

# Sticky Situation

H.B. Fuller has 90 days to be up-and-running

THE H.B. FULLER CONSTRUCTION PRODUCTS DIVISION, HEADQUARTERED IN AURORA, IL, is at the forefront of construction products innovation. Here, a very lean crew formulates, mixes and packages a long list of mastics, coatings, sealants and adhesives used in commercial and residential construction.

They make ceramic tile installation products, flooring adhesives, surface preparation products, exterior insulation finish systems and epoxy flooring for commercial and professional contractor markets. They also batch pre-mixed grouts, mortars and other products targeted predominantly to the retail home improvement marketplace. Jim Holman, president of Fox Valley Scale, New Lenox, IL, puts it in a nutshell, “They make sticky stuff.” Fox Valley Scale was called to the H. B. Fuller Construction Products plant to come up with a solution for what could have been a sticky situation.

“We needed a controller that was simple and powerful. We made the choice and it paid off huge. We realized a return within four months. I don’t think we have ever had to scrap a batch. We run about 20,000 pounds of product a day though this area of our operation. I’ve got a box here of data we collected to keep track of variances. But we don’t collect data anymore because there is so little variance. Saves some trees.”

Geoffrey Russell, H.B. Fuller production manager

Geoffrey Russell, production manager, and Jim Sansone, maintenance manager, recall the day they were advised that a variety of new processing and packaging equipment was being moved to the Aurora facility. Jim remembers, “We had to figure out how we could combine that new production equipment with the existing manufacturing area and be up and running in ninety days.”

Jim Sansone, maintenance manager, reviewed current production methods of the used equipment transferring to the Aurora factory. He realized that much of the equipment and processes were well over 20 years old and needed an upgrade in technology. Manual raw material weighing systems needed to be automated. The company had limited knowledge in using load cells and wanted to minimize capital spent on the relocation of the equipment. Jim notes, “We had to justify the money.”

Jim Holman did his research and Fox Valley Scale came back with this 920i® solution. Holman remembers the planning meeting. “I came up to Rice Lake and had a breakfast meeting with Don Fiedler and Marvin Stodola [Rice Lake engineers] and Mike Ryan [Rice Lake Great Lakes regional director]. We liter-



Left to right: Geoffrey Russell, H.B. Fuller production manager, Mike Ryan, Rice Lake Great Lakes regional director, Jim Sansone, H.B. Fuller maintenance manager, Jim Holman, Fox Valley Scale president, Travis TJ Oehmen, and Joel Velazquez, Fox Valley Scale service technicians

ally figured it out in an hour on the back of a napkin at the restaurant. Kristi Gay [Rice Lake engineer] wrote the program and created the tables to recall formulas.”

The system includes eight 920i's with 24-channel I/O and Ethernet® outputs. Holman believes the solution is perfect. “All the 920i's are tied to one network printer. Supervisors are using Interchange® to load formulas from the office

via the printer. One really neat aspect of the system is that any one of the 920i's can be used as a backup for any of the others. The I/O is redundant throughout the system. It can be changed simply wire for wire.”

Meanwhile, back at the plant in Aurora, Sansone and Russell were designing and building the steel mezzanine.

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H.B. Fuller Construction Products built a mezzanine to accommodate a variety of new processing and packaging equipment being moved from another facility. They were tasked to combine the new equipment into the existing manufacturing area and be up and running in 90 days.

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Sansone recalls the Big Day. “The first time we fired it up, everything worked! I was pretty happy about that.”

Holman adds, “And it can be expanded. We can stick another twenty-four channel card in there. That’s the beauty of the 920i.”

The factory currently supports another control system that requires ongoing

vendor changes, which in turn requires ongoing expense. Sansone agrees, “That is what got us thinking about another way to automate this new system. The 920i system is so much easier from a programming perspective and for updating. There is a cost to changing raw materials and formulas with the older system. We do that a lot. The fact that we can do it in a text style is huge. With



the 920i, we can load the new formula and go live today. It’s very flexible. No controller is unique. They are completely interchangeable, wire for wire. The programs are the same. We just load the batch routine.” ■

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Jim Holman, president,  
Fox Valley Scale, New Lenox, IL

The actuators open and close valves for the chemical ingredients in each formula. Geoff says the 920i weighs the ingredients and sends a signal as the target approaches. It anticipates the dribble of each ingredient after closing and actually adapts and improves each time it formulates a recipe.



## Surviving Ike

On September 9, 2008, as Hurricane Ike neared landfall near Galveston, Texas, it became the largest Atlantic tropical cyclone in recorded history, measuring 900 miles in diameter. The National Weather Service issued a strongly worded bulletin advising residents living in some parts of coastal Texas that they faced “certain death” if they did not heed orders to evacuate.

Ike’s 20-foot storm surge brought certain death to many truck scales in Texas—but not the SURVIVOR® OTR that Gary Becton, lead technician with Weighing Technologies, Seabrook, Texas, is still talking about to this day. “We had the service contract on this scale, and the owner asked us to come and take a look at it after the surge water went down. The scale had been under fifteen feet of saltwater for days. We opened up the summing box and there wasn’t a drop of water! I guess that’s why Rice Lake calls them “survivors.” We put in a new Rice Lake 420i indicator and printer and the scale worked perfectly!

“We had other customers in the Galveston area, and none of those truck scales survived Ike. The modules floated up and came apart. The Rice Lake scale didn’t float up at all. Probably because it’s heavier steel and the way the suspension system is designed—it doesn’t allow the scale to float off like all the others did.

“We’ve moved the scale to another location now. The new owner really likes the scale. He bought a Rice Lake floor scale later.” ■

