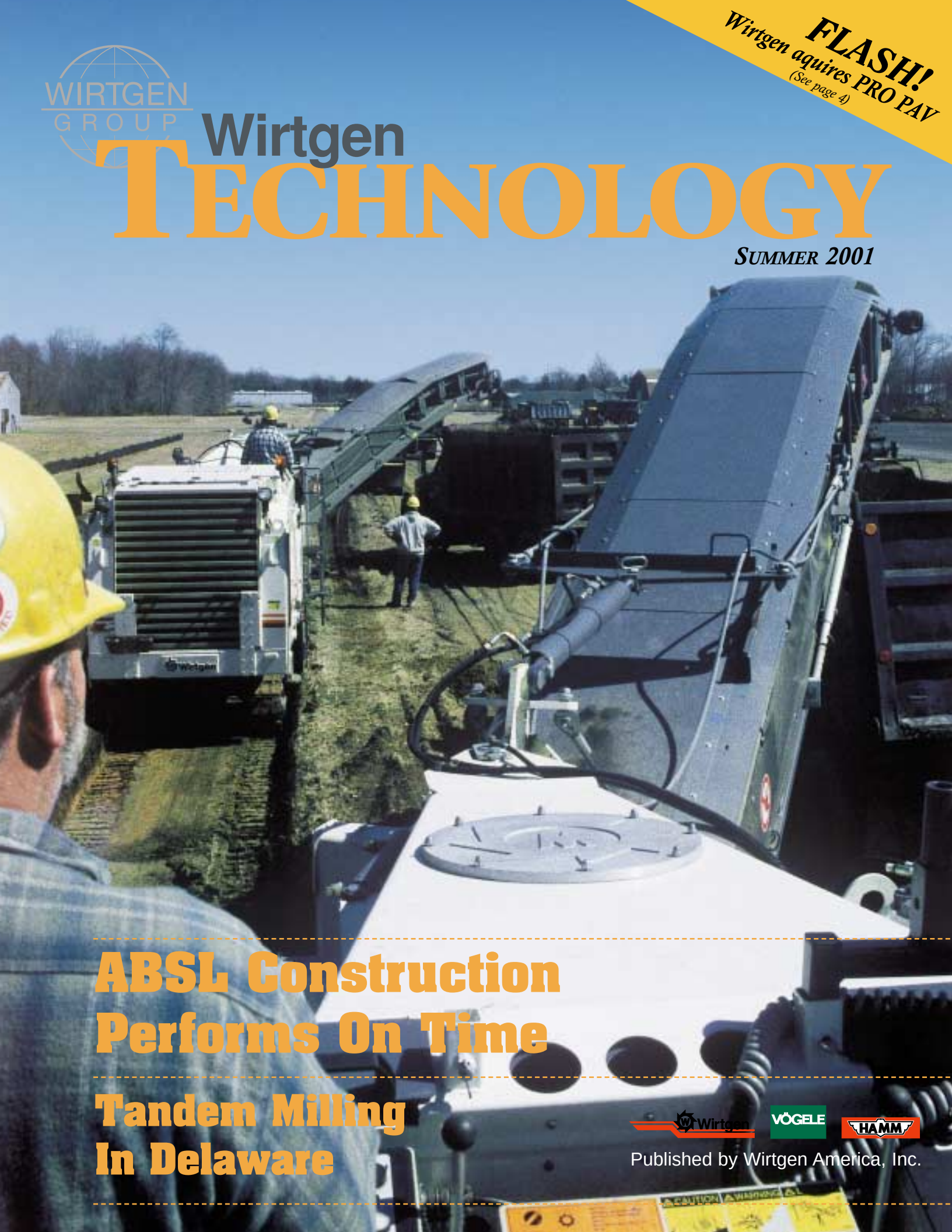


WIRTGEN GROUP

Wirtgen TECHNOLOGY

SUMMER 2001

FLASH! Wirtgen aquires PRO PAV (See page 4)

ABSL Construction Performs On Time

Tandem Milling In Delaware

Wirtgen VÖGELE HAMM

Published by Wirtgen America, Inc.

what asphalt contractors

WIRTGEN GROUP

dream

Vögele ProPav Series
made in the U.S.A.

Wirtgen
milling - cold recycle

Hamm
soil - asphalt compactors

Wirtgen's team delivers

The Wirtgen Group's recent acquisition of Global Asphalt, Inc., of Chambersburg, PA, completes the worldwide offering of technically advanced paving products for constructing and maintaining highway infrastructure systems.

With unbelievably high quality standards and customer satisfaction nobody else can match, Wirtgen will reshape the way you look at high performance roadbuilding equipment.

Wirtgen - setting the standard for performance and value throughout the world.

VÖGELE

Paving Your Future

Vögele America, Inc.
Chambersburg, PA
(717) 264-3200
www.pro-pav.com

Wirtgen America

Winning by Design

Wirtgen America, Inc.
Nashville, TN 37013
(615) 501-0600
www.wirtgenamerica.com

HAMM

Ground Pounding Performance

Hamm America, Inc.
Nashville, TN 37013
(615) 501-0600
www.hammcompactors.com

WIRTGEN GROUP

Wirtgen
TECHNOLOGY

SUMMER 2001

Contents

Feature Articles

Success Secret: Arrive, Perform On Time...Leave 6

Tandem Mills Keep Quick Airfield Job On Target 8

Hamm Gets Top Billing As Official Equipment Of Speedway Dirt Track 10

Mill, Recycler Team Up In Texas Reconstruction 12

Medium-Sized Milling Machines Speed California Utility Work 14

World Views Wirtgen Group's New Synergy At Munich Fair 20

Departments

As I See It.....5

Wirtgen News.....16

Newsmakers.....19

Wirtgen Technology Magazine, Summer 2001, Vol. 2, No. 1. *Wirtgen Technology* is published in the United States of America by Wirtgen America Inc., a subsidiary of Wirtgen GmbH. Portions of this magazine may have appeared in other publications. Copyright © 2001 by Wirtgen America Inc. All rights reserved. Contents of this magazine may not be reproduced in whole or in part without prior permission of the copyright owner. For permission or more information, or to address communications, please contact Connie Murray, Manager, Sales Administration, Wirtgen America Inc., 6030 Dana Way, Nashville, TN., 37013, voice (615) 501-0600, fax (615) 501-0691, e-mail connie@wirtgenamerica.com. Concept, photography and copy by ExpresswaysOnline.com, Wheeling, Ill., http://www.expresswaysonline.com/.

On the Cover: *Wirtgen 2100 DC and W2000 cold milling machines at work in Delaware; see page 8.*

Wirtgen Group Acquires PRO PAV Series Asphalt Paver Line

June 12 — Wirtgen, of Windhagen, Germany, has acquired Global Asphalt Products, Inc., of Chambersburg, Pa., including its PRO PAV Series of hot mix asphalt paving equipment.

Wirtgen will retain the PRO PAV Series brand name as part of its asphalt paver marketing strategy through Vögele America, Inc.

The PRO PAV line further strengthens the Wirtgen Group's position in road construction and reconstruction equipment worldwide, making cold milling and recycling machines, soil and asphalt compaction units, and now asphalt paving equipment available to customers from its single-source provider in North America. PRO PAV will align itself with Wirtgen Group's Vögele Asphalt Paver division to provide a common base for worldwide distribution opportunities.

Wirtgen is a leading German construction equipment manufacturer which owns Wirtgen America Inc., Pro Cut Inc., Hamm America, and now Vögele America Inc. Wirtgen America Inc. is the North American sales and service subsidiary of Wirtgen Group of Germany. In early 2001 Wirtgen America dedicated a new 74,000-square foot headquarters office and parts warehouse in suburban Nashville.

"The addition of PRO PAV asphalt paving products to Wirtgen and Hamm completes the circle of advanced technology, high-production and high-quality paving products that will allow North America's paving contractors to fulfill their desire for single-source procurement and service," said Stu Murray, president of Wirtgen Inc. and CEO of Wirtgen America Inc.

PRO PAV's seven-model asphalt paver line, Wirtgen's market-leading, 18-model line-up of high performance milling machines — now coupled with the Hamm Compaction Division line of 30 models — will allow Wirtgen to serve the total market needs of North America's highway construction, reconstruction, repair and recycling and reclaiming contractors, Murray said. "This focus will continually bring new technology forward with high production, low cost solutions for paving contractors," he said.

"We are very excited about joining the Wirtgen Group as we believe it is an excellent fit for both companies," stated Hugh Latimer, president of Global. "It will provide PRO PAV Series and its dealers the opportunity to continue to aggressively grow and develop our business of supplying a full line of world class asphalt pavers and support for the North American market," continued Latimer, who will become president of Vögele America, Inc.

The PRO PAV paving product evolution began over 40 years ago in 1951, under the Allatt paver name. Today its asphalt paver line is known as PRO PAV.

The PRO PAV product line consists of seven models. Both 8- and 10-foot highway-class pavers are manufactured in a modern, six-year-old facility located in Chambersburg, Pa. The product line offers wheel, steel-track, and rubber-track pavers.

Screed options range from a standard 8-foot fixed width vibratory unit with hydraulically extendable strike-offs, to the classic hydraulically extendable 10-foot to 19.5-foot heavy weight, super-smooth highway unit.

Where appropriate or advantageous to the customer, Wirtgen plans to grow this basic range of state-of-the-art pavers to 10 different models by the end of 2002, incorporating some of the advanced technologies of Wirtgen Group's Vögele brand of asphalt pavers manufactured in Germany. The result will be a product line of world-class highway and utility pavers manufactured in Chambersburg, Pa.

About Wirtgen Group

The Wirtgen Group is the world's largest manufacturer of asphalt recycling and reclaiming equipment, and has diversified into other road construction products, including Hamm compactors and Vögele asphalt pavers.

Vögele considers itself to be the world's largest manufacturer of asphalt paving products outside of North America, with sales exceeding 600 units per year. Wirtgen owns manufacturing factories located in Germany (3), Russia, Brazil, and now the new North American facility in Chambersburg, Pa.

The Wirtgen Group has more than 50 company-owned sales and service facilities in over 50 different countries worldwide. Headquartered in Windhagen, Germany, the Wirtgen Group is a family-owned business managed by brothers Jurgen and Stefan Wirtgen.

Wirtgen Group's year 2000 sales revenues exceeded US$550 million. The Wirtgen Group continues to grow and focus itself in reconstruction, recycling, repaving and rebuilding highway and airport infrastructures worldwide.

For more information contact Connie Murray, Wirtgen America Inc., (615) 501-0600, connie@wirtgenamerica.com.

As I see it...

'Perpetual Pavements' = More Milling

Cold milling is an integral part of a new all-asphalt pavement design that the hot mix asphalt industry is strongly promoting.

Perpetual Pavements is the name of this remarkable pavement design now being popularized by the new promotion arm of the asphalt paving industry, the Asphalt Paving Alliance (APA).

Launched in 2000, APA is an industry coalition composed of the Asphalt Institute, National Asphalt Pavement Association and the State Asphalt Pavement Associations, an umbrella group representing local associations in 36 states. APA's activities include publications, outreach through industry meetings and conferences, and targeted communications to public officials and the general public.

The interest in asphalt Perpetual Pavements is growing so quickly that at the 80th annual meeting of the Transportation Research Board in Washington D.C. in January, an entire morning was devoted to two panels on the subject. There, eight panelists from North America, France and Great Britain described current and past research into this uniquely durable, all-bituminous concept.

What is a Perpetual Pavement? It's a three-layer, full-depth HMA pavement design which may provide pavement life-expectancies up to 50 years, with only occasional, subsequent thin HMA surfacings to maintain optimum ridability.

The Perpetual Pavement concept "Keeps traffic running smoothly for 50 years or more," the APA says, adding that it "Limits repairs to the easily serviced top layer, eliminating the need for costly and disruptive reconstruction." Life-cycle costs are dramatically reduced, while motorists remain happy with a consistently smooth, quiet driving surface.

Up until the last decade, pavements in the United States generally were designed for a 20-year life span. At the end of this period, total reconstruction of a pavement usually was required, at soaring costs to road users, and great disturbance to motorists.

The Perpetual Pavement — developed by engineers from Great Britain and Australia, and first promoted domestically by Jim Huddleston of the Asphalt Pavement Association of Oregon — utilizes a three-layer, full-depth HMA pavement, the lower layers of which are significantly stronger than the top.

Perpetual Pavements typically will develop distress from the top going down, rather than from the bottom going up, as with thinner pavements. Because there is very low stress at the bottom of the full-depth HMA, Perpetual Pavements allow a pavement manager to concentrate on maintenance of the all-important riding course — with cold milling when required — followed by thin overlay.

Maintenance takes place at the surface layer only, with cold milling and overlay when indicated to maintain the best possible driving surface. The mill-and-fill can be done quickly during off-peak traffic hours with little or no impact to motorists.

Because cold milling of the deteriorated surface course (prior to fresh thin overlay) is a fundamental element of Perpetual Pavements, the design offers additional cost advantages to taxpayers and owner agencies through asphalt recycling, which conserves nonrenewable natural resources and landfill space.

The Perpetual Pavement — formerly called a Modified Full-Depth Asphalt (MDFA) design — provides two bottom layers designed to carry loads and resist fatigue, while the top "sacrificial" layer provides a superior driving medium and resists rutting. The two lower layers are intended to require no maintenance and can be designed to last 30, 40 or 50 years or longer.

The lowest layer — the "fatigue layer" — is between one-quarter to one-third the total pavement depth, and stands up to sustained loading without cracking. A middle layer is the main load-bearing layer, and varies in thickness according to subgrade soils and probable traffic loads.

With that being the case, it's evident that a foamed asphalt-stabilized base — such as that provided by the Wirtgen WR 2500 Recycler when fitted with the proper equipment — will provide an even stronger base below the fatigue layer, especially when a Perpetual Pavement is built on an existing bituminous right-of-way.

A foamed asphalt base will add to the significant strengths inherent in the multiple layers of the Perpetual Pavement and enhance its longevity even more. It would save time and money because the existing pavement can be used in-place, eliminating demolition and truck hauls. And the intrinsic strengths provided by foam-stabilizing the base with the WR 2500 also may allow reduction of the depth of the middle layer, saving money for taxpayers and owner.

The bituminous paving industry is excited because the Perpetual Pavement concept finally gives the industry a recognizable marketing hook to use against portland cement concrete pavements for initial pavement designs, where concrete often is favored due to its presumed long-term durability.

North America's cold milling operators and owners also should be excited, because the service they provide is an integral part of the Perpetual Pavement concept. Let's do what we can to learn about — and support — this important new design for our nation's roadways.

Find out more about Perpetual Pavements at APA's web site at http://www.asphaltalliance.com/, where you'll find promotional and technical documents, along with an illustrative "slide show" you can download and run on your desktop computer.

S W Murray

Stu Murray
President
Wirtgen America Inc.

Success Secret: Arrive, Perform On Time...and Leave

Fiberoptic trench is cut in San Francisco

A big California milling subcontractor is using its reliable Wirtgen cold milling machines to leverage growth and capture new business.

"We give our customers the service they want," said Luis M. Allende, president, ABSL Construction, San Carlos, Calif. "The secret to success is to arrive, perform, and leave. That's really all they want. And that's why we count on Wirtgen: They provide very efficient machines with high uptime."

From its base in the San Francisco Bay region, ABSL operates primarily in central and northern California. It also has undertaken work in southern California and Nevada.

High levels of equipment uptime are essential to ABSL's profitability, Allende said. "Keeping the equipment at maximum performance for highest output is important. We have to keep the equipment in excellent shape all the time. We have a high coordination of maintenance so the equipment is always available to us. And Wirtgen support is very helpful with answers when we need them."

ABSL owns nine Wirtgen cold milling machines of various sizes, and will lease extras when needed for major jobs. "We were among the first in this area to use them," said Bernard Saggese, chief financial officer. "We started with a 1000 DC, then went to a 1900, 1200s and a 2000. We use the larger models."

Sticking with one manufacturer has financial advantages, Saggese said. "You deal with only one company and one parts source, and their speciality is milling machines, so they know what they're talking about," he said. "In our case, it's been good for ABSL."

Wirtgen's specialization in milling machines benefits ABSL's specialized subcontracting practice, Allende said. "With some other equipment makers, cold milling machines are a division of one of their factories," he said.

"The secret to success is to arrive, perform, and leave. That's really all they want. And that's why we count on Wirtgen: They provide very efficient machines with high uptime."

W 2000 flush cuts on left hand side on Laguna Hondo Avenue in San Francisco

"Wirtgen machines have a great balance between weight and power, very precise, with a very good design," Allende said. "An electronic, computerized control system really makes that piece of equipment super-efficient and perform well. You're burning the exact amount of fuel at the exact rate for the performance you need. That's what we're looking for."

ABSL's Luis Allende at helm of W 2000

Match Equipment to Job

ABSL matches the exact piece of equipment to the right kind of work, he said. For example, ABSL owns both tracked and rubber-tired Model 1200s. "If you know which piece of equipment to send to a particular job, you know you will perform for the customer," Allende said.

Other models currently owned are the 1900 and the W 2000. "The 1900 is really reliable and performs tops in any kind of work or situation," Allende said. "And the W 2000 is outstanding."

ABSL was founded in 1991, doing concrete work and traffic control. It began its milling service in the Bay area in the mid-1990s. "We have continued to grow since our start, and 90 percent of what we do is milling," Allende said. "There was a need in the market, but the work is demanding and you have to dedicate yourself 100 percent. We've had the right people who have always worked as a team."

Also managing ABSL is Sebastian Solana, a civil engineer brought from Argentina two years ago to assist with estimates, bids and operations.

"We work as a team," Allende said. "We're all professionals, working together on estimating, bidding, public and private work, and keeping the equipment in top shape."

In early spring ABSL was using a W 2000 to cut fiberoptic trench for its on Laguna Hondo Avenue in a residential neighborhood of San Francisco. "Fiberoptic installations are providing a lot of work," Allende said.

Airports a Specialty

A more striking project was a winter paved surface removal project at San Francisco International Airport, involving six Wirtgen cold milling machines working in tandem nonstop for 30 hours. "We removed solid asphalt above CTB [cement-treated base]," Allende said. "Some sections were three feet deep. During that time, we had only one problem with a Wirtgen machine; we had to pull an alternator."

At one time last year ABSL was milling at the San Francisco, Oakland and San Jose airports on the same day. "We like to specialize in airport work, because the time frame and performance requirements suit us," Allende said. "If an airport job is available a prime may seek us out because the back charges are huge for not performing on time," Allende said. "We have the equipment and dedication to perform on time. We get in, get out and be done."

And that kind of performance is the essence of successful subcontracting, Allende said. "The challenge is to perform on time, without breakdowns, and get the most amount of work done with the best quality possible. That means a good pattern, with even surface, and great accuracy of depth. The Wirtgen machines have a very good depth control which is very precise. We leave the job ready for paving."

In early 2001 ABSL was constructing a new 25,000-square foot office, cold milling equipment maintenance facility and parts warehouse in Hayward, Calif., on the east side of the Bay. "All the equipment will be parked under roof," Allende said. "We will have wash racks so it will be kept very clean every week. We will be able to go over every single detail of the equipment, following the manuals to the letter, all the maintenance that is recommended, and more. We'll do this to keep our equipment at its best."

Tandem Mills Keep Quick Airfield Job On Target

Tandem machines speed runway removal

In a race against a race, a pair of Wirtgen cold milling machines removed a decayed asphalt runway at a Delaware airport, keeping the project on time so the airport could accommodate aircraft for NASCAR races in early June.

Delaware contractor George & Lynch, Inc., used its models 2100 DC and W 2000 cold milling machines to quickly remove a 3,700-ft.-long asphalt runway, part of a $1.1 million airfield reconstruction of the Delaware Airpark at Cheswold, Del. But soft, waterlogged soils were challenging the contractor as the removal got underway in late March on the 9-week job.

"It's a fast-track project where we needed to get a lot of work done quickly," said Dennis J. Dinger, vice president-operations, George & Lynch, Inc., New Castle, Del. "We had the availability to bring both machines together to work on this project, and it worked out really well."

The 45-acre general aviation airport is located near Dover, the state capital. The new 60-ft.-wide runway and parallel taxiway are replacing an existing 36-ft.-wide structure, and will complement a newly paved aircraft parking ramp.

NASCAR Race Drives Schedule

Delaware Airpark is home to 45 aircraft, in addition to the Delaware State University's flight training program. The airport stays busy during the summer months when Del State conducts NASA and Air Force ROTC pilot training.

Even more critical, twice a year Dover hosts NASCAR racing at the nearby Dover Downs International Raceway. Many race teams, drivers and fans use Delaware Airpark because of its close proximity to the track. The reconstruction — held during a complete closure of the airport — was being expedited to accommodate visitors to a three-day weekend of racing June 1-3.

The improvements are the result of a state bill enacted in 1999 to boost economic development in Kent County, which provided for purchase of the airport by the Delaware DOT. The airport is managed for the state by the Delaware River and Bay Authority (DRBA), a bistate public agency operated jointly by the states of Delaware and New Jersey.

Upgrading to Expand Service

"We're upgrading the runway so the Airpark can expand its business and accommodate small jets," Dinger said. "It was in very poor shape, and the runway is being reconstructed and widened to 60 ft."

George & Lynch was using its Model 2100 DC and Model W 2000 in tandem to cut the runway down to grade. After removal, a 10-inch stone subbase with underdrain was to be placed, followed by 7 inches of hot mix asphalt placed by subcontractor Tilcon Delaware. Complete removal of the runway would be done in a week, with full project completion by the week of May 20, 2001.

"We're using the milling machines because you can cut to grade a lot faster, with less disturbance to the subgrade, than with conventional dozers and loaders," Dinger said.

Soft soils slowed milling at first

Runway cut 10 to 18 inches deep

"Normally you'd have to use a dozer, a track loader, and a grader to do what we do with one milling machine," said Todd Yetter, milling foreman, and operator of the 2100 DC.

"What we did in two hours with two machines might have taken days with conventional equipment," Yetter said. "They saved the company and client a lot of time and money. And if you can do a job in half the time and half the money, that's how you make money. And that's the name of the game, and that's why we use these milling machines the way we do."

The cut depth of asphalt and dirt removed was varying from 18 to 10 inches. "Rather than go up and down, we'll take the first 10 inches right off the top, and because the machine will cut 12 inches, we have 2 inches of play," Yetter said. "And when we come back we'll take whatever additional is needed to get right on the money."

Right Technology for Work

"They're built primarily to mill asphalt," Dinger said, "but we use them to mill asphalt, concrete bridge decks, concrete approach slabs to bridges, and to mill shoulders on highways.

"We even strip topsoil with them," Dinger said. "For example, at the Dover Downs race track, they're continually adding parking areas for cars and campers in the fields. They like to put roads in, and we'll mill out a 10 to 12-ft. wide section 6 inches deep, and then backfill with stone. It works very well, because when you're done, you can't tell that the ground's been disturbed. They like it because it can be done at the last minute. We'll put a 1,000-ft. road in and two days later you can't even tell we've been there."

Dinger said the 2100 is especially useful to George & Lynch for U.S. Air Force work. "We like the 2100 because we do a lot of work at the Dover AFB, and we need the bigger machine because of the large areas and deeper cuts involved. We do a lot of asphalt milling and concrete removal and replacement there, and we try to use our milling machines whenever possible for this work."

New Machines Enhance Uptime

The W 2000 is a brand new machine, acquired in winter of 2000. George & Lynch believes that a fresh machine is a reliable machine, so the firm frequently trades in models to eliminate potential job downtime.

"We get new ones about every three to four years," Dinger said. "These machines are in a very high wear, abusive atmosphere. To keep breakdowns and repair costs at a minimum we like to trade in for a new one."

"Compared to other brands I enjoy this Wirtgen machine much better," said Earl Ward, milling foreman, and operator of the W 2000. "It's quicker-reacting and an all-around better machine. The four-track steering is a benefit. We've demo'ed a lot of machines, but this machine gives the most versatility and production." The W 2000 will cut around a 7-foot, 6-inch radius.

While other contractors may not do it, George & Lynch relies a lot on its operators for input as to which machine to buy. "They know we're here to make them money," Ward said. "We want to spend a 10-hour day of milling, and not spend much of it under the machine. George & Lynch asked us what we wanted and this is what we have come up with after seeing a lot of machines."

Privately owned George & Lynch was founded 78 years ago, and in March was named by the *Delaware News Journal* as the best contractor in the state to work for. While headquartered in New Castle, the firm's main equipment yard, estimating and project management functions are based in Dover. The firm employs approximately 200 persons.

About the Model W 2000

The W 2000 is a broad cutting width, high performance, powerful, compact large-volume milling machine for removing deteriorated asphalt pavements, or complete roadway structures down to 13 inches in a single pass. The W 2000 boasts a 565 hp engine and front loading of RAP for ease of operation. This model has a 79-inch cutting width, with 87-in cutter width available as an option.

At Bauma 2001, Wirtgen introduced the FCS (*Flexible Cutter System*, see article Page 20), which allows the owner to change cutter widths from 6-foot-6 to 24 inches in less than three hours.

Hamm Gets Top Billing As Official Equipment Of Speedway Dirt Track

Hamm 2420 preps track for races

Hamm and Wirtgen have been designated the Official Compaction Equipment of the Texas Motor Speedway (TMS) Dirt Track in Fort Worth.

Tens of thousands of fans will see Hamm soil compaction equipment being used exclusively to maintain and groom the Texas Motor Speedway Dirt Track. Numerous onsite banners and signs will also be visible to both the fans on site throughout the season, as well as the millions who watch the Pennzoil World of Outlaws Sprint Car racing on the TNN network.

At the Dirt Track, a Hamm Model 2422 84-in. single-drum vibratory padfoot soil compactor, a Model 2420 smooth drum equivalent of the 2422, and a Model GRW 6 pneumatic compactor — a nine-wheeled pneumatic roller weighing 30,000 lb. with maximum ballast — are being used to maintain not only the dirt track, but also nearly 60 miles of gravel aisleways throughout camping and parking areas on the 1,500-acre property.

Prior to its acquisition of Hamm equipment, the speedway used rented equipment, such as a towed padfoot roller. Now it's finding its task is greatly eased by the dedicated Hamm compaction equipment.

"It takes special equipment and a special process to maintain a dirt track," said speedway general manager Eddie Gossage. "Dennis Blake, our field supervisor, is one of the best in the business. He's learned over time how to make the track right for racing and he now has all the equipment he needs from Hamm and Wirtgen.

"For a top-notch dirt track, you have to have the right equipment to maintain it," said Gossage. "Having nice, new, sharp-looking equipment is great because many times, it's part of the show. Our guys are regularly out there on the track just before race time making last-second preparations."

Dirt Track Hosts Sprint Cars

The Texas Motor Speedway Dirt Track is operated in conjunction with the 1.5-mile Texas Motor Speedway quad-oval. The super-speedway is the second largest sports and entertainment facility in the U.S., with 154,861 permanent seats with room for an estimated 50,000 more in the infield.

While the 4/10-mile dirt track looks small compared to the super-speedway, its capacity is comparable to a pro indoor arena, with luxury sky boxes to boot — a rarity for dirt tracks.

"It's by no means a small operation," said Gossage. "The track is four-tenths-mile long by 70 feet wide, and uses six-degree banking on the straightaways, and nine degree banking in the turns."

The Texas Motor Speedway Dirt Track hosts Pennzoil World of Outlaws Sprint Car racing, late-model modified dirt car racing, motorcycles and Monster Trucks throughout the racing season.

"A Sprint Car is an open-wheeled car with large spoilers or wings to enhance down-force," said Brad Gillie, speedway dirt track manager. "It's a very light car at less than 1,200 pounds, but you have a 410 cubic inch, fuel-injected motor strapped to it that can produce over 800 hp." Large wings help the cars stay on the track, which makes for an exciting race.

"The late models are specially built, full-bodied stock cars. It's basically a modified stock car for dirt," said Gillie.

While drivers competing on paved speedways must use finesse, strategy and a highly developed race car to stay ahead of the pack, the dirt track harks back to auto racing's exciting roots in the county fairs and weekend dirt tracks of yore.

"On the dirt track it's brute force, testing whether a racer can manhandle the machine around a little track at upwards of 120 mph," said Gossage. "The Sprint Cars are so fast that they're mindboggling. It's the most distinctive kind of racing we do."

Dirt track is 4/10-mile long by 70 feet wide

"The Hamm equipment has really helped out tremendously," said field supervisor Blake. "We no longer have to depend on rental companies and, what's better, the Hamm equipment is designed for the purpose, with vibration and more precise control."

The pneumatic roller is used for a number of purposes including, to finish the track ahead of racing, to seal the track in advance of rain, and to keep excessive moisture from entering the track and liquefying fines.

"Careful dirt track compaction and surface prep is important because drivers like a smooth, slick surface," said Gillie. "The whole idea of dirt racing is that the cars are sliding through the corners. If the cars have too much traction, they're going to bite in too hard and that can cause an incident on the track.

"Fans are here to see green flag racing, and that can be determined, in part, by how well we prepare the track," Gillie said. "If we have a surface that's rougher and a little tackier, the cars get more 'bite' into it and we're most likely going to tear up race cars. We want to have as many caution-free laps of good, hard racing as we can. If we've got a good track for the drivers, prepared with good equipment, it helps us out in the long run and makes for a better show for our fans."

The benefits of good preparation were confirmed earlier this year when 23 Sprint Cars broke Mark Kinser's year-old track record on the first night the track had been prepared by Hamm machines.

"Wirtgen and Hamm have given us another avenue to provide a better racing surface, and a better racing experience for our fans," said Gillie. "To me, that's invaluable."

Focus on Texas for Hamm, Wirtgen

Hamm and Wirtgen will get national exposure as the result of being the exclusive compaction equipment provider for Texas Motor Speedway Dirt Track. But Hamm has the Texas market in mind with this innovative sponsorship.

"Our sponsorship here will have an immediate impact on our name recognition in Fort Worth-Dallas and other Texas markets," said Jim McEvoy, vice president of sales and marketing for Hamm Compaction Division.

"Fans in the stands will have immediate recognition of the names Wirtgen America and Hamm, as well as the additional exposure on TNN," McEvoy said. "The fan base for Outlaws reaches our target customer base very well."

Also, for a close-up experience, Hamm may entertain customers in the dirt track pits, where they can meet Outlaws drivers and even NASCAR drivers such as Tony Stewart, who co-owns the Hamm-sponsored Sprint Car driven by Danny Lasoski. "Tony always wears a Hamm cap whenever he's around the Sprint Cars, so he provides good advertising exposure as well," McEvoy said.

And as Outlaws races are held throughout the United States, local distributors and customers have an opportunity for this kind of in-your-face racing excitement. "As the races travel throughout the U.S., we will make sure local distributors have access to the races, and we may be able do a co-sponsorship of the events at some of the tracks," McEvoy said.

First impressions aside, there's nothing unusual about construction equipment manufacturers using professional racing to promote its "iron".

"If you take a look at the impact of the construction equipment manufacturers in NASCAR, it's not unusual at all," said McEvoy. "Many major manufacturers use professional racing as a promotional tool. In fact, automobile racing at all levels is becoming one of the fastest growing spectator sports in North America. That's why it's a good marketing vehicle for the customer we're after."

Mill, Recycler Team Up In Texas Reconstruction

W 2000 mills up to 12 inches deep in Texas

A Wirtgen W 2000 cold milling machine was teamed this spring with a Wirtgen WR 2500 Recycler to speed reconstruction of a dual-lane expressway in the Dallas-Ft. Worth Metroplex.

Sunmount Corporation, Justin, Tex., was using its W 2000 to completely remove the existing asphalt and asphalt-over-concrete pavement, to a depth of 11 and 12 inches. Existing rebar in the concrete precluded use of the W 2000 for concrete removal.

Later, after all pavement was removed, a Sunmount-owned WR 2500 Recycler was lime-stabilizing the subgrade.

The Wirtgen machines are involved in the early stages of the complete reconstruction and widening of S.H. 114, in Tarrant County just northwest of DFW Airport. The highway is a major artery in the northern part of the Metroplex, and on race days is a favored route to the Texas Motor Speedway (see related article on preceding pages).

"It's a 2-mile, $24.8 million freeway reconstruction project," said John Hajdasz, project manager for Sunmount, general contractor. Owner is the Texas Department of Transportation.

Begun Mar. 15, 2000, the work is being undertaken in a very wide, ample corridor, and the completed freeway will be flanked by highly functional one-way frontage roads, the preferred design in the Lone Star State. While the existing freeway is removed, traffic is being accommodated on the east- and westbound frontage roads that were constructed last year as the first phase of the project.

As general contractor, Sunmount was doing all earthwork, lime-treated subgrades, asphalt and concrete paving, precast retaining walls, and construction of bridges. Drainage, electrical, striping and guard rail work was being subbed to a variety of contractors.

"We're removing and reconstructing the existing two-lane main lines each way into three lanes, and constructing new two-lane frontage roads in each direction," Hajdasz said.

RAP Goes Back On-Site

The W 2000 was being used to remove all existing asphalt. "We are hauling it back to our asphalt plant in Justin, Tex., to be processed as RAP (Reclaimed Asphalt Pavement) for reuse in the asphalt underlayment," Hajdasz said. "It's coming back to the project, with the new mix containing 20% of RAP."

While Texas won't allow the raw RAP to be used as-is in the subbase, the existing concrete pavement can. "The existing reinforced concrete pavement is being broken in-place with a guillotine breaker dropped on 6-in. centers. We are removing the rebar, and will use the crushed concrete to fill low areas and embankments," Hajdasz said.

The new, wider main lines will be constructed of 13-inch continuously reinforced portland cement concrete (PCC). Shoulders will be of PCC, and the frontage roads will be of 8-inch-thick continuously reinforced PCC. All PCC will be placed over a 4-inch asphalt (HMAC) underlayment, a TexDOT Type D design, incorporating an approximately half-inch stone.

This all will rest on an 8-inch lime-stabilized subgrade made possible by the WR 2500. "The soil is very expansive, with a high clay content," Hajdasz said. "The lime stabilization lowers the high P.I. [plasticity index] of the soil, which stabilizes its shrinking and swelling capacity."

"We're using the WR 2500 exclusively for lime stabilization of high clay, high-P.I. soils, and for cement stabilization of low P.I., sandier soils," Hajdasz said. "It ranges in mixing depths from 6 to 18 inches with no problem compared to other machines we've used. We're very happy with their performance."

RAP from the project will be reused up to 20 percent in base underlayment

Lime-Treating Expansive Soils

To lime-treat the S.H. 114 base, Sunmount will grade the soil to subgrade elevation of the asphalt layer. The firm uses lime in slurry form that's dispensed on the job site in 9-ton wet batch slurry distributors.

"The existing ground is ripped by a motor grader and the slurry material is spread at an application area determined by the foreman," Hajdasz said, at a rate of about 5 percent by unit weight of soil. "Once that's spread, the WR 2500 comes up and pulverizes the lime into the soil, on this job, to 8 inches."

The material then is rolled with a smooth drum compactor and the material cures for 24- to 72-hours depending on the weather. Then it's remixed by the WR 2500 to achieve a required gradation. Texas specs require that lime slurry be first mixed in from four to six hours after placement, a snap for the WR 2500. "Unless we have an equipment failure — even when its 100 deg F in the summer — we still get it in within four to six hours," Hajdasz said.

During that one-to-three-day cure period, Sunmount will rehydrate the top layer of the subgrade so the lime slurry doesn't "bake out" too fast. "You have to keep it wet before you remix," Hajdasz said. "And after you remix, and before the asphalt interlayer is placed, we will put a prime coat of SS-1 emulsion as a sealant to keep the moisture in prior to asphalt."

Once gradation has been achieved the base again is rolled to achieve compaction prior to the asphalt underlayment.

Avoiding breakdowns is one of the reasons Sunmount has bought Wirtgen equipment. "Wirtgen has proved to be a reliable product," Hajdasz said. "We've been very happy with the dependability and performance of Wirtgen products. We've continued for the last five years to go their way in cold milling machines, and with the WR 2500 as well."

While the W 2000 was an integral part of the beginning of this project, it also figures at the end. As part of the lane shifts Sunmount built 12 10-inch-thick asphalt detours or crossovers. "They will have to be removed at the end of the job," Hajdasz said. "That will be another job for the W 2000."

Wirtgen WR 2500 lime-stabilizes S.H. 114 foundation

Medium-Sized Milling Machines Speed California Utility Work

W 500 restores Anaheim, Calif. pavement

A major California utility contractor is using its two utility model W 500 three-wheel milling machines from Wirtgen to provide reliable "grind-and-cap" pavement restoration following utility cuts.

"Our main speciality is underground utilities," said Adolfo Lambaren, president, Lambco Engineering, Inc., Santa Ana, Calif. "These are what we call 'dry' utilities, that is, telecommunications and electrical service. We're not involved with gas or water utilities."

Much of this is being driven by the onslaught of fiberoptic cable. "We have operations from Phoenix to San Diego to Sacramento," Lambaren said. "We specialize in long hauls from city to city. We are a turnkey company on the construction side, so we do our own street restoration. Some of our projects require full lane restoration, a full 12 feet."

Thus Lambco's equipment fleet is composed mostly of backhoes (excavators) and trenching equipment. But its operations are facilitated by the two W 500 milling machines from Wirtgen America Inc.'s distributor Nixon-Egli Equipment Co.

"They can do any area," Lambaren said. "They're good for small and midsize jobs. For us it's a good combination that does it all."

Lambco uses 20-inch drums on its W 500s. "We do that because generally we mill a foot either side of a trench," Lambaren said. "Typically we trench 18 inches, but the customer will require 2 feet outside, so our repaved areas will be 36 to 40 inches wide. Two passes with one W 500 gives us that width."

And the W 500s are giving this utility contractor the uptime he needs to keep on schedule. "The maintenance has been minimal so far," Lambaren said. "We bought our first W 500 two years ago, and added another to our fleet last year. While not being maintenance-free, their maintenance requirements are quite low. They are great machines and we're very happy to recommend them to anyone."

"We are doing a lot of 'grind-and-cap' projects these days," said Armando Aldama, paving superintendent for Lambco. "Nearly every city in Southern California we work with — from San Diego to Thousand Oaks — requires grind-and-cap. The cities are realizing that grind-and-cap looks better for the community, and performs longer by eliminating subsidence problems later on."

These grind-and-cap jobs can involve removal of backfill of a completed utility cut to a depth of up to 7.5 inches, and removal of pavement on either side of the cut to up to a foot.

Asphalt utility cut grind-and-cap is hand-groomed by Lambco staff

Hot mix asphalt trench cap is placed by shop-built paver box

W 500 visibility permits work close to curb

Lambco cuts trench under traffic in Anaheim, Calif.

In late winter, Lambco was executing grind-and-cap work 2.5 feet wide just 1.5 inches deep over utility cuts in a residential neighborhood of Anaheim, Calif., as a subcontractor to an electrical contractor which was burying electric lines.

In Anaheim, following milling, within minutes the milled surface was shot with a tack coat of liquid asphalt, followed by the cap of hot mix asphalt spread by a shop-built paver attached to the rear of a dump truck. This patch was compacted by a small tandem roller.

The W 500's flexibility around manholes is a plus for paving superintendent Aldama. "I can go around about 18 to 20 manholes a day," he said. "It makes circles around the manholes with no problems."

Visibility provided by the W 500 is a major advantage, he said. "You want to be able to see the ground," Aldama said. "It's been designed very well. I've been on machines where you can't even see the drum. You don't know if you're going straight or you have no way to guide yourself. But with the W 500 you just pick a point and follow it all the way down."

Wirtgen's rear-mounted drum design is a powerful tool for contractors like Lambco. It can back up to any structure, set down and cut its way out without leaving a lot of hand work.

About the W 500 (three-wheel)

The W 500 is a three-wheeled, lighter-weight version of its four-wheeled W 500 sister product, a compact cold milling machine for removing asphalt pavement. It's a real workhorse with impressive maneuverability and maximum production for any utility milling application.

The hydraulic milling drum drive, designed for continuous, heavy duty operation, has safeguards against overloading which prevent damage when hitting buried obstacles in the road. A rumble strip kit is available for the W 500.

It features a cutting width of 20 inches, with 24-inches option. With a cutting depth of 6 inches, it has an average productivity of 85 tph. It has an operating weight of 16,313 lbs. and produces 102 continuous horsepower.

New Headquarters Heralds New Era For Wirtgen America

Wirtgen America Inc.'s new North American headquarters now is a reality, and it heralds a new era for Wirtgen America and its customers.

Light rain did little to dampen the spirits of over 200 celebrants on Feb. 27, 2001 as a red ribbon was cut to officially open Wirtgen America's Nashville headquarters.

The $4 million, 74,000 square foot structure combines the North American operations of the Wirtgen Group, including Wirtgen cold milling and road recycling equipment, Hamm compactors, and Vögele asphalt pavers.

"I can't tell you how thrilled and honored I am," said Wirtgen America president Stu Murray at the ribbon-cutting. "This has been a work of passion, a great learning experience, and it has touched all of our hearts."

Murray gave credit for the firm's success in North America to its employees. "The people who need to be recognized are the people who work here, who do such a great job in the warehouse, and the marketing and accounting people. Because of their stamina, dedication and commitment we can stand here today."

Stu Murray, president, Wirtgen America Inc., welcomes guests to ribbon-cutting and open house of Wirtgen's new North American headquarters facility

Cutting ribbon for Wirtgen America's new headquarters in Nashville Feb. 27 are Stu Murray, president; Dr. Gunter Hahn, technical director, Wirtgen GmbH; Umberto Draghi, president, Hamm AG; Richard Smith, general manager, Wirtgen Assoc.; and Jurgen Wirtgen, president, Wirtgen Group

In addition to the ribbon-cutting, a handsome plaque was unveiled in the building's entrance portico, commemorating the life and contributions of Wirtgen Group founder Reinhard Wirtgen, who died suddenly in 1997.

Special guests included Dr. Gunter Hahn, engineering director, Wirtgen GmbH; Umberto Draghi, president, Hamm AG; Richard Smith, general manager, Wirtgen Assoc.; and Jurgen Wirtgen, president, Wirtgen Group.

Providing a celebrity presence was NASCAR driver Tony Stewart, fresh from the Daytona 500 held days earlier, and who signed autographs and gave an in-person perspective on pro auto racing. Hamm America is a cosponsor of a World of Outlaws Sprint Car co-owned by Stewart.

A catered luncheon of German specialities was provided, with draft German beer and live German music.

Before and after the ribbon-cutting, guests toured the headquarters, viewing administrative offices, warehouse and service areas, board room, racing trophy room, training center and adjacent conference rooms. In those areas, when movable partitions have been opened, up to 60 persons can be accommodated as a single group.

Total office space of the new headquarters — including administration and warehouse offices — total nearly 16,000 square feet on two levels. The structure includes 9,900 square feet of 60-foot clear-span shop. The parts warehouse is 38,000 square feet in size and is enhanced by a 20-foot clear minimum height. Mezzanines within the warehouse provide even more space, to a total of approximately 50,000 square feet on two levels.

The slab-on-grade structure is sited on 8.5 acres just off I-24 in suburban Nashville, within 10 miles of Nashville International Airport.

Guests endure light rain as they await ribbon-cutting and open house

Mrs. Georg Schmitt, center, admires plaque honoring Wirtgen Group founder Reinhard Wirtgen (1941-1997)

Visitors fill reception hall of Wirtgen America's new North American headquarters facility on day of ribbon-cutting and open house Feb. 27

At Feb. 27 ribbon-cutting for new Wirtgen America headquarters in Nashville are Dr. Gunter Hahn, technical director, Wirtgen GmbH; Umberto Draghi, president, Hamm AG; Stu Murray, president, Wirtgen America Inc.; Jurgen Wirtgen, president, Wirtgen Group; and Richard Smith, general manager, Wirtgen Assoc.

Acclaimed NASCAR driver Tony Stewart is introduced to Hamm AG president Umberto Draghi by Wirtgen America president Stu Murray, while Wirtgen Group president Jurgen Wirtgen looks on. Hamm America cosponsors Tony Stewart-owned World of Outlaws Sprint car

Roberto Garcia, Maquinaria y Caminos of Mexico, samples German fare at Wirtgen America open house Feb. 27

Contractor Ted Arscott, Roto-Mill Services, Brampton, Ont., and Erwin Felders, Wirtgen America service director, prepare to sample German cuisine during luncheon

Guests to Wirtgen America open house Feb. 27 watch ribbon-cutting ceremonies in fine rain

Accordion and synthesizer enhanced old-style gemuetlichkeit during luncheon at Wirtgen America Inc.'s open house

Over 200 well-wishers enjoyed a German-style luncheon as guests of Wirtgen America at an open house at its new North American headquarters

Honored Feb. 27, 2001, for his firm's being the national sales leader for Wirtgen in North America is John D. Skaaf, vice president, Nixon-Egli Equipment Co. Santa Fe Springs, Calif. He's joined by Stu Murray, president, Wirtgen America Inc.; Jurgen Wirtgen, president, Wirtgen Group; and NASCAR driver Tony Stewart

Agostino Loiacono, Intertractor (center) honors Wirtgen America Inc. with an award of thanks for its long-time service; he is flanked by Stu Murray, president, Wirtgen America Inc., and Jurgen Wirtgen, president, Wirtgen Group

Wirtgen America VP, Sales and Marketing Jeff Wiley prepares to fill plate with German specialities

Wirtgen America's Rhino Parts Division has a mascot of its own at Wirtgen America's new North American headquarters, Nashville

Honored Feb. 27, 2001 for outstanding dealer performance for Wirtgen in North America is Mike Chenet of CC&T, Folcroft, Pa. He's joined by Stu Murray, president, Wirtgen America Inc.; Jurgen Wirtgen, president, Wirtgen Group; and NASCAR driver Tony Stewart

Newsmakers

In December, *Jim Case* joined Wirtgen America as Rhino Parts representative. Road building is in his blood, via his family's road construction business. As a bachelor he enjoys racing, fishing and snowmobiling.

• • •

New in March to the Wirtgen America team is *Joanna Burcham*, administrative assistant at Hamm Compaction Division. She and her husband, Barry, have one child, Troy. Having moved to Nashville from Owensboro, Ky., she's naturally a fan of horses, but also working out.

• • •

Also in March, *Shondelle Crawford* began as administrative assistant, sales administration. She and her husband, Mike, have one daughter, 7-year-old Shelby. Shondelle is a big fan of fishing and also enjoys coaching Shelby's soccer team.

• • •

In April, *Tina Cadovec* joined as warranty administrator, Hamm Compaction Division. She relocated from Cleveland, where she served as warranty administrator for Allied Construction Products, makers of heavy demolition attachments. She enjoys reading, hiking, camping, skiing, and will begin college in the fall.

• • •

In January, just in time for the move to Dana Way, *Scott Garrett* joined as a warehouseman.

• • •

J.T. Wiseman joined the warehouse in January. He's a big fan of golf and bowling.

• • •

Also new to the warehouse is *Jerry Rogers*, who also joined in January. While living in the Nashville area, Jerry is an aficionado of cooking, camping and landscaping.

• • •

New to accounting is *Eleanor Liu*, who joined in March. Eleanor and her husband, Peter, and sons Nathan (3 1/2 years) and Albert (2 years) relocated from Cincinnati.

• • •

New customer service manager at Hamm Compaction Division is *Kenny Mitchell*, who joined in February. His work experience includes eight years with Hamm dealers. He and his wife, Janie, have two sons and a grandson. Kenny is a fan of golf, softball and landscaping his home.

• • •

Rita Wardlaw joined in April as marketing service coordinator. She and her two children — Steven (15) and Skye (12) live in the Nashville area.

• • •

New service technician in the Maintenance Department is *Josh Weston*. Single, he's a student at Volunteer State. He spends his spare time driving a race car at Nashville Speedway, and also pilots three-wheelers and wave-runners.

Jeff Wiley New Wirtgen America VP, Sales and Marketing

Jeff Wiley

Jeff Wiley, long-time Midwest Sales Manager for Wirtgen America Inc., was named Vice President, Sales and Marketing, at Bauma 2001, the world's largest equipment show, held in April in Munich.

This summer, Wiley will move from northern Illinois to Wirtgen America's new Nashville headquarters. As vice president, marketing and sales, he will be responsible for supervision of all territory managers.

Wiley has been in the construction equipment industry for over 20 years, and has extensive hands-on experience with milling machines. In 1979 he began his career as a service engineer for Barber-Greene Inc. with milling machines, asphalt pavers, and concrete slipform machines. In 1985 he moved from service into the Barber-Greene sales department.

Wiley began with Wirtgen in January of 1991, as sales manager for the Midwestern region, which at that time included Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Ohio, West Virginia, and Wisconsin. Since then his territory has expanded to include the Canadian provinces of Manitoba and Saskatchewan.

"I'm excited with my new position and am ready to face any challenges that may occur." Wiley said, "I've lived in the Chicago area all my life so, I'm sure the warmer weather will be a nice change. However, I am really looking forward to that southern charm and hospitality I hear Nashville has to offer."

Wiley is a native of Plano, Ill. He and his wife, Jeana, have two daughters, Shawna (15) and Alyssa (10).

World Views Wirtgen Group's New Synergy At Munich Fair

For the first time, pavers, mills and compactors were exhibited under Wirtgen Group banner

In April, for the first time, Wirtgen milling and recycling machines, Hamm soil and asphalt compactors, and Vögele asphalt pavers were united in one display at the Wirtgen Group pavilion at Bauma 2001 in Munich.

Wirtgen Group occupied the second largest outdoor exhibit at Bauma and used the opportunity to demonstrate the synergy and promise of its newly acquired product lines — Hamm AG and Joseph Vögele AG — when joined with Wirtgen's existing asphalt milling and recycling equipment.

The nearly two-acre (7,700-square meter) stand exhibited over 70 Wirtgen Group products, including the new Wirtgen model W 1500, W 1900 and W 2100 cold milling machines. Existing Wirtgen products showed refinements such as the new *Flexible Cutter System* (FCS), an innovative fast-change system for milling drums.

And for North American visitors, a new very stylish, dramatically shaped line of Hamm 3000 Series soil compactors was displayed.

"We demonstrated to the world that we are no longer just a milling machine manufacturer, but have expanded this business to cover all aspects of road construction," said Stu Murray, president of Wirtgen Group subsidiary Wirtgen America Inc.

"We have had machinery that lets you mill or dig it up," Murray said. "But for years, that's where we ended. For the popular mill-and-fill projects of today, cold milling now is just the beginning of the work. Now we can provide equipment for the rest of the project, laying of asphalt and compaction."

"We demonstrated to the world that we are no longer just a milling machine manufacturer, but have expanded this business to cover all aspects of road construction."

Drums of varying width are part of new Flexible Cutter System (FCS) unveiled at Bauma 2001

Prepared for Perpetual Pavements

The synergy of Wirtgen products available through Wirtgen America Inc. enhances the success of new industry concepts such as the bituminous Perpetual Pavement, now being promoted

in the United States (see *As I See It*, Page 3). The all-asphalt Perpetual Pavement is founded on massive base and intermediate courses, topped with a sacrificial surface course that will be cold-milled and replaced as needed throughout the years.

"We can provide a cold milling machine to remove the top layer of a Perpetual Pavement, but we don't want our customer's choices to end there," Murray said. "We want to provide a paver and screed to place fresh asphalt, and rollers behind. We're providing the whole family of products so contractors who want to be involved in Perpetual Pavements rehab jobs to be able to go to a single source for all their needs."

Clearly, the bituminous paving industry will benefit from the Perpetual Pavement philosophy, and Wirtgen America will be part of that. "We agree that Perpetual Pavements are the future," Murray said. "But we won't be just the guys out front with the milling machine. We will be a company that supplies all the necessary equipment to do a Perpetual Pavement rehabilitation. It's a natural progression for our company."

However, Wirtgen America will only focus on road rehabilitation and construction. "We're not into backhoes or excavators, or airplanes or other diverse manufacture," Murray said. "We don't want to sell bulldozers. We're very focused on niche markets, and that's reconstruction and resurfacing pavements."

Uniquely Suited for Today's Mixes

In addition to serving the needs of Perpetual Pavement rehab, products of the Wirtgen Group are uniquely suited for placement of Superpave mixes, the new performance spec-driven mix designs which are coming on stronger than ever among the state DOTs of the United States.

"Today's Superpave mixes have a significantly enhanced compaction requirement," Murray said. "Compaction must be accomplished within a tight temperature window and time frame. To be consistently successful a contractor may begin to use the kind of compaction at the paver screed that our asphalt pavers provide.

"And today's high-performance mixes like Stone Matrix Asphalt — even when combined with Superpave binders — require stone-on-stone contact of large aggregate," Murray said. "It will take significantly different types of compactors to successfully compact the lift behind a high-density screed. There's a whole new technology unfolding and Wirtgen products are at the center of it."

Fast Change System Debuts at Bauma

Bauma — a contraction of the German words for "construction equipment" — is the world's largest exposition for construction materials and machinery. Held every three years, it rotates in a cycle with ConExpo/Conagg (next year in Las Vegas), and Intermat (2003 in Paris).

An exciting new drum exchange system — the Flexible Cutter System (FCS) — debuted at Bauma and is sure to please North American contractors seeking more versatility from their cold milling machines. The unique system permits operators to change drums of different working widths — with tool holders fitted — in less than three hours on the job site.

A hinged side plate covering the drum housing is removed, revealing the existing drum, which is then removed by means of an extraction device. The existing drum is placed on a mounting trolley and pulled out of the housing. A different width drum is then wheeled into place using a trolley, the adjustable scraper blade is reconfigured, and the machine is ready to go to work.

FCS milling drums with working widths from 1 to 4 ft. for the Models W 1000F and W 1200F are available, as are drums in widths from 2 to 6.6 ft. for the new W 1900 and the existing W 2000. A variety of smaller FCS drums for the W 600DC is available. All FCS milling drums are equipped with the popular HT3 fast-change tool holder system.

Three New Cold Milling Models

At Bauma, three new cold milling machines for North America were exhibited, that either fill in a product line gap, or completely update an existing model.

The new W 1500 and W 1900 replace the 1300 and 2000 DC machines. A robust 435 hp diesel engine with extremely high torque range powers both models.

The W 1900 has a milling width of 6.6 feet (2.0 meters), while the W 1500 can be fitted with either a 4.25- or 5-foot (1.3- or 1.5-meter) working width drum. Both units have a milling depth of nearly 12 inches (30 cm). The W 1500 has an operating weight of 52,865 lb., while the W 1900 is 54,850 lb.

And a newly designed Model W 2100 has replaced the old Model 2100 DC. It boasts 640 hp from a Cat engine, with 74,000 lb. transport weight. "It's

The new W 1500, W 1900 and W 2100 machines were first seen at Bauma 2001, and are available in North America

for heavy duty deep cutting, in the range between the W 2000 and W 2200, being around 118,000 lb. GVW, easier to haul than the 2200, but more productive than the 2000," said Jeff Wiley, Vice President, Sales and Marketing, Wirtgen America Inc.

"It also has a tighter turning radius than the older model," he said. "It went from about a 14-foot turning radius to about 7.5-foot radius."

It comes with a 6 ft., 7 in.-cutting width, with an optional 7-ft-2-in. cut (2200 mm). It will cut to a 12.6-inch depth.

It also has a newly designed water system, Wiley said. "The new style water system has on-the-fly pressure adjustment. You can increase the water pressure in a tough cut — for example, when cutting concrete to keep the dust down — or decrease water pressure when in material with a high moisture content." Previously the machine would have to be stopped and a different-sized nozzle placed.

Optional cameras mounted both front and rear send a video image to a screen in front of the operator and enhance visibility. "You can see the cut behind the machine without having to rely on the ground man, and you can see areas in front of the machine as well," Wiley said.

Also available is a built-in wash-down hose and reel. "Before, to wash down a machine, a user would have to get a hose out of the tool box, unwind it, and plug it into the water system," Wiley said. "Now it's on a reel that can be taken out and reeled in when finished."

And on the W 2100, when changing teeth, a remote switch permits the ground man to hydraulically turn the cutter drum at will, so it doesn't have to be turned mechanically or manually.

Some 70 models of Wirtgen Group equipment were exhibited

Tiny Seat Makes Big Improvement

A tiny fold-down seat on larger Wirtgen cold milling machine models will make a big difference in the speed and convenience of drum adjustment or teeth changes, visitors to Bauma learned.

The seat is a new option on the W-series, including the W 1900, W 1500, W 2000, and W 2100 and W 2200. "It assists the ground man when he or she is servicing the drum or changing teeth," Wiley said. "He can sit in a relatively comfortable seat instead of squatting on knees underneath the machine, or sitting on a tooth bucket."

Also new for all machines is a side-plate extension or ski, used when cutting in soft material. "When cutting soft material, instead of the sideplate digging down into the material, better flotation is achieved," Wiley said. "This is especially useful when running grade off the side-plate. The better floatation keeps the sideplate up instead of it digging down into the material." The plate is free-floating, but cables are attached to lift it in the event a curb or pothole is encountered.

Handy fold-down seat eases cutter tooth maintenance

Hamm 3205 P (Padfoot) soil compactor new at Bauma 2001

Big 12.5-ft. Cutter for W 2200

While the W 2200 comes standard with a 7-ft., 2-inch (2.2-meter) -wide cutter 13.5 inches deep, a 12.5-ft.-wide cutter assembly will allow U.S. contractors to mill an entire lane in one pass. "It gives you a lot more flexibility while using the same tractors," Wiley said.

Also new at Bauma for North America was a surface miner based on the body of the W 2200 cold milling machine. The Model W 2200 SM Surface Miner on display at Bauma 2001 uses the same basic chassis as the W 2200 cold milling machine, but is beefed-up for surface mining use as well as cold recycling of asphalt pavements with stabilizing agent.

Steel grousers replace the poly pads on the tracks of the W 2200 SM. It has heavier-duty sideboards and the cutting drum has but 76 cutting tools with greater tool spacing and larger tool holders. It also has a counterweight and air-conditioned cab.

Many other refinements were on display at Bauma. For example, on some milling machines, a new control system permits much easier control of moldboard down pressure while the unit is moving forward.

"A pressure gauge with an adjustable control adjusts down pressure on the moldboard door as you're cutting, so you can get better scraping action — or lighten it up — based on the type of material you're cutting," Wiley said.

The control formerly was inside the machine, and it wasn't easy for the groundman to adjust as milling moved ahead. Now, to adjust pressure, the unit no longer has to be brought to a stop. "Now it's set up so the ground man can adjust the pressure on the fly," Wiley said."

Wirtgen 2200 SM is used for surface mining limestone, gypsum and other materials

3000 Series: Bold New Soil Compactors from Hamm

Model 3412 is 84-in.-wide, single-drum machine

At Bauma 2001 in Munich, a dramatic new line of soil compactors from Hamm was turning heads and winning awards for the manufacturer.

Hamm's new 3000 Series line of soil compactors won the *Prize for Innovation 2001* from a prominent German construction machinery magazine for its outstanding engineering achievement.

Hamm 3000 Series models available in North America include the Model 3412, an 84-in.-wide, single-drum vibratory compactor with operating weight of 12 tons; the Model 3307 (66-in.-wide, 7 tons), 3520 (87-in.-wide, 20-ton), and by the end of the year, the 3205 (54-in.-wide, 5-ton), all available in smooth or padfoot models.

Only the accompanying photo can suggest the advanced overall design of these new machines. But the engineering goes deep into these compactors, providing unsurpassed operator comfort and optimum productivity.

"The controls of the 3000 Series and the visibility are far superior to any other machine," said Richard Evans, National Sales Manager for Hamm Compaction Division, Wirtgen America Inc. "The majority of dirt machines have a fixed operator console, but not these. The seat can be moved to the left or right, and can rotate; the dual controls for forward/reverse are located on the seat, it doesn't matter whether you're right or left handed; everything is operated from the modern operator's compartment."

The articulation joint is unique in this series. It's a bolted, modular design that stays put when directed by the steering. "When you move the steering wheel off to one side, you don't have to keep holding it," Evans said. "It won't walk on you, it'll go where you want it to go until you move it in the other direction. Parts replacements are simple."

Cooling air flow is designed for maximum efficiency. "Air is brought in from the top front of the engine cover, where it's the cleanest, drawn through the engine compartment and the radiator and out alongside the exhaust at the back," Evans said. "It's cooling the engine and all components while mixing with the exhaust, making the machine quieter. It's jet turbine technology applied to soil compactors."

HD 130 Right for North America

Also new at Bauma for North America was the Hamm HD 130. At 30,000 lb. this 84-inch-wide double-drum, articulated machine is the largest Hamm asphalt compactor machine sold in the United States. It has a working width of 84 inches and boasts a top speed of 7.5 mph. It joins the existing North American lineup of large HD machines, the HD 110, HD 90, HD 70 and HD 75 machines; and small HD models, HD 10, HD 12 and HD 13.

HD 130 double-drum, 84-in.-wide asphalt compactor

"The HD machines were designed and engineered for the North American market," Evans said. "They have features of great appeal to American customers, including a compact, low profile, low center of gravity, and swiveling operator's seat."

Regarding articulation, appearances can be deceiving, Evans said. "While the HD machines appear to have a 70:30 split, meaning the articulation joint is not in the middle of the frame, on our machines it actually is a true 50:50 split, so the back drum will follow exactly the same path as the front drum, so making turns and going around corners will be that much easier."

All HD-series machines have the ability to offset the front drum from the back drum. "That makes it a lot more versatile," Evans said. "The ability to offset the back from the front drum has several key benefits, such as smoother mats and easier work around curbs."

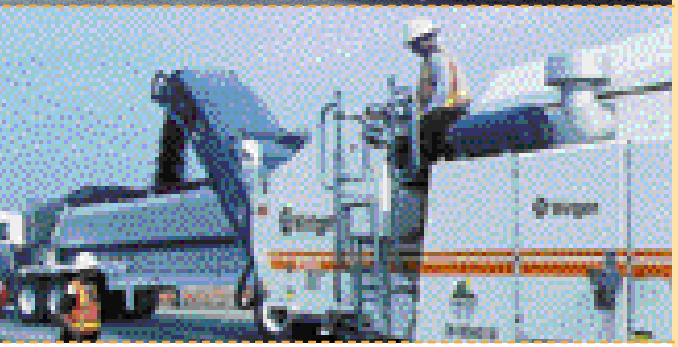
Exceptional visibility and a high performance water system also are hallmarks of the Hamm HD series. "You have equally good visibility to both the front and back," Evans said.

Waving toward the acres of competing compaction machines on display at Bauma, Evans said "You won't find another roller here that will have the visibility that the HD series has to its drums. And the water spray system is inside the frame, not hanging out the side, and therefore protected from the elements. The water is going to stay on the drum, where you want it. And the operator can see every nozzle, so if there's a problem he will see it before he's ripped out asphalt 100 yards down the road."

Cold Milling

Success Secret: Arrive, Perform On Time...And Leave

Page 6



Recycling

Mill, Recycler Team Up In Texas Reconstruction

Page 12

Open House

New Headquarters Heralds New Era For Wirtgen America

Page 16

Wirtgen America

Wirtgen America, Inc.
6030 Dana Way • Nashville • TN 37013 USA
Phone (615) 501-0600 • Fax (615) 501-0691
www.wirtgenamerica.com

PRSRT STD
U.S. POSTAGE PAID
ANTIOCH, TN.
PERMIT NO. 205