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CONTINUING OUR ROLE AS A SOLUTIONS PROVIDER



These are exciting days at Ammann. I hope you agree when you consider we are:

- Launching a whole series of new products.
- Preparing to showcase these and other products in April at bauma 2019 in Munich, the most anticipated construction trade show in the world.

The year 2019 marks the 150th anniversary of Ammann. While planning various anniversary-related

projects, I came across a number of old photographs – including many images of Ammann products.

The plants and machines in these pictures, while often more than 100 years old, laid the groundwork for what we offer today. For example, a "roller" once was truly just that: a heavy static drum that was pulled behind an independently operating tractor. Eventually, the design advanced so that a drum propelled the compaction machine. The roller's progression continued with the addition of dynamic compaction capabilities and, ultimately, technological developments such as Ammann Compaction Expert (ACE), our Intelligent Compaction system.

Each of these improvements was a significant milestone. Yet each was built on an existing foundation, and each was developed to overcome a specific customer challenge.

That customer-centric philosophy endures with today's product development team. The team must look years ahead in anticipation of the obstacles customers will face – and the tools that will help them succeed on the jobsite.

Our commitment to being a solutions provider drives all that we do. It includes not just new product offerings, but existing plants and machines, too. Ammann asphalt-mixing plant retrofits are a prime example of this. The retrofits take an existing plant, built by Ammann or another manufacturer, and offer enhancements that make the plant like new.

As Ammann looks forward and starts to build the next 150 years, we will continue to help customers find solutions through the development of new products and services – and by improving those that are already hard at work in the field.

Hans-Christian Schneider

av. Sdunider

CEO, Ammann Group



QUALITY OF AMMANN CHINA FACTORY CAPTURES ATTENTION OF VISITORS

Association Members Are Receptive Audience During Tour

A group of Australian asphalt experts visited Ammann China during a recent information gathering tour and came away impressed with the manufacturing facility – and optimistic about the role Ammann products can play in their country's future.

Twenty delegates from the Australian Asphalt Pavement Association (AAPA) visited South Korea, Japan and China and stopped at road authorities, a bitumen refinery, road construction firms, research institutes – and Ammann's Shanghai facility for manufacturing asphalt-mixing plants.

"What stood out the most was the professionalism of the Ammann team and the efforts and measures taken to ensure the quality of the product," said Carlos Rial, Chief Executive Officer of AAPA, which represents all sectors of the Australian bituminous flexible pavement industry. "The factory was clean, well-organised and professionally laidout with a high regard to safety practices."

Rial believes the facility will only get better. "It was obvious to all that Ammann is very serious about continuous improvement in quality control in manufacturing and has demonstrated this over the past 10 years at its Asian plant," Rial said. "It is a testament to the culture the organisation brings to the manufacturing industry in China and also how well it treats its workforce to retain highly skilled labor."

The visit to Ammann China was part of the AAPA International Knowledge Transfer (IKT) 2018 outreach to Asia. The delegates have diverse backgrounds, including state and local road authorities, road construction contractors, design firms, research bodies and bitumen suppliers.

"All delegates seek to participate in the knowledge exchange for their organisations and also to represent a collective AAPA voice that can drive change to benefit all industry in Australia," Rial said. "This exciting knowledge exchange between countries is an opportunity to benchmark best industry practices and to drive improved safety, sustainability and value for money through improved efficiency and innovative solutions."

The visit comes as Australian roadbuilding officials are looking at ways to increase utilisation of recycled asphalt (RAP). Key data was shared during the stop at Ammann China regarding high RAP usage and the best plants and technologies for doing so.

In some parts of Asia, such as Japan, high percentage recycling is a priority. The percentages are much lower in Australia, and increasing the ratio will require the implementation of improved asphalt-mixing plant technology, Rial said.

The delegates saw such technology in action when they departed the factory and paid a visit to a nearby working plant, an Ammann ABA UniBatch. Ammann's RAP technology, which prevents damage to the bitumen when working with the recycled materials, looks to be a good fit for Australia, Rial said.

Future plants will have to address environmental concerns beyond RAP utilisation, something Ammann products do. "The technology used by Ammann to address emissions and odour was particularly interesting," Rial said.

The emphasis on technology went beyond asphalt-mixing plants to include the compaction machines and light compaction equipment that also is produced by Ammann.



"There was a good information exchange on opportunities to improve pavement performance and enhance safety through Ammann advancements in compaction, remote-control, autonomous-plant and hazard-sensing technology," he said.

Rial believes lessons learned made the two-week trip worthwhile. He remembers Ammann as a very notable stop along the journey.

"The delegation was impressed with what was presented at the factory, the openness of the information exchange and the journey Ammann took from the time it began manufacturing until now," Rial said.

AMMANN UNVEILS TYRED COMPACTOR

Innovative Traction System A Key New Feature

The new Ammann ART 280 Hydrostatic Pneumatic Tyred Roller features a redesigned cab and a ballasting system that can be quickly and significantly adjusted.

The compactor also utilises the Smart Machine Reset Traction System. Every time the compactor is started, the system automatically measures the machine's weight and determines maximum speed and brake configurations for optimal safety.

The ease and weight of the ballast adjustment are unique to the market. Ammann's

modular, easy-load ballasting system enables the machine weight to be adjusted from 9 tonnes to 28 tonnes in a single hour with the help of only a forklift. This translates into a load-per-tyre adjustment from 1125 kg to 3500 kg.

The system enables use of varied ballasting materials including water, steel, concrete and sand. The air-on-the-run system allows easy control of tyre pressure from the cab. The compactor performs well on both asphalt and soil.

The compactor is powered by the latest U.S. EPA Tier 4f/EU Stage 4 engine from Deutz with EGR, DOC and SCR technology. In less regulated countries, the compactor features a U.S. EPA Tier 3/EU Stage 3A Deutz engine with EGR and muffler. The Ammann ART 280 is available with engines that meet varied emissions levels.



ART 280 PNEUMATIC TYRED ROLLER

Features & Benefits

MARKET-LEADING BALLAST SYSTEM

- Weight variability from 9 tonnes to 28 tonnes with Ammann's easy-loading, modular system; can be loaded with a forklift
- Available ballasting space of 3 m³

AIR-ON-THE-RUN SYSTEM

- Tyre-inflation system can be operated from inside the cab
- Controlled by display integrated into the steering wheel

FRONT-AXLE ISOSTACITY

- Front tyres connected with isostatic system that enables movement of + 50 mm
- Front-axle configuration combines with \pm 3° oscillation for optimal tyre contact in difficult terrain conditions

OPERATOR COMFORT AND SAFETY

- Seat slides beyond machine frame and rotates 170° to provide outstanding operator comfort and visibility
- Operator can fully control the machine through a single display integrated into the steering wheel
- Improved design enabled removal of columns for improved visibility, comfort and safety

TECHNICAL SPECIFICATIONS:

OPERATING WEIGHT: 9750 kg (21 500 lb) **MAXIMUM WEIGHT:** 28 000 kg (61 730 lb)

TYPE OF DRIVE: Hydrostatic **ENGINE:** Deutz TCD3.6

WORKING WIDTH: 2040 mm (80.3 in)

NUMBER OF WHEELS: 4+4 SIZE OF TYRES: $11.00 \times 20''$

AMMANN ARS 122 OUTSHINES THE COMPETITION

Compactor Excels on Embankment Project

An Ammann ARS 122 Soil Compactor outperformed machines from seven competitive manufacturers when tested on a jobsite in Giriulla, Sri Lanka.

The eight compactors worked on embankment construction as part of the Central Expressway project. The 10-tonne machines were tested while compacting aggregates on the embankment's base course, and the Ammann machine performed the best.

"This Ammann roller is the most effective for compaction efficiency, number of passes and test pass percentages," said Rohana While making the most of available time is always important, it was particularly crucial on the Central Expressway project. "Weather is the most dominant challenge when taking on large earthwork and the quantities of materials required," Eknathgedara said.

The ARS 122 operated at its highest vibratory setting while helping to compact approximately 200 000 m³ of materials associated with the embankment earthwork. Materials were loosely placed in layers of 225 mm before the compactors went to work.

The Central Expressway project will connect the Sri Lankan capital of Colombo with Kandy, another key city. The embankment work is part of the second of four project phases. That second phase is the creation of 50.7 km of a four-lane, divided carriageway with 30 overpasses and five underpasses.



Other manufacturers' compactors each required six passes to reach density targets, while the **Ammann ARS 122** was able to reach the same targets in four or five passes.

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Eknathgedara, chairman of S&K Engineering Enterprises (Pvt.) Ltd.

The other manufacturers' compactors each required six passes to reach density targets, while the Ammann ARS 122 was able to reach the same targets in four or five passes.

"It's highly effective," Eknathgedara said of the Ammann machine. "The compactibility is high and with fewer passes. The time required between layer compaction, testing and starting on a new soil layer is less than the other rollers, too."

The ARS 122 proved it could eliminate passes, thereby eliminating labor and fuel costs.



The quality of the mix was closely monitored during production.

QUALITY RAP AND COST SAVINGS, TOO

ABA UniBatch Helps Construction Firm Rebuild Chinese Roadways

Asphalt manufacturers around the world are required to utilise more recycled asphalt (RAP). The challenge: the high RAP-content mix must meet high quality standards, too.

Shandong Binzhou Road Construction Corp. (SBRCC) in China has faced such demands on a variety of high-profile national highway projects, including the recent rebuild of 50 km of China National Highway 220 (G220), which runs from Binzhou to Zhengzhou.

SBRCC utilised 25 per cent recycled asphalt for base mix as required on the G220 project. The company also met standards for quality, which were frequently monitored.

With the help of the Ammann ABA UniBatch Asphalt-Mixing Plant, the company achieved another objective that would please any business: reduced operating costs. "The fuel savings is significant," said Lu Shaoli, Site Manager.

Quality RAP-Based Mix

SBRCC is a large company with more than 300 employees, and it tackles high-profile projects. Among those in 2018: road repair of G220 and G205 national highways, revitalisation of a section of the Qinbin Expressway and overhaul of the Qingzi Provincial Road.

National and provincial projects in China have an increased environmental emphasis. For example, the G220 rebuild mandated 150 000 tonnes of asphalt mix with a base layer comprised of 25 per cent recycled materials. The ABA UniBatch, which is capable of utilising up to 60 per cent RAP, was more than qualified for the task.

The plant produced the mix, with both SBRCC officials and governmental authorities closely checking RAP utilisation and quality.

"Our company attaches great importance to recycling," said Wei Kehong, Deputy Director of SBRCC. "Since the beginning of last year, all recycling mix has been tested in detail. All the test data is in full compliance with national and other regulations. The performance of the Ammann plant is consistent and the quality of the mix is quaranteed."

The Plant Site

SBRCC operates an impressive facility, which covers an area of 107 000 square metres and includes more than the ABA UniBatch.

"The production site is equipped with an asphalt plant, a stabilised base course mixing plant and a concrete plant," Shaoli said. "It is a high-standard, modernised, integrated and environmentally friendly comprehensive site.

It provides various road materials, recycling materials, prefabrication structural materials and technology research."

SBRCC closely monitors all phases of the manufacturing process and protects RAP and aggregates. Cold materials are covered and the overflow silo and recycling material buffer are separated.

"Our site has passed the Energy Information Administration, which is the benchmark for environmental protection in Binzhou," Shaoli said.

Consistency

Providing quality mix also comes down to consistency – a feature closely scrutinised by SBRCC officials. "The Ammann plant is the most reliable asphalt plant I have ever used," Shaoli said. "It is very accurate and has a low maintenance rate. It does not delay our production plan, and the project owners are very satisfied."

Operator Yuan Yongbo believes consistency is essential to success. "I think the most important thing for an asphalt plant is stability," Yongbo said. "The zero downtime and continuous production are more important than the capacity. For this plant, the maintenance rate is very low, which guarantees our continuous production."



The **as1 Control System** is essential to mix quality and production efficiency.

Still, the plant's output is impressive. "The productivity can even exceed 330 tonnes for coarse materials per hour, and the capacity of the mixer can reach up to 4.3 tonnes," Yongbo said.

That production is provided in a cost-effective manner. "The plant is energy efficient," Kehong said. "Including the RAP system, the total installed power is only 800 kW, which is lower than other comparable plants."

While a great fit on the G220 project, the ABA UniBatch is built to handle requirements that could surface on other projects. "This plant can meet my various requirements for mix materials, including asphalt,

stone mastic asphalt (SMA), large black crushed material, hot recycling materials, and so on," said Shaoli.

as1 Control System

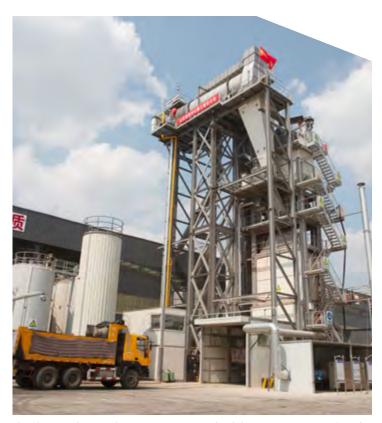
Ammann's proprietary as1 Control System is key to effortless operation of the plant, according to Yongbo. "The system is great," he said. "The interface is very intuitive and easy to understand. It has manual, semi-automatic and fully automatic settings. It is very easy to use and also can be fine-tuned manually."

Monitoring the various manufacturing phases is easy, too. "The plant is designed for a continuous level sensor," Yongbo said.

"I can easily see the material level in the silo. I can also see trends for each material and then send feedback to the loading area. They can adjust the loading of certain aggregates to keep the flow consistent."

Ammann After Sales support has been impressive as well. "You can reach it 24 hours a day," Kehong said.

For Yongbo, much has been gained – but there is still much to learn. "The as1 has many powerful tools, and I am still learning," he said. "We will actively participate in the winter training organised by Ammann to continuously improve ourselves."



Shandong Binzhou Road Construction Corp. utilised the **Ammann ABA UniBatch** because of the asphalt plant's ability to utilise RAP without a drop in quality.



Please scan the QR code to view an accompanying video.

ABA 100-340 UNIBATCH

Features & Benefits

- 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

TECHNICAL SPECIFICATIONS:

CAPACITY: 100–340 t/h

MIXER SIZE: 1.7-4.3 t

HOT AGGREGATE SILO: 29–40 t
HOT MIX STORAGE SILO: 40 or 30 t

(2 Compartments)

CONTROL SYSTEM: as1

RECYCLING SYSTEM: RAC / RAH 50 / RAH 60



THOMAS BETON STAYS CLOSE TO ITS CUSTOMERS

Strong Local Presence Essential for Company

The building materials sector is benefiting from stable economic conditions in the construction industry, and order books are full.

Production and delivery by providers such as Thomas Beton are ensuring that the ready-mix concrete boom will continue. The concrete specialists at Thomas Beton put their trust in Ammann concrete-mixing plants. For a new facility at Elmshorn near Hamburg, Ammann – the world's leading provider of mixing plants, machines and services for the construction industry – assembled a plant that is highly competitive in terms of price as well as performance.

Thomas Beton numbers among the leading producers of high-quality ready-mix concrete in northern Germany. Every day, the company's fleet delivers concrete for residential, commercial and industrial building projects,

and also for infrastructure and agricultural construction. Customers are equally welcome to collect their own concrete.

Thomas Beton is following a strategy based on strengthening its local presence, underpinned by continuing good economic conditions in the construction sector. Physical proximity to customers and construction sites ensures a key competitive edge in the concrete market, and shorter transportation distances are also a significant environmental factor. That's why Thomas Beton now produces concrete at 26 facilities across the German states of Schleswig-Holstein, Hamburg, Bremen and Lower Saxony.

When the firm was prepared to build a new facility in Elmshorn, its CEO, B. Rainer Brings, approached Ammann – which had already supplied plants for eight Thomas Beton facilities. These two companies can look back on several decades of positive collaboration.

The Swiss construction machinery manufacturer's portfolio includes the Ammann CBS Elba series of stationary concrete-mixing plants featuring highly flexible modular technology. Here was the ideal solution to meet Thomas Beton's needs: the Ammann CBS 120 SL Elba Concrete-Mixing Plant featuring a frequency-controlled skip hoist. It offers theoretical output of up to 121 m³ per hour yet has minimal space requirements – fully in line with the customer's expectations. Most of the components are galvanised to ensure maximum protection against corrosion.

For the mixing system, the customer opted for the Ammann CEM 2660 S Elba Single-Shaft Compulsory Mixer. Thanks to the proven advantages of the double helix,



mixers in this series have operated successfully across the globe for decades. High mixing intensity and fast homogenisation are their hallmarks. An additional cleaning system makes maintenance work considerably easier, contributing to a very comfortable overall user experience for plant operators. As Brings confirms: "Simple operation and good access for maintenance were key factors in our decision to purchase this plant. We've had many decades of good experience with Ammann products. Their service and supplies of spare parts are also excellent."

Due to on-site conditions at Elmshorn, the Ammann CEL 210/6 Elba Linear Storage Bin was lowered by three metres to allow gradelevel filling. This eliminated the need for an approach ramp, and additives such as steel fibres are now discharged directly onto the weighing belt at grade level. The opposite filling opening was increased to optimise filling and utilisation of the chamber volume. The segment dosing seals are operated pneumatically, and their opening width can be adjusted freely. Thomas Beton is fully aware of the customer benefits of so much flexibility: "The flexible plant design – as seen in features such as additive storage was definitely a criterion for our decision to

purchase. Now, we are also able to handle the production of special concrete varieties and other difficult assignments with the accustomed quality," Brings notes.

Project processing and assembly went well for the customer, as is usually the case. Thomas Beton already has positive experience with the Ammann CBS Elba plant, so the specifications were defined quickly and construction of the customised plant got off to a prompt start. In its basic version, the Ammann CBS Elba plant is installed on concrete foundations, but mounting on a steel frame without foundations is equally possible. Chamber walls and partitions are keyed for assembly of the linear batcher. Pre-installation of components such as the skip hoist track and the segment dosing seals saves time on-site - and reduced transportation costs improve what is already an excellent price/performance ratio.

Although high summer temperatures prevailed when the plant was commissioned in July 2018, it is designed to withstand winter

CBS 105-140 S/T L ELBA

Features & Benefits

- · Generously dimensioned mixing platform
- Assembling at \pm 0. No feeding pit is required
- Significant dust reduction through optional dedusting plant
- · Partial galvanization is standard

TECHNICAL SPECIFICATIONS:

MIXER TYPE: Single- or twin-shaft compulsory mixer MAX. CONCRETE OUTPUT COMPACTED FRESH

CONCRETE: 107–138 m³/h **MIXER VOLUME:** 2000–3333 l

ACTIVE AGGREGATE STOCK: 105–312 m³ MAX. COMPONENTS: 3–12 / 4–12



conditions. Even at midwinter temperatures, smooth mixing operation is ensured by the insulated housing together with a hot air/hot water system to heat the aggregates in the linear batcher and the feed water needed for the concrete.

Brings is satisfied with the new plant – already the ninth Ammann-Elba solution to take its place in a Thomas Beton concrete facility. And, in collaboration with Ammann customer advisors, he is already working on plans for another new facility.

COMPACT PAVER ELIMINATES MANUAL WORK

Ammann AFT 300-2 Places Mix Between Tram Tracks

When the narrow space between tram tracks needed paving, the Ammann AFT 300-2 Compact Paver went to work. The paver was utilised in downtown Brno in the Czech Republic by Firesta – Fišer, rekonstrukce, stavby a.s. while working on a project to rebuild a tram track.

The crew from Firesta is very experienced, but it was their first time working with the AFT 300-2. The transition was seamless.

"Machine control did not cause any difficulties for the experienced crew," said Pavel Pawlica of Firesta. "Machine setup is standard and is rather simple compared to competitive machines."

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The paver worked at a width of 143 cm while placing mix between the tracks. "The width of the paver was very important," Pawlica said. "It fit the rail track gauge perfectly. Otherwise, we would have been forced to pave manually."

Manual paving can take considerable time and put a great deal of stress on a crew. In addition, mix placed by hand is not as smooth and dense as is asphalt that is leveled and precompacted by a paver.

The quality of the work was good, as proven by an on-site governmental inspector. "The surface and compaction were examined by the inspector several

times and there was no problem with the quality," Pawlica said.

The paver was also able to complete work on the outside of each track, typically working at widths of 180 cm.

The project took about five days – a time frame that was considerably shorter than if the work had the work been done manually. Three lifts were placed for a distance of 4800 metres. In all about 1500 tonnes of asphalt were used.

Mix was loaded directly into the hopper by a skid-steer loader, which could easily clear the front of the hopper. The loader would approach from the front of the paver, unload the material and then return for more mix. This all could be accomplished without stopping the paver. "The paving



Hopper wings can be individually controlled.

Features & Benefits

• Theoretical paving capacity of 300 t/h

AFT 300-2 COMPACT PAVER

- Maximum paving width of 3.1 metres
- · Electric or gas heating for screeds
- Tamper/vibration screeds
- High quality components
- Excellent visibility from the operator platform
- Modern design
- Material hopper with capacity of 5 tonnes
- · Low centre of gravity and wide tracks for optimal traction

TECHNICAL SPECIFICATIONS:

WEIGHT (INCLUDING STANDARD SCREED): 5800 kg

STANDARD PAVING WIDTH: 1200-2400 mm

HEATING SYSTEM: Gas or Electric

HOPPER CAPACITY: 5 t

ENGINE: Deutz **TYPE:** TD2.9 L4

RATED POWER: 54 kW



THE PROJECT TOOK

ABOUT FIVE DAYS – A TIME

FRAME THAT WAS

CONSIDERABLY SHORTER

THAN IF THE WORK

HAD BEEN DONE

MANUALLY. IF

process was continuous, even for extended distances," Pawlica said.

It was just another way the AFT 300-2 perfectly matched the jobsite.

"It fit the project very well and helped us a lot," Pawlica said.



The crew found the machine easy to operate.



WHAT DOES THE FUTURE HOLD?

Machines That Are More Complex - and Easier to Operate



Bartosz Kozik Director of Global Product Strategy for Machines at Ammann

One need only look at an Ammann Dealer or rental store to ascertain the preferences of today's light equipment customers.

Product development teams, however, encounter a much more formidable task: gauging what customers will find indispensible a

decade from now.

"My team's role is to look 10 years out," said Bartosz Kozik, the Director of Global Product Strategy for Machines at Ammann. "New products must be far enough ahead of the industry to remain relevant and retain customer value a decade later."

The Commercial Product Management team uses customer data, research, industry knowledge and creativity to anticipate future needs. While Kozik declined to discuss specifics, he did provide insight into what he anticipates will be ongoing trends.

The group's chief prognostication: that light equipment will be more complex inside, yet more intuitive for easy operation.

"Customers demand more productivity than ever," Kozik said. "The best way to meet that need is to develop new technology."

Yet those advances must work inconspicuously and be accessible through an intuitive interface so an operator of any skill or experience level can easily leverage the technology.

"Being intuitive doesn't make the machine simple," Kozik said. "There is an abundance of sophisticated software working in the background to drive that operator's success. The machine itself is complex, but it does not require a highly accomplished operator to control it."

For example, Ammann Trench Rollers now feature ACE systems. (ACE stands for Ammann Compaction Expert, a proprietary Intelligent Compaction system.) ACE is a rather complicated system internally, but the operator need only identify the meaning of

colored lights. Green means compaction is finished, red means it isn't.

"The software is not easy to write," Kozik said. "The system is complicated, but the operator just sees a few lights that blink green or red. He is not factoring in the soil type or conditions. He is not even assessing whether compaction has been achieved. He is only looking at the lights – are they green or red? The machine does all the computing for him."

Additional Differentiators

In addition to making technology accessible, Kozik sees propulsion and safety as product differentiators of the future.

"We're looking into alternative propulsion systems," he said. "Machines increasingly work indoors. The conversation goes well beyond electric power, but I can't disclose much more at this time. There are many ways to propel machines without diesel or petrol."

Safety improvements address the migration toward more automation. "A machine will need to stop when it encounters an obstacle, go around it or even turn itself off if there is a problem," Kozik said. "A machine needs to communicate to the operator when there is trouble."

Dedicated to Value

Some customer requirements never change. For Ammann, that means a continued commitment to the best total cost of ownership and providing value. "Our machines need to be productive, easy to use and safe - and they should never break," Kozik said.

Seemingly minor design enhancements can deliver much more value than might initially appear. For example, Ammann light equipment can easily be lifted and handled from all sides. This reduces strain on the equipment and the operators. Integrated solutions such as drop-down wheels provide similar benefits.

"We have productivity solutions, such as the triple-shaft system that provides climbing ability and prevents the machine from sinking into softer material," Kozik said. "Ammann light equipment utilises



but easier to operate, too.



The Role of After-Sales

Product development encapsulates more than machines. "We are making after-sales support services more robust," Kozik said. "Owners don't just want simplicity when it comes to operation. They want fewer complications – period."

The creation of ServiceLink, a digital fleet management system, was driven by customers' desire for an effortless tool to access machine data.

"You automatically receive service information for that machine through your phone on the jobsite, or on your computer at the office," Kozik said. "You no longer need to physically plug into the machine. ServiceLink plugs in digitally and communicates with you remotely and conveniently from any place and on several devices, no matter where you are."

ServiceLink is a perfect fit for rental houses because it also monitors the level of battery charge. "You know if a machine's battery is fully charged before taking it to the jobsite – or if you're a rental house, before you rent it to a customer," he said.

"Fortunately for Ammann, we have a very versatile team of fantastic engineers who vary from young members almost right out of college who bring in fresh and futuristic ideas and results to seasoned and very experienced colleagues keeping well-established solutions intact," Kozik said. "This great combination is our key to success."



Increased automation requires advances in safety, too.



Machine displays will increasingly help operators determine if compaction has been achieved.



RETROFIT PROVIDES A TECHNOLOGICAL BOOST

Control System Update Adds Life to Plant

Socogetra S.A. is one of Belgium's leading civil engineering and road construction companies. Several of the Ammann plants in Socogetra's fleet of asphalting equipment

still have long service lifetimes ahead of them – but their control systems (the key technology of the plants) were starting to become outdated.



As Eric Perard, Industry Director at Socogetra, explains: "Our old Ammann AS2000plus Control System has functioned superbly for many years, and it has performed excellently throughout its lifetime. Nevertheless, we needed to take advantage of the latest technological advances offered by Ammann's as1 Control System so that we could continue to produce high-quality asphalt and anticipate our future requirements."

The Ammann Global 300 at Marcheen-Famenne, Belgium, was the first asphalt-mixing plant to benefit from a retrofit. This project was completed so smoothly and effortlessly that Socogetra decided to repeat the process on its plants at Bastogne and Arlon, which each produce as much as 60 000 tonnes of asphalt each year. The as1 was therefore installed on the Ammann Global 160 and the Ammann Global 200.

Operators became productive quickly because of the intuitive nature of the as1 Control System.





It took only a half day for the Ammann asphalt-mixing plant to be converted to the technologically advanced as1 Control System.

Ammann's tried-and-tested retrofit procedure was followed during all three conversions to the as1 Control System. Ammann experts reviewed each of the existing systems and then incorporated current modules into the new as1 configuration for each asphalt-mixing plant.

Conversion from the AS2000plus to the as1 Control System took just half a day, and staff training only required another 48 hours. Ammann technicians were on hand for a further 15 days to ensure that the conversion went smoothly, and to give the operators a thorough understanding of how the system works.

"The handoff to the as1 system was completed very quickly," Perard notes. "This software is highly intuitive. The main advantages are technological. We have better control over production, and we benefit from more alerts and settings to allow in-depth monitoring and control. And control is more flexible. Our plant managers and operators are equally pleased with the changeover."

The as1 was developed to handle multiple recipes with high precision. "It's very simple to adjust recipes," Perard points out. "Everything goes very quickly."

The system also makes it possible to use recycled asphalt (RAP). "We can now use 20 per cent RAP – which we were not incorporating before the retrofit," Perard explains. "In the longer term, we aim to boost this result to reach 30 per cent," he adds.

The savings made possible by a retrofit as compared to purchasing a new asphalt-mixing plant will assist Socogetra with its acquisition of the Enrobage Stockem company; and, as the key benefit, the reliability and quality of asphalt production will also be improved.

The company is taking on large-scale projects in Belgium as well as other countries. These include roads and motorways, railways for high-speed trains, main and branch pipework installations, sewage treatment and environmental projects, and also commercial and industrial infrastructure projects.

"With our strong foothold in the Walloon

region of Belgium, we can quickly organise suitable specialised teams that are readily available and highly efficient," Perard comments. "Our own quarries, asphalt mixing plants and concrete plants give us the capabilities to meet all supply-side requirements. And thanks to our thorough knowledge of the environment, the materials and the expectations of our many customers, we can offer them the services and benefits of a high-calibre partnership."

ADSK PROVIDES ASPHALT PRODUCTION AT CONVENIENT LOCATIONS

Company's Approach Helps Customers Reduce Transport Costs

Almaty Road Building Co. (ADSK) has thrived in the asphalt production industry by acquiring a number of high-production plants and locating them near key projects. The result is a high volume of mix provided at a low cost to customers involved in demanding projects.

The approach has paid off, as ADSK – with the help of its most recent acquisition, an Ammann ABC 180 SolidBatch Asphalt-Mixing Plant – is strongly positioned in the Almaty, Kazakhstan, roadbuilding market.

ADSK, established in 2002, participates in all significant roadbuilding projects in the Almaty Region. The company recently supplied asphalt for the 66-km Big Almaty Ring Road (BAKAD) bypass and a 47-km road section in the Almaty Region.

"We purchased an Ammann ABC SolidBatch this year and installed it in close

proximity to the location of the new project for BAKAD construction," said Gagiyev Yunus, owner of ADSK. "The new road will allow transit passage over one of the busiest routes bypassing Almaty."

Future work will take place in Taldykorgan, a regional center in Almaty, including a site for inert material production and processing. This project is due to be completed before the end of 2019.

The company currently has four Ammann asphalt-mixing plants with a combined capacity of 660 tonnes per hour. The plants can produce a variety of asphalt mixes.

"When we were just starting ADSK, we chose to rely on Ammann equipment," Yunus said. "It has proven to be the right choice, for Ammann is a dependable partner, and we are looking forward to our further collaboration."

All Ammann plants, including those purchased nearly 20 years ago, are in good condition and still in operation. The plants' productivity and reliability have helped ADSK grow its customer list beyond 50.

ADSK customers appreciate the impact the plant locations have on costs. "It helps create win-win partnerships," Yunus said.

Key to the Ammann plants is that they produce at the promised capacities. "Our experience using Ammann plants has shown that they meet all data sheet performance specifications," Yunus said. "Among other factors, our choice of the asphalt-mixing plant for a specific site depends on the plant capacity and the local demand."





It is therefore essential that the plant, once transported and assembled, be able to produce as the performance sheet promises.

Durability is another key factor. "We have hardly replaced any components or units over the 17 years of our successful partnership, which is due to Ammann's highly advanced production process and superior product quality," Yunus said. "One of the keys to success is obviously the ability to make immediate changes to the recipes of inert materials and asphalt binders, ensuring high-quality mixes."

Last but not least, he appreciates the service aspect as well. "Ammann plants are easy to maintain because they offer easy access to service points, allowing prompt part replacement – which is an advantage and one of the reasons we choose Ammann," Yunus said.



Representatives of Ammann and ADSK were present at the plant's grand opening.



The **ABC 180 SolidBatch** is being used on a number of Almaty Road Building Co. (ADSK) projects.

ABC 140-240 SOLIDBATCH

Features & Benefits

- An unbeatable cost/performance ratio
- Compact and modular for easy transport
- Quick assembly in part due to options such as built-in steel foundations and plug socket cabling
- · A compact footprint
- Engineered for easy integration of future options and technologies such as enhanced use of additives, fibres and more recyclable materials

TECHNICAL SPECIFICATIONS:

CAPACITY: 140–240 t/h **MIXER SIZE:** 1.7–3.3 t

HOT AGGREGATE SILO: 29 t or 53 t / 36 t or 86 t **HOT MIX STORAGE SILO:** 23 t in 1 compartment

50 t or 90 t in 2 compartments **CONTROL SYSTEM:** as1

RECYCLING SYSTEM: RAC / RAH 50

NEWS & EVENTS

Ammann India Pavers Earn Award

For the third consecutive year, Ammann India has won the "Best Seller Asphalt Finishers" award from trade publication Equipment India.

Ammann India was honored for the combined sale of all Apollo Asphalt Paver Finishers: the WM6 HES, the AP 550, the AP 600, the AP 800 and the AP 1000. The pavers are known for their productivity, value and customer support through the highly respected Apollo service network.



The Ammann India facility in Mehsana, near Ahmedabad.



One Plant Is Better Than Two

Airport construction is among the most stressful projects a business can face. Deadlines are extremely rigid and strictly enforced. Security creates logistical challenges. Other potential pitfalls, such as weather, can cause problems, too.

Greek construction company Intrakat added a significant burden to this already stressful scenario: It took on two closely scheduled airport projects – with only a single plant to supply the asphalt.

Intrakat utilised the transport-optimised Ammann ABT QuickBatch Asphalt-Mixing Plant to produce mix at the Mykonos airport in Greece. The plant was then packed and ferried to Kos, more than 250 km away, where it generated mix for the airport project there.

Using the one plant was a significant costsaver, but it also meant a missed deadline at the first jobsite would all but doom the second. "The margins of time available for executing the works at the airports of Mykonos and Kos were particularly tight," said Panagiotis Anagnostopoulos, project manager at Intrakat. "If it had not been possible to move the plant in the time available, we would have had to install two plants simultaneously at both the airports."



Ammann Marks 150 Years

Ammann celebrates our 150th anniversary in 2019, and the milestone will be marked in a variety of ways. Among them: a special issue of the Customer Magazine in spring 2019. The publication will focus on the history of Ammann - and offer a look forward, too.



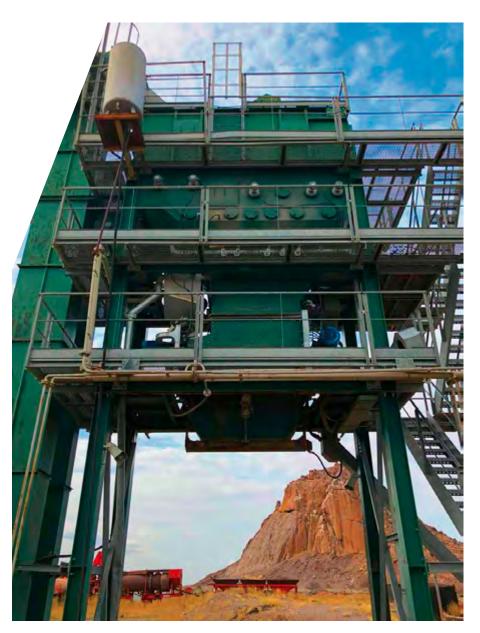
ABC 180 SolidBatch

History Leads to New Purchase

It's no surprise PT Sumber Mitra Jaya turned to Ammann when facing a challenging, high-profile asphalt-mixing project. The Jakarta, Indonesia-based business previously found great success when utilising multiple Ammann JustBlack Asphalt-Mixing Plants. "We were very satisfied with the performance of the plants during other island projects," said Ramesh, manager of PT Sumber.

When the central government hired the company to build and maintain a segment of the Trans-Java Toll Road, PT Sumber sought an Ammann Asphalt-Mixing Plant - this time, the ABC 180 SolidBatch. It was the third Ammann plant the company has purchased in the past year.

"We bought the ABC 180 SolidBatch plant because of its technology, reliability and high quality of hot asphalt mix," Ramesh said. "We also have confidence that we can count on Ammann plants to meet the strict time limit and high production volumes that are required."



Businessman Follows His Passion

Abuzar Mergani Elbushra has taken great time and care in building his Sudanese business. Elbushra worked his way up the ladder in the roadbuilding industry and in 2005, nearly 20 years into his career, he launched his own business. He now owns four asphalt-mixing plants - all manufactured by Ammann.

He chose Ammann because he began working with the company in 2010, and his trust grew from there. "I have grown from one plant, to three, and then four, because of the Ammann plants' mobility, production and the cooperation of the Ammann Dealer," Elbushra said.



A retrofit upgrades an old plant, so it meets new environmental standards – at a fraction of the cost of a new purchase. All projects are managed by the Ammann Retrofit Centre in Austria, which relies on proven processes and experienced technicians to troubleshoot any issues and ensure superior results.

What can you get with a retrofit from Ammann?

- Increased RAP utilisation
- An electrically heated bitumen tank system that is so cost effective it pays for itself in a few years
- Noise levels that are reduced up to 20 dB without an impact on daily production
- An ability to use low-temperature mixes that reduce fuel usage and emissions

Contact us to arrange a free analysis to learn the best opportunities for cost-effective, environmental improvements at your plant.