THE AMMANN GROUP MAGAZINE

ADDED VALUE FROM THE ARX 90 TIER 4f

Delivers exceptional compaction while meeting emissions standards

ORBITAL HIGHWAY
Ammann Plant Fuels Qatar Project
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DATA MATTERS
Embrace Telematics or Be Left Behind
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CUSTOMERS TELL THEIR STORIES
Rollers Boost Rental Business; Add-On Compactors Cut Time in Half; Paver Does the Job in Germany; All-Ammann Lineup Powers Highway Project

10.2016

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INDUSTRY LEADERSHIP'S KEY COMPONENTS

At Ammann, we always talk about the quality of the core components that comprise our asphalt plants. It's important that the mechanisms for the feeding, drying, heating, screening and mixing processes fit together seamlessly.

Being an industry leader also requires a similar blending, but of different core components: personnel, teamwork, industry knowledge, a global outlook and investment.

Personnel. Our staff must listen to customers; they are close to the products and best know the challenges their businesses face. The Ammann team also needs individuals who are able to identify trends and opportunities that others in the industry, including customers, cannot yet see. Visionaries are required for a leadership role.

Teamwork. These inspired individuals must be able to work together – to articulate their visions to a larger group in such a manner that others can help fill in gaps and take projects to a higher level. The baton must be passed smoothly many times during the development of a truly innovative product.

Industry knowledge. Our company must see the present before we can see the future. Ammann personnel travel to thousands of plants and jobsites in hundreds of countries every year. We see our products as they work – under the daily stress and grind. We have been part of this business for nearly 150 years. Each year is a new chance to build on our knowledge base.

A global outlook. A successful approach in one part of the world often can be translated to another. For example, techniques and machines used in Peru might solve a problem in Asia, too. The observations that the Ammann team makes during jobsite visits are shared internally and can fuel the next key product feature, or even the next product launch.

Investment. Product development is how industry knowledge, and ultimately innovation, ends up in the customer's hands. And the Ammann commitment to product development has never been stronger. We make a significant investment in research and fund development teams at facilities in Brazil, the Czech Republic, Germany, India and Switzerland.

Maintaining industry leadership takes an incredible commitment across multiple fronts, particularly considering the diverse Ammann product line. But there are no shortcuts. That commitment is essential to ensuring the best and brightest ideas make their way to market – in products that help make customers successful and profitable.

Hans-Christian Schneider
CEO, Ammann Group

ARP 95 TANDEM ROLLER

PIVOT-STEER TANDEM ROLLER Tier 4i

This roller excels on jobsites where manoeuvrability and flexibility are at a premium.

- Fuel-efficient, Tier 4i engine complies with high emissions standards.
- Operation is effortless with a fingertip steering system and easy-to-adjust amplitude and vibratory settings.
- A new cab design helps operators see drum edges and surfaces, while the pivot-steer system provides manoeuvrability.
- The optional ACE system adds intelligence that incorporates GPS and measures values to ensure quick, proper adjustment to jobsite conditions.

AMMANN

For additional product information and services please visit: **www.ammann-group.com**

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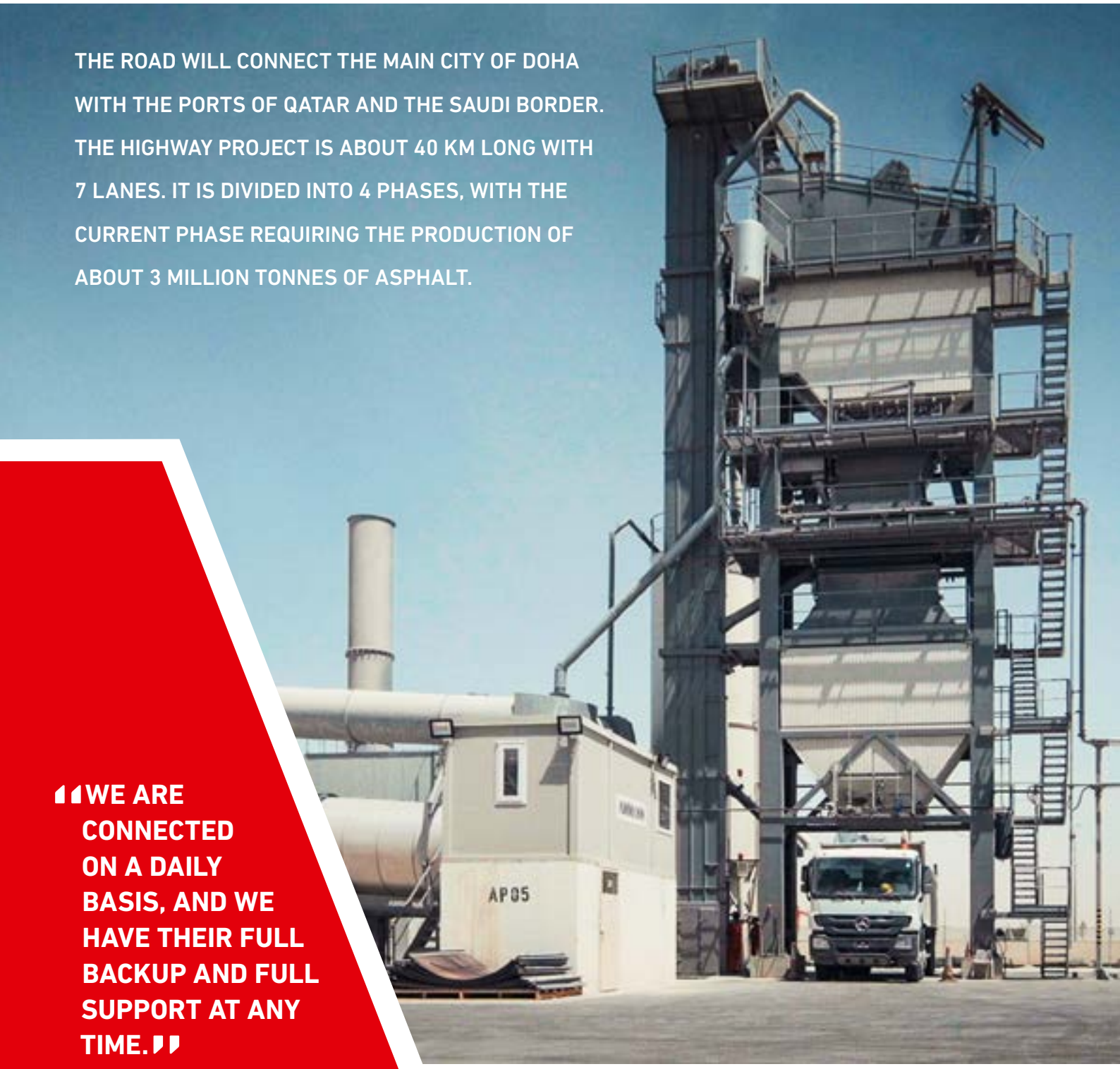
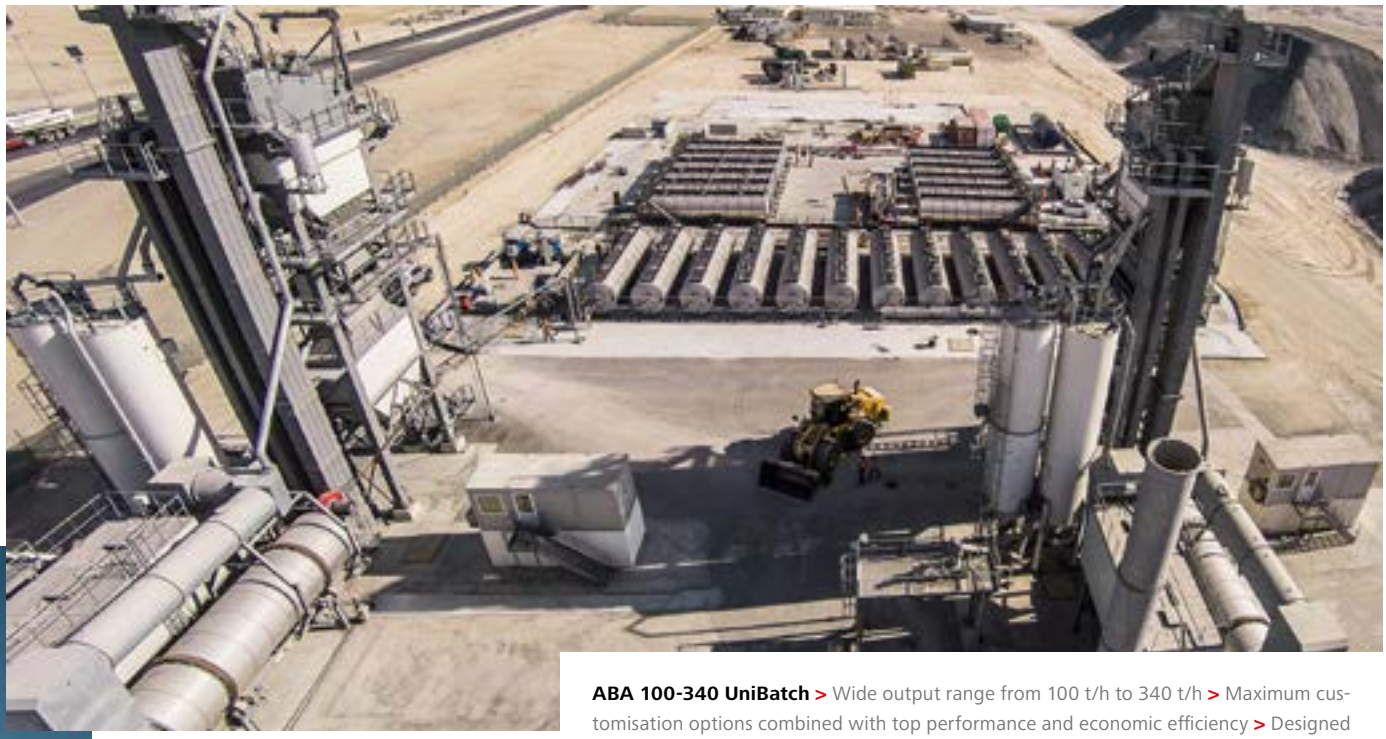
QATAR FIRM, AMMANN MEET PRODUCTION DEMANDS ON LARGE-SCALE PROJECT

The orbital highway, or ring road, is an essential corridor in the city of Doha, Qatar – and an Ammann plant is helping make the project a success.



THE ROAD WILL CONNECT THE MAIN CITY OF DOHA WITH THE PORTS OF QATAR AND THE SAUDI BORDER. THE HIGHWAY PROJECT IS ABOUT 40 KM LONG WITH 7 LANES. IT IS DIVIDED INTO 4 PHASES, WITH THE CURRENT PHASE REQUIRING THE PRODUCTION OF ABOUT 3 MILLION TONNES OF ASPHALT.

"WE ARE CONNECTED ON A DAILY BASIS, AND WE HAVE THEIR FULL BACKUP AND FULL SUPPORT AT ANY TIME."



ABA 100-340 UniBatch > Wide output range from 100 t/h to 340 t/h > Maximum customisation options combined with top performance and economic efficiency > Designed for worldwide use, with mixing tower modules providing ease of transport > Robust, tried-and-tested technology > Optional feed for additives such as dye pigment, fibres and Ammann Foam > Can be fitted and extended with numerous options > Engineered for easy integration of future options and technologies

"It is the biggest project in terms of quantity of asphalt in Qatar at the moment," said Youssef Ghadban, Plant Manager for Al Jaber & Makhlouf, which is manufacturing the asphalt. The company is a regional leader and has a significant presence in Qatar, where it operates 5 plants, and in Lebanon, where it operates 4.

Productivity was a must on the large-scale road construction project. The 3 million tonnes of asphalt will have to be manufactured within 2 years.

"It was a challenge for us because we were producing around 500 000 to 600 000 tonnes yearly," said Roger Makhlouf, Managing Director of Al Jaber & Makhlouf. "Now it will be an average of 1 million to 1.5 million yearly, so it's a big move and it was a big challenge for the company – and for Ammann too because we had to customise plants for this project."

The production demands made plant reliability crucial. The ability to make varied mixes was another requirement.

Al Jaber & Makhlouf utilised 2 Ammann ABA 340 UniBatch Asphalt-Mixing Plants on the ring road project. The company credits Ammann support and the as1 Control System for helping it keep pace with the demanding highway project.

"The as1 is the number one program," said Rabih El-Kattar, Plant Manager at Al Jaber & Makhlouf. "It's easier. It's not complicated, especially when changing parameters. If you have any problem with this plant, the computer can show you how to fix it."

The UniBatch plants and as1 Control System helped the company meet demands for varied recipes, as different mixes were required for base, intermediate and wearing courses.

Quality was essential as well. "The government is always looking for the best quality to apply on the road on the projects," said Ghadban. "Together with our partner, Ammann, we are looking to achieve the type of quality they are asking for."

"We consider Ammann to be our partner," said Makhlouf. "We have full support from them. We are connected on a daily basis, and we have their full backup and full support at any time. We believe the software that they have is one of the best and is giving us high precision in our production and very high consistency."

EMBRACE TECHNOLOGY OR BE LEFT BEHIND

By Kuno Kaufmann
Director of Research & Development at Ammann

TECHNOLOGY IS NOT NEW TO THE ROAD-BUILDING INDUSTRY. BUT IF YOU LOOK BACK, AND THEN FORWARD, YOU'LL REALISE WE'RE IN THE MIDST OF A TECHNOLOGICAL REVOLUTION THAT WILL BENEFIT THOSE WHO EMBRACE THE CHANGES – AND LEAVE BEHIND THOSE WHO DON'T.

If this revolution could be described in a single word, it would be "data." More jobsite information is being gathered, stored, documented and analysed than ever before. If we were able to add a bit more description beyond "data," the phrase "real time" would be most appropriate.

We have hard information on what is happening right now. That knowledge enables jobsite adjustments that lead to better machine utilisation, reduced fuel consumption and dramatic quality improvements. The associated cost savings are enormous, and those who don't take advantage of the opportunities will increasingly be unable to compete in the construction industry.

Communication and Local Control

This transformation is the result of combining advances in telematics (the use of data) with machine control (real-time response to that data on the jobsite – in particular, machine positioning).

In road-building, we're typically talking about soil and asphalt compactors. Yet other machines – pavers, graders, dozers and more – are now playing a role.

Currently the data is transmitted, stored and analysed elsewhere – typically in the cloud – and used to optimise machine utilisation. Machine control requires governing machines and processes "locally," on the jobsite.

Communication is essential to local control. The machines must be able talk to one another. As they gather the data it is processed and its relevance quickly communicated to the adjacent machine, which can adjust. For example one roller can tell another, "I've already covered this area, but no one has been over there."

This communication is done in real time. Adjustments can be made immediately, instead of having to go back to the office and dump data into a spreadsheet to spot trends and opportunities. Those adjustments aren't just for tracking machine movement but also to position the blade, bucket, screed or drum.

Where We Are Now

Today we are at the latter portion of the adoption stage, with interface improvements making utilisation easier. Previous technology often overwhelmed operators with information. Now it shows only what is needed.

The operator remains the master of the jobsite. He or she is now able to maximise

productivity and make sure the machine and the technology are working in unison.

Some governments are beginning to require the use of this technology. It eventually will become the norm when bidding on jobsites, whether you're a large or small contractor.

Where We're Going

Machines will continue to improve their data gathering, which ultimately will lead to process improvements. The communication between the machines will improve as well.

This need for communication creates an interesting situation: Machines built by the fiercest manufacturing rivals will need to talk to one another. The reality is jobsites feature contractors who prefer varied brands. If machines aren't able to communicate across brands, the benefits will be minimised.

At Ammann we are ready to work with all brands. Some of our competitors are resisting, but we think this is short-sighted. We remain committed to serving customers on their terms and want them to use our equipment by choice. We also want them to remain competitive in the bidding process.

The tools for collecting this information will become standardised. All data will go to the cloud, and how it is made useful from there – in the easiest manner possible – will be how companies such as Trimble and Topcon thrive in the future.

At Ammann, we also see the future as connecting more steps of the process, particularly asphalt plants. For example, if a roller fell behind, it could communicate to the paver – and ultimately the plant – that mix production should be adjusted.

Autonomous machines that don't require an operator are on the horizon. A safety hurdle – sometimes real, sometimes more a matter of perception – likely will remain for some years to come.

Yet progress has been made. Ammann has developed a prototype for an autonomous plate compactor. It is only logical to expect such technology be extended to other compactors.

The message we share with our customers is one of a continued partnership. We are committed to developing the technology necessary to improve their data gathering and real-time, local control.

AMMANN HELPS RENTAL COMPANY ROLL

Compactors Key to Customer Satisfaction

How can a rental business keep its customers happy? By supplying equipment that makes its customers productive – and profitable.

This simple formula is one of the keys to the success of Caribloc, a rental company in Martinique.

"Our priority has always been customer satisfaction," said Katy Pereira, the president of Caribloc. "We follow the evolution of products and renew our fleet regularly to offer our customers the products that best suit their needs at the best price."

This product lineup has included Ammann rollers since 2004.

"My father was first introduced to Ammann at an exhibition in Paris," Pereira said. Shortly thereafter, in 2004, an Ammann representative visited Martinique. "My father bought an AV 12, our first Ammann Tandem Roller," Pereira said. "After that, in 2007, my father bought 2 new tandem rollers."

Her father, Jacques, has since retired, leaving the day-to-day operations in Katy's hands. But the company's relationship with Ammann remains stronger than ever.

"Regarding Ammann, we own 8 tandem rollers and 1 single drum roller purchased this year," Pereira said.

How do these rollers help Caribloc succeed? There are 3 key ways.

Customer satisfaction. "We listen to our customers' needs and recommend a solution that best meets those needs," Pereira said. That includes Ammann rollers.

"They are simple machines to use. Maintenance, too, is simple, and the life is long. Quality equipment allows the customer to provide quality work and save time."

Reliability. "We are 8000 kilometers from France and we are victims of insularity," Pereira said. "We have therefore chosen to represent only premium brands. We chose Ammann because its equipment is reliable."

Repairs are few and far between and parts are readily available when needed. That is significant given the Caribbean island is a territory of faraway France.

"We need to have equipment that is really top-of-the-range, equipment that won't break down," Pereira said. "It must be possible to carry out repairs quickly, and maintenance must be simple."

Versatility. The supply of rollers on the island is limited, meaning what's there must perform. Caribloc customers use the rollers to compact soil, aggregate, hot asphalt and everything in between.

The smaller-sized rollers excel on varied jobsites. "We specialise in small equipment," Pereira said. "Our larger machines do not exceed 8 tonnes."

Yet given the diverse demands, the smaller rollers also must have good compaction output to ensure targets are met. "The Ammann compactors' power-to-weight ratio makes them ideal tools for our customers," Pereira said.

Caribloc

LOCATION: Martinique, an island in the French West Indies
PRESIDENT: Katy Pereira
FOUNDER: Jacques Pereira
YEAR FOUNDED: 1990
BUSINESS: Primarily rental, with a focus on the construction industry
CUSTOMERS: Mostly private businesses
RELATIONSHIP WITH AMMANN: Caribloc rents rollers and also serves as the island's Ammann Dealer. "We are very proud to be the Ammann Dealer in Martinique," Katy Pereira said. "It's a real pleasure working with Ammann France. I hope we continue to work with Ammann for a long time, expanding the range of equipment to other applications."

Differentiators

Caribloc tried several brands its first 15-plus years in business and has chosen to rely solely on Ammann since 2005. That exclusivity is high praise because Caribloc puts a great value on the relationships with its customers and the work they do together.

"I believe that our responsiveness and quality of service are our strengths because we can always offer a solution for our customers," Pereira said. "Personally, what is important and gratifying is knowing that my machines contribute to the growth of Martinique."

WHAT DO CARBILOC CUSTOMERS SAY ABOUT AMMANN ROLLERS?

"To put it in a nutshell, it's a good compactor brand. We've been using Ammann Rollers for about 3 years. We get very good compacting results. In short, the product is perfect. We have no problems."

David Tresident
Site Manager, Colas Martinique

"In Martinique, of course, we work in partnership with the Caribloc company, which uses Ammann equipment. This is very rugged and very reliable equipment; there's no time wasted, and it's also very easy to handle. We do a lot of work with drivers who are engaged on an ad hoc basis, and they easily adapt to machines of this type. In view of all this, we decided to work with Caribloc, in particular because of the products they use – that is to say, the Ammann brand."

Frantz Merine
Site Manager, Colas Martinique

"It was important for us to be able to rent from Caribloc – not only because they offer Ammann machines, but also because we had a choice of power, with several tonnages. Regarding the … access to several types of machine (weights), that possibility was offered by Caribloc."

Arthur Marlin
Site Manager, Colas Martinique

FROM START TO FINISH IN BANGLADESH

A single contractor and manufacturer handle all project phases.

THE DHAKA-ARICHA HIGHWAY IS BEING EXPANDED TO IMPROVE THE FLOW OF COMMUTERS AND TOURISTS TO KEY AREAS OF THE COUNTRY. THE REVAMPED HIGHWAY ALSO WILL BE SAFER.

The Dhaka-Aricha Highway is the lifeblood of Bangladesh. Commerce, commuters and tourists flow down the highway and fuel the country's economy.

The government of Bangladesh is aware of the crucial role this highway plays and is committed to expanding the road as well as making strong efforts to maintain what is already there. The government also has made significant efforts to improve the safety of the road, including rebuilding/redesigning portions and also ensuring the road is properly maintained and smooth.

Completing a significant amount of the road work for the government is Tanvir Construction Companies Ltd., with headquarters in Dhaka, the capital of Bangladesh.

Tanvir, a first-class government contractor for road construction, recently repaired and overlaid a 75-km stretch of the Dhaka-Aricha Highway.

The company handled virtually all phases of the process: the manufacturing, paving and compacting of the mix. The company used Ammann equipment for all construction stages.

The plant

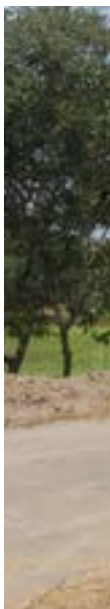
The work started with the Ammann Apollo DM 50, an asphalt drum type continuous portable plant, which had a daily production volume of 285 tonnes to 300 tonnes.

"The plant was excellent," said Tanvir Ahmed, managing director of Tanvir Construction Companies. "Its capacity was perfect for our requirements. Also the ratio of raw material was well maintained. The plant gave us a good performance."

The plant is among the world's most popular because of its mix quality, low operating costs, productivity, efficiency and high uptime.

The thermodrum unit utilises a triple-heat transfer system that uses conductive, convective and radiation techniques. The process ensures a total transfer of energy to the aggregates, which translates into higher productivity and lower fuel consumption.

The unique flight design enables total heat transfer, a thorough mixing and coating, lower emissions and prevention of bitumen oxidation.



> **“THROUGH OUR EXPERIENCE, WE CAN SAY THAT AMMANN EQUIPMENT IS VERY DEPENDABLE AND OPERATES SMOOTHLY.”**

Old one

The paver was productive, working at a pace of 5 metres per minute to 6 metres per minute. The quality of mix left behind was outstanding, and the material was evenly distributed along the screed to create a smooth mat.

“Operators like the paver because it is easy to use,” Ahmed said. “I would recommend it due to the smooth surface it leaves behind.”

The AP 600 often proves to be the choice of contractors, as it is a smaller paver that is effective on jobs requiring wider widths. The paver extends to 7 metres, making it the perfect fit for projects involving 2 lanes of 3.5 metres each. Without the AP 600’s wide-width capabilities, a 9-metre paver would have to be used – which costs more to operate and is harder to transport.

The roller

An Ammann AP 240 T2 Pneumatic Tyred Roller compacted the asphalt. “It is a good finishing roller for the application,” Ahmed said. “It keeps pace with the paver and is a good performer.” The roller also was used to seal joints.

A ballasting range of 9.5 tonnes to 24 tonnes helps make this Ammann roller a good fit on diverse jobsites. Also helping with flexibility is the air-on-the-run system, which the operator uses to adjust tyre pressures without ever leaving the cab.

One manufacturer

Having a single manufacturer provide so many essential elements proved effective, Ahmed said.

Communications are streamlined because there are fewer people to contact across all product segments. In addition, a manufacturer who supplies equipment for all phases of the project also knows how the pieces and processes should work together.

“Through our experience, we can say that Ammann equipment is very dependable and operates smoothly,” said Ahmed. “We feel confident with the Ammann products and also receive very good after-sales support from Ammann and the Bangladesh Dealer.”

Ahmed gave Ammann and the Dealer the ultimate vote of confidence. “We have decided to buy our next products from Ammann,” he said.

AMMANN COMPACTOR CUTS TIME IN HALF

An Ammann Add-On Compactor made quick work of hundreds of pylons installed during drainage channel construction.

THE COMPACTOR WAS PRODUCTIVE BECAUSE OF ITS VERTICAL, DOWNWARD STRIKE IMPACT THAT IS POWERED BY ITS TWIN-SHAFT TECHNOLOGY AND DIRECTIONAL OSCILLATOR.

SPECIFICATIONS APA 20/30

OPERATING WEIGHT CECE: 160 kg
WIDTH: 300 mm
FREQUENCY: 60 Hz
CENTRIFUGAL FORCE: 20 kN

The Ammann APA 20/30 Add-On Compactor cuts the installation time in half, saving the contractor countless hours on the jobsite.

"This type of work previously required pre-drilling of the holes and then pushing in the pylon with an excavator," said Johann Pflüger of Landschafts and Kulturbauverband (LKV), with Headquarters in Aurich, Germany.

"With the APA 20/30, it took less than a minute per pylon. It took at least twice as long before."

The embankment required the installation of 3–4 wooden pylons per linear metre for a distance between 400 and 500 metres. The posts ultimately will provide stabilisation for the drainage channels in Hilgenriedersiel.

The compactor was productive because of its vertical, downward strike impact that is powered by its twin-shaft technology and directional oscillator. The pylons were held in an upright position and simply compacted until they reached the proper depth.

The cost-savings was considerable, as were safety gains. "Some of the pylons could not be fully inserted with the previous method," Pflüger said. "They had to be cut to size by hand using a chainsaw. With this compactor, the pylon went as far as it needed."

APA 20/30

- The smallest Ammann Add-On Compactor
- Works with mini excavators in the range of 2 tonnes to 5 tonnes
- Can be mounted in a few minutes and does not require hydraulic quick coupling devices
- Patented vibration limitation system protects the excavator frame and operator
- Twin-shaft directional exciter
- Maintenance-free exciter unit
- Self-blocking mechanical rotating device
- Rubber bushings prevent metal-on-metal contact under extremely high pressures
- Runs on hydraulics, reducing emissions and fuel consumption

"WITH THE APA 20/30, IT TOOK LESS THAN A MINUTE PER PYLON. IT TOOK AT LEAST TWICE AS LONG BEFORE."

COST-EFFECTIVE CONVENIENCE

New brochure clearly organises kits for customer convenience.

TO ENSURE THAT EVERY PART, BIG AND SMALL, IS THERE WHEN YOU NEED IT, AMMANN IS OFFERING A BROAD RANGE OF PARTS KITS. THESE KITS ALSO SIMPLIFY THE ORDER PROCESS AS ALL NECESSARY COMPONENTS AND PARTS ARE SUMMARIZED WITH ONE KIT NUMBER.

Ammann is offering kits for all different needs. You will find the kit that fits your needs, whether you are servicing a product, replacing wear parts or just want to be prepared in case of a machine break down.

Wearing Kits
Some machines handle abrasive materials in demanding applications. While wear is inevitable, downtime can be limited. Wearing kits make replacement of these parts efficient and cost-effective. All the necessary parts – big and small – are in a single box to keep you organised and efficient and to ensure the machines are quickly back up and running.

Maintenance Kits
Preventive maintenance is crucial to efficient operation and service life of machines. The easier the maintenance, the more likely it is to be completed. Maintenance kits make the upkeep simple. Parts associated with a particular maintenance process are in a single box with a single part number.

Emergency Kits
Emergency kits prevent little frustrations from becoming bigger issues that can shut down a machine and even a jobsite. These kits include parts such as switches, fuses and valve coils that are simple and fast to change yet still can cause significant problems if not operating properly. The kits easily fit in the trunk or bed of a vehicle so they're on hand when needed. A crew member with a bit of technical knowledge can handle this work on the jobsite. These repairs take two hours or less and are completed on the jobsite.

And now a brochure is available that clearly organizes service kit offerings to make it easy for customers to find exactly what they need.

The brochure lists all wearing kits, maintenance kits and emergency kits for Ammann machines. It can be found online at **www.ammann-group.com**, or contact your local Ammann Dealer to request a copy.

TRAINING IS THE ANSWER

Lessons can have an immediate impact on profit and production.

MANAGERS WONDERING IF TRAINING IS WORTH THE TIME AND COST NEED ONLY ASK THEMSELVES THIS QUESTION: CAN THE LESSONS BE TAKEN BACK TO MAKE OPERATIONS MORE EFFICIENT – AND ULTIMATELY MORE PROFITABLE?

Ammann plant trainers' goal is to provide such valuable lessons to all members of the plant team – from operators to managers of multiple plants.

Of course, those who take the training must be the ultimate evaluators of whether the efforts were a success. Ammann recently asked employees of Tarmac, a key customer who took part in training, whether the lessons were of value.

The answer was a resounding "yes." Participants had strong words of praise, and many found efficiencies and cost-saving opportunities that can be applied immediately.

That's no surprise to Sandro Baumgartner of Ammann, the lead training instructor. "The benefits are that we have a better understanding of our plant," he said. "We can reduce production costs. We can reduce downtime. We can increase the quality of our products, of the asphalt we produce."

Another common theme was that participants – regardless of their specific role or experience level – walked away with new knowledge they could put to use immediately.

Rob Heath
Area operations manager, Tarmac
"The course is obviously designed to focus people's minds on cost saving across a wide variety of areas. But the important thing is a focus on cost saving from the ground up."

Phill Wilson
Asphalt plant operative
"If we did find that we were turning the flame up more than usual, that would be something I'd think about. I'd think about, 'Could it be the lifters that are worn out? Are the aggregates all being thrown around inside the drum the way they designed it to work?' So if I did discover that the lifters were faulty or poorly maintained or needed changing, it could save the company money because we'd be using less gas."

Mike Gale
Manufacturing optimisation specialist
"The course is sort of raising people's awareness on fuel efficiency, and it has a huge impact on our business, because one of the largest controllable costs that we've got when running an asphalt plant is the fuel and how we use it."

Phil Worthington
Asphalt plant operative
"I've been shown different methods in improving quality within the plants, so that's going to definitely improve when I get back to work."

Andy Hawkes
Plant batcher
"I've been in the industry for 9 years. But there are things today that have come through that I wasn't aware of. And, yeah, I'm learning new things all the time. It just covers everything from starting a plant to how they operate."

Keith Meason
Quarry operative
"I'm very new to the business. I'm actually new to the actual environment as well, so I felt this special course would be very beneficial to myself especially."

Daniel Morgan
Hire technician apprentice
"To be honest, it's been more details than I even expected, which is pretty good, because I didn't know as much as I thought I did."

Jack Brookes
Apprentice operations manager
"At the start, I wasn't quite sure what the course was going to entail, but now that I'm here, I feel like I'm a bit more confident about the actual asphalt process."

AMMANN TRAINING SPECIFICS

Training levels
Three levels of courses are offered at Ammann facilities for operators and key personnel.

1. Basic: for newcomers
2. Follow-up: the intermediate offering for those with a stronger knowledge base
3. Advanced: for those with considerable experience and previous training who want to be experts

Manager training also is offered at the regional centres or your facility. The production manager course enables senior production employees (including production supervisors and managers) to access valuable data from the as1 Control System. This information helps managers evaluate and improve the plant's performance and operation.

Locations
Ammann has 10 regional training centres around the world. Training also can be provided at an Ammann Dealer or a location of the customer's choice.

Modules
Training can be customised to fit a customer's particular needs. Ammann also offers several modules to choose from.

- Process technology, built around the plant's operations and the function of the key components
- Plant safety, which focuses on the potential risks at the plant and discusses how to ensure the safety of all at the plant
- Mechanical and electrical functions, which is the "how and the why." How do the key components function, and why do they work that particular way?
- Maintenance, which provides an understanding of the necessary requirements and interprets the maintenance manual
- As1 Control System, which focuses on control system operation and its communication with the external plant hardware

COMING SOON TO A LOCATION NEAR YOU

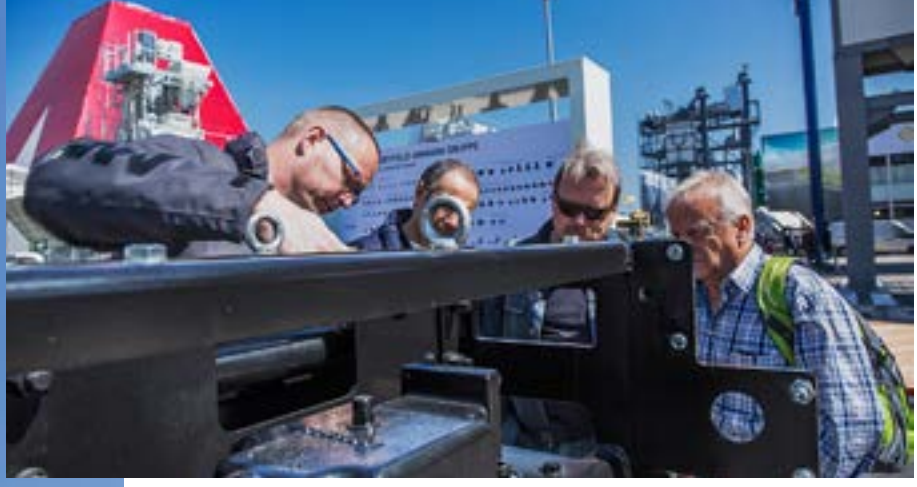
Increased Emphasis on Shows Both Big and Small

IT'S BEEN A STRONG YEAR FOR TRADE SHOWS AT AMMANN, WITH A DEDICATED PRESENCE AT A NUMBER OF FAIRS.

Trade show participation gives us a chance to talk to our customers about how we can continue to be a solutions provider. Ammann Dealers also take part in the fairs, and their presence enables visitors to make local connections.

Ammann has a presence at fairs both big and small. Please follow our plans on the "Shows and Events" page at **www.ammann-group.com**.

WE HOPE TO SEE YOU AT A SHOW SOON!



FAIR SCHEDULE

2016 **October**
10.10. – 12.10. | Concrete days, Wisla, Poland

November
22.11. – 25.11. | Bauma China, Shanghai

24.11. – 28.11. | AGRAMA, Bern, Switzerland

December
12. – 15.12. | BAUMA CONEXPO INDIA (BC India), New Delhi

2017 **March**
11.03. – 17.03. | CONEXPO-CON/AGG 2017, Las Vegas, USA

Ammann fair participation is subject to change.

ROADBUILDING WITH THE AFT 500 ASPHALT PAVER

A perfect refurbishment so traffic can run smoothly

THE WALTERSBACHER COMPANY, BASED IN THE BLACK FOREST, CAN LOOK BACK ON A LENGTHY TRACK RECORD IN THE CIVIL ENGINEERING, ROADBUILDING AND LANDSCAPING SECTORS, WHERE IT HAS BUILT UP AN EXCELLENT REPUTATION OVER SEVERAL GENERATIONS.

The team headed by the firm's junior principal Felix Waltersbacher uses an Ammann AFT 500 asphalt paver for road refurbishment work. The AFT 500 displayed its capabilities to full advantage during a refurbishment project on a local road in the municipality of Glatten near Baiersbronn.

A local road near Baiersbronn – home to the headquarters of the the Waltersbacher Company – needed refurbishment on the basis of an annual contract for civil engineering and asphalting work. Waltersbacher was awarded the contract for this construction project not least because its machine pool includes a highly efficient track paver that can carry out high-precision work: the Ammann AFT 500.

Felix Waltersbacher had no hesitation in opting for the AFT 500 because the company already had several Ammann trench rollers and rammers in its machine pool. Previously, asphalting work was carried out with a small paver that can cope with working widths of up to 2.5 m. Waltersbacher also wanted to handle larger working widths, so the company began searching for the right paver.

Waltersbacher sums up the story: "We were already able to cover a working width of 2.5 m with a small paver, and we wanted to take the next step forwards. Willi Reutter, Ammann's Sales Manager for Large Machines (South), devoted exceptional attention to our concerns and gave us perfect advice when we were choosing the right track paver." What ultimately persuaded the company to purchase the AFT 500 paver was its excellent cost-to-benefit ratio.

To allow even more flexibility for roadbuilding assignments, Felix Waltersbacher decided to buy the optional add-on parts for extended widths. The result: a maximum installation width of 6500 mm is now possible. Reutter explains: "Thanks to its vast array of options, the AFT 500 track paver can be configured optimally for each individual customer. More or less installation width than the standard version, electro-hydraulic adjustment of the roof profile, or heated lateral screed limiter plates – with options such as these, we always endeavour to meet all our customers' requirements and deliver machines that are perfectly suited to their purpose."

Before deploying the asphalt paver, the six-member team headed by Felix Waltersbacher first had to tackle some preparatory work: manhole covers and the surrounding areas were refurbished, and the curbstones

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SPECIFICATIONS AFT 500

STANDARD PAVING WIDTH: 2550–4900 mm
MAX W/EXTENSION: 6500 mm
MIN W/REDUCTION PLATES: 1500 mm
SCREED: vibration/tamper + vibration
PAVING SPEED: 0–37 m/min
CUSTOMERS: Mostly private businesses
CONVEYOR BELTS: 2 independent, reversible
AUGERS: 2 independent, reversible

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had to be regularised. This work was followed by pre-profiling of the damaged areas and milling operations for the carriageway connections. These stages of work were predefined in the client’s invitation to tender.

One of the AFT 500’s strengths became evident as soon as work began: this paver starts and stops very gently, and it maintains a constant speed thanks to precise metering of the hydrostatic transmission, which is switched by variable pumps with an adjustable flow speed. Felix Waltersbacher sums up the benefits: “This means we can carry out extremely neat and accurate work, because distribution of the applied material is absolutely uniform if the speed remains constant.”

A total of 200 tonnes of bituminous concrete were processed during the refurbishment project. The base and wearing course accounted for 20 tonnes of material, for which Felix Waltersbacher’s team used AC 16 DL asphalt; variety AC 8 was used for the top layer. Given that the AFT 500’s maximum output is 500 t of asphalt per hour, these quantities were child’s play for the Ammann track paver. Because the machine deployed for this project has such high capacity, the material can always be applied and compacted at optimum temperature.

Felix Waltersbacher brims over with enthusiasm as he talks about his track paver: “Our machine operator always has an excellent view from the AFT 500 – including peripheral areas. We achieve additional accuracy during operation thanks to the levelling system. Another benefit: when our truck drivers deliver new material, they appreciate the paver’s low filling height – which means that less material is spilt.”

Aided by the flagship of Ammann’s range of track-driven asphalt pavers, Waltersbacher can now offer excellent results for roadbuilding, even on a larger scale. This Black Forest company can look back on a long tradition spanning three generations. A 24-strong workforce and a pool of high-performance machines give this civil engineering and roadbuilding specialist the ability to handle a vast range of assignments – from small jobs on the doorstep to major projects elsewhere.

The final result of the road refurbishment project using Ammann’s track paver is something to be proud of: a road that used to be damaged and somewhat uneven now has an absolutely uniform seal, giving it a superb visual appearance and genuinely improved protection against traffic loads and frost.

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