Everything Old Is New Again

A customized retrofit prepares Walsh and Kelly's Griffith plant for the future.

No one in need of paving services within Indiana will have to wait long. Walsh and Kelly, Inc., a fifty-year veteran of the industry, offers five plants in the area, all strategically located closely to one another. But the company's plant in Griffith, Indiana, stands out as its flagship operation. The plant's recent customized retrofit was a multi-stage effort combining unique specifications with time-tested equipment—a blend of old and new that has positioned Walsh and Kelly well for the future.

BELIEF IN THE PROCESS

According to Walsh and Kelly special projects supervisor John Rietow, the vision for the plant's new upgrade began two years ago. An exacting maintenance program with regular checks for wear allowed him to choose where best to invest in new equipment and where to retain the existing plant components. "We're reusing some of the equipment, but the majority of it is new. Two years ago, we took down one silo and put up three brand new ones and a 425TPH (385 MTPH) drag slat with crossover transfer conveyors."

Adding new components to an existing plant provided more options for John to choose from and also allowed for the plant to work with contractors and labor on an extended time table. The choice to retrofit freed Walsh and Kelly to work on its own schedule and choose the best fit for any situation along the way. "By the time the job was finished," John explained, "this plant had a Double Barrel® originally in 1995 with two brand new silos and two reused silos for a four-silo setup, but now we boast a six-silo setup."

As Walsh and Kelly's flagship plant, the Griffith plant and its retrofit received careful attention within the company and from the components' suppliers. "I sat down with Mike James at Astec," John said, "and we kind of redesigned everything as far as the DuoDrum set up. Instead of just being a standard Double Barrel®, it's more like a 'half a Double Barrel®.' The aggregate is dried in the dryer and then the recycle and the dust is

Left: *Walsh and Kelley's flagship Griffith plant was a customized retrofit combining unique specifications with time-tested equipment.*

Top: *Electrical equipment has been consolidated into the RPH-104 Power Center® rather than exposed to the dusty and dirty plant environment.*

Bottom: *Originally fitted with a Double Barrel® and four-silo setup in 1995, the Griffith plant now boasts a six-silo setup.*

injected to the outer chamber of the drying drum and injected into the mixing drum with the asphalt."

With the customized mixing drum, the plant separates itself from the competition. John continued, "we get some longer retention times with everybody running shingles and high RAP (recycled asphalt pavement) counts. It's actually more feasible for running that kind of product. There's nobody else in this area who has one."

CUSTOM MADE

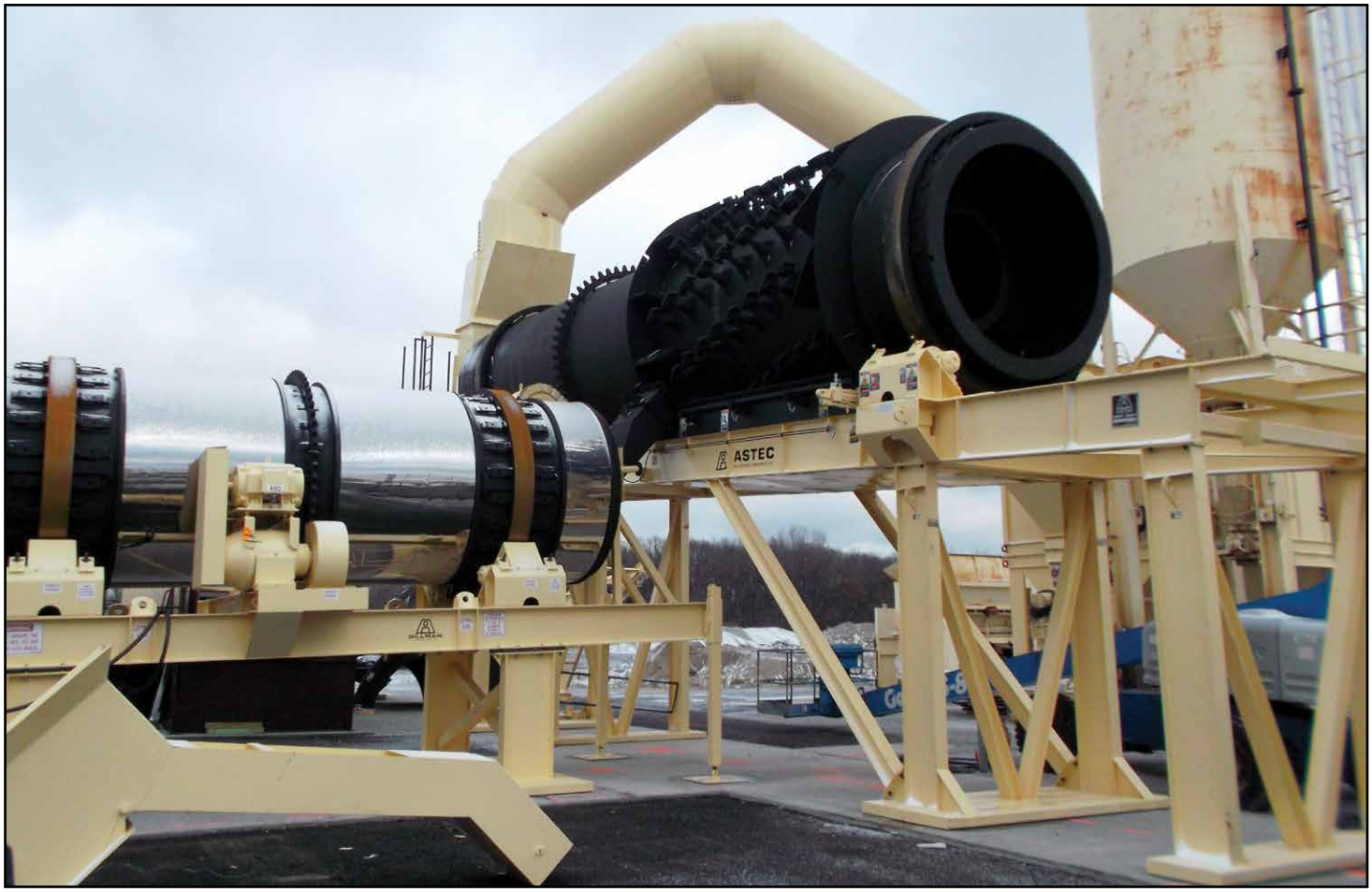
The mixing drum is the key to Walsh and Kelly's ambitions for the Griffith plant. After reviewing different designs from Astec and Dillman and listening to the various ideas that engineers had relied on in other plants, John asked for specific customizations that delivered exactly what he wanted. The plans started with a Dillman mixer drum, John explained, "but we extended it—made it a little longer and a little bit bigger around than their standard one."

But that wasn't all. Given the freedom to tailor the plan to his needs, John asked for more modifications to the system. "Personally, I'm not a big fan of trunnion drives, so I specifically asked for a chain drive on the mixing drum. Also, I had them size the existing trunnions to the same size as the Double Barrel® so the parts would be interchangeable between all the plants. And I did the same thing on the Double RAP dryer, but I had them chain drive it and add catwalks around both drums."

Another unique feature is that the plant's drying drum uses Astec's new Stack Temperature Control System®, which combines the V-flight design with variable speed controls. "There's not a lot of these out there yet," John added. "We can actually speed the drum up or slow it down to change the veil without reflighting the drum."

BUILT FOR COMFORT

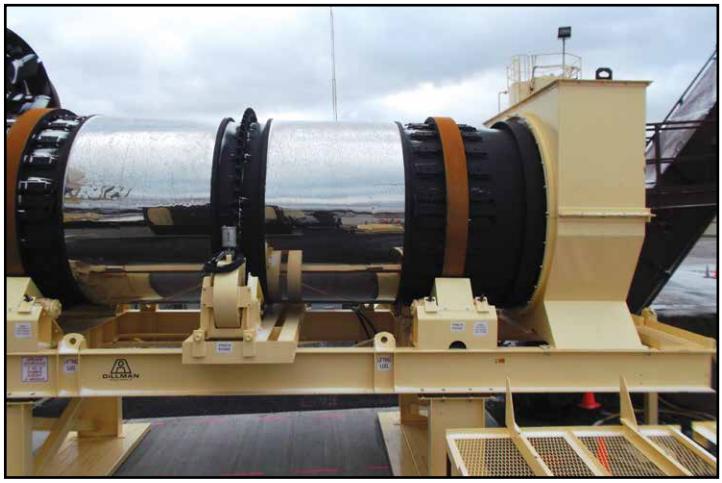
One of the more unique features concerns not the plant's mix or production rate, but its operators. The Griffith plant includes a complete 10 ft by 40 ft (3.05 m by 12.19 m) RPH-104 Power Center®. "Instead of having the feeder controls and the plant electronics out by the feeders or the ramps or the dust silos," John explained, "I had them bring all that stuff into a powerhouse that's heated, air-conditioned, and filtered. So all the control components are there inside one house, consolidated into one building, rather than out in the dusty and dirty environment." Moving the electrical equipment into a climate-controlled environment plant should yield more responsive and more useful reporting on each mix running through the plant.



ALL IN THE MIX

Production goals for the new plant are high, but John feels they are well within reach. "We're looking to use 45 to 50 percent RAP when the mix design allows it. We've run 47 percent recycle at one plant, with a combination of 40 percent RAP and 7 percent RAS (reclaimed asphalt shingles). And there's a company in Illinois, that's a DuoDrum also, and they're running 47 percent constantly."

"What we think is going to be the difference between this plant and a standard Double Barrel® is having that mixer," John added. "We can hold the material back and have a whole lot more mixing time. So we actually get all the residual and the asphalt off the shingles. We run a lot of private mix, and we're going to see what we can get. Once we get it up and running, we're going to see how it goes, but we strive to be in the 40 to 45 percent RAP range on all mixes."



Top: *The Griffith plant's drying drum uses Astec's new Stack Temperature Control System®, which combines the V-flight design with a variable speed drive.*

Left: *Aggregate is dried in the dryer and then recycle and dust is injected to the outer chamber of the drying drum and injected into the mixing drum with the asphalt.*

STAYING A STEP AHEAD

Astec's reputation of minimal maintenance cost was a winning factor for Walsh and Kelly. "Most of our plants are fairly new, so our maintenance is basically just keeping up with the wear points," John said. "Astec has done a lot in recent years with how they manage wear plates. Plus, our own program is to go through the plants each year to keep up with routine maintenance. We could radically replace them if we needed to—the old Double Barrel® plant had 6,000,000 tons (5,443,108 tonnes) run through it and, realistically, the drum was getting pretty worn—but we've always kept up with the maintenance. If you keep up with it by spending time along the way, it doesn't kill you five, six years down the line. We try to do major maintenance as needed and keep components rotated out every five years or so."

Now that the Griffith plant is receiving its facelift, and still under Walsh and Kelly's careful inspection, it should meet Indiana's need for paving services well into the coming decades. ▼▲▼

FOR INFORMATION

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