Editorial Point of View:
Critical decisions require forward thinking
Real-time Quality Control (RTQC) is being studied by NCAT and the Alabama DOT
Upgrading individual components on your existing plant can make economic sense
Get rid of those permitting nightmares by letting Astec handle much of the work

YOUR DEPENDABLE SOURCE FOR NEWS ABOUT HMA TECHNOLOGY

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Critical decisions require forward thinking by plant owners and managers

The owners and managers of companies are frequently required to make decisions—and some of those decisions may affect them for their entire business careers. A mentor once gave me some advice:

“Make reversible decisions quickly and make irreversible decisions slowly.”

Purchasing a critical piece of equipment such as an asphalt plant for your business is a major decision that can affect you and your business for twenty years or more into the future. Unfortunately, most people don’t get a lot of practice in buying asphalt plants. You may be involved in buying one or two asphalt plants in your lifetime. During that experience, you will have a barrage of salesmen, each of them telling you different stories. For these and other reasons, buying a new asphalt plant can evolve into one of the most difficult decisions you will make during your career.

In order for you to cut through all of that propaganda and clearly understand what is worth purchasing, you should first look at the needs of your company—both the immediate needs and the long-range needs. Making a decision based on your company’s long-range needs is the one that becomes quite difficult.

**Long-range planning and a look at the future**

As I look to the future of the hot-mix asphalt industry, what I believe to be the most important ingredients affecting the cost of asphalt-plant operations will be (1) material cost, (2) material availability, and (3) fuel cost.

Over the past 50 years, our industry has placed about 2 billion tons of asphalt on our nation’s 2.3 million miles (3.7 million kilometers) of paved roads. In many cases, we have had to fill our silos with 900 to 1,800 tons of hot-mix asphalt in the afternoon for use in that night’s paving activity. But then it starts raining— and it continues to rain for three days. That producer must be able to store the mix without having it deteriorate and without having to knock a plug out of the bottom of the silo the next morning. Storage is insurance.

To facilitate night paving, plants of the future must be equipped with storage silos that can hold mix for as long as three to five days. Why? Just imagine what would happen if a producer were to fill his silos with 900 to 1,800 tons of hot-mix asphalt in the afternoon for use in that night’s paving activity. But then it starts raining—and it continues to rain for three days. That producer must be able to store the mix without having it deteriorate and without having to knock a plug out of the bottom of the silo the next morning. Storage is insurance.

While these product features mentioned above may not seem to be of tremendous importance to most producers today, they will become extremely important over the next five to ten years.

**A glance at the past...that leads to the future**

In the early 1970s, we developed the first double-drum plant, but we didn’t use it then. Due to the heat loss from the drum, and because pollution codes were not critical at that time, we changed our design to the parallel-flow drum—and that was the plant of choice for many producers for a number of years. As air-quality laws became tougher, counter-flow plants were developed, and they are the plant of choice today.

The first Astec Double Barrel® plant was built in 1988. Since that time, we have built and installed more than 600 of these plants. There are currently more than twice as many Astec Double Barrel drum-mixer plants in operation around the world as all competing counter-flow drums combined.

While we have researched many types of equipment over the years, the Astec Double Barrel drum-mixer is the only one that can run mixes containing up to 50% RAP without using any more fuel than is required for all-virgin mixes. In the last year, we have added variable-frequency drives to our new Phoenix® material and probably have as many recycle bins as we have virgin cold-feed bins.
burner, our exhaust fan, and our fuel pump. This innovation allows a significant reduction in electrical costs. We believe that the Astec Double Barrel plant has come of age. We are convinced that—because of the increased cost of electricity, fuel, asphalt, and aggregate—the Astec Double Barrel plant has become the plant of choice for most producers.

Is it the plant of the future? Many people think so. It has storage silos that can store hot-mix for up to a week when necessary. It has a PC-based control system. It offers technical support in key ways: in person, on the telephone, and over the Internet.

In short, we believe that we have developed the hot-mix plant of the future: a plant that will last our customers 20 to 30 years.

Watch out for misleading claims
I am not in the habit of writing editorials that could be considered self-serving or commercial. So bear with me while I make one more point. There is so much false information floating around our industry today that the record needs to be set straight. My point is very simple and concise:

If a plant does not perform in a way that meets the regulatory requirements of the government and the production needs of the producer, then it does not matter what it costs.

The items mentioned earlier can be joined together to significantly reduce a plant’s overall operating costs. Consequently, the owner or manager of an asphalt-production company must take them into consideration in order to ensure the long-term success of his plant and his company.

The first purchasing agent we had at Astec, a man who served us many years until his death, gave me a plaque that I still have behind my desk. It reads, “The bitterness of poor quality lingers long after the sweetness of low price is gone.”

To put that into business terms, a 10% price differential between two competing hot-mix plants is only about 1% (with interest) when spread over 20 years. But it is possible to overcome this price differential quite easily if you choose the plant that can give you increased energy efficiency, substantial use of RAP in your mixes, and operating savings of 5% to 10%.

That is why I encourage you to look beyond the basic price when you are shopping for a new plant. You should carefully consider all of the long-range factors.

Choosing the right plant is a critical decision that can affect the success of your company. It is a decision that should be based not only on what your company’s needs are right now, but what your company’s needs will be in the future.

Remember: Critical decisions require forward thinking!

J. Don Brock

The 2004 Urban Mobility Study from the Texas Transportation Institute
The 2004 Urban Mobility Study shows how traffic congestion is growing across the nation in cities of all sizes. The study details how congestion is consuming more hours of the day and affecting more travelers and shipments of goods than ever before in history. For more information about the study and how you can order a copy, go to the Institute’s website: mobility.tamu.edu

Photo courtesy of the Texas Transportation Institute
**OUT-OF-DATE EQUIPMENT**
is as easy to spot as an old manual typewriter. But it is not always as easy to see how that out-of-date equipment affects your bottom line. So ask yourself this question:

If a plant upgrade from Astec—some added steel structures or major electrical improvements or a new control system—could increase your productivity, do you think it would be worthwhile?

A lot of producers have asked themselves that question before coming to Astec for help. Most of them will say that the decision to upgrade was absolutely, positively the right decision. Here are just a few of their stories:

**Ranger Construction Company: RAP System Upgrade**

“We’re really interested in getting into the fractionating of reclaimed asphalt pavement or RAP,” said Andy Jones, president of the North Division of Ranger Construction Company, Inc.

According to Jones, the company has operated an Astec Double Barrel® plant in Winter Garden, Florida for the past five years, but the plant was only equipped with one feed bin for RAP. The upgrade they ordered consisted of an 8 x 14-ft. (2.4 x 4.3-m) RAP bin, a belt feeder, a 4 x 12-ft. (1.2 x 3.7-m) grizzly, a bin vibrator, and other components.

“We needed to add a second RAP bin in order to maximize the potential of the fractionating procedure,” Jones said. “Now we can have two different sizes of RAP material ready to go onto the conveyor at any time. We just recently got the new Astec RAP bin installed and on-line. And we’re looking forward to using it this season.”

**The Shelly Company: RAP Crushing System**

Another company that believes in taking full economic advantage of the use of RAP in its mixes is the Shelly Company, a subsidiary of Oldcastle Materials. According to Paul Prottengeier, operations manager of hot-mix asphalt plants for the company, ten of their 51 hot-mix asphalt plants in Ohio have Astec closed-loop crushing systems that utilize Telsmith 3036 HSI crushing units.

“Over the last two or three years,” said Prottengeier, “each of my new Astec plants have come with the closed-loop crushing system. We ordered four systems last year to upgrade existing plants.”

According to Prottengeier, three of the units have already been installed: one on a Gencor plant in Cleveland; one on a CMI drum plant in Maumee; and another on a plant in Lancaster. The fourth system will be installed on another Gencor drum this spring.

In Indio, California, Granite Construction Company chose to upgrade almost everything at its old plant. “We took out the old CMI plant and baghouse and installed a new 500-tph (454-tonnes-per-hour) Astec Double Barrel drum-mixer and baghouse,” said Rob VanDerWall. They did keep three CMI storage silos and integrated them into the system.

According to Matt Johnson, president of Russell Standard Corporation in Pennsylvania, “We decided to upgrade for one basic reason: to increase our production capacity.” The company asked Astec to retrofit its old CMI plant with a new cold-feed system, a new control house and control system, two new Astec storage silos, a new truck scale, and other plant components.
Astec can provide any kind of upgrade for hot-mix plants ranging from a single RAP feed bin to a new control system... with new technology that works flawlessly with old technology.

Mesa Materials: Used Silos and AC Tank
A major upgrade at one of the hot-mix plants operated by Mesa Materials involved the acquisition of a new relocatable Astec Double Barrel drum-mixer, along with other new components, such as a five-compartment cold-feed system, a RAP system, baghouse, and a control center.

For economic reasons,” said Wayne Stamper, vice president and general manager of Mesa Materials, “we decided to use our existing storage silos and liquid-asphalt-cement (liquid-AC) tanks. But just about everything else was brand new.” Stamper said they did buy several pieces of used equipment from Astec, including two storage silos and a liquid-AC tank that had been traded-in for new equipment by a company in California.

“We also bought a small silo for our sand system. We have a customer that uses us to dry sand in our drum—and we wanted to be able to serve that customer.” When asked how the installation went—trying to marry existing equipment components with the used equipment and all of that with the brand-new equipment—he said that the Astec service technicians had handled it all very well. “There are always some small things that might go wrong with equipment that is from an older technology. But we did a good job of making sure that all the fittings and so forth were correct before we put it up.

“In addition,” he said, “the set-up of the new plant was supervised from start to finish by Jim Everett of Schmidt Construction with our sister company in Colorado Springs, Colorado.

Granite Construction Company: Complete Plant Upgrade
Some producers see advantages in upgrading only one or two pieces of production equipment in their plants. But others can economically justify complete and total upgrades for their plants. One example of this kind of innovative, long-range thinking is the upgrade work that was recently done with the help of Astec at the Indio, California plant of Granite Construction Company.

“We basically upgraded our entire facility in order to increase our productivity and continue improving our relationship with the environment,” said Rob VanDerWall, plant manager for the Southern Division. Some upgrades target one plant component. Ranger Construction Company’s North Division wanted a second RAP system (RAP bin, belt feeder, grizzly, bin vibrator, and other equipment) so they could maximize the potential of RAP fractionating. “Now we can have two different sizes of RAP material ready to go onto the conveyor at any time,” said Andy Jones, president.
Upgrading to new technology means that your plant will be more efficient...and that you will have access to the latest technical support.

Woodworth and Company: Plant Control System

Sometimes, the equipment of the plant may still be functional, but the system that runs the plant is out of date and undependable. If that is the case, then you might want to consider the acquisition of an entirely new control system.

The only thing that created any problems during the upgrade was the control system. “We don’t have an Astec control system,” said VanDerWall. “So we had to coordinate the plant’s different systems through the original controls. It took us some time to get all of those issues resolved.”

But VanDerWall said the bottom line is that the upgraded plant is up and working—and that the environmental impacts of the plant have been reduced significantly on a ton-per-ton basis.

The main reason we upgraded to a new Astec control house and control system was because our existing system and all of our switch gear were getting to the point where their reliability was in question. We had not had any major problems with them—yet.

“But we thought it was a good, solid idea to upgrade right now for two reasons: First, with a new upgrade, we would have the latest and most efficient technology available to us. And second, we would be able to get technical support any time if we should ever need it in the future.”

The company’s existing plant is a 500-tph (454-tonnes-per-hour) Cedarapids counter-flow drum plant. There had already been one major retrofit on the plant: When it was originally purchased in the mid-1980s, it had a parallel-flow drum. In the early- to mid-1990s, it was converted to a counter-flow drum. But none of the controls were ever upgraded.

“Basically, we had old wire and old controls,” said Shearer. “So when we put in the new Astec control house, we pulled all-new wire to everything in the plant. We put in all-new sensors and limit switches. Everything was upgraded—all new and modern.”

VanDerWall said they replaced almost everything else. “Except the feed system. We have a stock-piling system and a tunnel that works really well. We kept that. And we also upgraded our original RAP bin and feed system.”

The company’s existing plant is a 500-tph (454-tonnes-per-hour) split-level control house and control system. That system, the Astec Total Control 2000, incorporates the latest state of the art in PC-based control systems. Operators who have used the TC2000 system tend to appreciate its user-friendly controls. The system can be adapted to almost any kind of hot-mix asphalt plant, continuous-flow or batch.

Woodworth and Company operates a 20-year-old Cedarapids plant in Tacoma, Washington. Although the plant had its drum retrofitted from a parallel-flow design to a counter-flow design, the control system had never been upgraded. Last year, the company began to get nervous about what might happen if the old control system started acting up. They asked Astec to install a totally new, split-level control house and control system. That system, the Astec Total Control 2000, incorporates the latest state of the art in PC-based control systems. Operators who have used the TC2000 system tend to appreciate its user-friendly controls. The system can be adapted to almost any kind of hot-mix asphalt plant, continuous-flow or batch.
The rehabilitation of I-95 in Florida is a massive undertaking that requires the use of numerous milling and paving machines.

If you want to see how a piece of Roadtec equipment works, just drive along The Demo Trail.

Tackled two stretches of I-95. In the northern section of St. Johns County—the Jacksonville metropolitan area—APAC-Southeast’s First Coast Division completed nighttime paving using a Roadtec RP-180 that was equipped with a 10-ft. (3-m) screed.

Further down the road, APAC-Southeast’s First Coast Division was responsible for milling and paving a 13.5-mile (22-km) section of I-95 using a Roadtec RX-60C milling machine and a second Roadtec RP-180 paver. The milling project called for taking up a 24-ft. (7-m) wide strip of the original travel lanes, as well as the 10-ft. (3-m) wide outside shoulder.

According to Mike Jensen, the operations manager for APAC-Southeast’s First Coast Division, the project involved removing an estimated 125,000 tons (113,396 tonnes) of old asphalt pavement. All of this material was to be recycled. After milling was completed, paving crews moved in with the Roadtec RP-180 and placed two 2-in. (5-cm) courses of Superpave. This section of highway also required the new construction of one 12-ft. (4-m) travel lane and a 10-ft. (3-m) inside shoulder on both the north- and south-bound lanes of I-95. Under ideal conditions, APAC-Southeast’s First Coast Division can place up to 2,000 tons (1,814 tonnes) of hot-mix asphalt in a day—but Jensen said that the average for a day’s work is about 1,600 tons (1,452 tonnes).

In a situation when speed and quality are so important, Jensen said it is more than convenient to work with a manufacturer who backs up the quality of its equipment with timely service.

“I can tell you that we could not be happier with the service we get from Roadtec,” said Jensen. “They have great service. It is incumbent that we do this work right the first time. There is no bonus on this job, but the project is a contractor-maintained job warranted for five years—so if we don’t do it right, we’ll be back out here taking the material back up and replacing it.”

Brian Batzel, divisional-equipment manager with APAC, said that the company continues to purchase and rely on Roadtec equipment for several good reasons. “We are getting good results with our machines,” he said. “There is

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APAC-Southeast, First Coast Division
excellent product support—in fact, it’s unbeatable. I have been using Roadtec equipment since it came out, and they have been all-around good machines. They are very user-friendly, as well.”
For another contractor working on the I-95 project, the only thing that seems to slow down their Roadtec milling machine is the lack of available trucks to haul away the RAP that it produces. Anderson-Columbia Company, Inc., headquartered in Lake City, Florida, was responsible for milling a section of I-95 in central St. Johns County. Most of the milling was performed during daylight hours in a single 12.5-ft. (4-m) pass.
“This asphalt isn’t as tough to grind as some that we have been on before,” said Paul Dalton, foreman for Anderson-Columbia. “Actually, we have been able to go about a week and a half on a single set of teeth. That’s very acceptable because we average about 8,000 ft. (2,438 m) a day.”
Dalton said that they were able to average milling about 4,200 tons (3,810 tonnes) in a 10.5-hour day using a Roadtec RX-60C milling machine and 12 leased trucks to haul away the millings. Their top production day was the day they milled 7,500 tons (6,804 tonnes) in a 14.5-hour day using 22 trucks. During this project, truck availability was severely limited due to the massive amount of construction that was underway in the area.
“We averaged about 75 hours during a six-day week with a three-man crew,” said Dalton. “I was just hoping that we would hold up as well as our Roadtec milling machine was holding up. Before we got the new Roadtec milling machine with the 12.5-ft. (4-m) drum, we had one built by another manufacturer with a 7-ft. (2-m) drum. It was a good machine, but we can do so much more with the new Roadtec. And with less aggravation, it seems.”
Further south, in Palm Beach County, a 35-mile (56-km) stretch of I-95 was recently resurfaced and widened. The Florida DOT split the project into six different contracts due to traffic congestion in the area. One of the contracts was awarded to Hubbard Construction Company, headquartered in Orlando. Working as a subcontractor for Hubbard Construction, East Coast Milling Company utilized some of its six Roadtec milling machines to remove old pavement from the Interstate. Coordinating with other members of the Hubbard team was key to the project, according to Darrin Perry, superintendent for East Coast Milling.
“Scheduling the work is a very difficult operation that is almost as important as doing the milling itself,” said Perry. “We could only come in for a month or two at a time. Then we would work ourselves out of as much as the contractor had ready for us. While we moved off, they would resurface the area that we had milled, reroute traffic back onto that area, and then they would call us back in—and we would repeat the process. Heavy traffic and tight working conditions were the problems.”
In situations like this one, using equipment that you can trust is beneficial. And Perry said the company is quite familiar with Roadtec milling machines.
“The company owns a variety of Roadtec machines and uses them throughout Florida and New York,” explained Perry. “For example, at any one time we could have a number of Roadtec milling machines working on various projects in the Jacksonville area, on the Florida Turnpike near Orlando, in Palm Beach County, and in New York.”
Bob Carr, president of East Coast Milling, said that the company owns a total of six Roadtec milling machines. Most of them are the Model 60C size that can be used in widths of 12 ft. 3 in. (3.7 m) or 7 ft. 2 in. (2.2 m). The company obviously has a long history with Roadtec.
“The oldest Roadtec milling machine that our company owns has more than 3,200 operational hours on it,” said Carr. “And it’s still going strong.”
UNDOUBTEDLY, PRODUCERS of hot-mix asphalt (HMA) will be interested to learn about the benefits that can be derived from real-time quality control (RTQC)—the automated process of sampling and testing HMA mixes during production, without stopping the plant. Many departments of transportation throughout the United States have approved the use of RTQC equipment that was designed and manufactured by Astec Controls. Some felt that a formal study should be done to test the validity of this technology, as well as its end-user benefits.

The National Center for Asphalt Technology (NCAT) at Auburn University in Alabama—at the request of the Alabama DOT—is moving forward with a comprehensive study of RTQC.

The automated action of the sampling system takes place on the cold-feed conveyor belt as the material is being passed to the drum-mixer. First, the Accu-Swipe belt sampler captures a sample [1] of the material. The sample is dropped into an electrically heated dryer where it is dried and weighed. It is then dropped into the Automatic Gradation Unit [2] where it undergoes immediate analysis. The results are transmitted back to the control house where the Total Control 2000 lets the plant operator to make any changes that might be necessary.
There is a lot of interest in the industry to find better ways of doing quality control,” said Randy West, assistant director at NCAT. “The traditional techniques that have been used in the past were fairly labor-intensive. Sometimes, there’s just some uncertainty about the data using the traditional techniques. Overall, there is a lot of interest in finding a better way for controlling the production of hot-mix asphalt.”

**Astec’s RTQC technology**

For years, Astec has worked to provide technology that would allow producers to maintain the quality of their HMA as it is being produced. Traditional methods of quality control involve a fairly simple procedure: The operator stops the plant in the middle of production, one person walks out with a shovel and a bucket to retrieve a sample, and then the sample is hand-delivered to the on-site lab. This traditional method is obviously inefficient—and it is also very costly due to resulting downtime.

To replace this procedure, Astec provides to the HMA industry the Accu-Swipe™ belt sampler, an automatic device that collects a cross-section sample of aggregate from the moving feeder conveyor in approximately half a second. The Accu-Swipe belt sampler takes the sample without interrupting production. Once the sample is collected by the Accu-Swipe, it is dried, weighed, and dropped into the Automatic Gradation Unit (AGU)—a device mounted below the Accu-Swipe and the plant’s inclined conveyor. (see photo). The AGU weighs and screens the aggregate sample, separating the material by size and measuring its quantity. The actions of the AGU allow producers and state regulators to verify the aggregate mixture before the liquid asphalt cement is added.

The final tool in Astec’s line of RTQC technological advances is the Total Control 2000, Astec’s computer-based control system for HMA facilities. This system allows controllers to operate the entire plant from one computer system located in the plant’s control room. When it is used in conjunction with the Accu-Swipe and AGU, the Total Control 2000 collects quality data and saves it in a convenient format that is compatible with a wide variety of computer applications.

**Testing the technology**

In order to begin testing the RTQC technology, NCAT first obtained funding from the Alabama DOT, and then worked with Astec to set up the Accu-Swipe automatic belt sweeper, AGU, and Total Control 2000 at East Alabama Paving Company’s HMA facility. This setup is currently used as the test facility for the study.

According to Randy West, the project is still in the beginning stages since the system was installed last fall, just before the paving season came to an end. “This is the first attempt to test the idea as a complete system,” West explained. “There’s still some equipment tweaking that needs to be done. And we are trying to work out some of the details for the procedures. For example, on the drying unit: How many times do you take measurements? And what is a constant weight to determine the moisture content? We have to find answers to some of those things.”

Despite the learning curve, West said that the project is an exciting one to be working on. “We think this will result in a big step forward. Certainly, we don’t have all of the pieces of the puzzle put together at this point. This is the first step. Some of the equipment has been in existence for a while—such as the belt sweeps and the viscometers. But this is a first attempt to put a lot of those pieces together. Even now, there are still some pieces missing. But we have to start somewhere,” West said. “We’re on the cutting edge.”

The RTQC (Real-Time Quality Control) concept that is being studied by NCAT is actually working on a hot-mix plant owned by East Alabama Paving Company of Opelika, Alabama. The RTQC system installed here consists of the Accu-Swipe automatic belt sampler and the Automatic Gradation Unit (AGU). When material has been sampled and analyzed, the resulting data is transmitted to the plant’s Astec Total Control 2000 system so necessary adjustments can be made.
JUST ABOUT A YEAR AGO, Roadtec made some major changes to the company’s already well-known and highly popular equipment-service plan. Now, it has advanced that plan with the introduction of a new heavy-duty service vehicle that takes the service to the customer.

Robert Cates, Roadtec’s after-market facilities manager, said the company has customized a truck in such a way that they can carry out equipment repair and rebuilding at the contractor’s location in the field.

“Roadtec made the decision to substantially increase our firm’s commitment and capability to service, repair—even rebuild—disabled or damaged equipment,” said Cates. “Our goal is to provide Roadtec customers with the best and the fastest service possible in the industry. We did this to make sure our customers get the shortest periods of downtime.”

The new service vehicle gives Roadtec field-service technicians the ability to perform major on-site equipment reconstruction and repair, rather than having to move it all the way back to the Roadtec factory in Chattanooga, Tennessee or to one of Roadtec’s satellite repair facilities. The real benefit of this procedure, of course, is in the amount of time that is saved by eliminating the equipment’s transport.

Roadtec has always had a program in place to provide repair service to the owners of its roadbuilding equipment at their Chattanooga plant. A number of Roadtec equipment owners have used this service in the past.

In recent years, Roadtec has set up satellite repair centers across the nation. Such centers are currently operating in four different locations: Guthrie, Oklahoma; Williamsport, Pennsylvania; Texarkana, Texas; and Riverside, California.

Roadtec also initiated a program that offered increased parts availability and the convenient rebuilding of pavers, material-transfer vehicles, and milling machines in the contractor’s own shop facility.

Another benefit of this program was the customer’s ability to have his own regular personnel working with Roadtec’s field-service technicians. This enables the customer’s mechanics to gain more hands-on familiarity with the contractor’s equipment than they could by attending a factory service school. This was an expansion of Roadtec’s policy that extended the availability of aftermarket parts and service to owners of competitive equipment, such as Blaw-Knox, Barber-Greene, Caterpillar, and Cedarapids.

Most contractors plan ahead in order to schedule the rebuilding and modifications of their older machines during the shut-down or slow-down months of January and February. Everyone in the industry is well aware, however, that unplanned breakdowns can happen at any time of the year, often when it is inconvenient. The object of Roadtec’s program of on-site service is to reduce the repair time when that happens.

The on-site repair team is ready to travel from Chattanooga and give an estimate of time and cost to repair any machine. Today’s communications network makes it possible to initiate the necessary procedures in only hours.
Ben Guzman, president of the Mill-It Corporation, told of having one of their RX-50B milling machines serviced by Roadtec. It seems that one of their equipment operators accidentally backed the machine into a large stockpile of millings on a job. When he did, the milling machine turned over onto its right side. After being righted, the unit was okay, mechanically. But there was extensive cosmetic damage to the metal skin and panels. Roadtec delivered a replacement machine and transported the damaged unit back to the factory in Chattanooga for cosmetic rebuilding.

C.W. Matthews Contracting Company, Inc.
Marietta, Georgia

For almost 60 years, C.W. Matthews Contracting Company has been a multi-faceted highway contractor doing business in Alabama, Georgia, Florida, North Carolina, South Carolina, and Tennessee. The company employs more than 600 people year round, and enjoys a reputation as an industry leader in heavy highway construction.

C.W. Matthews is one of the largest producers of plant-mixed asphalt in the Southeast. They operate 17 asphalt plants in Georgia and Tennessee. More than 2 million tons (1.8 tonnes) of asphalt is produced each year for their own use and for sale to other contractors, municipalities, and government entities.

According to Joe Gillian, maintenance shop superintendent, the company maintains a large equipment fleet to help meet its obligations. This fleet includes a dozen pieces of Roadtec asphalt pavers and Shuttle Buggy® material-transfer vehicles (MTV). The company does the majority of its own maintenance and overhaul work at its eight-bay Marietta, Georgia facility. But when the company’s maintenance staff occasionally gets covered up, they rely on Roadtec factory service as their backup partner. Having an extensive transportation fleet, C.W. Matthews can easily haul a machine back to Chattanooga for Roadtec to rebuild. When they had to ask Roadtec to work on one of their SB-2500 Shuttle Buggy MTVs, they simply delivered it and let Roadtec’s service personnel do their job.

“Roadtec did this in a very professional and timely manner,” said Joe Gillian, superintendent with C.W. Matthews. “We were well satisfied with their service and we would not hesitate to use them again in the future.”

Ray Freeman, equipment manager of APAC-Southeast’s Georgia Division, is responsible for approximately 800 on- and off-road pieces of heavy construction equipment. According to Freeman, this includes 23 pavers, about half of which are Roadtec pavers. The company also has nine material transfer vehicles, all of which are Roadtec Shuttle Buggy MTVs.

Not too long ago, an SB-2500B Shuttle Buggy® MTV—one of APAC-Southeast’s earliest models—had deteriorated to the point where it was being considered for outright replacement. The front end of the unit was almost unusable as a result of having trucks backing into it over the years. Roadtec sent some of its people down to assess the situation and they recommended sending the SB-2500B back to the factory for rebuilding and update modifications.

“We have established a very close working relationship with Roadtec,” said Freeman. “They have advised us on certain things and, over the years, we have learned a few things ourselves, such as how to extend the service life of these machines. We are like many other contractors in that we always look for ways to get more usage from our equipment. Roadtec’s factory service people have helped us considerably in this regard.

“Very seldom do two weeks go by when we don’t either give them a call or get a call from them. It might be something on the order of consulting on particular wear properties of a conveyor or something similar to that. We have had them do redesign work on some of our equipment after they advised us of a problem they found.

“It’s a two-way street,” said Freeman. “We help them when we find an answer, and they help us. In one instance it was a cross-member structural component on a C-1 conveyor. In fact, they came to our facility to upgrade it and our men were able to work right alongside them so they could become more knowledgeable about the newer Shuttle Buggy MTVs.

“The SB-2500B Shuttle Buggy MTV that they rebuilt for us was first put into service back in 1995. It’s the oldest one that we still own and it currently has a total of 7,000 hours on it. Having the factory rebuild it meant that we had a machine as good as new for about a third the cost of a new one.

“Now, in my opinion,” said Freeman, “that’s real service!”
LoJac Enterprises is impressed with this unit’s productivity:
“We’re getting about 300 to 400 tph with RAP
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Each unit has its own diesel power onboard. The portability of the plant is enhanced by the fact that each unit has blocking supports integrated into the hydraulic leveling system, and a folding bulkhead and hydraulic folding dump hopper are built into the primary plant.

According to Bryan Carr, engineer with LoJac Enterprises, he has been extremely impressed by the capability of the setup.

“We have had it for about two years now,” he explained. “At this point, I am very pleased with the Telsmith crusher. It can take about anything you can feed it. It’s a hog of a crusher, so to speak. You can even run the RAP that’s been sitting there for years and years, or you can just run waste asphalt that was pulled up in chunks by a loader instead of milled up. The way this crusher is made, it will take something up to a 2.5-ft. (0.8-m) slab of RAP.

“The production rate of the unit is also impressive: We are getting about 300 to 400 tph (270 to 360 tonnes per hour) with RAP, and about 150 to 200 tph (140 to 180 tonnes per hour) with recycled concrete.”

In addition to the production, Carr said that the crushing and screening facility has lived up to the company’s desire for a truly portable plant.

“We can disassemble it, move it, and set it back up in just three days,” said Carr. “That’s compared to the two-week ordeal that we had with other less portable plants.”
It is probably not a surprise to hot-mix asphalt (HMA) plant operators that one of the hardest parts of the buying process is getting permission to put the plant where you want it. The hard part is not the shopping around with different manufacturers, preparing the site, or getting wiring to the control house correctly installed. Instead, permitting and public-relations issues have become one of the major hurdles for producers who are looking to set up a plant.

The reality for many producers is that HMA plants usually need to be located near populated areas that may vary in nature from industrial areas to new, upscale residential neighborhoods. But no matter who the new neighbors will be, getting approval to put a new plant on a new site can be a tedious, complicated, and confusing process.

Helping producers get over that hurdle is just one of the services provided by Catherine Sutton, the environmental compliance manager for Astec, Inc. Sutton’s job actually begins very early in the buying process for a new plant—when a potential customer begins working with a sales representative at Astec. It is at that point that all the groundwork is prepared in order to enable a smooth permitting process.

If all of this seems confusing or overwhelming or if it just sounds like too much work, producers need not become apprehensive, because Sutton’s job is to make sure the process moves forward effortlessly. Sutton is knowledgeable about procedures and she is available to provide expert assistance throughout the four steps of the permitting process.

Step One: Specing the right equipment

When a prospective buyer of a new HMA plant approaches Astec, Sutton must go to work finding out what local, state, and federal...
Astec has been providing assistance to HMA producers who are going through the process of applying for and getting zoning permits for new asphalt plants. That assistance includes expert advice and useful materials to be used for hearings and neighborhood public relations.

Step Two: Permitting Calculations

“Once we have a signed contract, I go ahead to the next step, which is preparing all of the emissions calculations for every piece of equipment,” said Sutton. “I gather together any drawings that may be needed—which is a step that is becoming a lot more critical because so many of these plants have to be modeled.”

The modeling process involves using special computer software to create a visual reproduction of the proposed plant and its major components. This reproduction is carefully laid out on a diagram of the prospective plant site.

“What this does is simulate the emissions that come out of the exhaust stack, and it predicts where those emissions are going to go and what concentration levels they will have when they reach the property line,” said Sutton.

“Modeling is especially important when there is a sensitive neighbor—such as a school or a hospital—located nearby. In short, the modeling shows how the plant may affect the neighbors. It determines whether the plant will meet local air-quality regulations.”

According to Sutton, not all states demand modeling as part of the permitting process, but more states are working this into their requirements as years go by. In the past, producers had to seek the assistance of an independent consulting company to get the modeling done. This year, Astec will begin to offer modeling as an additional service to customers who are planning to purchase a new plant. While this particular task will require an additional fee, the producer should appreciate getting all the permitting work completed by one source.

Step Three: Application paperwork

Any producer who attempts to tackle the permitting process by himself will be faced with seemingly unlimited mounds of administrative paperwork. Fortunately, a good amount of this tedious work can be handled by Sutton at Astec, although she cannot guarantee that the producer will avoid paper work altogether.

“I can never fill out the forms completely, because there’s a lot of information required that only the producer can provide,” said Sutton. “But I start the task by filling out all of the information that is directly applicable to our equipment—and that is a major part of the detailed paperwork.”

After the paperwork is completed, said Sutton, the process is mostly out of her hands. However, she still makes herself and her expertise available to play an important role in the final step of the permitting process. That’s Step Four…

Step Four: Public relations and hearings

Sutton said that one of the most important roles she can play in the permitting process is to attend the local informational meetings, zoning commission meetings, and air-quality hearings. Informational meetings, intended to open the lines of communication between a producer and the community where the new plant will be erected, may be one of the most essential parts of the process.

“The first thing a producer should do when he is considering a new plant is touch base with all of the neighbors who live and work near the proposed site,” said Sutton. “The producer needs to understand how the people in that area will feel about having an asphalt plant for a neighbor. Why is this so important? Because if there is going to be opposition, then there are steps the producer needs to take before going forward with the permitting process.”

In smaller communities, Sutton recommends actually going door-to-door and shaking hands with the neighbors. If the neighborhood is too large for this personal touch, then the producer can circulate a letter that introduces the concept of the proposed plant.

“It is important to avoid coming across as saying, “This is what we are going to do,’” cautioned Sutton. “Instead, you should say,
“This is what we would like to do and we hope it will meet with your approval—because we want to be a good neighbor.”

After introducing the concept, it is recommended that producers hold an informal, informational meeting where members of the community can come together to ask questions about the proposed plant. This is a point where Sutton can be of tremendous help to a producer.

“I like to take scale models of Astec equipment with me to these community meetings,” said Sutton. “The models are 1/16th scale and really very interesting. I also bring brochures so the participants can see photos of our equipment. During the meeting, I am available to answer any technical questions that come from the general public. It’s usually very informal. I’m just there to answer questions.”

In addition to meeting with the community, a producer may need to attend zoning hearings if the proposed site was not previously zoned correctly, or—if the zoning status is all in line—special land-use permit meetings.

“The zoning meetings are usually quite a bit more formal than the informational meetings. These meetings usually take place in a town hall or possibly in a courtroom-type setting. I have been sworn in at these types of meetings. It varies from city to city and township to township,” said Sutton. She is available at these meetings to also answer any technical questions that may be raised regarding the proposed equipment.

“I’ll talk about how the equipment itself works, how it is configured, and what kind of noise-levels and emissions can be expected,” she said. “Basically, as long as it applies to the equipment, I will field those questions. If there are questions about other operational issues—such as truck traffic—I will let the producer provide the answers.”

Although the format of zoning hearings varies from location to location, Sutton said that she is prepared to deal with any kind of situation. “We have the technical expertise to handle almost any situation may be.”

The permitting-process services offered by Astec ensure that the producer is not alone during this confusing part of plant acquisition. From checking specs and doing math, to addressing town-hall meetings and zoning and air-quality meetings, Astec is available to help the producer get over each hurdle that comes up.

There are many ways that Astec can help producers who are planning the purchase of a new asphalt plant. From checking the specifications to doing the math to producing complicated diagrams, Catherine Sutton can handle it. The diagram at the top shows the flow of materials through a typical Astec hot-mix plant. The diagram below looks simpler, but it is actually more complicated. It is a sound contour map that shows the decibel levels of the plant’s sounds at various distances from the center of the plant.
THE PORTABILITY IS JUST A BONUS

“What do we like best about the Fold ‘n Go plant? That would be the speed of operation. The portability is just a bonus.”

Harry Pownall, Plant Manager
American Materials, Inc.
Stafford, Texas
Given the product name, you might think a customer would do exactly what it says: “First fold it up… and then go to the next location.” But the Fold ‘n Go™ series of portable screening plants from Astec Mobile Screens is not always used that way.

For example: If you were to ask Harry Pownall, plant manager for American Materials, Inc., he would probably tell you that his company’s Fold ‘n Go 2612D is simply too valuable doing exactly what it’s doing on his company’s location: sitting there, just working away day after day.

“Even though we could move this plant, we probably won’t. If we needed one in another location, we would simply get another Fold ‘n Go plant,” said Pownall. “We use up to 30 to 35 percent reclaimed asphalt pavement (RAP) in our mixes—so, as a result, we are screening it every day. Actually, we use too much RAP to go and move this machine.”

American Materials is a hot-mix asphalt (HMA) producer with headquarters in Stafford, Texas. The company serves a market area that blankets a 120-mile (193-km) radius around Stafford. They operate two HMA facilities, both of which were made by Astec, Inc. According to Pownall, they recently ordered their third plant from Astec.

Because of the high percentage of RAP that American Materials utilizes in its mixes, the company needed a quick and efficient way to screen the reclaimed material and to prepare it for addition to the new mixes.

Pownall explained that American Materials has been screening RAP for years, but the older screening plant that they were operating was due for an upgrade. After seeing other Astec Mobile Screens Fold ‘n Go screening plants operating at other producers’ locations in the field, American Materials decided to purchase one of their own.

The Fold ‘n Go 2612D purchased by the firm is equipped with a Duo-Vibe® dual-frequency screen that is fitted with a 5 x 10-ft. (1.5 x 3.0-m) top-deck scalping screen and a 6 x 12-ft. (1.8 x 3.6-m) bottom-deck high-frequency screen. The unit is completely self-contained, with three on-board stacking conveyors.

Pownall explained that American Materials uses the Fold ‘n Go to screen RAP into two sizes: 3/16-minus and 5/8 to 3/16. One point about this screening plant that impressed Pownall the most, he said, was the productivity.

“I would say we get between 350 to 400 tph (320 to 360 metric tonnes per hour),” he said. “Of course, that all depends on how much water there is in the RAP.”

The reputation that the Astec Mobile Screens Fold ‘n Go 2612D screening plant has earned as a workhorse at American Materials means that the plant will likely never be moved. Still, one of the primary features of the screening plant is indeed its portability. In fact, the plant can be set up in less than 15 minutes.

“The portability is just a bonus,” said Pownall.

“I think purchasing this plant was a wise choice. The production rate is excellent, even when the material is wet. You get both high production and high-quality product, all at the same time.

“We are definitely going to look at buying another one some time in the future.”

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**FOR MORE INFORMATION**

about the wide range of products offered by Astec Mobile Screens, call Ron Earl at Astec Mobile Screens:

800-545-2145

Fax: 815-626-6430

E-mail: sales@astecmobilescreens.com
PORTABLE
FOR SOME PRODUCERS of hot-mix asphalt (HMA), when the term “portability” is applied to a HMA plant, it simply means having the option of moving the facility should the need ever arise. But other producers use the term “portability” in a very literal sense: They want a plant that can be torn down, moved, and set up whenever the work calls for it. For those who want the flexibility of bidding on jobs in distant parts of their territory, true portability in an HMA plant can be a major consideration when making a purchasing decision.

This priority is one reason that Charles Hamilton, president of James Hamilton Construction Company, chose to purchase the company’s newest HMA plant—an Astec Turbo 450 Six Pack portable facility.

Hamilton Construction, which has headquarters in Silver City, New Mexico, covers a wide territory that includes New Mexico and Arizona. The company currently operates three HMA plants: a Barber Greene DM71, a Cedarapids drum plant, and their newest addition, the Astec Turbo Six Pack, which is rated at 450 tph (408 tonnes per hour).

The company took delivery on the new Astec Turbo Six Pack in October 2004—the end of the season for most producers in the United States. However, Hamilton Construction wasted no time getting acquainted with their new portable plant. They started up the plant in November and operated it into December. Then—proving that they take the word “portable” very seriously—they picked up the Astec Turbo Six Pack and moved it about 350 miles (560 km) from Milagro to Deming, New Mexico.

The move took the plant about 1,500 ft. (460 m) lower in elevation and only a short distance from the Mexican border, putting the company’s production crew in a warmer climate during the winter months. It also allowed the company to produce hot-mix for the paving of an 8-mile (13-km) stretch of state highway (NM 11) south of Deming.

Although this was the first time they moved the plant—after only owning it for a few months—Hamilton said the tear-down and setup process was fairly smooth. “This was the first time we had taken it down, so we were going through a learning curve,” said Hamilton. “But then the setup went really fast—probably twice as fast as it did on the initial setup when the plant was delivered. We moved it over the Christmas holidays and in between storms. It took us about a week to move the plant and another week to set it up. And then another week to get it fully operational.”

When Hamilton was interviewed in late January, the crew was just readying the plant to begin full production at the new location in southern New Mexico. In the time that Hamilton Construction ran the new Astec Turbo Six Pack prior to the first move, however, Hamilton said its output was impressive.

“We’re very happy with it. It gives us a very homogenous mix,” said Hamilton. “Also, the operators seem to be pretty happy with the plant’s capabilities. This plant is capable of handling a lot of variables in the mix.”

Operational flexibility was part of the plan when the company originally speced the plant. The Astec Turbo Six Pack is equipped with a portable 8 x 9 ft. (2.4 x 2.7 m) Double Barrel® drum-mixer. It is rated at 450 tph (408 tonnes per hour) with aggregate having five percent moisture content at an elevation of 6,000 ft. (1,800 m).

The portable cold-feed system is equipped with five 10 x 14 ft. (3 x 4.3 m) cold-feed bins. Its reclaimed-asphalt pavement (RAP) feed system has two hoppers for added mix flexibility.

“We have the plant set up so that we can run our RAP mix, or we can go back and run a regular virgin mix,” said Hamilton. “New Mexico uses the standard national recommendations on Superpave mixes with 25 percent RAP, with one change for asphalt content. So for the most part, we are limited in the amount of RAP that we can run for those kinds of
“I probably spent four or five months evaluating producers’ plants all over the Midwest and in California. ...But in the end, Astec gave us the best overall package.”

The lime silo in the James Hamilton Construction plant is much larger than will be found in most plants, mainly because the company’s lime producers are so far away that they need to keep extra lime on hand.

Here is the James Hamilton Construction Company’s portable Astec Turbo 450 Six Pack plant, set up and ready to operate at its rated 450 tph (408 tonnes per hour). It is one of the largest portable plant ever manufactured by Astec. One of the most interesting features of this unique piece of production equipment is that every component was designed to be moved quickly and easily. There are both mechanical and hydraulic assists that speed and simplify teardown and setup. In this photo, notice the wheels and chassis on each separate component. This plant obviously brings a new meaning to the term “portability.”
FORWARD THINKING becomes a very significant part of doing business in a competitive market. For hot-mix asphalt (HMA) producers, that particular train of thought may include anticipating problems that could result in lost production time—because, of course, lost production time is lost revenue.

Finding ways to run a plant better is a constant work-in-progress for James Williams, plant superintendent with C.W. Matthews Contracting Company in Marietta, Georgia. This determination is something that keeps Russ Earp, regional sales manager for Heatec, busy when he helps specify new equipment for C.W. Matthews.

“James Williams has always tried to make the company’s equipment run better,” said Earp. “If he sees something on an existing plant that can be made better in some way, then he changes it on the next plant.”

These are the Heatec liquid-AC tanks at the C.W. Matthews Number 3 Plant in Kennesaw, Georgia. It is a unique plant for several reasons—but this article explores a feature that you will not see very often: isolation valves.
In this case, Williams recognized a number of benefits in adding isolation valves on all of the hot-oil lines for his company’s Plant Number 3 in Kennesaw, Georgia.

“Basically, what we had them do was put flexible jumpers between the hot-oil lines,” explained Williams. “We asked Heatec to put shut-off valves between the hot-oil lines and each end of the jumpers. Throughout the entire plant, we installed a total of 38 isolation valves.”

There are a number of benefits to this concept. First, the flexible hose on each jumper can be replaced at any time simply by shutting off the valves at either end of the hose. Second, with all of these isolation valves in place, repairs on the hot-oil equipment become much simpler and faster.

“This gives us a wide range of options when it comes to repairing equipment or replacing components in the plant,” Williams said. “This is because we can easily isolate a compartment, drain the appropriate part of the line, and make the repair or replacement—all without draining the entire system or getting a lot of spillage.”

Safety was also a consideration when Williams ordered Heatec to install the isolation-valve feature.

“We run a lot of rubberized liquid-AC,” he said. “That requires us to use hot oil that is at a temperature of about 450°F (232°C). It could be very dangerous to have any spillage while you’re trying to work on the equipment. So, that is one of the main reasons that we did this: Safety.”

Environmental regulations are also easier to meet thanks to the cleaner operation. “Here in Georgia, the environmental regulations are very strict,” explained Williams.

“So this system dramatically reduces the possibility of spillage and makes the plant more environmentally friendly.”

Time and money, of course, come high on Williams’ list of benefits for the isolation valves. “If we were going to drain the hot-oil system the old way, we would have to drain eight to ten drums of hot oil. And the plant would be shut down for hours. Now, with this new system, you only shut down for a few minutes—and you only need to drain a very small amount of hot-oil in order to do the maintenance work.”

According to Tom Wilkey, executive vice president of Heatec, the benefits of using isolation valves on a plant’s hot-oil system will probably be discovered by other producers in the near future.

“We have not included isolation valves as standard equipment because they are somewhat expensive and many producers would rather pass up that option,” said Wilkey. “But maybe ten years or so down the road, this sort of thing may be considered standard equipment. In this case, Williams used his background and experience to determine how many isolation valves would be useful and exactly where they should be installed. Astec and Heatec listened and complied.”

Williams concluded that if any producers are interested in taking advantage of isolation valves on their HMA plants, they should simply give him a call to learn more about the way they work. “They can call me. Or they can come down and look at how the valves are positioned on the plant,” said Williams. “I would be glad to talk with them. Just call our office—770-422-7520—and ask for me.” ▼▲▼

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FEW AGGREGATE PRODUCERS face a greater challenge for maintaining profitability than those in the portable sector. The transportation and erection of conventional portable plants can be a very cumbersome and time-consuming process. The downtime that is associated with the frequent moves can reduce profit potential through increased labor costs and the cost of expensive support equipment.

Conventional portable plants that require cribbing timbers and leveling for plant setup create some of the highest safety liabilities in today’s portable operations. Those plants also require the transporting of numerous loads of transfer conveyors and other support equipment.

Introducing the Fast Pack®
Since its introduction, a new portable crushing-and-screening system has caused many to think twice before they invest in one of the conventional portable plants. There is a new player—called the “Fast Pack”—that is made by Kolberg-Pioneer, (KPI), of Yankton, South Dakota, Johnson Crushers International, (JCI), of Eugene, Oregon, and Astec Mobile Screens of Sterling, Illinois.

The Fast Pack may well be the most mobile wheeled-plant system in the world—due to the simple fact that it can be moved faster and easier, with substantially lower transportation costs than conventional designs. This highly portable system also boasts the highest production rate of any other portable plant ever built. It offers a plant capacity in excess of 500 tph (454 tonnes per hour). The Fast Pack has provided the industry with a system that can be moved and erected again in a matter of hours, not days.

Testing the design
The first Fast Pack plant design debuted in early March 2002 at a pit in Grand Junction, Colorado that was being operated by United Companies, a division of Oldcastle Materials.

Dennis Osborn, a production manager with United Companies, oversees 18 active pits, four portable crushing plants, and three portable wash plants within a 200-mile (322-km) radius. The smallest of his portable plants are in the 200-tph (181-tonnes-per-hour) range, and his biggest portable plants—prior to the firm’s acquisition of the Fast Pack—were capable of producing 275 tph (250 tonnes per hour).

The Fast Pack plant that was purchased by United Companies included these components: a Pioneer 3042 jaw plant; two JCI 8 x 20-ft. (2.4 6.1-m) horizontal screen plants; two JCI Kodiak 400 cone plants; one Kolberg SuperStacker telescoping conveyor; three Kolberg Series 13 conveyors; one Kolberg Series 11 conveyor; a high-frequency screening plant manufactured by Astec Mobile Screens; and a control trailer.

Typically, Osborn’s crushing crews work 14 hours a day for three days (Monday to Wednesday), and then a second crew comes in for another set of three 14-hour days (Thursday to Saturday) to better utilize United Companies’ capital investment. As a result, a single crushing plant typically will run 84 hours a week, less any maintenance, downtime, and moving.

Osborn’s portable plants move as many as 30 times each year. A typical move involves 16 to 24 haul loads, which include a primary crusher, a secondary cone, three screen plants and 12 to 14 conveyors, in addition to support equipment. Under perfect circumstances, one crew can move and set up the company’s portable plants in three days. But the company averages five days for a move—and more time must be factored in if problems arise.

“Do the math,” Osborn suggested. And the math is not all that hard to do. If a crew takes five 14-hour
operate independently and eliminate on-board power on each load can result in more efficient and productive system that can be taken down, moved, and erected again in a matter of hours...not days.

The Fast Pack® portable crushing-and-screening plant has provided the industry with an efficient and productive system that can be taken down, moved, and erected again in a matter of hours...not days.

The Fast Pack portable crushing plant from KPI and JCI and can be configured in a variety of different ways, but all of the components were designed to be able to work together. In this photo, the plant is equipped with a Pioneer CS3042 Jaw Plant that has hydraulic plate foundations to quickly raise the plant into its operating position. Note that there is no cribbing with timbers required in setting the plant up for operation.

FOR MORE INFORMATION
about the Fast Pack portable crushing plant, contact Curt Peterka at Kolberg-Pioneer:
800-542-9311
Fax: 605-665-2623
E-mail: curt peterka@kolbergpioneer.com
Astec Parts Representatives travel throughout their territories, stopping to visit with producers who operate all makes and models of hot-mix plants. They can solve and prevent problems by testing equipment and recommending effective preventive maintenance.

The Astec parts representatives live and work within their own territories, they can come by the producer's plant site on a regular basis. Whenever a need develops or a question comes up, the parts representative can be there quickly to help. The key to this relationship, said Hartman, is communication and trust.

“We encourage the representatives to stop by often enough so that the customer has an opportunity to get to know them,” Hartman said. “This is particularly important when the customer is operating something other than Astec equipment. Why? Simply because they don’t know us as well. Once there is some trust developed, we are able to begin a two-way conversation. That’s when our representatives are really able to help.”

Hartman said it does not take very long for producers to realize the benefits of having a convenient source for their parts and service. “Many of our customers now call in directly to our parts headquarter whenever they have a need,” he said.

The parts representatives bring with them years of experience with hot-mix facilities. Two of the reps, Greg Painter and Travis Sneed, have been working with Astec for about 15 to 20 years each. Rick Merritt was formerly service manager with Cedarapids in Iowa for 25 years. And Nick Popeck has a lengthy background in parts sales and customer service.

In addition to their personal experience with HMA plants, the representatives have the strength of Astec service behind them. “If they come upon a customer with a problem, they have the service department, the controls department, and the engineering group—all of these—behind them as backups,” said Hartman. “We utilize these services quite often in order to help a customer.”

The Astec Parts representatives don’t just solve problems. They are also able to prevent problems by regularly checking equipment and recommending effective preventive maintenance.

“They can take thickness readings on silo cones or drum shells in order to tell a customer what his wear pattern is and how close that equipment is to needing a replacement,” said Hartman. “They can also take temperatures of the mix, temperatures of the drum shell, or temperatures of the motors. And they have tools with them that can assist a customer in making a decision as to whether a bearing, a trunnion, a drum shell, or a drag chain needs to be replaced.”

If it is determined that a part does need to be replaced, many common replacement parts are available right on the truck that the representatives drive around every day. Typical replacement parts that are carried include the following: baghouse damper actuator; belt-lacing fasteners; belt scraper; chain oiler; baghouse control board; flame detector; ink cartridges; lamp; lamp holders; lenses; limit switches; screw-bearing packing; shaft adapter; truck-scale linkage; motion sensor; and a wide range of other parts. If the part is larger, more specialized, or requires some special fitting, the representatives are able to get an order processed almost immediately from headquarters.

“Fate Thomas, the sales coordinator back at our headquarters, can do a lot of the administrative work for the guys out in the field,” said Hartman. “For example, if a rep calls from a Cedarapids plant and they’re looking for a bearing, they give the sales coordinator the information and he’ll run it to...
ground—finding out what they need to do in order to get that bearing and get it right out to the customer as quickly as possible.”

All of this assistance back at the Astec headquarters gives the regional parts representatives the support they need to provide prompt, personal service in the field. “They have a pretty awesome responsibility out there in the field, because they have big territories to cover,” said Hartman. “Most weeks, they will travel more than 1,000 miles a week. That’s a lot of windshield time!”

Hartman said that the concept has blossomed in the three years since its inception. There has been an increasing number of producers who choose to take advantage of this service. Existing Astec customers also appreciate the service, he added, especially since many of the producers have equipment that originally came from various manufacturers.

“It has been an interesting undertaking for us. Initially, we weren’t sure how it would go over,” said Hartman. “We started with Travis Sneed covering the southeastern states—and fairly quickly we realized that this was something that no one else was doing. So at that point in time, we decided to add Rick Merritt in the upper Midwest. After that, we added Nick Popeck in the northeastern states and Greg Painter in the western states. We are still looking at the West Coast.”

“This traveling parts concept has been well-received everywhere we have gone!” ▼▲▼

**Sales Territories for Astec Competitive Parts**

**Greg Painter**
Cell Phone: 423-667-4281  
E-mail: gpainter@astecinc.com

**Rick Merritt**
Cell Phone: 423-280-9243  
E-mail: rmerritt@astecinc.com

**Nick Popeck**
Cell Phone: 423-322-7261  
E-mail: npopeck@astecinc.com

**Travis Sneed**
Cell Phone: 423-240-1754  
E-mail: tsneed@astecinc.com
work in progress
When two technologies are joined together in an innovative way, very often the result is something that is really different—something that makes people stand up and take notice. According to Tom Lewis, international sales manager with CEI Enterprises, Inc., the hot-mix asphalt (HMA) market is certain to take notice of CEI’s newest product: The Nomad RAP King™.

The RAP King is currently in the advanced stages of development, and fabrication is well underway. This new addition to the Nomad™ portable plant line is already fueling producer interest in the U.S. and international markets. The main features of the Nomad RAP King are its low capacity and its ability to produce HMA mixes with up to 50 percent RAP content.

The work is in progress: CEI has designed and is already making the new plant. It combines the rugged, portable design of its popular Nomad plant with the proven and trusted counter-flow technology of the Astec Double Barrel® dryer-mixer. The result? A sturdy, efficient, and cost-effective hot-mix production facility.

The idea behind the Nomad RAP King is simple: Smaller producers should be able to produce high-RAP content mixes without added emissions or increased operation expenses. The Nomad RAP King also offers producers exceptional portability and efficiency.

Lewis said he expects CEI’s new plant to be of special interest to producers and contractors who focus most of their attention on the secondary markets within the United States.

**Technology for smaller producers**

“I think this plant has a bright future,” said Lewis recently. “It should be well received in the western part of the United States where there are fewer demands for extremely high production and where paving jobs require less HMA output.

“I also believe there will be a big market for this plant in Mexico and South America, as well as other export markets.”

Lewis went on to explain that the relatively low acquisition cost of the new Nomad RAP King should allow smaller contractors to have access to a level of production technology they could not touch before. The production rate will be 180 tph (163 tonnes per hour). The new plant will feature a portable 6 x 32-ft. (1.8 x 9.8-m) counter-flow drum-mixer, along with a portable baghouse and a portable control house. There will be a three-, four-, or five-bin cold-feed unit that is mounted on a separate chassis.

CEI engineers have also designed a portable 50-ton (45-tonne) self-erecting surge bin to go with the new plant. The company will continue to offer its 50- or 100-ton (45- or 90-tonne) crane-erect surge bins on other Nomad plants.

The Nomad RAP King plant will be quickly and easily portable.

Low environmental impact

Unlike earlier Nomad models which have a parallel-flow design, the Nomad RAP King will use the counter-flow design. This environmentally friendly configuration will make it easier for producers in the United States to obtain permits for operation in states that have more sensitive air-quality regulations.

“This new Nomad plant should be perfect for small contractors who have never owned a plant before,” explained Lewis. “Smaller plants like the Nomad RAP King are ideal for environmentally sensitive areas. Our new plant will have a lower profile, be less conspicuous, and should get much credit for being environmentally friendly—all of which will make it more attractive to local permitting authorities.”

Perfect for small contractors who want to grow

Any contractor who is currently paving rural, two-lane, secondary roads or city streets will be interested in the portability and production capacity of this highly flexible HMA plant.

“The Nomad RAP King will cost more than the original Nomad,” said Lewis. “But I think a lot of contractors will quickly see the wisdom of spending the extra money to get the benefits of the counter-flow technology and the higher production rate.”

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**CEI Enterprises, Inc. introduces a new Nomad™ portable HMA plant featuring the RAP King™ combination aggregate dryer and HMA mixer.**

The Nomad RAP King is sturdy, efficient, and cost-effective.
Astec Industries announces the appointment of new Executive Vice President J. Neal Ferry

In late January, Astec Industries, Inc. announced that J. Neal Ferry was joining the organization as executive vice president. Ferry brings with him thirty-four years of experience in the construction industry. During those years, Ferry worked with Peter Kiewit Sons', Inc., one of the largest construction and mining contracting firms in North America. Ferry began his career at Kiewit at the age of 18. During his last ten years with the company, Ferry served as corporate equipment manager. In that position, he managed a significant inventory of machinery with a replacement value that was estimated at $1.9 billion. His duties as corporate equipment manager at Kiewit also included overseeing a network of personnel in the company’s maintenance, purchasing, and equipment-sales departments. At Astec Industries, Ferry looks forward to applying his industry experience and his perspective as a long-time end-user of construction equipment to help further Astec’s role as the leader in technology development, equipment, and customer service.

Ferry

Astec customers receive 2004 NAPA Diamond Achievement Award

NAPA recently announced the recipients of the organization’s Diamond Achievement Award for 2004. Fifteen of the operations are Astec HMA plants:

- Adcamp, Inc. Jackson, Mississippi
- APAC-Arkansas, Inc. Arkhola Division Greenwood, Arkansas
- APAC-Atlantic, Inc. Coastal Carolina Division Conway, South Carolina
- APAC-Atlantic, Inc. Coastal Carolina Division Jefferson, South Carolina
- APAC-Atlantic, Inc. Coastal Carolina Division Lumberton, North Carolina
- APAC-Atlantic, Inc. Thompson-Arthur Division Fieldale, Virginia
- APAC-Southeast, Inc. Alabama Division I Huntsville, Alabama
- APAC-Southeast, Inc. Georgia Division Tyrone, Georgia
- APAC-Texas, Inc. Bitulithic Division Midlothian, Texas
- APAC-Texas, Inc. Buster Paving Division Brashear, Texas
- Carolina Sunrock Corporation Butner, North Carolina
- Maryland Paving, Inc. Cockeysville, Maryland
- Larco Construction Burlington, North Carolina
- Roger’s Group, Inc. Hopkinsville, Kentucky
- Valley Asphalt Corporation Plant #17 Cleves, Ohio

Additional recipients of the award can be found in the Jan-Feb 2005 issue of HMAT magazine, published by NAPA.

Powerful towels for cleaning hands, tools, equipment...and more

Astec Power Rags are premoistened, multipurpose towels that eliminate the need for water or other cleaners when working in the field. Power Rags will remove asphalt tar, grease, dirt, and stains from almost any surface, including hands, tools, equipment, shoes, and recreational items. To order a bucket of Astec Power Rags, just call Astec Parts at 800-251-6042. Or go to the Astec Parts website: astecparts.com.

Roadtec has introduced a new, versatile machine for tackling various asphalt milling jobs

Recently, Roadtec, Inc. introduced the latest addition to its line of milling machines: the Roadtec RX-700 half-lane cold planer. With its standard 700 horsepower engine and 14-in. (35-cm) cutting depth, the RX-700 cold planer will be able to tackle a wide variety of milling jobs. As with all the current Roadtec cold planers, the RX-700 is available with three or four tracks and a secondary conveyor that can be pivoted 60 degrees left or right. The RX-700 will be available with cutting widths ranging from 6 ft. 7 in. (2.0 m) to 10 ft. (3.0 m). For more information on this new machine, contact your Roadtec regional manager at 800-272-7100.

Astec to sponsor Young Leaders Reception at Annual NAPA Convention

At NAPA’s Annual Convention in Kona, Hawaii in February, Astec Industries, Inc. will sponsor the event’s Young Leaders’ Reception, Dinner, Dance, and Show. The event will include dinner, followed by live musical performances by the Platters, Coasters, and the Drifters. The evening will end with a patriotic finale.

Ferry
Telsmith will introduce three new products at 2005 ConExpo/Con-Agg in Las Vegas in March

Three new advanced products for mineral producers will be launched by Telsmith at ConExpo/Con-Agg in Las Vegas, March 15-19, 2005. The company will unveil the 44SBS-H-CC closed circuit cone crushing plant (pictured above). The company will also unveil the Telsmith 3258 jaw crusher with an advanced adjustment system, and a standalone automation package for the model SBS cone crushers. These technologically advanced products will be on display at Telsmith’s Booth No. C-5129. Company representatives will be available to share information about Telsmith’s line of jaw- and cone-crushing equipment, screens, washing equipment, and conveyors.

Soliman joins Astec’s International Sales Team

As the need for infrastructure repair and improvement in the Middle East continues to grow, Astec’s International Sales team will strive to provide the best possible service to those markets. Leading that effort will be Joseph Soliman, who recently was appointed as director of operations in the Middle East for Astec’s International Sales team. Soliman brings with him an extensive knowledge of the industry and the Middle East. He speaks English, French, and Arabic, opening up channels of communication and making him an excellent resource for virtually all potential customers in his territory. Soliman manages sales efforts in Iraq, Turkey, Lebanon, Palestine, Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, Oman, Yemen, Egypt, and Libya.

Frost moves to new position as inside sales manager for Astec

Astec, Inc. recently announced the promotion of Chris Frost to the position of inside sales manager. This move comes after Frost spent the last six years as a member of the domestic sales team, supporting Astec’s outside sales representatives by preparing work orders, customer proposals, and contracts. In his new position, Frost will oversee all of the inside sales operations at Astec’s headquarters in Chattanooga, Tennessee.

Astec technology receives award from Better Roads magazine

Better Roads magazine recently presented its 2004 “Top Rollout” award to Astec for its Variable Frequency Drive system (shown above). This award recognizes the risk and reward of introducing new products to highway professionals. Astec’s Phoenix® Talon burner and baghouse use the Variable Frequency Drive technology for accurate regulation of airflow. To read the article, go to: www.betterroads.com/articles/hotprods04.htm

Take a big look at Astec’s surprising booth during the ConExpo-Con/Agg 2005 tradeshow

Astec has big plans for ConExpo-Con/Agg. And although show planners are not releasing specific details, they promise attendees a big surprise. “We’re showcasing our products in a way that has never been done before,” explained Paul Shelton, Astec’s tradeshow coordinator and director of advertising. “And one thing is certain: Visitors to our booth won’t forget it!” Astec will share an indoor booth with Heatlec and CEI Enterprises. Look for the three companies at Booth No. 5151 in Central Hall 3 at the Las Vegas Convention Center. ConExpo-Con/Agg will take place from March 15 to 19.