

down an older stationary plant the company no longer needed. "We'll be selling off our old equipment as we go," Carroll says. "This stationary plant (at the Summit quarry) was running right up until this last Friday (March 26, 2004).

According to Carroll, when the KPI and JCI factory service reps helped his crew to set up the Fast Pack for the first time in Guntersville, they explained a step-by-step process, outlined by the manual, in which the Fast Pack should be set up. "In Summit, we've got a small footprint we have to use," he says, indicating the Fast Pack's placement in a narrow "box canyon" created by the quarry face. In order to fit the footprint, Carroll set the radial stacker to run parallel to the first JCI 8203 screen. "This plant sets up so easy – everything lines up so well – that you really only have to be particular with matching up the belt coming off the second cone to the first cone's discharge conveyor, so that the material can recirculate back to the second screen."

Carroll says with Whitaker's previous portable plants, a move would take two to three weeks to complete, compared to two to three days for this particular Fast Pack

move – Whitaker's first time moving the plant. "It used to be a portable plant meant a torch and a welder. This is a cakewalk in comparison," he laughs, adding, "Our time will improve with further moves, too, because we're slowed down here, having to move components from our stationary plant as we set up the Fast Pack in Summit."

Other than typical glitches, which occur with any new piece of equipment, Whitaker has not had any problems with its Fast Pack, says Carroll. "There were some electrical problems with the first cone when we got it," he notes. "JCI came out, tore it down and fixed it right off, and we've had no problems since. It runs great. Also, this JCI screen is the first screen I've ever used where you can adjust the speed and stroke in just a minute. In Guntersville, we had some blinding on the screen, so we sped it up, adjusted the stroke, and cured the problem." Carroll says it's been his experience – including 13 years with Whitaker Contracting – that any new piece of equipment is going to involve a learning curve to determine its optimal operation.

"But the bottom line, too, is that any time you purchase a new piece of equipment, you're going to see a

Whitaker's Fast Pack Equipment and Products at a Glance

- Pioneer 3350 Jaw Crusher
- (2) JCI 8203 8' x 20' Three-deck Horizontal Screens
- (2) JCI K400 Cone Crushers
- Kolberg Radial Stacker
- Kolberg Series 11 Stacking Conveyors
- Guntersville Quarry 1" and 2" (800 tph)
- Summit Quarry 1-1/2", 3/4" and 1/4" chips 500 tph

benefit of less downtime, and less maintenance. The Fast Pack is particularly easy to set up, and easy to run," he says. "Before, we would crush all day, and work on equipment all night. Now we've managed to cut our hours down to six days a week, one shift. We're cutting down on labor, and saving money. That's the biggest benefit."



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Whitaker Contracting Corp. faced a dilemma. With two operating quarries, several inactive quarries which still had viable material, and obsolete equipment, the company had to decide whether it should invest in several stationary plants, which could provide the necessary production at a higher initial investment, or a portable plant, which might not deliver the high production rates Whitaker needed.

A 25-year-old Guntersville, Ala.-based family-owned asphalt producer and paver, Whitaker operates active quarries in Guntersville and Summit, Ala., under the name of Madison Materials. Its markets reach about a 50-mile radius surrounding each plant, and the company sells 50 percent of the aggregate it produces, keeping the remainder for use in its own asphalt plants.

"We really wanted a high production portable plant that could take the place of the stationary,

portable and semi-portable equipment we already had," says Whitaker's Quarry Superintendent Shane Carroll. "We have the two active quarries in Guntersville and Summit, and several inactive quarries in the area that Whitaker either leases or owns where we can crush rock, and we also do contract crushing. Our goal was to find a plant that could do it all, and save us money."

Carroll says Whitaker's regional manager, Ken Johnson, had heard about a plant known as "Fast Pack," manufactured by Astec companies Kolberg-Pioneer, Inc. (KPI), based in Yankton, S.D., and Eugene, Ore.-based Johnson

Crushers Intl. (JCI). Fast Pack is a revolutionary plant design that can economically provide quicker



Whitaker Contracting/Madison Materials Quarry Superintendent Shane Carroll stands beside the JCI 8203 Horizontal Screen.



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The “front half” of Whitaker Contracting’s Fast Pack plant consists of a Pioneer 3350 Jaw, with a BTI breaker mounted at the grizzly; a JCI 8203 horizontal screen, a Kolberg radial stacker and a JCI K400 Cone Crushing plant.

moves, with lower transportation costs, than traditional portable plant designs. The system has been proven to tear down in less than three hours, and set up in a new location in less than four hours. In addition, the system can offer production capacity in excess of 500 tph, which, prior to the Fast

Pack’s development, was almost unheard of for a portable plant.

Johnson and Carroll drove to Augusta, GA, in the summer of 2003 to look at the Fast Pack in operation. “We knew we were interested in this plant, even before we went to see it,” Carroll says. A decision was quickly made, and in

September 2003, Whitaker took delivery of its new Fast Pack plant at its Guntersville quarry.

What is it that sets the Fast Pack aside from traditional portable plants? Some of its differences include individual power units for each component, onboard discharge and transfer conveyors, and hydraulic setup and adjustment for each component (which eliminates the need for auxiliary equipment and cribbing timbers). The use of a small, flexible “Profibus” cable the size of a typical 110V household extension cord (which connects the control trailer to the primary jaw, the jaw to the screen, and so on, progressing to each component in turn) eliminates the need for bulky cable to connect each component individually to the control trailer. In addition, with onboard power for each component, the control trailer is not full of expensive and hard-to-maintain MCC panels and starters.

Whitaker Contracting’s Fast Pack consists of a Pioneer 3350 primary Jaw Plant with a MBS13H Series portable rockbreaker (manufactured by Breaker technology, Inc. (BTI), also an Astec company) mounted at the grizzly. The jaw is fed by a loader.



The small footprint of the Fast Pack is particularly helpful at Whitaker’s Madison Materials Summit, Ala., quarry. The Fast Pack sits in a man-made “box canyon,” created by the quarry face.

Material from the jaw goes to a JCI 8203 8’ x 20’ three-deck horizontal screen, with sized product going to a Kolberg radial stacker. Overs from the screen flow to a surge bin for the JCI K400 cone. From the cone, material flows to another JCI 8203 horizontal screen, which sends sized products to their respective stockpiles with Kolberg Series 11 stacking conveyors. Oversize material goes to a second K 400 cone via a surge bin, and recirculates from there to the second 8 x 20 screen.

On Monday, March 29, 2004, Whitaker Contracting moved its Fast Pack plant for the first time, from its Guntersville quarry to its Summit quarry. In Guntersville, the

Fast Pack had been producing 1” and 2” rock at speeds up to 800 tph for Whitaker. In Summit, Carroll changed the screen cloth to produce the 1-1/2” rock, 3/4” and 1/4” chips needed at that location. Carroll said

the Fast Pack should produce this material at 500 tph with no problem.

As Carroll’s crew worked to set up the Fast Pack in Summit, they also were in the process of tearing

“In Summit, we’ve got a small footprint we have to use. This plant sets up so easy – everything lines up so well – that you really only have to be particular with matching up the belt coming off the second cone to the first cone’s discharge conveyor, so that the material can recirculate back to the second screen.”

— Shane Carroll, Quarry Superintendent
Whitaker Contracting/Madison Materials



The “back half” of Whitaker Contracting’s Fast Pack Plant consists of a second JCI 8203 horizontal screen, Kolberg Series 11 stacking conveyors and a second JCI K400 Cone Crusher. The sized material coming from the second cone recirculates to the second 8203 screen. In this picture, the first K400 cone is visible in the foreground.