, specially engineered facings are used to ensure system compatibility while achieving the highest R-values possible. “Hunter Panels has gone above and beyond as far as helping,” Keith declares.

“That is one of the key relationships in getting to where we’re at today,” he continues, noting that the polyiso product gives HK Composites an edge. “They’ve been phenomenal.”

HK Composites also benefits from Hunter Panels’ location in Utah. “[They’re] 45 minutes from our facility,” he says. “Being able to have them streamline the process and get it over to us is advantageous.”

Quality Focused

HK Composites maintains an environment focused on quality. “We’re an ISO 9001:2008-certified manufacturing facility,” Keith says. “We’ve also gone through the Six Sigma Black Belt training.”

But the company also maintains a relaxed workplace, he asserts. “There’s not a lot of micromanaging going on,” Keith states. “Everyone knows what they need to do [so we are] getting these projects out on time.”

The essential members of HK Composites’ team, he notes, include his father. “He really holds it all together,” the younger Keith says. “He solves any problem that we have. He’s one of the brightest engineers in this specific industry.”

Keith joined his father’s business five years ago. “Since I took over sales and marketing with my partner, Kevin Christiansen, we’ve been able to grow sales exponentially year after year.”

The future for HK Composites looks good and includes the World of Concrete show in February, Keith says. “We’ve done [the show] multiple times and it’s been very successful for us,” he says. “We’ll up our booth size with more interactive demonstrations and modules.”

HK Composites also has studies in the works that will be game-changers for the company, he predicts. “These reports will really level the industry and double our growth,” he teases.

The firm also is pursuing opportunities overseas. “There’s not a lot of people [in some regions] with experience like we have,” he says.