Stone Fabricator ASSI Achieves 100% Recycling of Wastewater

When American Synthetic Surfaces, Inc. of Beltsville, Maryland, decided to expand operations from a solid surface supplier—primarily Corian countertop products—to offering products fabricated of natural stone as well, the company knew from the outset that they were dealing with a whole different animal.

For one, ASSI would need more space, which fortunately became available for occupancy in late 2004 immediately next door to their existing facility. For another, while they could adopt and integrate the fabricating methods easily enough, there would be significantly different equipment requirements. Finally, though ASSI felt strongly that the growth in stone products was real and there was a need to offer their customers more choices, there would be a need for accompanying stone sales and marketing efforts.

All were manageable, however. But one new challenge would take some thought, research, and realistic long-range planning in an area where the company had little experience: what to do about the untold gallons of wastewater ASSI would be generating in the stone fabrication process, particularly as a firm that prides itself on its environmentally responsible corporate identity. Growth projections weighed in as well, and by January, 2005, the decision was made to work with Beckart Environmental, Inc. of Kenosha, WI, for installation of a Hy-Pack® Filter Press system.

“As we were looking into various systems that were recommended to us,” he said, “we were actually considering a similar system from another company, but what I was consistently hearing was that the systems they had specified were often undersized within about a year. During our meetings with Beckart, it became obvious to me pretty quickly—by the overall approach, by the questions they asked about our new process equipment, what our plans were for down the line, and so forth—that they had dealt with these kinds of issues before.”

Beckart recommended a 630mm filter press, one of their most popular models for use in the stone fabricating industry. The system offers a 10 cu. ft. initial capacity, easily and affordably expandable to 15 cu. ft. as the customer’s requirements increase. ASSI also elected to outfit their system with a Beckart automation kit that includes a programmable logic controller (PLC) panel that allows for hands-free operation throughout practically the entire process, including system start-up, precoat introduction and automated pressure regulation. The primary operator requirement on ASSI’s part is to empty the press of accumulated, compacted solids at appropriate intervals.

“As you commit to a system like this,” Hazlett said, “the additional costs of automation and expandability are negligible, and I’d recommend those features strongly. It’s also important to work with a filter press supplier that will provide good support after the sale, and on that count, I’ve been very happy with Beckart. The bottom line is to let the system take care of processing your water, so that you and your employees can pay attention to the fabrication side of the business. The last thing you want is downtime that puts your entire business at a standstill.”