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Spring/Summer 2009

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On the Cover: *Wirtgen America's new Reinhard Wirtgen Learning Center will host both indoor and outdoor training sessions in greatly enhanced settings. See article, pp 8-11.*

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The challenge: bridge rehabilitation under pressure of time over the weekend to avoid a total gridlock. In night operation, of course. The solution: fast and cost-effective rehabilitation methods using Wirtgen Group technologies. That's how it works!

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As I see it...

Surface Transportation Program's Survival Lies In Your Hands

As the Sept. 30 expiration of the current federal surface transportation program looms, survival of the federal program lies in all of our hands.

Reauthorization of federal surface transportation legislation has been the major infrastructure issue of 2009. That existing law, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users* (SAFETEA-LU), was enacted in August 2005.

The existing SAFETEA-LU authorized $286.5 billion in federal surface transportation investment for FY 2004-09, representing a nearly 39 percent increase from the predecessor TEA-21's $207 billion over six years. Now SAFETEA-LU expires at the end of September, and new authorizing legislation must be enacted by then or else the federal surface transportation program will expire.

Congress In Different Directions

The House of Representatives took the initiative, reporting a bill in mid-June. The House Transportation & Infrastructure Committee reauthorization proposal includes a generous, six-year, $337 billion highway investment as part of an overall $450 billion program over six years.

And it would come on a timely basis. Seeking to halt the parade of program extensions seen with previous reauthorizations – TEA-21 was extended a record 12 times – committee chair Rep. James Oberstar (D-Minn.) vowed in May that there would be no extensions to SAFETEA-LU.

This is ominous, considering that at press time, July 15, the Senate Environment and Public Works Committee approved an 18-month extension of SAFETEA-LU. The legislation authorizes the program in FY 2010 at this year's funding level of $41 billion and provides $20.5 billion in authority for the first six months of FY 2011.

We understand that the Senate SAFETEA-LU extension meets the approval of the Obama administration, as the administration wants to work on new policy initiatives to be included in a long-term reauthorization after March 2011.

"[This] 18-month extension of SAFETEA-LU … will send a message of certainty to all of our states and give us the time to develop a transformational transportation bill with a stable, reliable funding source," said Senate Environment and Public Works Committee chair Barbara Boxer (D-Calif.) July 15.

And *transformational* means more emphasis on an "environmental" highway program. "Most of us believe the next surface transportation bill should and must be transformational, to reflect the need for more sustainable communities, cleaner air, and more transportation options for the American people," Boxer said.

Whether those new policies of the administration or Senate would be friendly to highways is a matter of conjecture. What we know for sure is that if there is a clash between the House and Senate on program extension – and it is unresolved by the end of summer – it could result in the end of federal funding on Sept. 30, with no funding safety net.

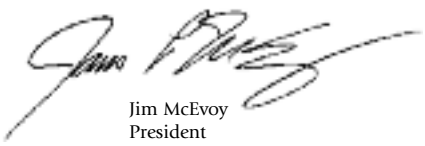
What Roadbuilders Need

It's no secret that delay in reauthorization will greatly hurt roadbuilders and the public agencies they serve, but small business – the prime generator of jobs in this country – would be hurt the most.

Many road contractors – like those represented by the American Road & Transportation Builders Association – want a long-term bill this year, not 18 months from now.

At a minimum, the Associated General Contractors' top priority is to make sure there is no disruption in payments to contractors for ongoing projects both in the short term and long term. AGC also is pressing for a long term reauthorization of the program.

Fortunately, we have the ability to impact the reauthorization that is going on this summer in Congress. I respectfully urge each and every one of our readers to acquaint him- or herself with the issues involved in reauthorization, and press their opinions on their legislators. Our industry's survival depends on it.



Jim McEvoy
President
Wirtgen America Inc.

New Hamm HD+ Asphalt Rollers Set New Standards For Compactors

The new HD+ Series of tandem asphalt rollers from Hamm Compaction Division of Wirtgen America, Inc., was introduced to North America at the World of Asphalt 2009 Show & Conference in Orlando in March, and is setting new standards for asphalt compactors, with an unusually large operator's platform, perfect all-around visibility for the operator, and very impressive performance data.

The HD+ 120 and HD+ 140 rollers – the first of the HD+ line – are articulated tandem rollers, with respective operating weights of 13.8 and 14.5 tons, and respective drum widths of 78 and 84 inches. The HD+ 120 and HD+ 140 rollers replace the existing HD 120 and HD 130 rollers in the Hamm lineup.

Each size compactor will be available in three models: the HD+ 120 or 140 VV, with conventional vibration in both drums; the HD+ 120 or 140 VO, with vibration in the front and exclusive Oscillation compaction in the rear; and the HD+ 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 when compacting.

The HD Series of articulated tandem rollers has been gaining fans and customers for years. Now Hamm has risen the bar for articulated tandem rollers with the North American debut of its HD+ Series.

Developed For North America

"This machine has been developed over the last four years specifically to meet the criteria of the North American contractor," said Richard Evans, vice president-sales, Hamm Compaction Division of Wirtgen America, Inc. "They are available as conventional vibratory machines and, of course, exclusive Hamm Oscillation compaction is available on either model. A third option is a high frequency HD+ machine that features 4,020 vpm."

HD+ 140 VV, among the first in North America, compacts in northeast Louisiana

HD+ 140 VV is an articulated tandem roller, with operating weight of 14.5 tons and drum width of 84 in.

Unlike some competing machines, which require physical movement of weights on the side of each drum to change amplitude, 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.

Super-Sized Cab

Even from the outside, the super-sized operator's platform looks impressive. New on the HD+ models is the ability to pivot both the seat and the console across the full width of the big HD+ platform, for much better control and visibility, particularly to the drum edges.

The operator has an unexcelled view of the drums, and the water application, from every position. At the same time, the operating console with the display is always in the operator's field of vision because it is firmly attached to the seat without restricting the driver.

Operator comfort is enhanced with cup holders and lunch box tray.

"In addition, if you are a big guy, the steering column tilts up out of the way when you are climbing in or out of the seat," Evans said. "Also, the drive levers are wide, so you have plenty of room for your legs."

Enhanced Offset Capability

Also unique is the HD+ Series' offset capability, which is close to 7 in. "We can roll around a curb with the front drum without risking damage by the rear drum and now, with the extra 3-in. offset over the older model, we now have enough offset for a good roller operator to pinch a joint," Evans said.

This 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.

Operator has an unexcelled view of the drums, and the water application, from every position

It's permitted by a new-design articulated joint, which ensures improved driving stability and increased quality when compacting on curves. The offset during crab steering has also been almost doubled in comparison with the previous models in the HD series.

The HD+ offers a further advantage when it comes to productivity: the water tanks, with a capacity of nearly 306 gal – a 30 percent increase over predecessor models – make it possible to work a whole shift without stopping to refill.

New drum edge lights are now standard on the Hamm HD+ Series. Halogen lights mounted on the roll-over protection system (ROPS) are available either in a four-light or six-light configuration. A xenon light option on the ROPS for those markets with this requirement also will be available.

Customers, Distributors Welcomed To New Wirtgen Learning Center

In late January the ribbon was cut on Wirtgen America, Inc.'s world-class **Reinhard Wirtgen Learning Center** on Wirtgen America's expanded headquarters campus in suburban Nashville.

Customer and distributor personnel were welcomed immediately into the new 21,000-sq. ft. training facility, for both indoor and outdoor technical and orientation sessions.

Ground was broken early last year for the training and education facility. This exciting new building provides two lecture class rooms, each with 50-person capacity, and two laboratory classrooms, each with 50-person capacity. The lab classrooms will accelerate training for equipment electronics and hydraulics systems. The seven-acre site also includes a 3.5-acre outdoor demonstration area.

"We have been doing training for 17 years, with the majority of the training in Nashville being technical classroom, or hands-on training in a shop or lab," said Jan Schmidt, vice president, product support, Wirtgen America, Inc. "But unless we can have live equipment operating, it's almost impossible to train and teach someone how to set up a machine, how to calibrate it, or how to use it. With the 3.5-acre outdoor demonstration area, we will be able to do hands-on, live training with all the different products."

Schmidt said the Learning Center and outdoor facility will be able to showcase the performance of Wirtgen Road Technologies and Wirtgen Mineral Technologies products as they appear in sequence in real life.

"The 'circle' of road technology products that we provide – the cold recycling plants, the pavers, the rollers, the milling machines and the stabilizers – enables us to demonstrate all four processes in a circle or closed loop," Schmidt said. "We can start out demonstrating cold mix manufacture with the KMA 220, then place that material with a Vögele Vision paver, compact it with our Hamm rollers, then grind it back up with a Wirtgen cold mill and put it back in the KMA 220 and start all over again." Kleemann mineral processing products also will be able to be demonstrated, he added.

Exciting Added Features

Wirtgen America's existing headquarters, located just minutes from Nashville International Airport, originally was built on 8.5 acres of land in suburban Nashville. Now, Wirtgen's site has been expanded via property acquisitions into a campus headquarters, which ultimately will accommodate multiple buildings in an over-33-acre park-like setting. These buildings – of which the Learning Center is the first – will provide ample room to provide customer training that its growth in sales requires now and in the future.

The Learning Center also features other exciting, innovative features new to Wirtgen America and its customers:

- **Show Room.** A show room will permit display of Wirtgen Group's largest machines, such as the 10-ft. Vision Series pavers from Vögele America Inc.; its largest double-drum rollers from Hamm Compaction Division; and large cold mills and reclaimer/stabilizers from Wirtgen America.
- **Shop Area.** A shop area with four large, fully equipped service bays will provide hands-on experience to Wirtgen Group contractor and dealer/distributor personnel.

At ribbon-cutting in late January are, right to left, Jürgen Wirtgen, president, Wirtgen Group; Wirtgen America past president Stu Murray; and Jim McEvoy, president and CEO, Wirtgen America, Inc.

The Wirtgen America campus from the air: Clockwise from top left, Reinhard Wirtgen Learning Center, 3.5-acre Outdoor Demonstration Area, equipment yard, and, at bottom, Wirtgen America offices and parts distribution warehouse

- **Dining Area.** A dining area is provided that will accommodate 80 patrons.
- **Offices.** Offices are provided for training staff personnel.
- **Company Store.** A company store has been opened, where visitors may purchase official Wirtgen Group logo merchandise.
- **Outdoor Demonstration Site.** Outside, a 3.5-acre site will permit cold milling, soil stabilization, paving and compaction demonstrations, plus demos of Wirtgen Mineral Technologies crushing and screening plants from Kleemann Inc. USA, or of the new, very low-emission KMA 220 portable cold mix/Green Mix plant from Wirtgen.

Keeping Growth Strong

"Wirtgen America is on a growth track in North America, and we intend to keep it there," said Jim McEvoy, president and CEO, Wirtgen America, Inc. "Our expansion represents a commitment to the future, and to future growth in the key areas of product support and training. This commitment is being fulfilled by our land acquisition and construction of the Learning Center."

The new 21,000-sq. ft. training facility is needed because unprecedented demand from Wirtgen Group customers has totally outstripped the capacity of the existing classrooms built into its headquarters building seven years ago.

Now the new building will provide four classrooms – two auditorium-style lecture halls, and two laboratories – with an aggregate 200-person capacity. The lab classrooms can train for equipment control systems while an additional, on-site, fully equipped asphalt testing lab can teach mixes such as foamed asphalt Green Mixes – which must be tailored according to the existing materials at each site – using the new Wirtgen WLB 10 S mobile lab.

Following extensive grading on Wirtgen's hilly, wooded site, construction continued at a fast pace, with slab-on-grade foundation and poured concrete tilt-up walls moving toward an end-of-year opening.

Having the new learning center located near the existing headquarters building led Wirtgen to acquire additional parcels around each structure, so future expansion will be much easier.

"For example, we anticipate that the existing building will require expansion in the warehouse and service areas at a later date," McEvoy said. "Just recently we 'built out' our product support and parts department offices, expanding into an interior mezzanine level of our warehouse. We are taking the opportunity of the new Learning Center to map out our company's growth in the coming years."

Optimum Equipment Utilization

The learning center is required because Wirtgen Group's Wirtgen Road Technologies and Wirtgen Mineral Technologies divisions sell unique construction, maintenance, recycling and materials processing products that are very much technically advanced. They are the industry-leading products in terms of their technology and innovation, but for the customer to get maximum value, he or she must know how to utilize the products in an optimal way.

Wirtgen Group does this by educating the people who operate the machines, and service them, whether they are on a contractor's staff, or that of an equipment distributor. Wirtgen machines, despite utilizing a high degree of comput-

One of two auditorium-style classrooms seats 50 and is equipped with state-of-the-art AV and media equipment

Center includes two laboratory classrooms where equipment controls instruction can be undertaken

er control and integration, can be challenging to operate and service, at least in the beginning, but the Learning Center will show customers how.

In addition, customer needs are evolving, as they are pressed to provide a higher and higher quality product in shorter amounts of time, often under increasingly difficult conditions. Wirtgen is determined to make sure customer personnel are able to utilize or service their products to the best of their ability.

Wirtgen America has experienced many years of continuous growth, and anticipates that it will be able to sustain it even as markets slow. And as markets turn around – whether as the result of pent up demand, new infusions of road funding, or economic recovery – Wirtgen will participate at a much greater level.

Four-bay training shop is devoted to hands-on instruction in actual equipment systems

In late January, one of first classes gets operational instruction in cold milling with Wirtgen products at Outdoor Demonstration Area

With rising energy costs we're seeing the growth of recycling rise to astronomical levels. At the same time Wirtgen is refining all its products to use less energy at every point of operation. In the meantime Wirtgen's other product lines are producing new models with exciting, exclusive technologies such as Oscillation compaction in Hamm rollers or advanced smoothness capabilities in the new Vögele Vision Series pavers. It all amounts to the need for more service space, more parts facilities, and enhanced training capabilities.

When the increase in product features and numbers of models is combined with the huge increase in Wirtgen's customer and distributor base, the need for a new training facility and expanded headquarters campus is evident. Please plan to visit or use the new Reinhard Wirtgen Learning Center in the coming years.

Wirtgen Store – manned by Jennifer Vaughn – offers full variety of logo merchandise

On-premises dining area seats 80 visitors

Adjacent kitchen assists caterer in serving diners old-fashioned Tennessee barbeque

Fleet Of W 2400s Helps Gilchrist Meet 'TIMED Program' Schedule

One of five WR 2400s of Gilchrist Construction turns over base material to remove excess moisture in ROW of reconstructed U.S. 167 in central Louisiana

Louisiana's TIMED (*Transportation Infrastructure Model for Economic Development*) Program is the single largest transportation program in state history.

Created by legislative act, the $5 billion improvement program includes widening 536 miles of state highways to four lanes on 11 project corridors, widening or new construction on three major bridges, and improvements to both the Port of New Orleans and Louis Armstrong International Airport, all on accelerated schedules. Projects are funded by a four-cent gas tax established in 1989, and in effect until all TIMED projects are complete. A series of bond sales is helping accelerate construction.

The program will enhance economic development in Louisiana as well as improve its north-south routes to ease evacuation in case of a major hurricane.

And Wirtgen products are helping Gilchrist Construction Company, Alexandria, La., complete its TIMED Program projects – including clearing, grubbing, excavation, embankments, soil stabilization, and asphalt or concrete pavements, as well as bridge construction – done on or ahead of schedule, and under budget.

'Wirtgen Works'

Gilchrist is a strong user of Wirtgen Group products. It owns five WR 2400 stabilizers, two Hamm HD O120V rollers with exclusive Hamm Oscillation technology, and a Wirtgen W 2200-12 cold mill with full-lane cutter.

"Wirtgen works," said Steve Retos, Gilchrist Equipment Division manager. "They have good pulverization and good production with minimal downtime."

"The W 2400s run all over the competition," said Greg Reynaud, equipment repair and maintenance manager for Gilchrist, responsible for all shop and field repair operations, and maintenance. "Side by side, the 2400 outperforms the competition."

Stabilization is a serious business in Louisiana due to the expansive soils there, which can cause a pavement to fail if not fully stabilized. "Our stabilizers work in soils with a lot of clay and sand content," Retos said. "We will cut in cement or lime, anywhere from 6 to 12 in., from 5 to 6 percent by volume."

Usually the cement or lime goes down dry, unless required otherwise by specs. "Every now and then we will use a slurry, especially when we're in an airport," Reynaud said. "Other than that, we put down mostly dry."

New Highways On New Alignment

When visited in June, Gilchrist was stabilizing base for the complete reconstruction and widening of U.S. 167 north and south in Winn Parish, for the Louisiana DOT. The existing two-lane highway was being replaced by a dual-

"Wirtgen works. They have good pulverization and good production with minimal downtime. Side by side, the WR 2400 outperforms the competition."

lane highway with separated median.

The entire U.S. 167 project – Alexandria to the Arkansas state line – will cost $693 million and in May 2009 was 76 percent complete. Widening of the entire corridor is scheduled for completion in mid 2010.

Using two of its five WR 2400s, Gilchrist was drying out the fill that had been placed on the new alignment, to follow with base stabilization using cement.

"On U.S. 167 we will be putting down a layer of soil cement, 8 in. thick," said Brent Ducote, Gilchrist Base Division soil cement foreman. "Right now we are processing or drying the base material out, because the moisture is over the optimum right now. We will dry it out to get it back within the spec."

Stabilization is essential due to the expansive soils in the Pelican State. "A lot of times we will cut lime in instead of cement," Ducote said, "but we always want to break down the P.I. [plasticity index] of the clay, or dry out the material."

As soil cement foreman, Ducote uses the Wirtgen WR 2400s exclusively. "Their power is awesome," he said. "They have more power than all of the competitors. Because of the way they are designed, cleaning the drum and maintenance needs little effort. The drums have less shanks and teeth than a competing model, which makes the space between the shanks a lot wider, making it harder for dirt to stick in there. Plus it makes it easier to get up in there and clean it out. We clean and chip every day at the end of the shift, but the Wirtgens make it easier. And the air conditioning makes work easier this time of year, when it will get over a hundred degrees each day."

Cold Mill On U.S. 165

At the same time, Gilchrist's W 2200-12 cold mill with full-lane drum was removing existing pavement for the reconstruction of U.S. 165, a 173-mile, $925 million, four-lane reconstruction of a two-lane highway on new alignment under the TIMED Program.

"With the W 2200 I have all the power I need," said Jeffery Ponthier, Gilchrist milling foreman. "I can mill 2 in. thick and carry a good profile, running at 50 to 60 feet per minute. The full-lane drum eliminates passes, so I don't have to make quite so many passes, depending on the roadway."

But for the U.S. 165 work, Ponthier was cutting 8 to 9 in., at 10 to 15 fpm, removing asphalt in advance of percussive cracking of the concrete underpavement. "I could go faster but I don't want to wear out my teeth so quick," he said, adding Gilchrist uses Rhino teeth.

Gilchrist's WR 2400s can cut up to 20 in. deep at a 95-in. cutting width

On different U.S. 165 project, Gilchrist's W 2200-12 cuts asphalt off concrete underlayment a full-lane wide, prior to percussive demolition

Unlike northern tier states, Gilchrist does not have a winter down-period in which it can do equipment overhauls. "We stay busy the year around," Ponthier said. "They will go in for maintenance a couple of days here, a couple of days there, and that will take care of everything that's not done in the field."

About The Wirtgen WR 2400

The WR 2400 is a state-of-the-art, mid-sized stabilizer/reclaimer. This 571 hp-class, high-performance and versatile machine lets contractors cut up to 20 in. deep at a 95-in. cutting width. It stabilizes with both emulsion and foamed asphalt, and can be equipped with a high capacity water pump for dry soil conditions and cement or lime stabilization projects.

Rigid welded construction with mounts for the individual units and attachments. The water tank is integrated into the chassis. All components are easily accessible for maintenance and servicing.

Noise levels are reduced by its robust soundproofing, which protects both the operating personnel and the environment against any nuisance due to noise. The operator's cabin keeps dust or stabilizing materials away from the operator, and can be air conditioned, essential for work on hot summer days. The entire cabin can be shifted to the right beyond the edge of the machine.

All machine functions are controlled or regulated by means of microcontrollers. All control modules are accommodated in an easily accessible control cabinet. The operator has immediate access to data, such as operating hours, oil pressure, engine temperature, engine speed, hydraulic fluid temperature, filling level of the diesel tank, wheel position, milling depth, travel speed, job data, etc., via the CGC display at the operator's platform.

New Rumbler Bits Deliver 40 Percent Boost In Production, Texas Contractor Finds

A milling contractor in south-central Texas has found that the new ultra-high-penetration bits from Rhino Parts – optimized for use with Wirtgen's Rumbler-series rumble strip cutting attachments – has boosted his rumble strip cutting productivity by as much as 40 percent.

PennTex is using a W 600 – predecessor to today's W 60 – to cut rumble strips using the latest Rumbler III attachment manufactured for the W 600.

"The reliability of the Wirtgen machines is what's helped us build our name out here," said Debbie Polasek, office manager, Hallettsville, Tex. "Our largest customer, on our first job, could not believe how clean the W 2000 was in terms of its exhaust, how quiet it was, and what a good job it did.

"We hear a lot of comments comparing our Wirtgen mills to our competitors' mills," she said. "They comment on how clean the machine is ahead of the clean-up crew. One contractor said he had 12 guys behind our machine, ready to start shoveling up; after an hour or two they all left."

"That's what we've come to expect with Wirtgen," said Larry Polasek, PennTex operations manager.

Like many other businesses, PennTex has prospered in the Lone Star State. The firm was launched in 2006 and began work in 2007. "We began with one Wirtgen mill – a W 2000 – one low-boy, one water truck and one pickup," Larry Polasek said. "I was the operator then, and still am an operator today, but now we have four W 2000 mills, plus the rumble machine on the W 600."

Rumbler III In Texas

"We bought the W 600 used in spring of 2007, and it went straight from him to Nashville, where they installed the Rumbler III attachment," Larry said. "As we have no use for a 2-ft. machine we only wanted it for rumble strip cutting. We had the conversion arranged before we bought the W 600 and now it's the only machine we'll use for rumble strips."

At that time PennTex was using the Rhino W4E bit in the Rumbler III. "We learned of the new W1-10/S-R bit and we were sent a supply to try. We were able to increase our travel speed a lot.

"We put them in and did 18 miles of Interstate shoulder in less than nine hours," Larry Polasek said. "We were able to increase our travel speed from 145 to 155 fpm with the W4E to up to 245 fpm with the new W1-10. Wirtgen recommends 180 fpm maximum so we backed down to 225 fpm with good results. And our first set of the new W1-10/S-R teeth lasted over 55 miles, which included cutting through very

PennTex personnel check cut depth of fresh rumble strips on U.S. 77 north of Victoria, Tex.

tough river rock."

Compared, the cuts made with the new and the older bits look identical, he added. "We could not tell the difference between a cut made at 155 fpm and one at 225 fpm," Larry said.

Great Boost In Productivity

In terms of productivity, PennTex typically could average eight to 10 miles of shoulder in an eight-hour day. Now it can average at least 12 to 14 miles in a day.

"The new bits have increased our productivity about 40 percent," he said. And because rumble strip milling is paid by the "station", that is, in 100-ft. increments, the faster PennTex can go, the more money it can make every minute. He also said the improved penetration of the bit cuts down on the "rocking" that the machine can experience when cutting rumble strips in hard material.

"They let us get done quicker, sometimes faster than our primes can imagine," Larry said. "The prime contractors can get ahead of themselves. They will get one line painted and think it will take us days to get the job done. We get out there, and they show us where to start. We will have to ask them 'What will we do in the afternoon or the next day?' The Rumbler III is that fast.

"This tooth has really made a difference, as far as the speed that we can go, because it penetrates so much better than the preceding tooth," he said. "They really work well, leaving a faster cut, a much smoother cut, and a more stable machine that tracks and travels easier."

Larry Polasek operates W 600 with Rumbler III on U.S. 77; contractor PennTex achieved 40 percent increase in productivity with new Rhino bit design

Fresh Rhino W1-10/S-R bit, left, compared to same bit after 36 miles of cutting; unique new design enhances productivity, longevity of bit life

About The Rhino W1-10/S-R Bit

The Rhino W1-10/S-R "ultra-high-penetration" bit from Wirtgen America, Inc. is specifically designed for cutting rumble strips. The slim carbide and body design allows full utilization of the carbide tip.

Standard asphalt bits with the cap-style carbide are not optimized for repeated-plunge cutting as the large diameter at the brazing interface between the tip and the body gets into the cut, and this requires more down-force to penetrate the surface.

The features that make this bit so desirable for rumbling also prove to be very beneficial with any small milling heads where material is left behind on the surface. In these applications, extra body material is not required to guard against abrasive wear. The result is higher performance and production throughout the full life of the bit.

Optimized features include:

- **Cylindrical carbide tip,** to maximize penetration performance throughout life of the tip
- **Slim body,** also maximizing penetration characteristics throughout the life of the tip
- **Puller groove** makes bit removal easier in fine-spaced cutter drums
- **Extended spring clip** maximizes retention and tool holder life
- **Pre-compressing spring clip** makes installation easier
- **Hard Rhino ring** maximizes rotation and tool holder life, and
- **Strong brazed joint** joins carbide tip to the body.

Training, Advanced Controls Lead To Smoothness Bonus

On Ohio 161, Shelly & Sands used dual 50-ft. sonic averaging skis to help eliminate longitudinal swales

A trained, motivated crew – combined with advanced paver controls – on a full-depth asphalt paving project were instrumental in a major Ohio asphalt contractor's receiving a $230,000 performance bonus late last year.

Roadbuilder Shelly & Sands Inc., of Zanesville, Ohio, received 97 percent of the available bonus for smoothness attained in constructing dual-lane Ohio S.R. 161 on new alignment in Franklin and Licking counties, just east of Columbus.

The asphalt paving was so exemplary that the contractor received Flexible Pavements of Ohio's *Quality Award for Asphalt Paving* for 2008 for Ohio 161. Shelly & Sands received the award from the state asphalt contractor association for "achieving the highest quality in asphalt paving as exhibited by superior workmanship and riding quality".

While Shelly & Sands did all drainage, paving, bridge and wall construction, earthwork was subbed to Beaver Excavating Company of Canton, Ohio, and lime stabilization was done by Specialties Company LLC of Indianapolis.

Compaction was a minimum 93 percent on every course, which provided the 100 percent pay factor for intermediate and surface courses. The firm averaged 94 to 95 percent.

Smoothness was tested with a high-speed profiler and attained an average of below 40 IRI. That equates to under 40 inches per mile, with 60 to 70 IRI required to achieve 100 percent of pay.

Placing A Winning Pavement

Placement of a super-smooth pavement that garners nearly all of the available bonus is the result of crew training using the right equipment. Training begins with the delivery of the paver, when factory personnel join with the distributor to make sure the customer knows how to use the machine to its best advantage.

"Our crews executed an exceptionally well-done job," said Shelly & Sands' quality control manager, Ed Morrison. "I've been in this business for three decades and it was a delight to work with all of the crews on this project. They took an assertive role in this high profile job and wanted to do very well. I was very pleased at the response of the crews, from the quality control team, to the paving crew, to the screed men, to the plant crew. They took ownership of the project and that's key."

"First off you need people who care and who have pride in what they do," said Steve Schlosser, equipment superintendent for Shelly & Sands. "I would say that group out there had that." Paving foreman is Neil Prouty.

"We have five of the new Vision Series models in our fleet, all 5200-2s. You always expect some bugs or problems along the way. Instead we won an award for the good job they did."

Shelly & Sands used material transfer vehicle at its option to control mix segregation and isolate paver from haul trucks, leading to smoother pavement

The award-winning pavement on Ohio 161 was placed using a Vision 5200-2 10-ft. tracked paver from Vögele America Inc. The paver was equipped with a 23-ft. paving kit plus Vögele's Niveltronic Plus control system.

Three rollers were used on the project, a 78-in. HD 120 HV for breakdown, a 78-in. high-frequency double-drum roller for intermediate compaction, and an HD O120V compactor combining exclusive Hamm Oscillation compaction for finish rolling. "Typically the oscillation gives us another 1 percent compaction, even at lower temperatures and materials with a tender zone," Morrison said. "We also don't have to cross our fingers hoping we won't break any aggregate with the oscillation, because when the black turns to white, we have to get off it."

"We have 11 Vögele pavers, more than any other contractor in North America," Schlosser said. "We have five of the new Vision Series models in our fleet, all 5200-2s. The crews had never seen these new pavers before, and we put them in the saddle right out of the chute. You always expect some bugs or problems along the way. Instead we won an award for the good job they did."

"Good paving practices with virtually any machine will get you a result like we had," Morrison said. "But we did not have any downtime with the machine. And we were able to pave on new alignment without traffic issues. In the end, the IRI results proved that good paving practice was used on this project."

The advanced control system worked to optimize placement, Morrison said. "A big difference was the Niveltronic system," he said. "We got a larger footprint when we went to dual sonic averaging skis of 40-ft.-plus [actually 50 ft.] length, which helped us watch our longitudinal swales for averaging."

It's essential to have the paving crew knowledgeable about the technology at their fingertips. "The knowledge of the crew and the automation – their making sure it's set up properly – had the positive effect on the end result," Schlosser said. "The crews said the Vision paver with Niveltronic Plus controls reacted a lot smoother than other systems we've used. The use of a material transfer vehicle helped, although at added cost, even though it was not required by the state. The MTV eliminated the contact of the truck against the paver, and helped remix the material to fight segregation issues. Again, paver setup was critical."

The new Vision pavers have constituted a major leap forward in terms of technology, Schlosser said. "There are improvements in visibility, and it's a cooler-running machine, with less heat around the operator," he said. "The track system is another item I like, especially after having issues with competing makes. With them, you could never keep those tracks aligned, no matter what you did. But with the Vision 5200-2's independent tensioning cylinders in the track, they run perfect. We have never had an alignment problem with our Vision pavers as we had with the other pavers, one of which rode so

Paving in full 23-ft.-wide pull enabled Shelly & Sands to place pavement in one width without longitudinal joint, improving long-term durability of pavement under seven-year warranty

hard to the outboard side that it wore a hole in the screed tow point cylinder. The benefit is reduced owning and operating costs for our tracked machines."

Training For Smooth Pavements

Training is so important to Shelly & Sands that earlier this year it opened a corporate Safety & Training Center in Zanesville. The facility can accommodate up to 75 students in a classroom, with an attached garage for equipment or mechanical training. Classes began in December 2008 even before work on the facility was complete.

Training also comes from the distributor. "At startup I'm there as an ombudsman and to do additional training on the machine," said Scott McLean, The McLean Company, area distributor for Wirtgen Group products. "Our service technician, as well as Vögele America's, will be there as well. We make observations to see what's not happening, and then will try to correct it as a team.

"Our business has had two generations of McLeans calling on Shelly & Sands," McLean said. "When we jumped on board with Wirtgen we demo'ed an 1110 RTB Vögele paver for Shelly & Sands, and they have been buying Vögeles ever since."

"As a result of their training, the crew became very proficient going 23 ft. wide, then a week later having to tear it down to place a narrower temporary pavement," Schlosser said. "They became adept at putting the screed plates and tunnel guards back on without any assistance. They weren't afraid of wide-width paving, and attacked the challenge and did a good job."

Typically a mechanic might have done the width changeovers, but not with this well-trained crew. "We let the crew do it," Schlosser said. "Normally an on-site mechanic might have done it, but with a little bit of training, this crew did it all by themselves."

Paving 23 ft. Wide

Also beneficial to smoothness plus long-term performance were the wide paving widths used, with paving of 23 ft. width for the base course, 22 ft. 6 in. for the intermediate, and 22 ft. for the surface course. With this wide paving, longitudinal joints are eliminated.

"The screed kit was set up properly for best paving practice," Schlosser said. "Augers were within the right distance, a foot and a half to 2 ft. at the end gate. The tunnel guards and auger hanger bearings were mounted correctly, plus the tunnel supports and the aft supports for the bracing and bracketing were all put in place."

The project started in June 2006 and involved the complete reconstruction of an existing two-lane blacktop to new

dual-lane highway between Granville and New Albany, Ohio. The completed project included 7.15 miles of new four-lane divided freeway, but also the construction of five service roads for local traffic, the construction of new interchanges at Beech Road and Ohio 310, and re-routing a portion of existing SR 161 to proposed Dublin-Granville Road.

The original $55 million contract consisted of 1.36 million cubic yards of excavation, 1.73 million cubic yards of embankment, three bridges, 41,000 lineal feet of storm drainage, 340,000 lineal feet of underdrain, four box culverts, and 12,000 sq. ft. of mechanically stabilized earth walls. Some 290,000 tons of asphalt were placed, plus 52,000 square yards of concrete pavement.

Shelly & Sands began work on Ohio 161 in June 2006, and had 24 months to complete by May 30, 2008. But utility conflicts and near-endless rain delayed the project six months right after the project started. In 2006 Shelly & Sands lost 88 calendar days on the schedule due to unusually wet conditions.

"We were greatly delayed by the weather when we first started out in 2006, but 2007 started out dry, and we were able to get underway with no problems," said Brian Varrato, Columbus area manager for Shelly & Sands. "We started from the east end of the project and headed west."

For this project on new alignment, a 12-in. lime stabilized foundation was topped with 6 in. No. 304 crusher-run aggregate, followed by base courses of 5 in. of asphalt with No. 302 aggregate, and 2.5 in. with No. 301 aggregate. This was topped with 1.75 in. of Type 2H intermediate course with 3/4-in. max nominal size aggregate and 1.25 in. of Type 1 with 3/8-in. max nominal size aggregate for friction or driving course. The hot mix asphalt was provided by the Mar-Zane Materials division of Shelly & Sands. The PG binder was provided by S&S Terminal, the liquid asphalt division of Shelly & Sands. The HMA was made by a portable plant of composite manufacture, at 350 tph at 5 percent moisture removal.

Careful set up of screed extensions and internals critical to achieving IRI of below 40 in. per mile, resulting in 97 percent of smoothness bonus for contractor

Enhanced visibility for operator above hopper and to side with swing-out seat improves chances of a successful placement

Reclaimed asphalt pavement (RAP) was used at a maximum 40 percent in the base, 35 percent in the intermediate lift, and 10 percent in the friction course. "This was a seven-year warranted project," said Shelly & Sands' Morrison. "We had flexibility in our design criteria, but had to meet aggregate quality specs for the material used.

"As far as the design of the structure, we could use Superpave or Marshall design," Morrison said. "We chose a hybrid, with 10 percent RAP in the surface course. We also added at the plant, at our own option, 1.5 percent Rub-R-Road latex modifier to the intermediate and surface courses. It was not required by the state spec because the average daily truck (ADT) estimate was lower than 1,500, which is the ODOT requirement for PG 64-22 liquid. But with the anticipated added traffic once an additional section is opened, we wanted to add a little more cushion to the mix to help it fight rutting and cracking. The extra percent and a half latex brought it up to a 70-22 grade."

Photos by Scott McLean, The McLean Company, Columbus, Ohio

Wirtgen Group 'Iron' Keeps New Jersey Operators At Top Of Their Game

The advanced technologies and increasing popularity of Wirtgen Group paving equipment has compelled a New Jersey construction equipment operators union to train its members on Wirtgen, Hamm and Vögele Vision paver equipment.

Local 825 of the International Union of Operating Engineers trains its apprentices, and keeps its journeymens' construction skills current, at a field facility located at Dayton, N.J., in the center of the state.

There, last winter, both apprentice and certified operators trained for weeks on a Wirtgen W 2100 cold mill, Hamm HD O120V roller with exclusive Hamm Oscillation technology, and a Vision 5200-2 tracked paver as they familiarized themselves with Wirtgen Group products and operating characteristics.

Local 825 has 8,000 members, who operate all types of construction equipment. But one of the largest segments is road construction, and the local union conducts paving, compaction and milling training classes each year for three months during the slow season.

"We bring everyone back to the Training Center, and Wirtgen America was good enough to provide its newest-technology milling machine, Oscillation roller, and Vision paver for training purposes," said Len Hull, acting director, Training Center of Local 825, International Union of Operating Engineers. "We were able to bring all of our members up to par on the latest technology so that when our contractors call for a qualified operator for one of those machines, we can supply him or her to that company."

Union Trains Members

In New Jersey, contractors use qualified operators that are screened, trained and selected by the operator's union. As a result, over the weeks and years, a Local 825 operating engineer will work for a variety of contractors running equipment within his or her specialty.

But with this system it's incumbent on the union to make sure it is sending operators who know what they are doing. "We have taken the stance that we are going to work with manufacturers to demonstrate their brands of machines to our operators," Hull said. "But it's also good for our members, because our contractors buy a variety of brands. If we can train our members on what Wirtgen offers, then our con-

Local 825 operator gets experience in exclusive Oscillation compaction at union training facility using Hamm HD O120V

tractors benefit, while paying nothing for the service."

In a northern-tier state like New Jersey, road construction is highly seasonal. "Typically, an operating engineer will go to work in the beginning of April, and they will stay with that contractor through December of that year, and then be laid off," Hull said. "During that period – December through April – is when we do all of our training."

Paychecks are issued by the contractor, which conform to the current bargaining agreement. The union works with about 1,200 contractors of all specialties in New Jersey, and five counties in New York. "We train operators for excavation, lattice boom crane operation, paving and milling, transmission pipeline work, and much more," Hull said.

A benefit to the contractor is that he is offered a qualified, OSHA-trained employee for whom he does not have to bear the costs of training, Hull said. "All of our instructors are Occupational Safety & Health Administration-trained, and most have about 25 years or more experience in the field, doing exactly what we are training."

Classroom Sessions

For paving and milling training, classroom sessions complement outdoor field sessions.

"For paving and milling we will be in a classroom about two hours a day, and then move to a machine for six hours a day," Hull said.

"Each class is a six-week course," he said. "Wirtgen advised us of topics it feels should be covered, and sent a tech rep who spent three days with our members, going through Wirtgen's entire fleet of mills, pavers and rollers. That way, when our members go out to a major contractor like Tilcon, for example, Tilcon will get someone who already has run a Wirtgen machine."

Safety is a major element of the training. "Just like Wirtgen America, we emphasize safety," Hull said. "We spend hours on safety-related topics. It brings our operators back-to-basics of what the operator must look for before that machine moves one inch. We want them to look around and be aware of their surroundings. We look at the studies of where accidents happen, and we fine-tune our classes to make sure those points are covered. That way lessons can be learned and an accident that happened last year does not reoccur."

Leveraging Wirtgen Training

The Dayton training facility is paid for entirely by union dues, and is owned completely by the union, but the union expands its coverage by cooperating with manufacturers to leverage their training resources.

"We know training is important to Wirtgen, too, and Wirtgen's new Learning Center is a magnificent facility," Hull said. "Wirtgen conducts a fabulous training program, and our idea was to work with Wirtgen to let them know what we needed here, and to utilize Wirtgen's training resources as well.

"Any time we can get a manufacturer like Wirtgen to work with an end user like us, it's good for the industry, good for the manufacturer – as their machines are being showcased – and good for the local union because we can bring our members up to speed on the newest technology."

Vögele Vision 5200-2 and material transfer vehicle get 'dry run' at Local 825 training facility; training also included planing with a Wirtgen W 2100 cold mill

Digital Technologies Leverage Wirtgen Product Support

As vice president-product support, Jan Schmidt oversees the after-sale side of Wirtgen America, Inc. He and his staff are responsible for timely parts fulfillment, parts inventory management, product service and service management, all training applications – including the new Reinhard Wirtgen Learning Center (see pp 8-11 of this issue) – warranty management, and all other product support functions.

Born in Hamburg, Germany, he came to the United States as an exchange student in 1975 at Terre Haute, Ind. He attended the University of Hamburg and holds a degree in computer science and physics from Middle Tennessee State University at Murfreesboro. He joined Wirtgen America in January 1986, and served as a product manager from 1994 to 2007, when he was promoted to vice president. He and his wife Sue, and daughters Jacqueline and Emilia, live in Cane Ridge, Tenn.

Wirtgen Group's product lineup and product technology have changed dramatically in recent years. To give readers of Wirtgen Technology *a better idea of the depth and rapidly evolving nature of Wirtgen's product support capabilities, we conducted this interview with Schmidt.*

Jan Schmidt, vice president-product support, Wirtgen America, Inc.

Wirtgen Technology: ***What are your responsibilities as vice president of product support?***

Jan Schmidt: My responsibilities include everything related to after-sales support, including parts, warranties, training, and service. I also get involved from time to time with the sales side as well.

Wirtgen Group has a tremendous commitment to detail, not only for the design and building of the product, but in the after-sale support period. Wirtgen America has a very extensive product support program in terms of parts availability, the ease of ordering parts, product training and documentation, and much more.

Our new Learning Center is being used to train our own technicians as well as those of our customers and distributors. It's become a huge component of our ability to share with our customers the experience and expertise which we have, but also needs to be in our customers' hands.

What is the purpose of the new Reinhard Wirtgen Learning Center?

It is to expand the volume and capabilities of the product training that we can provide. One of the significant changes in the Wirtgen Group distribution system over the last few years has been in our network of dealers, which has expanded, but increased in quality as well. Because we have a lot of new distributors there is an increased demand for training of dealer personnel. But we also still are very committed to the customer training that is necessary to support the machines in the field.

Wirtgen America offers a specialized product line, especially when you consider our milling, stabilizing and recycling equipment. Not everybody is as familiar with this equipment as they might be with a bulldozer or motor grader. They won't necessarily have the experience or the expertise required to operate the machine efficiently or profitably. And on the technical side, they may not have the ability to work on this type of equipment all that often, because the population of products is much smaller.

So the intent of the Learning Center was to expand the amount of space we had for training classes, as well as to expand the curriculum, but also to offer something we really weren't able to do before in an effective way, that is, training on machine applications.

We are fine-tuning how we will use the facility. For example, for the hands-on or application training, we have conducted some preliminary classes that consist of an hour or two orientation on the product. It's not a model- or brand-specific training, but a comprehensive class where we take a group of distributor personnel and show them how to handle and operate the different products. We start out producing cold mix in a KMA 220, then we can load that in a Vision paver, which the participants get to operate, including setting the screed and grade control and slope, and compact the "road" using Hamm rollers. Afterwards we can use a mill to take up the material return it to the KMA and start the cycle all over again.

There is not much classroom content there. Rather, it's an orientation so they understand, for example, what the KMA 220 does, and what it creates. We can show the process from plant, to paver, to roller, and milling machine.

This will be especially useful for dealer personnel such as product support/sales reps – who call on customers and provide resolution of technical questions, parts recommendations, or repair estimates – who don't always have an opportunity to interface with live equipment every day.

How will the classroom sessions differ from product orientation?

The service technicians and customer personnel also will be given the opportunity to interface with our equipment, but it will be in a different context. That will be wrapped into a class in which they will get an orientation on the machine and its application in the classroom; then we will give them a basic understanding of troubleshooting concepts, along with the hydraulic and electrical systems.

The agenda will change from what we've been doing. In the past, we have offered three to four different types of classes only. They were comprehensive, such as an operator's class, and a hydraulic class and an electrical class which were model-comprehensive for the whole product range. If you went to a hydraulic class for the Wirtgen range you could work on the smallest to the largest milling machines.

Since we now have different capabilities at the Learning Center, we will break up the curriculum into model-specific classes, where we would have a "half-lane milling machine class", entailing some classroom or lab hydraulics and electrical training indoors, and some operational and application training outdoors on the test track. We'll also do some troubleshooting training and general orientation on the machine in the shop and the labs.

In the past, such training has been confined to winter months, when road construction is at a lull. Will the Learning Center be able to better utilize those summer months as well?

We intend to offer, if not the full spectrum, at least some of the training year-round at the Learning Center. We will need to see how seasonality affects the demand for classes for training. The summer peak of activity applies to both customers and distributors, so there is a limited availability of personnel then. But we also will use the center for sales training and other opportunities that we are pursuing right now.

The Learning Center is an extraordinary place to woo customers, with its exhibition space and hospitality facilities.

It is most certainly unique in its capabilities, within the North American continent. We will have the ability not only to host events in the central "Hub", and the training wing, but also the ability to do hands-on application training. I don't know of anyone else who has that capability.

The Hub enables us to host receptions and other events. We also provided a cafeteria for catered fare so we would not have to shuttle students back-and-forth to restaurants for lunch or for dinner events.

We have full multimedia capabilities, and also have the whole building networked, so we can do video presentations in multiple rooms, but also do a live Wirtgen TV session for large groups, when it would be impossible to get a large number of people on that machine all at once. Instead, someone with a camera can document a presentation on a piece of equipment and the instructor can direct the cameraman on what to show.

We now have a dedicated four-bay shop, which is not "live" with actual work being done. With the existing facility we were sharing bays in our main shop, which was generating a lot of

Reinhard Wirtgen Learning Center trainees are introduced to Vögele Niveltronic Plus leveling system in one of two auditorium classrooms

Then, same trainees see how system is used in real conditions in the field at adjacent Outdoor Demonstration Area

noise and distractions. We also intentionally developed the training concept of the Learning Center to break up the daily schedule for our students to minimize the monotony of being in a classroom for long periods.

Where before we would have three to four hours in a classroom before going down to the shop, and then return to the classroom to reinforce what we learned, and then back to the shop, we designed the Learning Center with the learning wing and lab wing are on one side of the building, so you can learn the theoretical side in the classroom auditorium, move to the lab to do hands-on work on smaller components like pumps and electric parts, then back into the auditorium for another small session on components, and then take the whole group across to the other wing where the shop bays are. The students won't be locked into a tunnel-vision mode where they just hear an instructor all day long; we will get them up and move them around and give them lots of hands-on.

What kind of increase in personnel training does Wirtgen envision for the Learning Center?

Traditionally, for the last five years in our existing facility, we would average between 320 to 400 students during the winter months. We have consolidated Vögele America paving products training from Chambersburg within this facility, so we've increased the volume just due to that move.

With 2009 being the first year that the training facility has been opened, we have had about 740 students. Our intention is to average between 1,200 and 2,000 students each year, once the agenda is fully developed and staffed.

How have the product support needs for Wirtgen America increased since you joined in 1986?

Back then it was only the Wirtgen milling products, and the hot in-place recycling service, which was later spun off. Since then we've added stabilizers, pulverizers, asphalt pavers, surface miners, concrete paving equipment, and the whole compactor range. Now we've added the Kleemann Mineral Technologies line.

The facility from which we provide parts support is a 55,000 sq ft warehouse that handles 23,000 line items, with a value of about $24 million. We process at least 250 orders a day, up to 380 on peak days. The service staff has increased from two in 1986 to 35 dedicated techs that are handling all these different products on the service side.

Back then was there not a heavier reliance on getting parts sent air-freight from Germany, versus now, during which you are attempting to have as broad an inventory as possible in Nashville, in addition to the distributors having their inventory of parts?

Yes, in the 1980s the population of machines that we were supporting was so small it was hard to justify large levels of parts inventory, despite Wirtgen's philosophy that parts needed to keep the machines up and running were always available locally. The inventory levels were smaller so the possibility existed that something might have been sold prior to another customer's having a need for it.

We now have shipments arriving on a daily basis, but we have "safety" stocks in Nashville that cover the demand in excess of 30 to 60 days on numerous parts. We know we will have the parts we need to support the customer in North America, and only rely on air freight as a back-up. Also our distribution network maintains parts inventory at the local level.

How do you keep track of this enormous parts inventory and fulfillment?

It requires the assistance of computers! Wirtgen Group now is switching over to an SAP network on a global scale, and the North American subsidiary will go online on that new system in 2010. And we utilize Internet technology for the benefit of our customers.

Our *Parts and More* 'net is an online-based parts ordering system. We communicate internally with our distributors on inventory levels and forecasting, so we get their requests, but also can give them recommendations for their parts inventory levels based on their sales history and the machine populations in their territory.

There is another level to Parts and More. There is a customer-accessible web site that a customer can browse, and take a peek at the system, but can't order parts or perform any transactions until he registers. When he signs up he is provided a password and user log-in, which is provided by his local dealer, who sets the customer up and administers the orders, all on the Internet.

When a customer places an order, the distributor will have the choice of either fulfilling from his local stock, or just forwarding the order to Nashville and we will ship it from here.

The system is fully functional now for Wirtgen, Hamm and Vögele, and will be functional for Kleemann in the near future. The Parts & More Net website link is http://partsandmore.wirtgen-group.net.

How do customers and distributors obtain product and service documentation?

Parts and More is parts-related only. For documentation users turn to *WIDOS*, an acronym for *Wirtgen Documentation System*. WIDOS is a comprehensive library of all product support-related documentation, with a complete Wirtgen Group product palette.

WIDOS includes parts manuals, parts catalogs, parts documentation, but also service guides, service bulletins, hydraulic and electrical schematics, hydraulic hose diagrams, machine technical data and specifications, and much more.

It even has computer simulators that allow you to go through the operating screens and the displays that we have in the more technically developed products that use such screens as graphical user interfaces. A technician or service or shop manager at the customer level can go through these screens while he's on the cell phone with his operator, without having a live machine or a component physically there.

WIDOS is not web-based, but is available only on disk. Customers can order the set via part number either online, or from their distributors. He will install WIDOS on his PC,

then sign up for a registration code which unlocks the application. He also can use WIDOS to place orders via e-mail, fax or hard copy.

What is WITRAIN?

WITRAIN is a product-specific and brand-specific program, as opposed to WIDOS, which is for the comprehensive product palette. Right now it's available only for Wirtgen products. It takes the same cross-section of documentation pertaining to parts – catalogs, parts lists, service information, operations-related documentation, and sales information – and combines it on a disk.

While WIDOS is a subscription that's frequently updated, WITRAIN is a static product for which no updates are provided. Every machine we sell comes with a copy of WITRAIN; the customer uses the serial number of his machine to register and is given a code, which unlocks the product documentation for his machine in WITRAIN.

We also are working on a WebEx-based live support session module that right now is used for information technology-related concerns, regarding distribution and set-up. WIDOS also can be hosted in a terminal-server environment. That's a little more challenging, and we have yet to utilize the WebEx technology for, say, service diagnostics in the field.

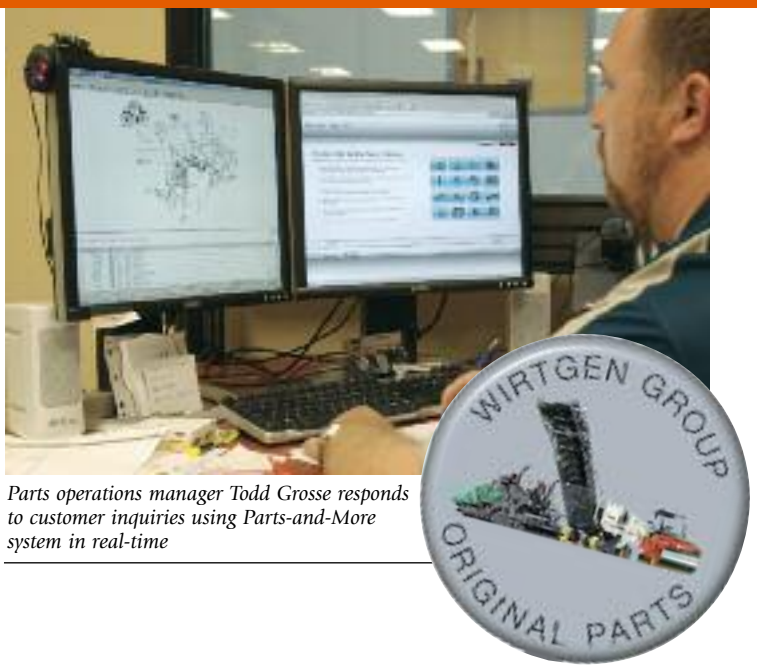
But we have implemented, on our own Intranet, a service call log system. We have a dedicated service phone number – the number is (615) 501-0605 – and it is answered by a dedicated service receptionist who will identify the product, the model number, the customer's contact information, and a short description of the problem. That information is entered into the web-based call system and it is logged, and forwarded by e-mail to the expert the receptionist feels is most capable of answering those needs.

That individual will call the customer back as soon as possible. One big advantage – in addition to being able to log the call and determine how many times the customer had to call and how long it took to resolve the issue – is that the call and response will become searchable information in a knowledge base. The service call log is available on our Intranet for all service employees, as well as field technicians, so if there is an issue they are not familiar with, they can search to see if a similar problem had been solved previously.

That's a far cry from the old days, when a contractor would talk to Jan Schmidt personally on his cell phone, and Jan would walk him through the problem and get the machine up and running in no time.

This augments Jan Schmidt's walk-through because now he is not the only resource we have to get customers up and running at Wirtgen these days!

We are trying to expedite the daily calls we get of a non-technical or nonchallenging matter, such when a customer wants to know how many gallons of oil it takes to fill his drum planetary. Or he needs the torque spec on a bolt. Those are things for which we don't need to have a highly qualified technician.



Parts operations manager Todd Grosse responds to customer inquiries using Parts-and-More system in real-time

Instead, we want to make sure those customers with urgent, machine-down situations have access to a resource that will be able to help them at short notice, and be able to pinpoint their problem without them having to wait two or three hours while service techs answer less critical questions.

Wirtgen America also offers occasional seasonal specials on parts. How are they derived?

Todd Grosse, our parts operations manager, together with his parts sales group, puts together that program. We discuss why we might run certain specials at particular times of the year, and develop flyers that are distributed to our mailing list.

Some potential customers express reservations about purchasing a German-sourced machine from Wirtgen Group, because they don't want to have to wait for a part from overseas. What kind of fulfillment performance is Wirtgen America experiencing now?

Our goal and target is 93 percent same-day fulfillment for emergency orders, and we are consistently striving to meet that each day, not only for emergency orders, but for stock orders as well. Our criteria for completion of orders dictates that any partial fulfillment counts as zero, that is, if it's a 10-item order, and we only ship nine, that complete order counts as zero. If you are ordering 10 parts, you likely will need all 10 parts to complete the repairs, and that's what we strive for.

We have a very good understanding of the parts needs of these machines. We have a significant investment in spare parts here in Tennessee, and economical considerations such as turnover ratios are not the only factor in keeping a part in inventory.

We also have contingencies for parts not in our warehouse. We will remove a needed part from a stock machine, whether here in Nashville, or in our five port machinery depots around the country. We also know what the inventory of our dealers is, and on occasion we have sent a dealer to remove a part from his stock machine and send it across the country where it's needed.

Kleemann Jaw Crusher Makes Quick Work Of Concrete Offices

In June an MC 110 Z mobile jaw crusher of Kleemann Inc. USA made quick work of a concrete credit union building in downtown Bartlesville, Okla., thick, reinforced vault and all.

There, in the shadow of the ConocoPhillips Financial Services headquarters building, the sprawling two-story Phillips 66 credit union building and two-block concrete parking lot were demolished, with a Hilton hotel destined to take their place.

The MC 110 Z is a track-mounted jaw crusher ideally suited for contractor work. But what its operator likes is the fact that it allows him to take advantage of the growing demand for "green", recycled materials.

"We've been in business 33 years, and we've always felt a need to recycle concrete, but it's never been in high demand because our part of the country is so rich in limestone," said Gary Gorby, owner, G&G Dozer, a Wrecking Company, Caney, Kan.

"We've looked at recycling concrete a number of times in the past, but the product then was not as saleable as it is today, with everybody wanting to 'go green'," Gorby said. "This jaw crusher gives us that opportunity."

So despite G&G's three decades as a demolition company, the Kleemann MC 110 Z is the first crusher the firm has used. "This is the first time we've been able to use a recycler, and it's working out really well," Gorby said.

Operator uses remote control unit to 'walk' MC 110 Z to adjacent stockpile, but also to control crusher from cab of excavator/grapple

"The Kleemann machine is such that one man can run it by himself; as he feeds demolition concrete into the recycler, the excavator/grapple operator also can control the MC 110 Z from a wireless remote control unit, on his lap, in the cab," he said. "He can shut the machine down or change the size of the material, all off the remote control." The remote also is used to "walk" the crusher from one part of the site to the other.

The only additional personnel needed would be a skid-steer operator to remove scrap steel, and occasionally someone to move the stockpiles, Gorby said.

"As a contractor, that means a lot," Gorby said. "The high cost of labor keeps going up. A stationary crusher might be able to produce 10 times the amount of product, but also would require about seven or eight workers. It means a lot to us to be able to produce this material at this rate with basically one person."

Impact Crusher Not Indicated

Gorby did look at impact crushers for recycling work, but disregarded them due to the excessive fines that they generate, which become problematic in the urban settings where demolition contractors operate.

"This machine does not make a lot of fines, just a minimal amount of dust," Gorby said. "It can work slower than an impactor, but the product it's producing is a lot better, which is needed for a value-added product for resale."

The crushed recycled concrete aggregate (RCA) is being sold back to the general contractor, which will use it as base material underneath the future hotel, and as base for the future parking lot, drives and sidewalks.

The MC 110 Z quietly was reducing concrete slabs with imbedded steel to a clean 2-in.-minus size. A side conveyor was removing dirt and material smaller than 1 in. size, which can be mixed with soil and fly ash to bring the sub-base up to grade. The machine was producing RCA at about 120 tph.

"The machine is capable of running up to 400 tph," Gorby said, "but because we are running 2 in. material, we've

got it squeezed down about as far as we can go, which knocks our production down quite a bit."

An adjacent lot was serving as a staging area for the stockpiled RCA. "We've already hauled 3,000 tons off the site, as we are very limited in area," Gorby said. "And we have two piles on the adjacent lot that we will use immediately on the building pad to bring the base up to grade."

Yet another product was scrap steel, pulled out of the stream by a magnet, and then kicked out to the side by an ejector belt. A skid-steer loader periodically removed the steel and stockpiled it separately.

"In addition to the aggregate to the contractor, we are selling the 'iron' to a scrap yard," Gorby said. "We feel that this project will be a cost-effective use because we are recovering the value of the three recycled materials, plus we are not hauling big chunks of concrete off the site, tearing up our dump truck beds."

MC 110 Z quietly reduces concrete slabs with imbedded steel to a clean 2-in.-minus size

Formerly such demolition concrete was either landfilled at a cost, or deposited along banks as a kind of rip rap. "We have our own landfill about 20 miles away, but we would have looked to find a deposition site much closer," Gorby said. "In some instances we would have had to pay to get rid of it; other landowners might let us dump it for free if their area needed stabilization."

Not only is the material not being landfilled, or urban dwellers being subjected to excessive dust and noise, but the carbon footprint of the project is smaller, due to greatly curtailed truck trips. "We're not exposing residents to trucks pulling out on the highway and into our site," Gorby said. "Our exposure to these hazards is reduced at least 50 percent."

Low Fuel Consumption

Gorby said the Kleemann crusher was going through fuel at a very slow rate. "From what we've seen, the machine's burning about 6 gal. of diesel fuel per hour, which is very good," he said. "I've been around some stationary crushers, and they can burn up to 30 and 40 gal. per hour. But this crusher is very fuel-efficient."

It also not was emitting much noise, Gorby observed, which is important for urban work. "It does not make as much noise as an impactor would," he said. "We are situated right next to high-rise office buildings and have had no complaints about the noise."

The prime contractor has been sampling the quality of the RCA throughout the project, and Gorby engaged a geotechnical engineer which has tested the material and certified it for use as backfill under the future hotel. A City of Bartlesville engineer also has OK'd the material for use elsewhere. "The material has passed the test," Gorby said.

Next stop for G&G's MC 110 Z was to be a months-long demolition project, five city blocks in Manhattan, Kan., for a future civic center and park.

In Bartlesville, the prime contractor is Am-Bur Construction, North Kansas City, Mo. G&G is serviced by Murphy Tractor & Equipment Co., Wichita, Kan., which carries all four Wirtgen Group product lines.

MC 110 Z is a track-mounted jaw crusher ideally suited for contractor work

About The MC 110 Z and MC 110 R

The MC 110 Z and MC 110 R track-mounted jaw crushers — with their high torque reversible hydraulic jaw, and fully hydraulic gap adjustment — makes this platform a great contractor's crusher.

The R version has an integrated grizzly and the Z version a fully independent double-deck pre-screen. The machine also can be fitted with an optional final screen and oversize discharge, allowing the operator to produce a final graded product with one machine.

Crusher dimensions of both models are 44 in. x 28 in. and both use a Cat C9 engine. The transport weight of the R model is 92,540 lbs. and of the Z model, 99,200 lbs. Length of the R model is 44 ft., 7 in., and of the Z model, 47 ft., 5 in. Width of both models is 9 ft., 10 in.

Wirtgen, Hamm, Vögele Prep St. Louis Pavements In Advance Of MLB All-Star Game

St. Louis' W 50 DC cuts around manholes but also does curb reveal

Milling, paving and compaction equipment from Wirtgen Group got a workout in the Gateway City as equipment owner City of St. Louis hustled to get streets around Busch Stadium paved just ahead of the Major League Baseball All-Star Game there July 14.

Working at night, while the St. Louis Cardinals were on the road, city forces used one of the city's two Wirtgen W 2100s, a Wirtgen W 50 DC, a 2219T 10-ft. tracked paver from Vögele America, Inc., and two DV 8 rollers from Hamm Compaction Division to provide fresh pavement around the stadium and in surrounding blocks of downtown St. Louis.

"We're milling and paving these downtown streets in advance of the All-Star Game, along with some other downtown improvements," said Kent D. Flake, commissioner of streets, City of St. Louis. "No one had to put pressure on us from above; we knew we would have to do it. We set up a plan where we would spend as little as we needed to get the most bang for the buck that we could."

"If we are going to dig the base out of an unpaved alley, prior to placing aggregate base and asphalt lift, we will use a W 2100 to remove up to 12 in. of dirt. But for an old concrete alley that's been patched and patched and patched, we will break out the W 1200s."

New Residents Mean Night Work

There continues to be substantial growth in St. Louis downtown population and the number of hotels there, so that's changed how the Streets Department works there.

"The area has blossomed with new residents, and that makes work here more difficult," Flake said. "Five years ago we could have done this work without any problems at all, but with the loft conversions and new hotels bringing activity to downtown, we find it best to work downtown at night, so we don't interfere with business access and parking. Businesses need to stay open; that's a major goal."

There, the W 50 DC was used to mill around sewer lids, curbs and other tight spots while the W 2100 did main-line street milling. "We use it for other special applications – especially when we're trying to get rid of water – but here it's useful milling curb radii and around manholes," Flake said.

The half-million dollar project encompassed as many as 15 major intersections and about 10 streets, Flake said. These were completely milled and resurfaced, milled to a depth of 2 to 2.5 in., and overlaid with the same depth of hot mix asphalt.

Utilities in the area posed the biggest challenge, Flake said. "Being an old city we have water, sewer, gas, and steam manholes and utility patches to contend with, and 90 percent of it all

seems to be within close range of intersections," he said. "As a result, most of the construction work is concentrated there. Twenty to 50 feet away from the intersection it all fades."

Operator Kenny Wencker mills just north of Busch Stadium using one of two W 2100s owned by City of St. Louis

Full Fleet Of Wirtgen Products

The city owns two 2219T 10-ft. tracked pavers, and one 2116T 8-ft. tracked paver from Vögele America. "The operators love the quality of the final product," Flake said. "All are tracked; we feel we get more control over trucks and greater manueverability on the job."

Two Hamm DV 8 rollers with split drums, a Hamm HD 12 roller, and a Hamm HD 12 VV roller complement the pavers and cold mills.

"We don't often work at night, but it gives us less people and less traffic to work with," said Art Reel, street maintenance supervisor. "It's also not as hot as it is during the day and that makes it easier."

The city is happy with the results it's gotten with the Vögele 2219T, Reel said. "It holds the grade really well and gives us a really good-looking mat," he said. "We have a grade sensor on one side, and averaging ski on the other, and that's been really beneficial to us on these 50-ft.-wide streets, in making sure each pass matches the next."

The Hamm DV 8s are not often seen in the United States. "Our breakdown operator has told me that when it's time to trade the rollers in, that we stick with the DV 8s, because he really likes them," Flake said. "The split drum makes it really convenient for our applications, because unlike highway paving with its straight runs, we have lots of corners and roundings. The split drum allows us more versatility in steering, along with the articulation; it allows us to make turns without cutting into the asphalt."

Flake was promoted to his position in August 2008, replacing Todd Waelterman, who was promoted to director of streets. Milling foreman is Steve Franklin and the operator of the W 2100 is Kenny Wencker. Paver operator for this project was Dave Pender, and the two Hamm roller operators were Ed Young and Mike Johnson, although all operators are cross-trained for maximum flexibility.

Not used for the All-Star game work, the city also has two W 1200 Fs, predecessor to the W 120 F, used principally to mill alleys.

"We started doing alleys back in 2002, and we milled and paved two-thirds of the alleys that needed to be paved since then," Flake said. "The W 1200 works great in those conditions. It gives us a lot more ability to get close to garages and fences, while not knocking them over. If we are going to dig the base out of an unpaved alley, prior to placing aggregate base and asphalt lift, we will use a W 2100 to remove up to 12 in. of dirt. But for an old concrete alley that's been patched and patched and patched, we will break out the W 1200s."

The city just received a new W 2100 to enable it to retire the older of the two W 2100s. Roland Machinery Co. is the distributor.

10-ft. Vögele America 2219T – predecessor to the Vision 5200-2 – places overlay across street from Busch Stadium

One of two of city's Hamm DV 8 compactors features split drums which city appreciates for rolling curves and intersections

Contractor Foam-Recycles, Cold Mills Aged Asphalt With Single Machine

A pavement recycling contractor in eastern New York State in the United States is foamed asphalt-recycling pavements one week, and cold-milling others the next, using a single, innovative machine that does both.

Specialist contractor Reclamation, Inc., of Kingston, N.Y., acquired the machine in May and immediately put it to work foamed asphalt-recycling Zena Road for Ulster County, N.Y., within the environmentally sensitive Catskill State Park in the scenic and historic Catskill Mountains north of New York City. The contractor then mounted a conveyor on the machine and used it to cold-mill pavements the very next week.

"We're recycling the road in-place to a 4-in. depth," said Chris Suttmeier, technical services manager for Reclamation Inc. "We do the full-blown design, including gradation, density, and optimum moisture and asphalt content."

"It's a very 'green' process," said David Sheeley, commissioner of public works, Ulster County, N.Y. "We don't have to haul a lot of material out and in. Foaming the base adds structural stability and does away with the problem of having to do a lot of work on driveways afterwards. Foamed asphalt recycling is beneficial in a lot of ways."

Foam Asphalt Recycling

Foamed asphalt or bitumen mixes incorporate liquid "foamed" bitumen or asphalt, in which hot penetration-grade asphalt is foamed with water and air, and is injected into reclaimed materials and aggregate in a mixing chamber.

Precise addition of water allows control of the rate and amount of asphalt foam expansion. The expanded asphalt has a resulting high surface area available for bonding throughout the materials, leading to a stable cold mix that can be overlaid with a thin wearing course. This "green mix" is placed, graded and compacted, and can permit traffic — including heavy trucks — almost immediately.

Tremendous savings in extraction and hauling costs are realized because the reclaimed asphalt pavement (RAP) used in this technology contains aggregates that have already been acquired, permitted, shot, loaded, crushed, screened, stockpiled, reloaded and hauled.

The machine, a 2200 CR from Wirtgen America, Inc., was foam-recycling the pavement surface "cold in-place" to a depth of 4 in, with a mix containing 2.0 percent PG 64-22 [performance-graded] liquid asphalt, with 1.5 percent water added to assist compaction. Pre-construction material tests indicated that addition of cement or lime fines would not be required. The recycled base was to be topped with a 2.5 in. friction course of asphalt over its length of 1.9 miles, for a total of 28,000 sq yd of pavement.

The Wirtgen 2200 CR recycled the road in-place at just over 34 ft per minute. To ensure proper gradation, as a standard, the 2200 CR is fitted with a gradation beam mounted directly in front of the cutter. The beam is held under pressure on the pavement, holding down the loose alligator-cracked pavement. "This allows a cutting action to achieve gradation, as opposed to other systems that simply 'pop' the fractured pieces into the mix," said Mike Marshall, recycling specialist for Wirtgen.

With conveyor mounted, Reclamation Inc. cold mills pavement with Model 2200 CR from Wirtgen Group

U.S. Contractor Reclamation Inc. foamed asphalt-recycles Zena Road in New York State adjacent to Catskills State Park

Once a positive recycled lane is established, the 2200 CR's screed can run from sonic sensors to ensure the correct pavement crossfall.

Compacting Foamed Base

Three rollers were used to compact the freshly foamed surface, which was accommodating local traffic. They included the 84-in.-wide HD 130 HV double-drum steel vibratory roller, and HD 110K combination roller, combining a 66-in.-wide vibratory steel drum at one end, with four pneumatic tires at the other.

"The combination roller kneads the asphalt in," Suttmeier said. "At some points the screed might not be matching up with the center line exactly, and the steel rollers bridge that and leave a spot where we're not getting proper density. The rubber tires help us out there, as well as kneading together any minor surface cracking. We have a target density of 140.9 lb per cubic foot, and we're getting 95 to 97 percent of that."

Compaction at the 2200 CR's screed was 100 to 110 lb per cubic foot. "The more compaction you can get early-on, the quicker, more efficient and better things will be," Suttmeier said.

Compaction of the foamed base provided a functional roadway over which local traffic could move almost immediately, as no curing or asphalt emulsion "break" was required. A full lane of alternating one-way traffic always was available with the foamed asphalt option, which could accommodate even heavy trucks on the rural road, so no disruptions of traffic or road closures were necessary, as can be the case with conventional base recycling "trains".

Restoring Failed Pavements

As there is a local asphalt plant on this road, the road has had a lot of heavy truck traffic, most of which is being detoured for the project, and the road had paid a price for that, Sheeley said. "The road had deteriorated over the past five years to the point where it had become very hard to maintain and plow snow," he said. The surface was heavily 'allligatored' with wheel ruts." The heavily oxidized asphalt pavement also was suffering from localized base failures.

"I see counties and towns doing overlays on top of cracked roads," Suttmeier said. "They may be milling up 2 in for overlays. And I come back six to eight months later and the cracks have propagated through. To me, that's a waste of money. With this procedure, you can get to the bottom of the crack. You will have a good, solid base with no cracks. Overlay that with 2 in of material and that's money well spent. Foamed asphalt is a good process for the long-term life of a road.

"Plus, it's a green process," Suttmeier said. "We're not milling the asphalt out and taking it to a landfill. Everything we are using on the road is in-place, with just a small amount of liquid asphalt added. And it's eliminating hundreds of truck trips, with diesel fumes emitted and fuel consumed."

Option For Emulsion Stabilization

In addition to the foamed bitumen and cold recycling

With conveyor removed, Wirtgen 2200 CR recycles pavement surface in-place, but also can cold-mill pavements with conveyor mounted

work, Reclamation Inc.'s new 2200 CR also can stabilize bases with asphalt emulsion. "The machine is very versatile in that it can straight-mill as well," Suttmeier said. "You just add a conveyor. You adjust some gates on the bottom, and throw a couple of switches."

"The 2200 CR gives us the opportunity to move into some other disciplines," said Mike Haggerty, marketing director for Reclamation Inc. "Wirtgen has been fantastic in terms of support. We are very impressed with the machine as it does cold in-place recycling, milling, stabilization and laydown with the screed. Recycling trains with other machines are longer with more components; here we have an oil tanker and the water is contained within the 2200 CR. It lets us do more work in cities and towns because of its maneuverability and 8-ft [2.4 m] width."

The firm also owns a Wirtgen WR 2500, predecessor to the big WR 2500 S recycler/stabilizer.

In Ulster County, N.Y., Reclamation Inc. was foamed asphalt-recycling the pavement surface "cold in-place" to a depth of 4 in

Hamm HD 130 HV 84-in double-drum steel vibratory roller was one of three compactors on foamed asphalt mix

WIRTGEN GROUP

Wirtgen News

Hamm HD+ Compactors Debut At World Of Asphalt 2009

The new high-performance Hamm HD+ Series of asphalt compactors was introduced to North America at World of Asphalt 2009 in Orlando in March.

The HD+ 120 and HD+ 140 rollers – the first of the HD+ line – are articulated tandem rollers, with respective operating weights of 13.8 and 14.5 tons, and respective drum widths of 78 and 84 inches. Displayed was the Hamm HD+ 120 VV HF. For more information about the HD+ Series, see the article on pp 6-7 in this issue.

Also exhibited was the HD 12 VV compact roller, with 47-in. drum width. It's one of a series of six compact rollers from Hamm, each offering wider compaction width when operated in offset mode. VV stands for "Vibration Front, Vibration Rear", in which both drums offer vibration, with the capability of vibration running in the front drum only, in the rear drum only, in both drums, or no vibration.

Two of the new Vögele Vision Series asphalt pavers were exhibited, the 8-ft. tracked Vision 5100-2, and 10-ft. wheeled Vision 5203-2 with HR 500-1E screed. The "clean sheet-design" Vision Series also includes the 10-ft. tracked Vision 5200-2 and the 8-ft. wheeled 5103-2. Together they represent the highest evolution of asphalt paver design to-date, and are quieter, cooler and more productive than either competing pavers, or Vögele America predecessor models.

The innovative new Wirtgen W 150 cold mill was exhibited. The W 150 is a large but compact milling machine that can optionally be fitted with milling drums of 4 ft. (1.20 m), 4 ft. 3 in. (1.30 m) or 5 ft. (1.50 m) working width, letting the W 150 be used for a variety of different applications such as milling large surfaces, removing pavement layers at full depth, or leveling.

Also displayed was the Wirtgen W 50 small cold mill. The W 50 three wheel mill can cut up to 6 in. deep and up to 20 in. wide, with a 4-in. turning radius. A loading conveyor and 4 wheels are optional. The W 50 features an 89 hp Deutz diesel engine and a very compact 13,162 lb.-design (excluding conveyor).

Lastly, Kleemann Inc. USA provided information on its superior line of massive mobile crushing and screening equipment. Kleemann manufactures and markets a broad range of durable, productive mobile and stationary processing technology for crushed stone, demolition waste and mixed construction waste.

New WLB 10 S, WLM 30 Aid Foamed Mix Design

Wirtgen Group has refined the ability of producers of foamed asphalt "Green Mix" with the new WLB 10 S mobile lab – successor to the WLB 10 – and the new WLB 30 mixer.

The WLB 10 S produces foamed bitumen in the laboratory by varying different parameters, such as liquid asphalt temperature and pressure, and the quantity of water during injection of the binding agent. The plant enables tests to determine the ideal foamed asphalt properties for the job at hand.

The new WLM 30 twin-shaft compulsory mixer is offered as an optional accessory to the new lab plant. Like the WLB 10 S, the WLM 30 mixer was developed by Wirtgen and is ideally matched to the new laboratory plant. The WLM 30 can be used for mix designs of both hydraulically bound and bituminous layers, as the high mixing intensity fully reflects field application.

New WLM 30 mixer, left, adjacent to new WLB 10 S mobile lab

WIRTGEN GROUP

Wirtgen News

Vögele Vision Pavers Win International Design Awards

The tracked and wheeled 8-ft. (2.4-meter) Vision Series pavers of Vögele America, Inc. are the recipients of two international awards for modern product design.

In the United States, the Vögele Vision 5100-2 (tracked) and Vision 5103-2 (wheeled) pavers won a *GOOD DESIGN™ 2008* award, one of six in the Industrial class, and were the only construction equipment so honored. The 5100-2 and 5103-2 were introduced at Conexpo-Con/Agg 2008 in March of that year.

The Good Design Awards are presented annually by the Chicago Athenaeum: Museum of Architecture and Design, and the European Centre for Architecture Art Design and Urban Studies, and publicly acknowledge and elevate the best and finest new design and design innovation for products and graphics designed or manufactured between 2006 and 2008. The awards spotlight new, visionary, and innovative product concepts, and invention and originality in design. They are the world's oldest and most coveted design competition for manufactured goods, for both consumer and business-to-business products.

Separately, in Germany, the entire Vision Series line of 8-ft. and 10-ft. pavers was honored with an iF Product Design Award 2009 from the *iF International Forum Design* GmbH in Hannover.

The iF product design awards seek to recognize early-on new trends in design. Award criteria include quality of design, workmanship, choice material, degree of innovativeness, environmental compatibility, functionality, ergonomics, visualization of use, safety, brand value and branding, and universal design appeal. Winning entries were selected from a total of 2,808 entries from 39 different countries.

New Added Emulsion Tank Boosts Vögele Super 1800-2 SprayJet Capacity

The Super 1800-2 SprayJet paver from Vögele America, Inc. can do double duty for its owner. With the exclusive SprayJet module mounted, a contractor or government agency can use the Super 1800-2 to place both open-graded rubberized and Novachip wearing courses. And with the module easily removed, the Super 1800-2 SprayJet can place conventional hot mix asphalt pavements.

With the SprayJet module mounted, the Super 1800-2 has an integral spray system that sprays polymer modified binder in front of the mix being laid, followed immediately by aggregate, and then a second spray of rubberized binder. The advantage is less mess; there is no traffic or construction equipment tracking the binder before the aggregate is laid, and a solid coat of emulsion is placed on the entire lift, edge to edge for a lane.

In addition, the spray system of the Super 1800-2 SprayJet operates with great precision as it works in conjunction with the paving speed and shot rate programmed into the machine. Various nozzle sizes are also available and easily changed to accommodate coverage requirements.

Now, an extra emulsion tank is available for contracts requiring very large rates of spread. The extra tank holds 1,320 gal, so a total of 1,849 gal of asphalt emulsion can be carried on board the paver. The extra tank is accommodated in the paver's material hopper.

The Super 1800-2 SJ works well with material transfer vehicles and truck interfaces. A stand-alone heating unit operated by diesel fuel is installed in the extra tank, keeping the emulsion at the desired temperature. Furthermore, the extra tank comes with its own pump circulating the emulsion and maintaining it in a highly homogeneous state.

The Super 1800-2 with SprayJet Module can pave widths up to 19.7 ft (6 m) as another option.

Powerful New 4200 SM Surface Miner Debuts

The powerful new 4200 SM is a high-performance surface mining machine for operators and customers in large-scale surface mines, whose goal is an annual mining capacity in soft rock of up to 12 million tons with a single machine. Surface mining with a Wirtgen machine allows selective mining that enables cutting, crushing and loading in a single working pass.

The 4200 SM is available to customers in two different designs: as a powerful miner for hard rock, such as iron ore, bauxite or phosphate; or for use in various types of soft rock including, for example, coal or lignite.

The miner has a cutting width of 13.78 ft (4.20 m) and is capable of working at a maximum cutting depth of 32.7 in. (83 cm) in soft rock.

The heavy-duty machine is equipped with a 16-cylinder diesel engine from Cummins, making it the ideal candidate for a wide range of applications as its rated horsepower of 1,601 offers tremendous reserve capacity. Being the most powerful machine in the surface miner division, the 4200 SM complements Wirtgen's product portfolio in the upper performance class.

New 4200 SM surface miner dwarfs delegation from its first customer, an Australian mining concern

Charlie Daniels To Host Third Annual Wirtgen Golf Classic

Register now for the third annual Wirtgen America Golf Classic, set for Monday, Oct. 5, 2009, and hosted by country music legend Charlie Daniels.

The Wirtgen America Golf Classic will be held at the Gaylord Springs Golf Links in the Nashville area, and will begin with lunch, followed by a 1 p.m. shotgun start. The event will end with a post tournament awards reception.

Proceeds from the event will benefit the T.J. Martell Foundation, a 501(c)3 national non-profit organization that supports innovative research for leukemia, cancer and AIDS research through six top research hospitals in the United States. In Nashville, the foundation annually supports cancer research through the Frances Williams Preston Laboratories at the Vanderbilt-Ingram Cancer Center.

Just minutes from Gaylord Opryland Hotel, this beautiful 18-hole, links-style golf course is carved from the banks of the Cumberland River. Among the nation's best courses, Gaylord Springs was designed by former U.S. Open and PGA champion Larry Nelson.

You also may be part of a prestigious tournament by becoming a corporate sponsor. Various levels of participation are available. Visit www.wirtgenamerica.com for more information, or contact Laura Heatherly, T.J. Martell Foundation, (615) 256-2002, lheatherly@tjmartellfoundation.org, or Sandy Draper, Wirtgen America, (615) 501-0600, sandy@wirtgenamerica.com.

Employee News

T. Wade Bowman has joined Wirtgen America, Inc., as national sales manager, concrete slipform products. Bowman has over 15 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.

In Vancouver, B.C., Canada, **Larry Howorth** joined Wirtgen America as district sales manager, western Canada, for the Wirtgen, Hamm and Vögele lines. Most recently he was general manager, Columbia Bitulithic division of Lafarge Canada, Inc. His work experience also includes a major distributor of liquid asphalt and road maintenance products, and equipment distributors in western Canada.

Clifford McCarty joined Wirtgen America as district sales manager, covering the states of Louisiana, and Arkansas. Clifford brings to Wirtgen America a strong background with over 25 years of experience working for the road contractor, manufacture and sales, and dealer distribution. Clifford and his wife, Jill and son Garrett resides in Longview, Tex.

Dave Reposa has joined Wirtgen America as district sales manager for Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont. His work experience includes the asphalt paving contractor Lorusso Corp. from 1980 to 1988, Fortress Allatt/Ingersoll-Rand from 1988 to 2003, and LeeBoy. Reposa is a lifetime resident of Massachusetts, where he lives with his wife, Maureen, three grown children and three grandchildren.

And long-time Wirtgen recycling specialist **Mike Marshall** has been named director, recycling products, for North America, responsible for all reclaiming, recycling and stabilization products there.

Hamm

New Hamm HD+ Asphalt Rollers Set New Standards For Compactors

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Vögele

Training, Advanced Controls Lead To Smoothness Bonus

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Wirtgen

Wirtgen, Hamm, Vögele Prep St. Louis In Advance Of MLB All-Star Game

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WIRTGEN GROUP

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