10th ANNIVERSARY ISSUE

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Spring/Summer 2010

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As I see it...

Stand Up And Be Counted!

Now is the time to stand up and be counted in the fight for national surface transportation funding.

This September will mark an entire year without a federal surface transportation program. The existing act, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), expired Sept. 30, 2009 and has not been renewed.

Instead, such federal funding has continued under a series of program extensions, but there is no guarantee that future extensions will be enacted, especially in our age of "inside the Beltway" partisan rancor. At press time the program was limping along on its latest short-term extension, this one due to expire Dec. 31. In addition, the Highway Trust Fund has been depleted, and infusions of general fund revenue have been needed for it to meet its obligations.

I don't have to tell you that, in our era of strapped state budgets, federal surface transportation spending will be the driver of recovery in our highway, road and bridge markets. We saw this in the benefits our industry enjoyed under the *American Recovery and Reinvestment Act of 2009*, the "stimulus act," which kept road work going, state DOTs active, and many road contractors working, with crews retained and asphalt placed.

Say what you will about ARRA, its $27.5 billion in highway and bridge infrastructure spending — which actually amounted to less than 3.5 percent of the total $789 billion stimulus bill — did a good job of keeping many road contractors active in 2009 and 2010. The problem is that there is no such program to keep road builders active in 2011, unless the federal program is reauthorized, or failing that, extended one more time.

Fortunately, this summer we all have an extraordinary opportunity to impact this impasse and prod Congress to get moving on surface transportation reauthorization. Because Congress won't reconvene until Sept. 13, this late summer is an excellent time to personally make your senators and representatives aware of the impact this lack of action by Congress is having on your state's highway construction program.

Wirtgen America, Inc. has been very active in making the industry's position known inside the Beltway, being a longtime member of the National Asphalt Pavement Association (NAPA). Now, as a new director of the American Road & Transportation Builders Association (ARTBA), I have pledged with other directors to meet with my elected representatives in Congress to make sure they know how federal transportation funding benefits our communities and creates jobs. I will tell them how the uncertainty caused by a lack of a multi-year bill impacts our — and our customers' — business and business decisions.

It is a challenge I extend to you as well. Please contact your representative and senators and make the conversation personal. Introduce your company to them, its number of employees, the size of their families, type of work it's done in your state, and compare market conditions pre-recession versus now. Invite them to visit your facilities or a work site.

Let them know how ARRA, the stimulus act, impacted your employment and work load. Reinforce the concept that ARRA was a much-needed "shot in the arm" that enabled improvements in road conditions and work volume, but we now are facing a drop off in overall market activity, unless some long-term infusion of capital investment materializes that will leverage our transportation fuel and excise taxes for surface transportation improvements. It's now in your hands!

In the meantime, I'm proud to say that the issue you hold in your hands is the 10th anniversary issue of *Wirtgen Technology*. This twice-yearly corporate magazine first appeared in Summer 2000 and is a vehicle through which we demonstrate the attributes of our many products while shining a spotlight on our customers. To all of our customers, our heartfelt thanks for your support and for your participation on the pages of *Wirtgen Technology*.

Jim McEvoy
President
Wirtgen America, Inc.

The 'Wirtgen Advantage' On Display To World At Bauma 2010

The volcano in Iceland may have made it harder for overseas visitors to get to bauma 2010, but it didn't keep Wirtgen Group from rolling out an astonishing variety of new and refined equipment in the road construction and mineral processing fields.

bauma — officially spelled with a lower-case "b" — stands for *baumaschinen*, in German, "construction equipment," and is the world's largest construction equipment show, held once every three years in April in Munich. As one of the very largest German construction equipment manufacturers, Wirtgen Group always puts its best foot forward, and bauma 2010 was no exception.

There, Wirtgen Group exhibited its four strong brands of Wirtgen, Vögele, Hamm and Kleemann, with 75 products on display, with 10 world premieres of equipment. The Wirtgen stand occupied 96,875 sq. ft. in the vast outdoor area and underscored Wirtgen's position as No. 1 worldwide in the field of mobile machinery for road construction and road rehabilitation.

New products included the new generation of cold milling machines from Wirtgen, represented by the W 200 and W 210; the largest road paver from Vögele, the flagship Super 3000-2; two new HD+ rollers, the HD+ 90 and HD+ 110, the new GRW 280 pneumatic roller, and a revised and improved Compact Line of rollers, all from Hamm; and the exciting new MOBIREX EVO track-mounted impact crushers from Kleemann.

This year marked the first time Kleemann appeared integrated within the Wirtgen Group stand. Kleemann GmbH recently moved into its new production plant at Göppingen, southeast of Stuttgart. This state-of-the-art manufacturing facility has a total production space of over 376,737 sq. ft. and incorporates the highest, most current production technologies.

In the meantime, construction accelerates toward a fourth quarter-2010 opening of the new main plant of Joseph Vögele AG outside Mannheim. This will be the world's most modern plant for the production of road pavers, and will cover a floor space of nearly 4 million sq. ft.

At 1,600 hp, 4200 SM is largest surface miner

Vögele Vision 5100-2 was shown at bauma for first time

Also on the stand for the first time at bauma was the Vögele Vision Series paver line. Originally designed for the North American market, these pavers now are gaining attention from other parts of the world.

A jaw-dropping addition to the Wirtgen stand was the 4200 SM surface miner. This 200-plus-ton monster stands nearly 22 ft. tall excluding conveyor, cuts over 13 1/2 ft. wide, and is emblematic of Wirtgen's leadership in surface mining and minerals processing technology.

Here's a closer look at what was on display at bauma 2010.

New Wirtgen Mills

The two new big cold mills from Wirtgen Group — the **W 200** and the **W 210** — excited tremendous interest at bauma. These mills are described in detail elsewhere in this issue, and they are profiled in three field case histories from North America. But while they have been available in North America since the beginning of the year, bauma 2010 served as the official international roll-out for the W 200 and W 210.

These new models replace the world-leading W 1900 and W 2000 models, and include over 60 new innovative features over the previous models. Read more about these new cold mills on pp. 6-17.

Productivity of Wirtgen cold mills will be enhanced by Wirtgen's **new cutting tool extractors** for cold milling machines and surface miners, introduced at bauma. These new, practical cutting tool extractors from Wirtgen provide a significant increase in operator comfort.

Their intelligent automatic features speed up the replacement of cutter teeth, minimizing machine stoppages. Milling contractors can choose between a hydraulically assisted tool extractor, with integrated drum turning device control and an average extraction time per cutting tool of less than two seconds, or a battery-operated hydraulic tool extractor, with an average extraction time per tool of less than five seconds.

The pressing heads of both the hydraulically assisted and battery-operated hydraulic tool extractors are suitable for use with the HT3 and HT11 quick-change toolholder systems installed in the Wirtgen cold milling machines.

Hamm Plus Line Expanded

At bauma 2010 in April, Hamm Compaction Division rolled out an all-new 66-in. tandem roller, in two different weight classes. The new **HD+ 90** features an operating weight of 10 tons, and the **HD+ 110** has an operating weight of 11.5 tons. Both models will offer a variety of different options, including conventional vibration, high frequency compaction at 4,020 vpm, exclusive Hamm Oscillation compaction, a combination option, and even a split-drum option.

They join the HD+ 120 and HD+ 140 rollers — introduced at World of Asphalt 2009 — with respective operating weights of 13.2 and 15.4 tons, and respective drum widths of 78 and 84 inches. All are setting new standards for compactors, with an unusually large operator's platform, perfect visibility conditions for the operator, and very impressive performance data.

Each size compactor will be available in at least three models: the HD+ 90, 110, 120 or 140 VV, with standard vibration in both drums; the HD+ 90, 110, 120 or 140 VO, with vibration in the front and exclusive Oscillation compaction in the rear; and the HD+ 90, 110, 120 or 140 VV HF, offering high-frequency vibration to 4,020 vpm. Frequency and amplitude can now be controlled independently on either drum, providing increased flexibility in the roller train.

Performance options, operator comfort, visibility and ease of control are unsurpassed by any model. The fully adjustable seat — with integral control levers — moves together with the operator's console completely from side to side. and swivels through 180 degrees, for much better control and visibility, particularly to the drum edges.

The Plus models feature *Hammtronic* operation as standard, providing engine management control for considerable fuel savings, programmable speed control, and the ability to independently control vibration frequency and amplitude to either drum.

Drum-mounted halogen lights are standard for improved illumination to all four drum edges, and either halogen or xenon light options are available to mount to the ROPS structure.

W 210 (left) and W 200 draw crowds at Wirtgen stand

bauma was roll-out of new Hamm HD+ 90 and HD+ 110

Unlike competing machines, which require physical movement of weights on the side of each drum, which is hard enough to do in the daylight, let alone at night when most of the major highway work is done, amplitude and frequency adjustment on the HD+ models can be done by the operator on the control panel.

Also unique is the HD+ Series' offset capability, which on the HD+ models is close to 7 in. That means an operator can keep the front drum on the hot material and offset the rear drum so it can bridge between the pre-compacted hot material and the cold joint, potentially saving a pass for higher productivity, and avoiding travel in the other lane of traffic, for enhanced safety. This capability is not available on some competing models.

Relaunched Hamm Compact Line

At bauma Hamm Compaction Division also relaunched its **Compact Line** — its popular series of small asphalt rollers — with significant changes "under the hood" that will boost performance and productivity.

Models of the new Compact Line — with drum sizes from 31 to 54-in.-wide — are just as user-friendly and functional as ever, but now are quieter and more powerful. These articulated tandem rollers offer big-time compactive effort in a small package equally at home for commercial or roadbuilding applications.

The Compact Line includes the **HD 8 VV**, with a drum width of 31.5 inches; the 39-inch **HD 10 VV** and the slightly smaller **HD 10 C VV**; the 47-inch **HD 12 VV**; the 51-inch **HD 13 VV**; and the 54-inch **HD 14 VV**. Each offers a wider compaction width when operated in offset mode. The Compact Line also offers combination rollers. The **HD 10 VT**, **HD 12 VT**, **HD 13 VT** and **HD 14 VT** are combination models with smooth drum in front, and four smooth pneumatic tires in rear. Nomenclature of the models has not changed for 2010.

For 2010, the Compact Line drive train has been redesigned. All models have been upgraded to the new, exceptionally quiet, environmentally friendly yet powerful Kubota diesel engines. In the HD 13 and HD 14 models, Hamm has increased the engine power by 15 percent.

Hamm Compact Line improved 'under the hood'

GRW 280 is revolutionary new design pneumatic roller

The new drive train components have brought about only minor changes to the external design of the machines. They retain their "wasp waist" and superb visibility. The operator's platform is fully insulated against vibration, thus improving comfort levels. The operator's seat, steering column and tread plate are mechanically isolated from the framework, which significantly reduces vibration and makes working with the Compact Line even more pleasant.

The new engines and changed layout of the central electrical system mean quicker servicing and simpler maintenance in the future. Significantly, now all service points for the drive units are located on the same side, making them quicker and easier to check than before.

Also, a revolutionary new pneumatic (rubber-tired) roller was introduced, the **GRW 280**. With an operating weight between 11 and 32 short tons, the GRW 280 provides exceptional operator visibility, a new, "intelligent" ballasting concept, and the highest safety standards.

In the operator's workplace, instead of the previous setup with two seats, the new GRW offers one comfortable, adjustable seat and thus maximum freedom of movement. The language-neutral control panel is connected to the seat console and is therefore always within the operator's field of vision. Operators can comfortably turn their seats with minimum effort and can move them right up to the lateral outer edges.

For the first time ever, viewing channels in the frame structure offer a view of the edges and the tires of the outer wheels. What's more, a novel suspension of the front wheels allows for an uninterrupted view towards the front.

A new, hydrostatic rear-axle drive guarantees a high driving speed, and the powerful brake system featuring disk brakes ensures adequate safety. The flexible ballasting concept enables variation of the weight swiftly and easily.

New flagship Vögele Super 3000-2 can lay 1,600 tons of asphalt per hour

New Vögele Flagship Paver

At bauma 2010, Joseph Vögele AG presented the new flagship **Super 3000-2**. This large tracked paver features the innovative and user-friendly *Dash 2* technology from Vögele, raising it to the very top of the class of large pavers in terms of performance, technological lead and ergonomics.

With a laydown rate of up to 1,600 tons per hour, and pave widths up to 52.5 ft., large-scale construction projects can be completed in the shortest possible space of time and large widths can be paved without joints. The machine has a basic width of 9.8 ft.

Due to its wide range of applications, the new Super 3000-2 is ideal for construction or rehabilitation of expressways, highways, trunk roads and airports. It's equipped with the latest version of the *ErgoPlus*® operating concept featuring four different operating modes and a particularly high-contrast display. All information is clearly legible on the display panel, even when subject to reflections from sun rays. A very useful *Memory* feature stores last settings when exiting *Pave Mode*, and settings are retrieved automatically after the paver's move on the job site.

Kleemann EVO Models Debut

Also, the new **EVO models** of track-mounted, mobile impact crushers from Kleemann were introduced at bauma 2010 in April, and they constitute a new generation of mobile crushers specially suited for contractor use.

Kleemann sets new standards with its new **MR 110 R EVO** and **MR 110 Z EVO**, and **MR 130 R EVO** and **MR 130 Z EVO** plants. EVO represents a genuinely new evolution for the entire plant spectrum in terms of performance, economic efficiency and equipment longevity.

The EVO concept matches refinements for all individual components with a new highly efficient material flow concept. The new flow concept of the EVO models eliminates all restriction to the flow of the material throughout the entire plant.

For example, the discharge chute under the crusher is 4 in. wider than the inner width of the crusher, and the subsequent discharge belt is another 4 in. wider than the discharge chute. Material is thus transported quickly and carefully away from the critical area under the crusher, with flow rate increased, and wear reduced.

Even before the crushing takes place, there is an improvement in the material flow, thanks to the system widths of the feeder troughs and grizzly that facilitate flow of the material through the opening of the crusher.

The independent and effective vibrating double-decker pre-screen, a Kleemann specialty, improves the EVO models' impressive cost efficiency. In the EVO plants, vibration of the pre-screen and vibrating feeder below the crusher have been improved. Together with the newly designed crusher bypass — which features changes to both form and geometry — the entire system has been relieved of load and a significant contribution has been made not only to increased performance, but long-term life of the EVO models.

The advantages to EVO technology don't stop there, however. The new crusher features highlights such as a new inlet geometry which allows even better penetration of the material into the range of the rotor. Also, the wear behavior of the new C-form impact ledges has been improved to such an extent that the edges remain sharper longer, leading to improved material shape. The rotor ledges are held securely by a new and extremely user-friendly clamping system, which means that they can be changed even quicker, and thus contribute to greater plant uptime.

Outstanding performance is made possible in part by the extremely efficient direct drive with which both machines are equipped. A latest-generation diesel engine transmits its power almost loss-free directly to the flywheel of the crusher, via a robust fluid coupling and V-belts. This drive concept enables enormous versatility, as the rotor speed can be adjusted in four stages to suit different processing applications.

Also, the newly developed and fully hydraulic adjustment capability of the crushing gap permits greater plant uptime, while improving quality of end product. Not only can the crushing gap be completely adjusted via the electronic control unit, but the calculation of the zero-point is possible while the rotor is running. This ability to accurately set the crusher aprons from the control panel saves time, and improves the overall efficiency and handling of the crusher.

The Kleemann MR 130 ZS EVO represents next generation in crushers

New W 200, W 210 Set Lofty Standards For Half-Lane Mills

Two new large cold mills from Wirtgen America Inc. — the W 200 and W 210 asphalt cold milling machines — are setting new, lofty standards for half-lane cold milling machines, and the three field case histories which follow — gathered just weeks ago as these machines become more available in North America — prove it.

The new W 200 single engine model is a large but compact milling machine that can be equipped with milling drum assemblies of 59 in. (1.5 m), 79 in. (2.0 m), or 87 in. (2.2 m) working width. Three selectable engine speeds enable a broad range of applications, such as large-scale surface course rehabilitation, complete pavement removal at full depth, fine milling, and many others.

The W 200 has a milling depth of 0-13 in. and is powered by a single engine generating 550 hp. Its operating weight is 59,934 lbs. with half-full water tank, half-full fuel tank, a 165-lb. driver, and tools.

Like the W 200, the new W 210 dual engine model is a large but compact milling machine, which can be equipped with milling drum assemblies of 59 in. (1.5 m), 79 in. (2.0 m), or 87 in. (2.2 m) working width. But unlike the W 200, the W 210 boasts a unique fuel-saving drive concept utilizing two diesel engines, generating a total of 671 hp with both engines engaged. Like the W 200, it features three selectable engine speeds enable a broad range of applications. Its operating weight is 62,138 lbs.

Exclusive, Innovative Features

"For three years, our colleagues at Wirtgen Group in Germany have been designing and testing all-new half-lane milling machine concepts," said Jeff Wiley, senior vice president, Wirtgen America, Inc. "This season I'm proud to say that Wirtgen America has introduced two new large cold mills that will revolutionize cold milling of asphalt as we know it. The new W 200 single engine, and W 210 dual engine cold mills will prove to be the most exciting half-lane machines in generations."

These new models replace the world-leading W 1900 and W 2000 models. They include over 60 new innovative features over the previous models.

"This innovative technology has been derived with intelligence and input from customers, machine operators, a large team of milling engineers, and six long-time milling pioneers from around the world," Wiley said.

The Parallel-to-Surface technology of these new models automatically keeps the milling machine level as the W 200 and W 210 move into a cut, accelerating production and improving accuracy. And their "smart" WIDRIVE technology offers new microprocessor-controlled enhancements to machine control systems.

"The Intelligent Speed Control system incorporates an

Parallel-to-Surface technology speeds milling involving manholes

Refined operator controls permit near-fingertip operation

electronic flow divider that makes the four tracks work in harmony when turning a radius, making for a smoother cut," Wiley said. "They also incorporate the familiar Level Pro, Wirtgen's existing automatic leveling system which is highly user-friendly, can reduce manpower and regulates the pre-set milling depth and actual readout electronically."

Asphalt and concrete milling is one of the most abrasive environments for any machine, but their new, optional Vacuum Cutting System will remove dust, fines and smoke from the cutter chamber and extract it out the conveyor, keeping the machine cleaner and prolonging component life. And Wirtgen's new 3DS Flexible Application Drum Speed system will automatically slow drum speeds in deep cuts, saving on fuel consumption and tooth wear.

Three selectable drum speeds system will allow the operator to apply the maximum productive effort and reduce tooth consumption at the same time. Engine rpms vary with machine application loads to reduce fuel consumption.

"The W 210 Dual Engine Concept is the ultimate in 'more-power, less-fuel' technology," Wiley said. "The operator can select between one engine or both engines, depending on the type and hardness of the material being cut, and only run one engine when not milling during transport, or walking the machine in or out of the cut. This can give up to 18 to 20 percent savings in annual fuel consumption."

'Wasp-Waist' Enhances Visibility

First seen on the midsized Wirtgen W 150, the "wasp waist" design has been a big success and now has been applied to these two new half-lane mills.

"The wasp waist frame puts the operator in a safe position, with an excellent line of sight to the machine cut edge," Wiley said. "This design narrows the machine's mid-section at the critical viewing area on both the left and right sides."

In the meantime, optional forward and rear television cameras provide a view of reclaimed asphalt pavement into the haul truck hopper, or when the unit is in reverse, a view to the rear.

"Wirtgen is always striving to put the customer in the driver's seat when it comes to the latest innovation and technology to improve profitability," Wiley said. "It's just one more way Wirtgen is 'Staying Close to our Customers'."

Single engine of W 200 gives plenty of power to Finley Milling (see pp. 18-19)

Optional conveyor-mounted video camera gives superb view into truck hopper

Gallagher's New W 210 Offers Versatility, Power And Production

Gallagher Asphalt's new W 210

On Chicago's South Side, a major asphalt contractor and producer has taken possession of one of the first Wirtgen W 210 cold mills in North America, and is using it with great effect in everything from wide-open milling to tight radii cutting to curb notching.

In late June Gallagher Asphalt Corp., Thornton, Ill., was milling and resurfacing Harlem Ave. (Illinois Route 43) in southwest suburban Chicago, using its new W 210 to remove 2 in. of aged asphalt prior to placement of leveling and friction courses.

In terms of productivity Gallagher is benefiting from the extraordinary new features of this "next generation" half-lane machine.

That the W 210 is an improvement in productivity is borne out by the numbers. On a job earlier in 2010, Gallagher's existing W 2000 was milling 17,000 to 18,000 sq. yd. per shift, but on the same job the new W 210 bumped the quantity up to 25,000 sq. yd. per shift. "That's a tremendous improvement and that's one of the reasons why we've been so impressed with the performance of this machine," said Jim Trost, superintendent of operations for Gallagher Asphalt Corp., Thornton, Ill.

As a result, in late June Gallagher had a second W 210 on order.

Drum Maintenance Eased

"I really like the W 210," said Tony Ziccardi, operator for Gallagher Asphalt. "It has many features. For example, you no longer have to use a hand crank to turn the drum for maintenance. That's fantastic, because it makes it so much faster to change teeth. You can change them on the fly in half the time. You just press a button and the drum turns by itself. And if you come to the end of a pass and want to check the teeth, you are in and out a lot faster."

As operator, Ziccardi has become fond of Wirtgen's advanced steering technology incorporated into the W 210. "The steering makes the machine so much more maneuverable than other models," he said. "This half-lane machine can go around manholes. We recently did a nosing on an island, and it had to be one of the sharpest turns there is. We didn't have to stop, we just kept on going around and cleaned it like a whistle."

And the enhanced visibility provided by the W 210's "wasp waist" lets Ziccardi look right down in the cut. "This machine can't be beat in terms of visibility," he said. "I used to be one of those guys who would move the side rails down so I could see directly into the cut. But with this machine I no longer have to do that. I now can look directly down into the gutter line."

The location of controls on the

"Everything is located so close together that you can use one hand, three fingers, to operate just about everything, including horn, conveyor and steering."

W 200 And W 210 has been altered from previous models, and the new layout is boosting productivity for Gallagher.

"At first, when I got on top of the machine, I found the controls to be a little bit farther to the left than I was accustomed to," Ziccardi said. "But they knew what they were doing when they changed the location of the controls. Everything is located so close together that you can use one hand, three fingers, to operate just about everything, including horn, conveyor and steering."

Simplified operator's controls enhance operator productivity

Optional Video Cams

The W 200 And W 210's optional video cams give the operator even more awareness of both levels of RAP in the truck bed, and the proximity of workers to the rear of the mill.

"We are always concerned with maximizing our ability to load trucks for productivity and controlling trucking costs, so for the operator to have the ability to see right into the truck bed and see where the material is loading is a major benefit," Trost said. "In reverse, the view automatically shifts to the back and the operator can see where all workers are on the ground. That's important, especially for someone who is new to the job and is unaware of how these machines operate, and who may walk into the path of the machine."

"The rear video camera is a great safety feature," Ziccardi said. "When backing up there are blind spots into which you cannot see. Now I know where the workers are. And while loading the truck you can see directly into the truck from the conveyor. The monitors themselves used to be built into the dashboard, but they were difficult to see because of the glare of sunlight. Now the screen is bigger and is mounted so it can be moved for the best view. It lets me control the water flow and know how many gallons of water are left, know how fast I am going, adjust the speed of the belt, and much more, all on a touch screen."

Controls offer near one-hand operation

Optional conveyor-mount video switches to rear view when machine is reversed

Investigating Purchase Decision

Wirtgen Group's reputation notwithstanding, Gallagher Asphalt thought long and hard before making the purchase decision for this new-design equipment. Despite its confidence in Wirtgen as manufacturers of quality equipment — the W 210 was to replace a W 2100, and the firm also owns two Vögele Vision 5200-2 pavers and a Vision 5100-2 paver, and Hamm compaction equipment — Gallagher had to see for itself whether the new design was all Wirtgen said it was.

"We spent a lot of time looking at the W 210," Trost said. "Any time a manufacturer comes out with a brand new machine that they have designed from the ground-up, there may be bugs in it that will take a while to get worked out. So we had concerns. But Wirtgen assured us with the fact that they had several prototype units that had been running

upwards to 2,000 hours, and that the bugs already had been worked through. And as we have owned Wirtgen mills for years now, we know Wirtgen stands behind its product."

So Gallagher went to kick the tires of the new W 210, so to speak. "I went to Georgia in December 2009 and saw a contractor using the prototype," "I liked what I saw and was very impressed with the machine."

Trost then led a group to Wirtgen America in Nashville — including operator Ziccardi, mechanic Steve Kuhlman, milling foreman Jim Parker and vice-president of construction Dan Darden — to examine the W 210 in detail. "Wirtgen gave us a complete education on the machine, noting all the enhancements they had implemented. And then they let us operate the machine at the training facility, which is very impressive. As an equipment guy, from my perspective, when you make a big change to a brand new machine it can be a little risky to be the guinea pig. But having the whole team go there enabled us to buy into the concept and acquire the W 210."

Gallagher also chose to purchase the optional Vacuum Cutting System, which removes dust, fines and smoke from the cutter chamber, and extracts it out the conveyor, keeping the machine cleaner and prolonging component life.

"I originally thought it would not be very effective, but when I saw it in action down in Georgia I was very impressed," Trost said. "When you toggle it on and off you can see the difference in the amount of material it removes. For people on the ground there is virtually no exposure to dust, and after talking with our owners within the Gallagher family, they felt the additional charge for the system was worth it for the guys on the ground in terms of comfort and productivity, and for the cleanliness of the equipment."

Moreover, as pressure mounts for construction equipment to produce less noise, consume less fuel, and emit less fumes and particulate matter, Gallagher already will be ahead of the curve in terms of having the right environmentally sustainable equipment.

"Illinois DOT recently implemented its construction equipment emissions requirements, and they are starting with the big stuff, 600 hp and above. The milling machines typically are the only equipment we operate with that much horsepower," Trost said. "With this machine we already are compliant with IDOT's new 2010 requirements."

One Mill, Two Engines

A principal difference between the W 210 and the W 200 is its incorporation of two engines instead of one. The W 210 operator can opt to use one engine or two engines, depending on the demands of the job, and only run one engine when not milling during transport, or walking the machine in or out of the cut. This can give up to 18 to 20 percent savings in annual fuel consumption.

"The operator has the choice of one engine or two," Trost said. "Our concern was that more moving parts with two engines meant more things to maintain. But one of the major costs of operating these big mills is fuel. We do some jobs where we will be cutting 1-in. at the curb and flush with the

Gallagher's W 210 extracts dust and smoke out the conveyor via its optional Vacuum Cutting System

Dual-engine power plant for W 210 can achieve fuel savings of 18 to 20 percent annually over similar-sized machines

existing pavement or the other side of the machine. We don't need 670 hp to do that, so having the flexibility to run one engine is ideal for that kind of work, and in residential areas.

"With both engines we still will have the horses we need for doing deep cuts and wide open grinding," he added, "but the one-engine option gives us versatility and fuel savings."

Wirtgen also has built-in enhancements to the machine's leveling system to keep it level when going over irregularities in the ground, Trost said. "They keep the machine level and able to handle irregularities without the machine tipping over," Trost said. "We have had grinders tip over before — even with four tracks — so that was a plus for us."

Gallagher has had a long history with Wirtgen mills, and the acquisition of the W 210 is only the latest in a line of machines with greater and greater capabilities.

"Prior to the W 210 we owned a W 2000, a W 2100, and a W 120," Trost said. "We were looking to replace the 2100, with 7,000 hours on it, and the W 210 falls pretty much in between the 2000 and the 2100. We also considered stepping up to a W 2200 full-lane mill but we decided not to, and this machine appeared to be the right choice for us in size, along with all its additional features."

Gallagher typically will run its mills up to 7,000 hours before trading them out. "Wirtgen products have been good, reliable performers for us," Trost said. "Wirtgen is on the leading edge of the enhancement of milling machines. They truly are dedicated to the business of making cold mills, just look at the number of improvements on the W 210 compared to the previous model. They always are looking to improve productivity, safety, the operator's environment, and all facets of the machine for better, safer and more reliable operation. I have visited the facility in Windhagen, Germany, where the mills are built, and have seen why they are the leader of the pack."

Vision Pavers In Fleet

In addition to milling capabilities, Gallagher is a major paving contractor in the Chicago area, owning two Vögele Vision 5200-2 pavers, and one Vision 5100-2 paver in its fleet of six pavers.

"Two years ago we went out and demonstrated everything there was in the market, including the new Vision paver," Trost said. "We decided that the Vision paver was the best for us. There were a number of features that sold us, including the operator's console and controls, the diagnostics that are incorporated with the machine, the Cummins power, the reversible augers and conveyors, plus many others."

In an age of hypercompetitive bidding, smoothness bonuses can drive contractor profits. While Gallagher hasn't participated in a job that provided smoothness bonuses, the Vision controls are helping Gallagher get the smoothness numbers it needs to avoid penalties.

"Our guys picked up the *Niveltronic* electronic grade/slope controls very easily, and it's a very simple and reliable system," Trost said. "We use the long non-contact skis very frequently in our paving operations. The Vögele/Niveltronic system they offer has worked out great for us. The Vögele paver, screeds, and grade controls consistently deliver a smooth mat for us, we're very satisfied. And for any issues we've had with the pavers, we've received great support from Vögele and our dealer, Roland Equipment. They definitely stand behind the equipment!"

With Its W 210 Ohio's Kokosing Gets More Power While Meeting Weight Limits

A Wirtgen W 210 cold mill — one of the first in North America — is giving Ohio contractor Kokosing Construction, Inc. the horsepower it needs to mill major projects, but without exceeding trailer weight limits on Ohio highways during transport.

In July 2010, prior to overlay, Kokosing was using its new half-lane W 210 to cold-mill Ohio State Route 306, also called Chillicothe Road, in Chester Township in Cleveland's eastern suburbs. "It's a two-lane mill-and-pave project, cutting 2 in. and putting back 3 1/4 in. in two lifts of hot mix asphalt," said Rich Torrence, senior superintendent and Milling Division manager for Fredericktown, Ohio-based Kokosing. About 9,000 sq. yd. were being milled.

In addition to its major highway and bridge construction capabilities, Kokosing has six cold mills, all but one of them Wirtgens. "We have three W 2000s, the new 210, and a W 1200," Torrence said.

At dusk, Kokosing's W 210 mills Ohio S.R. 306

Kokosing acquired the W 210 in spring 2010 to replace an existing W 2000. "We wanted to stay with the same size but chose the W 210 over the W 200 because of its higher horsepower," Torrence said. "And it's only about a thousand pounds heavier than the W 200. That's important because we stay away from the W 2200s and W 2100s because they are too heavy for hauling in Ohio in the configuration that we cut."

Packed With Improved Features

The W 210 incorporates welcome changes from the older machines, Torrence said. "We like the W 210," he said. "It has a lot of good changes. The operator's station has changed and been made much better."

The W 210 operator's station was enhanced with improved visibility and a new set of ergonomic controls. "The W 210 gives us a lot more power with better technology," said Chuck Howey, operator of the W 210. "We don't have as many controls as before, and the ones we have are a lot nicer. The visibility has been improved a lot from the old design, narrower in front and you can see farther down underneath."

The conveyor now slews 60 deg in either direction, compared to 45 deg with older designs. "I like the wider swing on the conveyor," Howey said. "It helps when we have trucks that are farther away from you than they should be, and we were able to load over a barrier wall not too long ago."

Improvements to the drum also were selling points to Kokosing. "The half-lane drum is 7-ft., 3-in. wide, triple-wrap," Torrence said. "You do not have to

W 210's Xenon light package illuminates highway for night work

physically change cutter speeds, it's all done electronically. We have a number of different options which can be a big help to us in the field. We have three different cutter speeds, and two different engines, both of which can be run as high as full throttle, or not, as required. We don't have to run the machine at 100 percent when doing 1 in. cuts, or doing butt joints. We can economize by using just one engine."

Also welcome is the W 210's capability to rotate the drum when evaluating or changing cutter bits, Torrence said. "It's very handy because you don't have to have somebody outside the machine spinning the drum while somebody else is underneath at work," he said. "You can take the remote with you underneath and spin it while you are working on it. And the machine doesn't have to be running while you are doing it."

And Torrence is glad that Wirtgen's easy-to-use *Level Pro* leveling system has been incorporated into its new W 210. Level Pro is standard with the W 200 And W 210. "We very much like the Level Pro system," Torrence said. "The guys absolutely love it. It's a lot more user-friendly than other systems we have used. Level Pro takes the MOBA system, which is good in its own right, a step higher.

"We have high hopes for the machine, especially in fuel savings," Torrence said. "This summer we are seeing how it performs. It's done a good job so far. Wirtgen has proven itself to us in the past so problems with the W 210 are not something we need to worry about."

Popular Level Pro leveling system is standard on W 210

Clean cuts are common with Wirtgen mills

Only One Machine Right For One-Mill Subcontractor

Rex Finley works as groundman for his new W 200

A one-mill subcontractor in central Illinois was reaping the benefits of its new W 200 — one of the first in North America — as it milled an urban street in summer 2010.

In mid-July, using a new W 200, contractor Finley Milling, Inc., Sherman, Ill., was cold-milling Martin Luther King Jr. Drive in the heart of Springfield, Ill., in advance of a hot mix asphalt overlay the next week (see following article). The contractor was experiencing productivity increases as well as boosts in ease of operation.

"It's one helluva machine, easy for the operator and easy for the groundman," said Rob Minder, operator for Finley. "The W 200 is totally different from the W 1900 we had. It is a lot easier to operate, with a lot less stress for the operator. There are a lot fewer operations that I have to go through, when, for example I jump over a manhole. It used to take four or five steps; now only two steps take me up and over and we keep moving."

In this instance, the W 200 stops, Minder lifts the cutter up, moves forward, the groundman utilizes the automatic controls at the rear which sets the cutter down, and milling resumes.

"The operator has a lot going on up there, and the improved control station allows him to perform his function with less motion, which lessens the chance for error," said Rex Finley, owner of Finley Milling.

As operator, the enhanced cut visibility provided by the W 200's "wasp waist" design is a big plus, Minder said. "They have the machine 'cut away' in which I can now actually see where I am going," Minder said. "If you lean over far enough you can see the inside of the track, and if you can see the track, you can see what's coming up a lot better."

Controls have been greatly simplified, and that reduces operator tension while boosting productivity, Minder said. "I have a forward stick with two buttons, one for milling and one for traveling," he said. "I just push the stick forward to go forward. And at the end of the day, for most operators, it gets hard to remember all the buttons you have to push. For example, you will do most of your butt joints and round curbs at the end of the day. But with the W 200 there are fewer buttons and you don't have to think as much to raise the cutter up and get it ready to go again."

Minder has a choice of three milling speeds: ECO, a low drum speed, and milling speeds one and two. "We are finding the W 200 to be very economical to run," Minder said. "In ECO the mill is so quiet that you can hardly tell that it's running." And Minder is very much aware of the enhanced maneuverability of the W 200. "The turning ability is great," he said. "You can easily turn around in two lanes."

"The availability of these Wirtgen mills could not be any better...with Wirtgen mills we have been down only five days in 12 years"

Over 98 Percent Availability

"The availability of these Wirtgen mills could not be any better," Finley said. The new W 200 replaced a W 1900 that had been acquired in 2005, for which Finley estimated had over 98 percent availability over the five years he owned it. "With Wirtgen mills we have been down only five days in 12 years," he said.

That's important to a one-mill sub like Finley, which doesn't have a back-up mill, and whose reputation is on the line with every job he undertakes. "We need for this mill to be available. As time goes on, comments we get are all positive and keep increasing," Finley said.

And the comments on the W 200 have been all favorable, he added. "It's a great urban machine for parking lots and cul-de-sacs, but we also use it out on the road," Finley said. "The productivity is quite high for a half-lane mill. In addition, there is more to milling than setting down and going in a straight line all day. Instead, this machine, big as it is, is very nimble. We have been cutting out the insets for the side roads and what have you in half the time of the W 1900."

As operator Minder noted, Wirtgen has made significant improvements in steering and controls over previous models. "The steering options and parallel-to-surface [PTS] function are incredible," Finley said. PTS technology automatically keeps the cutter housing level as the W 200 and W 210 move into a cut, accelerating production.

"You don't actually employ PTS; it takes care of itself," Finley said. "When an operator on top picks the machine up for an obstacle, and then we activate the electronics to lower the machine back into the cut, the machine lets itself down parallel to the surface. Previously it was something the groundman was responsible for, and consistency depended on your experience. It's a remarkable feature. It relieves me of one function, and I haven't found a place yet where it hasn't worked up-to-snuff."

While that helps the inexperienced crew, Finley said it boosts performance of skilled crews too. "This machine also complements experienced people, because of its features," he said. "I can't say enough about *Level Pro*; we are doing the same type of work we've always done, but now we do it as good or better, in less time."

The *Level Pro* system is Wirtgen's existing, user-friendly automatic leveling system, which regulates the pre-set milling depth and actual readout electronically. "First off, it lets us completely operate the machine from either side, or the top if we so desire," Finley said. "We also have the ability to move our grade references around. From in front of the drum, we have the ability to go from depth control to cross-slope and back, which is really useful in city work."

The revised conveyor slew angle of the W 200 also is boosting productivity for Finley Milling. "Wirtgen has gone from a 45 deg swing from either left or right — 90 deg total — to a 60 deg side swing," Finley said. "That's a huge difference in the ability to keep the conveyor on the truck in all types of tight spots, not just a cul-de-sac. For example, last week we were loading shoulder material, and had to step over 9 ft. away from the edge of the pavement. But we were still able to load the trucks. It's remarkable and it's all part of the package."

Finley said there are many nuances to the machine. "We have 160 hours on it and we are still learning," he said. "For example, as groundman I can control the back gate, the side gates, the down pressure, the rear steering. I can turn the water on and off and the steering on and off. Those all are features that are new on the W 200 and whomever they have on the design team really listens to their customers."

Only Runs Wirtgen Mills

Finley is a family owned business and was founded in 1999 with a used 1900 DC, predecessor of the W 1900. In 2001 Finley acquired a W 1900, again one of the first in North America, and replaced it with another W 1900 in 2005. "We've been with Wirtgen ever since," Finley said. "We are finding the trade-in value of our used Wirtgens is fantastic."

But you can't be a one-man sub without a support group, and Finley has what he needs. "I can't say enough about Roland Machinery, our distributor," Finley said. "They're superb. They provide great support locally, and we get great support out of [Wirtgen America in] Nashville. Between the Wirtgen people and the Roland people, I don't know how I could have it any better. They take good care of me, and it's clear that they take just as good care of the one-mill guy the same as they do for the guy with a fleet of them."

Operator Rob Minder at helm of W 200

Finley trusts his reputation to Wirtgen W 200

Vision Paver, Hamm Oscillation Finishes What W 200 Starts

In Springfield, Ill., an advanced-design Vision paver — and Hamm roller incorporating exclusive Oscillation compaction — finished what a Wirtgen W 200 started the week before.

There, cold milling of Martin Luther King Jr. Drive by Finley Milling using its new W 200 was followed the next week by paving with a Vision 5200-2 paver from Vögele America, Inc., and a Hamm HD O90V from Hamm Compaction Division (see preceding article).

"Finley Milling milled 1 1/2 inches off Martin Luther King, and we are putting back a 1 1/2-in. overlay," said Josh Broughton, vice president, P.H. Broughton & Sons, Inc., Springfield, Ill. P.H. Broughton is a family-owned contractor with nearly 90 years of experience in the central Illinois region.

Approximately 1,275 tons of hot mix asphalt was being placed by P.H. Broughton on Martin Luther King Jr. Drive in mid-July. The mix was made by Broughton using its drum mix plant. "It's an Illinois DOT spec, a surface course with 3/8-in. chips, placed 2 in. deep and compacted to an inch and a half."

A double-drum vibratory roller provided breakdown, and that was followed by a Hamm HD O90V roller using Oscillation compaction for intermediate/finish rolling. A small "pup" or compact roller was handling driveways and tight radii.

"We are using the Hamm in the Oscillation mode, especially for getting compaction on the cold joints between passes," Broughton said. "IDOT has come out with a new joint spec in 2010 in which you have to reach a certain percentage of your maximum density within 2 in. of the cold joint. We have found that it is getting compaction without cracking the edge, unlike a vibratory, with which you really have to pound that edge, and sometimes it will tear the mat, especially if it's unconfined. The Oscillation gives us the density without destroying the mat."

The versatility of Broughton's 10-ft. Vision 5200-2 paver — its first Wirtgen Group product — was speeding placement of mix on Martin Luther King Jr. Drive, but also can handle low-end work with aplomb, Broughton said.

"Even though it is a 10-ft. paver, we can do parking lot work with it," Broughton said. "We do patch work and then immediately can jump to main line work. The screed is heavy enough to place a nice smooth mat with no problem, but in the parking lot it's manageable enough that you can operate in tight corners. This paver and screed gives us the best of both worlds, something that will do main line work but also parking lot work, even though it is a 10-ft. screed."

Broughton's former 10-ft. paver could extend only to 16-ft. wide, while the Vision 5200-2 can extend to 19 ft. without extensions.

Smooth Placement After W 200

Broughton said Finley's use of its new W 200 is making his paving crew's job much easier.

"We follow Rex Finley and Finley Milling quite a lot, and I know he's really pleased with his W 200 and we are pleased with what it's doing for us," Broughton said. "He did a great job. The milled surface was phenomenal for laying asphalt, the W 200 made our job getting a smooth overlay much easier."

From the point of view of the laydown contractor, there is a big difference between surfaces left by Wirtgen mills, and those of other makes, Broughton said.

"The smoother the mill can leave the surface, the better it

Vision 5200-2 and screed works for main line and parking lots alike

Vision 5200-2 screed can extend to 19 ft.

Broughton was placing 1,275 tons of HMA on Martin Luther King Drive in Springfield, Ill.

is for me to lay down on top of," he said. "We have followed Wirtgen mills and we have followed other brands. As far as I'm concerned there is no comparison. Wirtgen mills are 'dialed-in'. They are consistent and the result actually doesn't even feel much like a milled surface. We know it's a rough surface, but it's finer and smoother compared to the other brands, which can grab hold of the mat and tear chunks out."

That can result in the laydown contractor having to do remedial work prior to overlay. "We will have to go back in and patch areas that have flaked off or are chunked out," Broughton said. "With Rex and his W 200 we don't see that. It makes our job a lot easier."

The Wirtgens also leave a much cleaner cut ahead of the broom, and that helps productivity when Broughton is paving the same day as Finley is milling. "We have done parking lots when we are paving right after a Wirtgen mill," Broughton said. "The cleanup behind the Wirtgens is phenomenal. Hardly any residue will be left and my angle broom will be done in one pass."

The new W 200 also eases traffic control for the laydown contractor, Broughton said. "Finley's W 200 outperforms his old W 1900 regarding the turning radius in the front," he said. "When turning the mill in an intersection to make a pass in the opposite direction, with the W 200 he can turn around and take off probably 25 percent faster than he could with his old 1900. That makes traffic control easier. The whole operation moves so much faster that it's unreal."

Jumping To Vögele

As Broughton is approaching its ninth decade of service, it had a strong tradition with a variety of other makes of pavers. Yet in 2009 it elected to buy a Vision paver after conducting research and a lot of conversations.

Rex Finley, owner of the W 200, told them that Wirtgen America was a provider of high performance machines that stood behind its products, and Broughton already had a great deal of experience with Wirtgen's Midwest distributor, Roland Machinery, Inc.

"While there had been big changes in the ownership of the more traditional lines of pavers, Vögele America was not even on our radar screen," Broughton said. "But after seeing the technology, and the layout of the Vögele, it was clear to me and our principals that Vögele had done its homework on what the guys in the field needed to make it easy.

"This Vision 5200-2 is unbelievably easy to use," he said. "With another paver it's taken two days for an operator to just start to get a feel for it. But with the skis and the electronics on the Vögele, you get things to where they need to be, step on the back, hit the null button, turn it on and you are in business. I could teach my eight year old how to run it."

The electronics of the Vision Series can be of concern to an operator who is unfamiliar with computers, Broughton said. "It can be intimidating because there are so many buttons and a little computer screen," he said. "But once you look at it, it's laid out so well that control placement is almost second-nature. And with everything going to computers, the generation that is coming in now is more comfortable with a machine like the Vision paver than they would be with the old mechanical controls. They just look at the screen, dial the numbers in, push buttons and go."

Oscillation compaction gets density in Springfield

The Wait Is Over For Wirtgen Concrete Slipform Pavers

The long-awaited entry of Wirtgen Group into the North American concrete slipform equipment market has become a reality with the debut of the SP 15 concrete slipform pavers at World of Concrete earlier this year, and the rollout of the SP 25 this fall.

While North American customers readily associate Wirtgen Group products with asphalt and asphalt recycling, Wirtgen is the world leader in concrete slipform paver manufacture as well, with a pedigree that dates back nearly five decades.

Ultimately, the full line of Wirtgen slipform pavers — the SP 15, SP 25, SP 500, SP 850, SP 1500 and SP 1600 — will be marketed in North America. But initially, the SP 15 and SP 25 will be introduced, with other models in the ensuing years. All models marketed in North America are modified to meet the demands of contractors on this continent.

To better understand these exciting new products, Wirtgen Technology *conducted this interview with Wade Bowman, national sales manager, concrete slipform pavers. Bowman has over 16 years of sales and marketing experience for construction equipment and high-tech navigation aids, including six years as international sales manager for Power Curbers, Inc., Salisbury, N.C.*

Wade Bowman, national sales manager, concrete slipform pavers, Wirtgen America, Inc.

Wirtgen Technology: *Why Wirtgen concrete slipform pavers, and why now?*

Bowman: Wirtgen has been manufacturing concrete pavers for a long time, but just has not sold them in the North American market until now. Customers look to Wirtgen concrete slipform pavers for the same reasons they have chosen our other lines, and the Wirtgen cold mills are a good example.

Both the concrete slipform pavers and the cold mills are characterized by higher attention to detail, better componentry, and better engineering. It all leads to a better machine and better product out the back end. And that's what it boils down to for concrete slipform contractors, what's coming out the back end of the machine.

How are Wirtgen slipform pavers better than the competition?

We are confident that our slipform pavers will pour more accurately, and require less handwork, than other machines on the market. For example, the SP 15's trimmer — a drum with teeth that rotates and levels the grade immediately ahead of the concrete — comes from the market leader in milling technology, so it's no surprise that we have the best trimmer on the market.

The trimmer is well-balanced and its torque is the highest of any trimmer in its class. Trimmers in this class tend to induce vibration into the machine, which then impacts the quality of what's coming out of the back end of the paver. Any vibration or instability of the machine — in this case, induced by the trimmer — will wind up in the product. But our trim-

SP 15 places parapet on overpass

Wirtgen SP 15 places curb-and-gutter in Racine, Wis.

mer is so well balanced, and trims so efficiently, that most people don't even know it's running. And it certainly doesn't induce those imperfections in the product.

Another example is the posts, or the legs, of the machine. We actually machine these on a lathe, so they are made to exacting specifications. There is no 'slop' on our legs. If there is slop in the legs of the machine, that also translates into inferior product coming out the back end.

If a machine does not accurately steer or hold grade, the poured section will be all over the place. This results in lots of expensive hand finishing, perhaps at $50 per manhour and margins go out the window.

How has the SP 15 machine been received?

The machine has been very well received. Customers have been very happily surprised by the way the SP 15 works, how straight it pours, and how intuitive it is to run. Unfortunately the market is extremely soft so despite our warm reception, we have not yet been able to achieve the presence we had hoped for. But, of course, it is an extremely challenging time for everyone.

What is the strategy of introducing a machine like the SP 15 in a soft market?

The strategy is to introduce the machine to as many people as possible, so they can see the SP 15's advantages. When the market turns around, and contractors are again in a position to buy, they will think of us.

How do the SP 15 and the SP 25 compare?

Weight-wise, the SP 15 maxes out at about 28,500 lb., whereas the SP 25 can go up to nearly 40,000 lb. For the SP 15, the machine will pour sidewalk up to 6 ft. wide, for example, while the SP 25 will pour sidewalk up to 8 ft wide in the offset position. The SP 25 can also center pour a 12 ft. section. That makes it useful for paving single lanes. Additionally, the 15 will do a 51-in. barrier, and the 25 will do a 6.5-ft. barrier.

If the SP 15 slipform paver is available now, when will the SP 25 be available on these shores?

The first SP 25 machines will arrive in the fall of 2010.

How do the other slipform pavers compare to the first two models?

We have a full range of machines that complements the SP 15 and SP 25. These bigger machines handle even larger offset projects as well as full width paving up through 50+ ft. And, we have the ancillary equipment to go with the big pavers. All of these models are in redesign for the North American market.

What kind of penetration does Wirtgen Group have with these machines elsewhere in the world?

Excluding the U.S. and Canada, we enjoy a 69 percent market share, similar to what we have with our other product lines. But in a typical, healthy market, the U.S. and Canada would constitute half the world market. That's one of the reasons we could not ignore North America any longer.

What is the ECO Mode and how does it enhance the SP 15 and SP 25 pavers' operation?

The ECO Mode matches the output of the machine's engine to the demands of the job at the time. For example, if we are in ECO Mode on the SP 15 or SP 25, and we need to turn on the trimmer, the machine will automatically increase the RPMs to provide the power to run the trimmer. The same goes for the concrete vibrator circuits and other features; the machine will rev up or down accordingly.

The benefit is that ECO Mode cuts fuel consumption considerably. Operators typically run a machine's engine at or near full throttle so that it can handle all requirements. Also, during idle periods, operators will oftentimes leave machines running at high RPM. In our case the machine will idle itself down, saving fuel, cutting noise and stack emissions, and lowering wear and tear on the engine. ECO Mode is standard on our machines.

One contractor told us he saved 12-15 gallons of fuel per day in ECO Mode. When multiplied times the price of fuel, five or seven times a week, throughout the year, that adds up.

Stringless or GPS-based concrete paving is a trend of the future. Are Wirtgen slipform pavers so-equipped?

We already have that capability and have used it on numerous jobs around the world. We also have an expert who came to us from Leica on staff who is spearheading those efforts to integrate this technology with our pavers and customers. Not only does he have the background and expertise, but also has connections within that industry to make sure our technology stays cutting-edge.

This technology is available for these machines, but it's an option. If someone wants that option now we can sell it to him. Quite frankly I don't expect too many people to use this technology right away for curb-and-gutter, but it's definitely the wave of the future and we are devoting the resources that will be necessary to be the leader in this area.

What are some of the other reasons a contractor would buy a Wirtgen concrete slipform paver?

First off, a fair number of potential customers already have Wirtgen equipment. If they do, the basic concepts of the hydraulic and electronic systems are very similar, and in many cases, the componentry is the same. We've had operators demo our machine who have run our mills, who have just jumped on the SP 15 and run it right away with no difficulty. So the transition is very easy for them.

Likewise, it will be very easy for their mechanics and service personnel to work with our equipment. And because of the overlap of components, decreased parts inventory is possible.

Getting more to the specifics, one advantage that no one else can match or claim is that we have true left- and right-side capable machines. If you look at the SP 15 and SP 25, you will see that left/right they are the same, so switching from a left- to a right-side pouring position is quick and easy, and can be done on-site. No one else really has this capability.

Switching from a left- to a right-side pour has not been a big issue in North America because most machines have worked in housing developments. These have typically been in a "greenfield" environment, and it did not matter what direction in which they poured concrete because there was no traffic. Going forward, we see rehab and DOT work as a bigger percentage of the work, and having the ability to work within constraints as being increasingly important. To us, having that extra flexibility is a real plus.

As contractors look for ways to keep their businesses growing in these difficult times, having extra flexibility can equate to getting more jobs.

The SP 15 can place sidewalk up to 6 ft. wide

How does the Wirtgen slipform paver operator's platform compare to Brands X and Y?

Our operator's platform, basically, is mounted on rubber "doughnuts." The rubber isolates the operator from the vibration of the machine. That seems like a simple affair, but at the end of the work day, most operators are amazed at how they feel. They feel great after a full day, whereas typically their back or knees would be killing them.

Whether or not a contractor thinks much about operator personal comfort — and most probably do — they surely care about what the machine is doing

during the day to induce fatigue, because a fatigued operator does not perform as well as one who is fresh and comfortable.

Does Wirtgen incorporate all-track positioning and steering?

Yes and we think our approach brings new capabilities to the jobsite. All-track positioning and steering have been around for a long time, but has often been difficult to use in practice. Both front posts on our SP 15, for example are infinitely adjustable through their range, and can be adjusted on the fly. There is no need to stop the machine to reposition and then pin the posts in position. The operator can instead move the post as the machine approaches an obstruction and then move it back after that obstruction is passed.

And the way we position our conveyor is also different. Our conveyor is fully adjustable hydraulically. The standard has been to slew conveyors by hand; ours is slewed hydraulically. This also allows operators to quickly adjust to jobsite conditions.

What about maintenance?

Wirtgen slipform pavers feature easy access to maintenance points. For access to daily maintenance points, we can open the engine compartment on either side of the machine at eye level. To get at the entire engine we have two fairly lightweight, but strong, covers that come off and expose the engine compartment completely. And all of the machines' electronics and hydraulics are very logically laid out and well marked. This makes troubleshooting easy.

What is it going to take to get the slipform paver market moving again?

It will be a while before we see the kind of activity we saw a few years ago. First, a new highway reauthorization bill would help. Second, it will take a turnaround in the economy. Housing and commercial development will be soft until things pick up and machines in this class are closely tied to housing and commercial development.

That being said, the longer we go with a depressed market, the greater the pent-up demand. I expect that once things get rolling again and confidence returns, the rebound will come fast and furious. And that's why we need to be talking to people now.

Wirtgen SP 15 is noted for its arrow-straight curb pours

Hydraulically adjustable conveyor allows operators to quickly adjust to jobsite conditions

Micromilling Means Smoother Roads For South Carolina

PP&S uses W 2000 to fine-mill I-185

A major South Carolina asphalt milling subcontractor is using fine-tooth milling or "micro-milling" to give South Carolina taxpayers smoother roads.

Micromilling with a full-lane drum provides paving contractors a more-even substrate on which to place asphalt lifts, essential for winning smoothness bonuses. For bonus-winning thin-lift hot mix asphalt layers micro-milling is a must.

South Carolina is taking a leadership position on micromilling and it shows in the increase of fine milling jobs undertaken by the contractor.

"In 2009 we had a couple of micromill projects, but this year we have seven so far within South Carolina alone," said Douglas E. Limbaugh, operations, Pavement Products & Services, Inc., Piedmont, S.C.

Limbaugh attributes this in part to the fact that the state is correcting cross slopes. "South Carolina has a lot of 'flat' roads," he said. "The cross slopes are out of balance. So we will surface-plane or micromill an inch or two off the road, to get the aged asphalt off, and once that's done, variable surface-plane or cross-slope correct the main lines or roadways."

By doing the planing in two stages, PP&S eliminates the drop-offs that would result in doing the work in one pass. "Motorists don't have to drive with more than a 1-in. drop, and in the meantime they get a better surface to drive on," Limbaugh said.

To do this work, PP&S was utilizing its Wirtgen cold mills both day and night. In March, during the day, PP&S was micromilling the I-185 expressway just southwest of downtown Greenville, and at night, was using some of the same equipment to micromill I-85 west of the city.

PP&S is a major customer of Wirtgen, with four W 2000s, and three W 2200s. One of the W 2200s was only three weeks old when it was put to work on I-185. "Using our fine-tooth drums, we are removing an inch from I-185, then coming back the same day and fine-milling a second inch," Limbaugh said. "We then will go to isolated areas and cross-slope correct there." That project represented two 50,000 sq. yd. lifts, 100,000 total.

The I-85 work — three lanes both north and south — that night was part of a total 1.4 million sq. yd. of 1-in. micromilling, and 295,000 sq. yd. of variable surface planing for cross slope correction. "We will be using two full-lane W 2200s with 12.5-ft. drum, and a half-lane micromill."

Fine Milling = Surface Planing

For super-smooth thin-lift HMA surfacings, cold-milling of the existing, worn surface with a fine-tooth drum is

"When you combine the multiplex averaging system, the Level Pro slope system, and the fine-milling capability, all three are giving us the product that's keeping us at the top."

a must, said Jeff Wiley, senior vice president, Wirtgen America, Inc.

"With a conventional drum, and relative to ground speed your 'peaks-and-valleys' patterns will be relatively high and deep, and if you are not placing a lift that's thicker than 1- to 1 1/4-inches, the rough surface can reflect through to the paved surface," Wiley said. "But with 5/16-in. bit spacing (or less), the definition of a fine-toothed drum, an owner or contractor can minimize the potential reflection of the peaks and valleys through the thin lift surface."

The South Carolina DOT uses the terms "surface planing" but the same term applies to "fine milling" and "micromilling," Limbaugh said. "The spacing on the cutter drum is very tight, with restrictions from chevron to chevron, or tooth mark to tooth mark, that necessitate the use of tightly wrapped surface planing drums."

"The state also requires tolerances of 1/8-in. from high to low on the tooth marks, so you can't just put a thousand-tooth drum out there and run 80 ft. per minute," Limbaugh said. "You have to go at a steady pace because that will leave as smooth a surface as you can. In ride quality it's comparable to a porous friction course."

On top of that, for cross slope correction, the state imposes a rideability spec. "That's where our Wirtgen 'triplex' or multiplex systems come in to play," he said. "We have been very successful with them here. And for paving, when you do a final cross slope correction, they are much more demanding in depths. To be honest with you, technology from Wirtgen is what's getting us there. When you combine the multiplex averaging system, the Level Pro slope system, and the fine-milling capability, all three are giving us the product that's keeping us at the top."

And that results in repeat business from the asphalt paving prime contractors. "The 10 strongest paving companies in the state keep coming back to us because we keep providing them with what they need," Limbaugh said. "They are getting a cleaner and smoother surface with our fine mills."

As standard bids are cut to the bone, these contractors strive to earn smoothness bonuses, which PP&S makes easier by its fine milling. "We are setting them up not to fail, but to win, by giving them a superior surface," he said.

PP&S hit the ground running, so to speak, with its brand new W 2200-12 in March. "It's working absolutely great," Limbaugh said. "It's humming along. The Level Pro system took a proven product — MOBA — and took it to another level. It's improved the ease of use. I won't say a cave man could do it but it makes a seamless transition from grade-to-slope, and slope-to-grade. It 'dummy-proofs' the problem of two people talking and trying to zero-out a cut because it's all on one box, in which one person can control everything from one side, regardless of what side of the machine they are on."

PP&S was founded in 1992, with three principles guiding its operation, Limbaugh said: quality, safety and zero downtime. "That requires superior equipment," he said. "Wirtgen is helping us stay the course. And our employees, along with good equipment, have done a great job with the work that we are doing. Good equipment doesn't mean anything if you don't have a solid group of people to perform the work. Our three principles require a strong team of qualified, hard-working employees from our shop to the field, as well as superior equipment."

Full-lane W 2200-12 mills I-85 at dusk

Fine milling provides super-smooth base for overlays while correcting cross-slope problems

Millings One Night, Aggregate The Next On Georgia's I-75

A fleet of five Wirtgen cold mills was the key in June to high production on a mill-and-fill project on heavily traveled I-75 south of Valdosta, Ga., near the Florida line.

There, the volume of milling — approximately 155,000 tons — was such that reclaimed asphalt pavement (RAP) from this project was going right back into the mix being used for resurfacing.

"We're putting the same RAP from this project back into the mix," said Mike Fisher, general manager, The Scruggs Company, Valdosta, Ga. "Some of this RAP tonight may end up in the mix tomorrow night."

Testing was a major element in the ability to reuse the RAP on the same job. "We came out and milled a section of road before the project kicked off, and tested the RAP for our mix designs," Fisher said. "So once we got going on the project we were able to recycle it almost immediately back on the job."

"The DOT gets a big bonus out of that," said Ferrell Scruggs Jr., president of The Scruggs Company. "We've put a big RAP credit into the project and the DOT gets a true, true savings by reuse of the existing mix on the ground, which still has a 5.5 percent liquid asphalt content after two decades."

Joint Venture For I-75

On I-75, a joint venture of The Scruggs Company, Valdosta, Ga., and Reames & Son Construction Co., also of Valdosta, milled and paved 17.25 miles of I-75, three lanes each way. In one pass, the mills were removing 2 3/4 in. raveling, deteriorated pavement two decades old, a total of some 77,500 tons each direction.

The milled course was replaced with 2 in. of a stone matrix asphalt (SMA) intermediate course, with a maximum allowed void spec at 7 percent, but Scruggs set a goal at 5 percent, followed by a 1 1/4-in. lift of porous European mix (PEM), a open graded mix with around 6.1 percent liquid asphalt binder and 0.4 percent fiber. RAP was allowed only in the SMA mix, at a rate of 10 percent.

The PEM binder is typically polymer modified, but the I-75 job had the option to be polymer modified or crumb rubber modified, the latter of which was the contractor's option. PEM is designed to contain about 20 percent air voids to make it very porous, and it serves as an open graded friction course, reducing tire spray, enhancing drainage and attenuating noise.

The project was funded under the American Recovery and Reinvestment Act of 2009.

"Between we two contractors, we are running five milling machines, with one spare," Scruggs said. On the southbound lane, milling was subcontracted by Scruggs to Oxford Construction Company, Albany, Ga., which was running two Wirtgen mills, a W 2100 doing main line, and a W 2000 doing a 5-ft. shoulder cut. Scruggs also was running its W 2000 in the mainline cut in the southbound lanes.

On the northbound cut, milling was being undertaken by Pavement Products & Services, Inc., of Piedmont, S.C. as a subcontractor to Reames & Son. It was using one W 2200 with full-lane head, and one W 2000. PP&S is featured in the preceding article.

Oxford's W 2100 mills using balloon light

Oxford's W 2000 works for The Scruggs Company on I-75

Constraints Of Time

All four contractors were laboring under the pressure of time constraints. "The project has a lot of pressure in it, because of the restraints on the time we can work," Scruggs said. "We have to have the milling and paving done within the time limits of the contract. Once we mill out a section, we cannot allow traffic on it until it's been paved back."

Safety issues posed by the 2 3/4 in. drop-off between lanes is the reason that traffic is not allowed on the milled areas, Scruggs said. "From that standpoint, we have to have quality equipment out here, especially the milling machines. The pavers, plant and trucks all have to be at 100 percent," he said.

The joint venture, though, means that back-up mills and even plants can be utilized in case of a breakdown. "If our plant goes down, and we can't get it back up, instead of paying liquidated damages the other contractor can help us meet our needs," Scruggs said. The joint venture was subject to a $2,000 per hour penalty for failure to reopen on time.

"This big production milling is a little bit out of the norm for us, so that's why we are relying on subs for this work," Fisher said. "We are time-constrained by a certain window, having to work from 7 p.m. to 7 a.m. to mill and inlay in one night. That's why we had to hire production machines, to get in the cut and get out of the way."

Milling production was averaging about 11,000 ft. per night, but the volume of milling was limited by the progress of paving and the ability to get hot mix asphalt to the job. Milling would begin by 7:30 p.m. and paving would commence about 45 minutes to an hour later.

"We like to have the last truck leave the plant about 5 a.m. and be here by 5:30, with everything completed by quarter to six," Scruggs said. "We have to have everything up, the job secure with all equipment off and traffic back on the road with striping and raised pavement markers by 7 a.m."

The Scruggs Company is a heavy/highway contractor which does grading and both hot mix asphalt paving and concrete slipform paving.

While Oxford was working as a sub to Scruggs, it also is a large milling contractor in its own right, said Chris Turner, milling supervisor for Oxford Construction Co., Albany, Ga.

"In addition to our milling machines we have a Vögele Vision 5203-2," Turner said. "Wirtgen machines are the best in the business. I've worked them and know they are easy to operate. They are dependable with very little downtime. We do our own maintenance and I've been to a couple of the training schools up in Nashville, which help us get a better understanding of how the machine works and how to work on it."

Contractors and subs all maintained safe working environment

Performance, Mobility Of Vision Wheeled Paver Keeps Delta In The Black

The performance — but especially the mobility — of a new 8-ft. wheeled Vögele Vision 5103-2 paver is helping a major Midwestern asphalt producer and contractor stay in the black.

Delta Companies, Inc.'s Missouri Region, located in Cape Girardeau, Mo., this summer was using a brand-new Vision 5103-2 to build a new asphalt parking lot and resurface streets in the Ozark city of Doniphan, Mo., on the scenic Current River. Delta was benefiting from the paver's automation and mobility.

Delta was placing a 2-in lift directly on an existing rock parking area

There, Delta was paving a parking lot for Doniphan's city park on the Current River. The contractor placed a 2-in. lift directly on the existing, graded rock parking area, then followed with a 1 3/4-in. cap lift, compacted to 1 1/2-in. A 3/4-in. NMAS material was used in the base lift.

For this project in early July Delta placed 770 tons of base mix, and was placing 470 tons of surface mix when visited, for a total of 1,240 tons of asphalt. HMA was placed at about 320 deg F. The project was funded by a Rural Development grant from the U.S. Department of Agriculture.

"The Vision is a user friendly machine, more comfortable for the operator and easy to maneuver," said Derek Schatte, operator. "A lot of the older pavers will overwork the operator, but not this one. Everything is right at your fingertips. To fill the screed, I have one button to push. Instead of worrying about each separate auger, it fills the screed automatically and shuts down when its full."

In addition to street and main line work, the 5103-2 is especially suited for paving parking lots over loose bases, Schatte said. "It goes well in parking lots on sand bases, where most pavers won't go," he said. "But with its front wheel assist this one goes right on through."

Since early 2010, the Vision 5103-2 has been used continuously by Delta on a variety of projects. "It's the smoothest-laying machine we've ever used," said Jesse Schrader, screed operator. "The mat is good and even all the way across. You can adjust the screed so there is not a line or a blemish in the mat."

Tires Bring Speed

Delta likes rubber-tired (wheeled) pavers because of their mobility. "We like the speed and maneuverability they provide," said Keith Richard, general superintendent, Delta Companies, Inc. "We were impressed by the speed at which this Vögele paver can travel when we are paving, so long as we don't outrun our rollers."

But the wheeled Vision paver isn't just fast; it's maneuverable. "That's especially important on a gravel-base parking lot

Vision 5103-2 tires provide enhanced mobility

like Doniphan City Park," Richard said. "When you turn a track machine too sharply, you will just tear up the base and create a lot of extra handwork. But our Vision rubber-tired paver is very maneuverable."

The 5103-2 enhances productivity in other ways. "It has other features that we really like," Richard said. "When have to tie into a header or bridge the 5103-2 allows us to continue to run our augers while the drag chain is off. This reduces the amount of waste and clean-up inherent to this procedure."

The machine's quiet operation also aids working conditions. "The Vision paver is quiet, very quiet," Richard said. "Also, the operator can do everything from the top that the screed operators at the back of the machine can do. For example, the screed operator may go back to help rake a joint, or go back and fill in a hole. With him gone, if the joint needs to be matched, the paver operator can bump the screed extension out to match the joint with a push of button, or turn the augers off. He can do whatever he wants to up there."

Delta doesn't have firm numbers on fuel consumption, but they have an idea. "We are tracking fuel consumption but don't have detailed data right now," Richard said. "But I can tell you it does not use the amount of fuel that our other pavers do. It holds enough fuel for the entire day and appears to use two-thirds of the fuel that other pavers do."

Paving Crew Participated

While contractors can be creatures of habit in terms of the equipment they acquire, Delta understands that the quality of the equipment and the way it is used is changing, and the contractor must change with it. Delta evaluated the technology that the Vision Series and a competitor offered and let the paving crew decide which machine it wanted to use.

"It's all about change," Richard said. "We looked at the technology and looked at the Vögele paver and another brand, and asked the crew for their opinion, which was used as one of the criteria for evaluating the new paver. They liked the features of the Vögele versus the other brand, and we had three of the other brand's machines already."

One of those features was the Vision paver's electronic operation. "The electronics make it very simple to get a very good ride," Richard said. "Even though it has an 8-ft. main screed, we have paved three state routes with it already this year and the rideability is excellent." With built-in extensions, Delta can pave up to 15 ft. wide with the screed extensions. "We also actually can get heat on the extensions," he added.

And "Vision" means more than just a series name, as enhanced visibility was designed into the series. "I ran the machine myself one day, and it was great," Richard said. "On either side the seats pivot and swing out to the side of the machine, so you can see into the augers. You could also see at least half the hopper."

Delta's Missouri region owns a half-lane Wirtgen W 2000, acquired in 2009.

Delta Part Of COLAS Family

Delta Companies, Inc. traces its lineage to 1920, when a partnership in 1920 between Edward F. Regenhardt and William H. Harrison led to what is today the Delta Companies Inc. In 1962, Delta Asphalt, Inc., was formed to provide the Missouri market with asphalt and contracting services.

In 1993, the companies became part of COLAS, Inc., based in Morristown, N.J. Since then, the Delta Companies have grown significantly, starting with the 1997 purchase of Baughn Construction in Arkansas, which added asphalt plants in Tuckerman and Black Rock.

Today, Delta Companies Inc., with locations in Missouri, Illinois and Arkansas, is a major Midwest heavy/highway contractor, paving contractor and materials producer.

Delta began use of 5103-2 in spring 2010

In Middle Georgia, New Kleemann Impact Crusher Optimizes RAP Sizes

RAP processed by Kleemann MR 130 Z would go right back on road

A Middle Georgia paving contractor is using its new Kleemann MR 130 Z mobile tracked impact crusher to process reclaimed asphalt pavement (RAP) into engineered gradations that can be reliably incorporated into asphalt mix designs.

In early 2010, Robinson Paving Co., Columbus, Ga., located its new MR 130 Z plant at a portable asphalt plant located at Rupert, Ga., southeast of Macon, where it was processing RAP for the plant, which produces close to 250,000 tons of asphalt each year.

"A lot of this material was milled from our project on U.S. 19," said Darrell M. Robinson, vice president, Robinson Paving. "It was milled up, brought to us, screened, and we are crushing the oversize — mostly 3/4 to 1 in. size material — to 9/16-in. size."

Then, much of the crushed, beneficiated RAP would go back into the ongoing U.S. 19 four-lane project, in up to 25 percent of mixes for all courses. "The same RAP that was taken up is going back to the same areas we took it from," Robinson said. "We have found the 9/16-size works best with the asphalt mix designs we make at our plants, and the Georgia DOT specs we use. You can get another design for a base mix using larger stone, but overall, this 9/16 material works good for everything we use, be it 25mm, 19 or 9.5 mixes."

RAP No Longer Waste Product

Decades ago, RAP was considered a waste product that could be used as fill, as base or in limited amounts in coarse mixes. But processing and testing of RAP as an engineered material has tremendously increased the acceptance and usefulness of RAP in mixes, lowering costs and giving roadbuilders environmental "street cred" to use against those who say roadbuilding is not environmentally sustainable.

"RAP's been in the DOT specs for years now," Robinson said. "But it's even more important now with the high prices of fuel and liquid asphalt. The price of liquid asphalt has gone through the roof. That's affected the DOT's lettings and the amount of roads that can be paved. So now, the more RAP that can be used, the cheaper the prices can be for hot mix, and the more roads that can be paved in Georgia. In the future I can see the price of liquid asphalt getting even higher, so RAP re-use represents a great return for Robinson and the state as well. But you need to process it."

The MR 130 Z was prescreening the material, separating any fines out ahead of the crusher. "That's great," Robinson said. "A grizzly is standard on the machine, and it works great for crushing concrete. But Kleemann also offers the

"... we will feed the crusher as we take it up, crush it there, process it to the right gradation, and truck it to a different job site for re-use."

Excavator feeds hopper with raw RAP

option of what they call a punch plate, which we purchased. The punch plate has holes that separate a lot of material out of the feed. The stockpiles show a great deal of material was separated out by the prescreen before it entered the crusher. That separation of fines saves lots of wear and tear on the crusher, and also saves electrical power."

Because the MR 130 Z generates its own power, that calculates directly to diesel fuel consumed. "When I first started talking with Kleemann about this machine, they said it would burn around 14 gallons an hour," Robinson said. "Well, the first time we checked it was burning 10 gallons per hour. That's a tremendous saving, considering what we are producing in a day's time."

Robinson's target for crushing the oversize RAP was around 125 to 150 tons per hour, for crushing and screening of a final product. "We're getting that," Robinson said. "We are very pleased with what this machine can do for us."

Crusher Mobility Pays Off

Mobility of the crusher was a key requirement for Robinson. "We wanted one machine that would be mobile, as we were looking at moving the machine six to eight times a year, with as little trouble as possible," Robinson said. "But we've now moved this machine twice, and after removing certain components, can move it with our lowboys. And we are very pleased with that."

The crusher's mobility will come into play later in 2010, when Robinson would begin crushing concrete from an Interstate job. "We have done some advance crushing of that concrete, and we were getting about 250 to 300 tons per hour," Robinson said. "We just wanted to see how well it would do, and it was very good."

For that project, the Kleemann MR 130 Z will be taken directly to the Interstate job site. "When lane shifts are completed on the Interstate, we will take the crusher out to the site," Robinson said. "Instead of bringing the concrete to a different location to be crushed, we will feed the crusher as we take it up, crush it there, process it to the right gradation, and truck it to a different job site for re-use."

With the Kleemann crusher, Robinson is confident that the recycled concrete aggregate (RCA) will meet specs. "We fully intend to crush that material and have it approved to go onto one of our projects, as base material for a road," Robinson said.

Kleemann crusher turns RAP into engineered product

Taking Crushing In-House

Robinson acquired its MR 130 Z mobile, tracked impact crusher because it wanted to take crushing in-house.

"We always contracted out our crushing," Robinson said. "Probably in the last couple of years, with the economy being what it is, a lot of contractors have gone to crushing and screening their own material, saving as much money as possible. Back then we were crushing 60,000 tons per year and higher, and with more milling going on than ever before, it made sense to acquire our own crusher. That's why we acquired the Kleemann and it's worked out great."

Robinson does its own asphalt milling, and owns a Wirtgen W 1900. "The W 1900 is our second Wirtgen mill, and we've been really pleased with it. It's a good machine and it's one of the busiest machines that we have."

Robinson's experience with the quality of the Wirtgen mill led to its consideration of the Kleemann crusher, Robinson said.

"As a small, family-owned company, we have to look closely at our purchases," he said. "Before we buy a piece of equipment we do a lot of research. We felt that the Kleemann was the best we could buy for the money, and that it would last us many years with good service. The Wirtgen quality had been proven to us with the Wirtgen milling machine, and that's why we leaned toward the Kleemann. After the research I had done on the Kleemann, and gone to several locations where I could see it in operation, to me the choice of an MR 130 Z was a 'no-brainer'."

Robinson saw the same "family business" tradition in the Wirtgen Group, when he visited with Wirtgen Group president Jürgen Wirtgen in Georgia in 2009.

"His visit said a lot to me, because we also are a family-owned business," Robinson said. "I spend a lot of my time out in the field, visiting customers, seeing the people who work for us, every day. I see the same thing in Wirtgen, in the same emphasis they put into their equipment quality. It's always good to deal with people who take a personal interest in what they do. I love what I do, and if he didn't love what he does, he would not have been here. That to me indicates a better quality of machine."

But buying a brand that was new to America, with a limited number of product placements, gave Robinson pause, at least for a while. "Kleemann's newness was a big concern of mine," Robinson said. "There really weren't any dealers in our area. But after dealing with Kleemann's representation that was no longer a problem."

As this was Robinson's first crusher, the contractor underwent a learning curve with the help of Kleemann's parts and service manager Paul McLaren.

"Paul is tops in his field," Robinson said. "He really helped me learn a lot about crushing, as I went into crushing knowing very little. At times I thought he knew more about his competitive machines than their own representatives. And he was always right about what he told me, which I confirmed after seeing the machines in person. At the end of the day we sat down and discussed the Kleemann. We noted it would be more money, but we would get what we paid for, and we wound up with a machine that will last us for many years."

The proof is in the pudding, so to speak, Robinson said. "It's been proven to me that we made the right decision," he said.

Electrical Vs. Hydraulic Systems

In the environmental age, Kleemann's design extensively utilizing onboard generator-produced electricity, instead of hydraulics, posed definite advantages to Kleemann.

"The Kleemann's electrical system, to us, was very attractive," Robinson said. "We knew the fuel consumption would be better. And now we don't have the extensive hydraulics that we would have with other machines. Nowadays we cannot have any leaks on a machine. If a machine has leaks, customers won't let you run it. At Fort Benning, the machine will be inspected; if they see leaks they have to be fixed before you start running, or you have to move it off the job. Because the electrical system is so advanced on the Kleemann it's much easier for us."

Kleemann technology greatly curtails fuel consumption

WIRTGEN GROUP

Wirtgen News

New Distributors Expand Kleemann Reach In United States

A cohort of new distributors is expanding the reach of Kleemann mineral processing equipment in the United States.

In summer 2010, Kleemann added nine new firms to its existing line-up of distributors, where it joins other product lines from Wirtgen America, Inc., including asphalt reclaiming and recycling equipment from Wirtgen, asphalt and soil compactors from Hamm Compaction Division and asphalt pavers from Vögele America Inc.

"We are very pleased to welcome these new firms to the growing list of distributors for Kleemann equipment," said Evan Clarke, vice president, Kleemann. "As Kleemann gathers momentum within the United States and Canadian markets, and new dealers take on the product line, many customers are seeing the 'Kleemann Advantage'. "We bring to the market a wide range of track mobile crushers and screens with many unique features."

New distributors for summer 2010 are:

- **James River Equipment**, Ashland, VA, distributor for central and eastern Virginia.
- **Kirby Smith Machinery, Inc.**, Oklahoma City, OK, distributor for Oklahoma and central and north Texas.
- **Linder Industrial Machinery Company**, Plant City, FL, distributor for most of Florida, and North Carolina and South Carolina.
- **Monroe Tractor**, Henrietta, NY, distributor for central and western New York State.
- **Nueces Power Equipment**, Corpus Christi, TX, distributor for south Texas, west Texas and southern New Mexico.
- **Robert H. Finke & Sons, Inc.**, Selkirk, NY, distributor for eastern New York State and western Vermont.
- **The McLean Company**, Hudson, OH, distributor for Ohio.
- **The W.I. Clark Company**, Wallingford, CT, distributor for most of Connecticut, western Massachusetts, and all of Rhode Island.
- **Tractor & Equipment Company**, Birmingham, AL, distributor for most of Alabama and Georgia, and the Florida Panhandle.

They join these existing Kleemann distributors:

- **Brandeis Machinery & Supply Company**, Louisville, KY, distributor for Kentucky and most of Indiana.
- **Central Equipment Company (CECO)**, Sillwater, ME, distributor for central and northern Maine.
- **Elliott & Frantz, Inc.**, Jessup, MD, distributor for southeastern Pennsylvania, Maryland, Delaware and northern Virginia.
- **Modern Machinery Inc.**, Missoula, MT, distributor for Washington State, Oregon, Idaho and Montana
- **Murphy Tractor & Equipment Co.**, Wichita, KS, distributor for Kansas, western Missouri, Iowa and Nebraska.
- **Power Equipment Company**, Knoxville, TN, distributor for Tennessee, eastern Arkansas, northern Mississippi, northeast Alabama, northwest Georgia and the western tip of Virginia.
- **SMS Equipment Inc.**, Edmonton, AB, distributor for Canada, except for Ontario.

Wirtgen America Charity Golf Classic Again To Feature Charlie Daniels

Mark your calendar now to participate in the expanded fourth annual Charity Golf Classic, which this year (as in 2009) will feature Country Music legend Charlie Daniels. Sponsored by Wirtgen America, Inc., and benefiting the T.J. Martell Foundation, the expanded event will be held Sunday and Monday, Oct. 3-4, 2010.

"This year we are making it a two-day event," said Sandy Draper, tournament director. "We will begin Sunday evening with a live-music party and auction at Legends Corner Bar on Broadway in downtown Nashville. On Monday we will tee off at 10 a.m. at Gaylord Springs Golf Links, have lunch, and come back in for a post-tournament awards reception."

The T.J. Martell Foundation is a national non-profit organization that supports innovative research to fight leukemia, cancer and AIDS through six top research hospitals in the United States. In Nashville, the foundation annually supports cancer research at the Frances Williams Preston Laboratories at the Vanderbilt-Ingram Cancer Center.

"Last year we netted $32,000 for cancer research," Draper said. "It's very important for Wirtgen America to give back to the community, and to help with charitable organizations when we can. Wirtgen is underwriting the Sunday night event and auction, so its costs won't come out of the proceeds. The research T.J. Martell funds hits very close to home as we have lost several employees to cancer."

For entry or sponsorship information, please contact Draper at (615) 501-0600, or sandy@wirtgenamerica.com.

Wirtgen

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