



THE AMMANN GROUP MAGAZINE



SUSTAINABILITY
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AMMANN'S GREEN PLANT INITIATIVE

Improving Sustainability at Production Sites Around the World

GOING ON THE GRID

Innovative Material
Prevents Reflective Cracks

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PLANT FUEL SAVINGS

Burn Less with ADX

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E-PLATE POWER

Electric Machines
Bring Muscle

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MIXING OLD AND NEW

Components Blended
Into New Asphalt Plant

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ENJOY THE SILENCE

A BREAKTHROUGH ELECTRIC ROLLER



- Fully electric drive and vibration
- 1 Shift = 1 charge
- Zero-emission



- ECOdrop and Ammann ServiceLink
- Energy recuperation = extended operation



- Advanced battery pack with long life cycle, high capacity and optimal safety
- 100% Traction control for performance on difficult terrains



Series ARX 1-2
ARX 12-2
ARX 16-2 | ARX 16-2C
ARX 20-2



Series ARX 2-2
ARX 23.1-2 | ARX 23.1-2C | ARX 23-2 | ARX 23-2C
ARX 26.1-2 | ARX 26.1-2C | ARX 26-2 | ARX 26-2C
eARX 26-2



Series ARX 4-2
ARX 36-2
ARX 40-2 | ARX 40-2C
ARX 45-2 | ARX 45-2C



SUSTAINABILITY APPLIES TO BOTH OLD AND NEW PRODUCTS

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Dear Customers

New product development is at the core of Ammann's sustainability efforts.

In fact, there are several new, green products featured in this magazine. They include light compaction equipment with e-drives. These are zero-emission machines.

We're excited about another new sustainable product: Blue Smoke Treatment, or BST. The system captures vapours that previously escaped when loading asphalt onto trucks. This is an enormous breakthrough on the emissions front.

It's easy to build enthusiasm over new products – as it should be. These products offer creative solutions to difficult challenges.

Yet it's also important to improve what's already out there. Sometimes, these efforts get lost in the excitement over new products.

This magazine includes a story about hydrotreated vegetable oil, or HVO, a biofuel made by repurposing waste oil. HVO has been approved for use in all Ammann diesel machines. It reduces CO₂ emissions by up to 90%, with no additional cost.

By utilising HVO in diesel machines that are already in the field, we've instantly improved their sustainability. The improvements are immediate – not when the customer buys a replacement machine.

It's the same case with asphalt-mixing plant retrofits. There are thousands of existing plants located around the world. Building new, more sustainable plants is, of course, a very good thing. But we also need to find immediate solutions – which retrofits accomplish.

Building sustainability into new products and finding ways to add sustainability to products already in the field ... it's a winning formula for all of us.

Hans-Christian Schneider
CEO Ammann Group

PAVING ON THE GRID

|| SMOOTH, CONTINUOUS PAVING IS ALWAYS IMPORTANT ON SENSITIVE JOBS SUCH AS AIRPORTS. IN THIS CASE, CONTINUOUS MOVEMENT WAS EVEN MORE ESSENTIAL AS SUDDEN STARTS AND STOPS COULD DAMAGE THE GRID. ||



AIRPORT PROJECT INCLUDES PLAN TO PREVENT REFLECTIVE CRACKING

Ammann plants, machines and experts laid the groundwork for a challenging airport project at the South Ari Atoll in the Republic of Maldives.

Ammann trainers and application professionals visited the site for placement of test strips before the full runway project began. The testing ensures the crew is properly prepared to handle the bigger job – and to meet the demanding deadlines and specifications that come with it.

Key to the final phases of the runway project will be the placement of a geosynthetic glass grid to stop reflective cracking. The grid consists of man-made materials used to improve the soil or base beneath the asphalt layer and for additional reinforcement. This particular geosynthetic consists of fiberglass coated in a patented elastic polymer, which is bonded to a textile.

While the geotextile will enable longer life (and cost savings), it also adds yet another element to an already complicated undertaking.

TRAINING

The Ammann team visited the site and worked alongside the contractor, Villa Construction & Projects. Technical teams from Ammann Germany and Ammann India assembled an Ammann AFT 800-3 Asphalt Paver that was delivered for the job. That machine worked alongside an Apollo AP 600.

The soil/cement sub-base and asphalt base layers had been completed before the testing team arrived. The Ammann application experts worked alongside the crew during the testing phase. First, a tack coat was placed on the base. Crews then unrolled and placed the geotextile by hand, followed by the pass of a pneumatic-tyred roller to ensure adhesion between the geotextile and the tack.

ASPHALT PRODUCTION

Villa Construction utilised an Ammann ABC 120 EcoTec Asphalt-Mixing Plant on the project. The plant is renowned for its drying and mixing capabilities, low production cost per ton and RAP capabilities.

The plant provides exceptional technology at a low acquisition price. It utilises multiple coupled geared motors that reduce fuel and minimise maintenance costs. The efficient burner is another cost-saver, while the hourly output capacity makes the plant desirable for any business.

HIGHLIGHTS – ABC 120 EcoTec Asphalt-Mixing Plant

Low ownership costs

- Minimal acquisition, maintenance fees

Baghouse design

- Prevents temperature loss, lessens fuel needs

Convenient transport

- Simple packing, loading and assembly

The Ammann AP 240 Pneumatic Tyred Roller



PAVING

The asphalt was placed the same day as the geotextile, which is a requirement during paving of the runway.

The crew utilised echelon paving. The Ammann AFT 800-3 worked at a width of 6 m (19.7 ft), as did the Apollo AP 600. The pavement was placed at a depth of 6 cm (2.4 in). The pavers kept a consistent speed and worked closely together throughout the placement of the strip.

Smooth, continuous paving is always important on sensitive jobs such as airports. In this case, continuous movement was even more essential as sudden starts and stops could damage the grid.

Only the Ammann AFT 800-3 was utilised when paving the surface lift. Its advanced controls helped crews meet precise specifications. The screed was extended to 11.75 m (38.6 ft) for this portion of the testing. The paver utilised the SFTV 3000G, a rigid screed. It paved at a thickness of 6 cm (2.4 in), with a 1.5% roof profile and 1.5% cross slope.



The Ammann ARX 91 Tandem Roller



Ammann Asphalt Paver	AFT 800-3
EMISSION	EU Stage V / U.S. EPA Tier 4f EU Stage IIIA / U.S. EPA Tier 3
OPERATING WEIGHT	20 000 kg (40 092 lb)
STANDARD PAVING WIDTH	2.55 – 6.00 m (8.37 – 19.7 ft)
MAX. PAVING WIDTH WITH EXTENSION	12.00 m (39.4 ft)

Apollo Asphalt Paver	AP 600
WEIGHT WITH TV 4900	3140 mm
SCREED	(123.6 in)
PAVING SPEED	40 m/min

COMPACTION

Initial and breakdown rolling was done using a heavy tandem vibratory roller of around 10 tonnes (11 U.S. short ton). Finish rolling was accomplished with a smooth-tyre pneumatic roller weighing around 20 tonnes (22 U.S. short ton).

All rolling had to be completed before the mat temperature fell below 90 °C (194 °F).

GEOTEXTILE REDUCES CRACKING

Unstabilised granular bases and sub-bases enable deflection because of a lack of stiffness. This results in high strains and eventually fatigue and cracking. The geotextile manufacturer says reflective cracks are reduced by a factor of two to three times through the use of the textile.

Another advantage is the grid can be used in place of an intermediate layer. The airport specs called for either an intermediate lift of asphaltic chip seal, wet mix macadam (WMM) or unbound macadam between the base and the surface – or the geotextile.

In the end, the testing went well and positioned the team for success when the full project begins.

Ammann ABC 120 EcoTec Asphalt-Mixing Plant



ACE TO THE RESCUE

BRIDGE COMPACTION REQUIRES PERFECT AMOUNT OF VIBRATORY FORCE

Compacting asphalt on a bridge is an extremely sensitive undertaking. The operator of the roller needs to bring just the right amount of vibration. Too little force and targets won't be reached ... too much and the bridge can be damaged.

Crews faced such a challenge during a recent bridge repair project on Road II/268 near Mnichovo Hradiště – Mimoň in the Czech Republic.

The bridge had undergone repairs, and a new top layer of asphalt needed to be placed. Supervising the project was Mr. Hloušek, the asphalt site manager for USK Mladá Boleslav.

An Ammann EasyBatch Asphalt-Mixing Plant provided the mix. The mobile plant has a capacity of 120 t/hour (132 U.S. short t/hour). It utilises cold recycling technology and has equipment for introducing granular additives.

Haul trucks transported the materials to an Ammann AFT 700-3 Asphalt Paver, a technologically advanced tracked machine. The paver placed a smooth 4.5 cm (1.8 in) surface layer at a length of 150 metres (492 ft) and a width of 9 metres (29.5 ft). About 170 tonnes (187 U.S. short ton) of mix were placed on the bridge.

Then it was time for the moment of truth: compaction. An Ammann ARX 110 Tandem Roller handled compaction behind the paver. The machine features a heavy-duty, two-stage vibrator and easy adjustment of amplitude and frequency.

The crew from USK Mladá Boleslav took advantage of the optional ACE^{force} Intelligent Compaction system, which provides a host of benefits including measurement and documentation, evaluation of material stiffness and operator guidance.

This information proved crucial while compacting on the bridge. The operator was able to gently work the surface, yet also be confident that proper compaction had been achieved. The machine worked in the lowest vibratory setting, an approach the operator would not have been confident of without ACE^{force}.

The project was a success, with a smooth, properly compacted mat the final result – thanks in no small part to Ammann's proprietary compaction measurement system, ACE^{force}.

The Ammann ARX 110 Tandem Roller and the Ammann AFT 700-3 Asphalt Paver



ARX 110



AFT 700-3		
EMISSION	EU Stage V / U.S. EPA Tier 4f EU Stage IIIA / U.S. EPA Tier 3	
OPERATING WEIGHT	18 500 kg (40 785 lb)	
STANDARD PAVING WIDTH	2 550 – 6 000 mm (100 – 236 in)	
MAX. PAVING WIDTH WITH EXTENSION	9 000 mm (354 in)	
ARX 110		
EMISSION	EU Stage V / U.S. EPA Tier 4f	EU Stage IIIA / U.S. EPA Tier 3
OPERATING WEIGHT	10 560 kg (23 280 lb)	10 310 kg (22 730 lb)
MAXIMUM WEIGHT	12 010 kg (26 480 lb)	11 750 kg (25 900 lb)
DRUM WIDTH	1 680 mm (66 in)	1 680 mm (66 in)
ENGINE	Deutz TCD 3.6 L4 74.4 kW (100 HP)	Deutz TCD 3.6 L4 74.4 kW (100 HP)



HVO - BIOFUEL USE APPROVED FOR AMMANN MACHINES

Hydrotreated vegetable oil (HVO) has been approved for use in all Ammann diesel-burning machines.

HVO reduces gas CO₂ emissions by up to 90%, with no additional costs.

HVO is a biofuel made from waste, such as animal fat or processed vegetable oils. It is classified as a renewable diesel and renowned for having a longer shelf life than other biodiesels.

Every 1000 litres of standard diesel fuel burned produces ca. 2640 kg (5820 lb) of greenhouse gas CO₂, compared to just 260 kg (573 lb) of greenhouse gas CO₂ for every 1000 litres (264 gal) of HVO burned.



AFT 700-3

BREAKING THE BLUE SMOKE BARRIER

AMMANN'S REVOLUTIONARY SOLUTION

Blue smoke emissions have been around since the advent of asphalt-mixing plants. The smoke released during loading resulted from the extremely high temperatures required in the production process. The temperatures were a necessity. Therefore, little could be done to stop the smoke.

Now, new regulations are requiring steps be taken to mitigate the fumes. It's a challenge for those in the industry, but Ammann has found an answer.

Ammann Blue Smoke Treatment (BST) captures vapours that previously escaped during loading. With BST, the trapped fumes undergo a filtration process where oily particles are removed and the remaining gas streams sent to the burners.

"This is a significant development on the sustainability front," said Marzio Ferrini, Product Marketing Manager at Ammann. "Blue smoke is a challenge the industry has faced for years – and Ammann has found an answer."

BST is a cost-effective solution. It does not require the use of complex and costly confinement methods, and the filtration system is highly efficient and inexpensive to operate.

The BST system is green, from start to finish. Diffuse emissions are removed, pleasing those at the plant – including operators, haul truck drivers and other workers near the loading dock. Those who live near the plant are thrilled at the removal of the fumes.

"BST is a win for plant owners on all counts," said Marzio. "It's the answer the industry has been looking for."



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“BLUE SMOKE IS A CHALLENGE THE INDUSTRY HAS FACED FOR YEARS – AND AMMANN HAS FOUND AN ANSWER.”

Marzio Ferrini

Product Marketing Manager at Ammann

How It Works

- BST captures the fumes and redirects them to a multi-stage filtration system.
- The filters remove the oily particles during multiple filtration stages, ensuring high efficiency and allowing the remaining gases to be re-used in the combustion process.
- The condensed oil that accumulates in the filtration system can be recycled.
- BST enables a steady flow rate at the chimney, a key factor in controlling NOx and CO emissions. Therefore, BST is not a case of solving one problem and creating another.



ADX SYSTEM

NEW TECHNOLOGY SIMULTANEOUSLY REGULATES MATERIAL AND RAW GAS TEMPERATURES

Ammann has developed a burner power and dryer RPM system that is both automated and combined.

The patent-pending Ammann Drying Expert (ADX) automates both the burner power and the dryer RPM setting for virgin and RAP dryers, with a potential of saving fuel in production.

Simultaneously automating control of the material temperatures – by varying burner power – and raw gas temperatures – by varying dryer RPMs – has proven difficult.

The ADX controller eliminates the need for manual interventions by the operator to regulate burner power and dryer RPMs due to changing conditions. This prevents inefficient fluctuations and ensures a highly consistency material temperature.

With ADX, too high – and too low – material and raw gas temperatures will be avoided to the maximum.

ADX is run through the Ammann as1 Control System and can be included when purchasing a new plant. Retrofits are also available. The only requirement is a variable-speed drive.

ADX is currently released for virgin aggregate and RAH60 and RAH100 dryers on Ammann ABA UniBatch and ABP Universal asphalt-mixing plants in most of Europe.

01 This provides potential fuel savings and a host of other benefits:

INCREASED OPERATIONAL SAFETY

- Continuous operation protects plant components and materials
- Operational adjustments are automated and executed more accurately than by hand
- Temperature limits cannot be exceeded, preventing damage to plant components and the associated downtime and energy-intensive restarts that go with it

INCREASED PRODUCT QUALITY

- Avoidance of too low / too high material temperatures at the dryer outlet improves consistency
- Optimum material temperatures = more uniform mix quality
- Improvement of mix processability

IMPROVED EASE OF USE

- Operator can focus on other tasks during operation

THE PATENT-PENDING

AMMANN DRYING EXPERT (ADX) AUTOMATES BOTH THE BURNER POWER AND THE DRYER RPM SETTING FOR VIRGIN AND RAP DRYERS, WITH A POTENTIAL OF SAVING FUEL IN PRODUCTION.



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AMMANN'S GREEN PLANT INITIATIVE

1 WARM-MIX ASPHALT WITH AMMANN FOAM TECHNOLOGY

2 HEATING PROCESS

- Highly efficient heat transfer
- No parasite air
- Optimised regulation burner / drum

3 BURNER

- Various fuels available
- Ideal combustion process
- Optimised energy consumption

4 USE OF RAP MATERIAL

- Full range of technical solutions
- Additions of RAP up to 100%
- Industry-leading partner in the use of RAP

5 BST – BLUE SMOKE TREATMENT

- Captures vapours during loading
- Filters trapped fumes
- Removes oil particles

6 EMISSIONS

- Lowest VOC (TA-Luft)
- Complete dust suppression
- Odour management solutions
- Noise reduction kits

7 AVOIDING HEAT LOSS

- High insulation up to 200 mm
- No thermal bridges
- Flaps to close the storage silos
- Reduction of wasted material

8 AS1 CONTROL SYSTEM

- Wide range of modules for software upgrading
- Expert use of inverter
- New professional and ergonomic user interface
- Energy management of photovoltaic systems
- Automatic burner control ADX

NO COMPROMISES

QUIET E-RAMMER & E-PLATES DELIVER PETROL-TYPE POWER

Ammann's new electric-drive light compaction equipment dispels the notion that power must be compromised when using an electric machine.

The Ammann eATR 68 Rammer and eAPF 12/40 and eAPF 12/50 Forward Moving Vibratory Plate Compactors are electric-drive machines that generate zero emissions.

They also bring power. The e-Rammer has centrifugal force close to its petrol counterpart, while the e-Plate equals the output of the petrol machine.

As electric-drive machines, the new Rammer and Plates:

- Reduce the contractor's carbon footprint while creating zero emissions on the jobsite
- Allow bidding on jobs that require e-drive machines
- Enable work in confined spaces with poor ventilation
- Supply an option for sound-sensitive jobsites, including residential areas

■ eATR 68

VARIABLE SPEED. A single button lets the operator adjust speed to match the jobsite needs and conditions.

COMPACTION MUSCLE. Exceptional design and engineering ensure the rammer's powerful compaction punch is transferred to the surface, helping the machine meet any jobsite challenges.

PRECISE WEIGHT BALANCE. The design and optimal engine position provide exceptional balance that prevents tipping and delivers a host of operator benefits – including effortless guidance and precise control. The ideal balance also spurs the forward movement that boosts rammer performance and efficiency – and ultimately leads to profitability.

■ LOW HAND-ARM VIBRATION

VALUES. An optimised handle concept limits hand-arm vibrations to protect the operator and improve comfort and productivity.

OPEN GUIDE HANDLE. The handle design creates sight lines to the rammer foot during the compaction process, providing informed movement around jobsites. The open guide handle enables a secure grip from all sides, even near obstacles.

MULTIPLE SHOE CHOICES. The rammer will have shoe options for varying widths and an asymmetric foot that allows work along curbs and walls without the risk of tipping.

TOOLLESS DAILY MAINTENANCE. No tools are required to access daily service points, ensuring the maintenance is completed quickly.

LONG LIFE. The toughest jobsites are no match for the machine's heavy-duty parts and protective casing. Contractors and rental businesses appreciate the durability.



■ ■ THE E-RAMMER HAS CENTRIFUGAL FORCE CLOSE TO ITS PETROL COUNTERPART, WHILE THE E-PLATE EQUALS THE OUTPUT OF THE PETROL MACHINE. ▽ ▽

STROKE HEIGHT	65 mm (2.6 in)
PERCUSSION RATE	666 bpm
CENTRIFUGAL FORCE OF E-DRIVE	13.5 kN (3035 lbf)
CENTRIFUGAL FORCE WITH PETROL ENGINE	13 kN (2923 lbf)

■ eAPF 12/40 AND eAPF 12/50

IMPROVED CONTROL. Electric drives provide better speed and torque control, which translate to more precise and efficient compaction.

LABOR SAVINGS. Improved efficiency means a reduction in the time – and labor – required to achieve compaction.

REDUCED MAINTENANCE COSTS. There are no fuel or oil filters to purchase or dispose of. Time spent on maintenance is significantly reduced, too – as is machine downtime for servicing.

VIBRATORY SYSTEM. The plates utilise a single-shaft vibratory system and a balanced base plate that properly distributes compaction power and provides industry-leading speed.

VERSATILITY. An innovative design that includes tool-free options helps APF machines quickly switch to compacting asphalt and paving stones.

DURABILITY. The machines are made from high-quality, wear-resistant steel. There is no bending or welding of the steel during manufacturing, so there are no weaknesses. Base plate service is not required during the life of the machine.

LOW-VIBRATION GUIDE HANDLE. Industry-leading HAV values below 2.5 m/sec² protect the operator and eliminate the need for time-consuming record keeping.

EASY-TO-GRIP FRAME. This, too, enables control and increases the productivity of inexperienced operators. It also makes for easy transport.

CLIMBING. The e-drive APF remains a good climber, with gradeability of 30% and maximum incline of 20% to all sides.

SPEED. Speed for both electric and petrol versions is 0-20 m/min (65.6 ft/min).

START/STOP. Starting the machine is easy. Simply switch on the power, push “start” and the machine goes to work.

SERVICE. No tools are required for daily maintenance.

MAX VIBRATORY FREQUENCY	100 Hz (6000 VPM)
MAX CENTRIFUGAL FORCE WITH PETROL ENGINE	12 kN (2698 lbf)

THE BATTERY

Common to the electric Ammann Rammer and Plate is the battery pack.

CHARGING. Ammann’s battery pack charges quickly – and holds its charge, too. The machine can be charged overnight to maximise capacity the next day. If needed, it can be charged for a shorter period during a shift and then quickly return to work.

INTERCHANGEABLE BATTERIES. The same battery pack powers both the Ammann e-plate and e-rammer – and likely additional Ammann machines in the future. This provides convenience and promotes uptime.

SAFETY. The plate utilises lithium iron phosphate (LFP) batteries, which maximise safety. The batteries and their advanced management system are particularly robust and resistant to high temperatures, overcharging, and mechanical damage.



CONTROL SYSTEM BREAKTHROUGH

KEY AUTOMATION ADDED TO AMMANN ARR 1575 TRENCH ROLLER

The Ammann ARR 1575 Trench Roller's new, infrared remote control is finding many fans on the jobsite. The remote requires a direct line of sight between the machine and the operator. If that sight line isn't there, the machine automatically stops.

SAFETY MEASURES

The control system can distinguish between "working zones" and "safety zones."

WORKING ZONE

- The operator can safely and comfortably control the machine without restrictions.
- The zone range is within 2-20 metres of the machine.

SAFETY ZONE

- The machine stops immediately if it enters an active "stop zone" between 0-2 metres.
- The safety zone can be deactivated temporarily when the machine is working in tight spaces, or during machine loading (Only working speed and vibration are enabled. Transport speed is disabled.)

ROPS 2D

- The integrated system prevents machine roll-over.
- The system automatically measures the lateral machine position and communicates it to the operator.
- The compactor automatically deactivates the vibration system to avoid roll-over if lateral limits are exceeded.

OTHER HIGHLIGHTS

- Improved LED visualization of operator functions, which are located directly on remote control
- High operation safety on jobsite due to dual control signals (infrared and radio)
- Chargeable and exchangeable internal battery (can charge on machine with cable, or via external charger)

The system and its accessories can be retrofitted on previous generations of the ARR 1575 StV trench rollers.





TRENCH ROLLER TACKLES LARGE HOUSING PROJECT

The Ammann ARR 1575 Trench Roller has compacted sub-bases for parking lots, walkways, roads and parks. The work is taking place in Prešov, Slovakia. The project includes new homes and apartments.

Ammann light equipment was used during the first phase of the work. The machines proved successful, and the contractor turned to the powerful Ammann trench roller as the work became more challenging. The local Ammann Dealer, Slovakia KCI Tech s.r.o., provided the machine.

The contractor, Tektonika s.r.o., utilised the Ammann ARR 1575 to handle the larger portions of the construction, such as parking lots. The work has been ongoing for the past two years, and the Ammann Trench Roller has been on the jobsite for most of that time.

The ARR 1575 is an articulated trench roller that provides exceptional ground contact and optimal compaction. The machine and its padfoot drum provide results, even where other compactors have failed. Its ability to work in cohesive soils can prevent the need for soil removal and replacement, providing a significant financial impact.

Two steering cylinders help make the ARR 1575 responsive and precise, while the oscillation feature provides excellent stability on uneven surfaces.



Trench Rollers

FREQUENCY	40 Hz (2400 VPM)
DRUM WIDTH	640 / 850 mm (25.2 / 33.5 mm)
CENTRIFUGAL FORCE	75 / 36 kN (16 861 / 8093 lbf)
OPERATING WEIGHT	1340 / 1440 kg (2950 / 3170 lb)



◀◀ THE MACHINE AND ITS PADFOOT DRUM PROVIDE RESULTS, EVEN WHERE OTHER COMPACTORS HAVE FAILED. ▶▶

AMMANN ABA UNIBATCH PLANT IMPROVES OPTIONS, OUTPUT AT BUSINESS

CAPACITY	100 – 340 t/h (110 – 374.8 short tons/h)
MIXER SIZE	1.7 – 4.3 t (1.9 – 4.7 short tons/h)
HOT AGGREGATE SILO	29 – 115 t (32 – 127 short tons/h)
HOT MIX STORAGE SILO	Up to 500 t (551 short tons/h)
CONTROL SYSTEM	as1
RECYCLING SYSTEM	RAC / RAH 50 / RAH 60 / RAH 100



HIGHLIGHTS

- Wide output range from 100 t/h to 340 t/h (110 to 374 U.S. short 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



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“ WITH A SIMPLE CLICK OF THE MOUSE, WE CAN SWITCH FROM LIQUID GAS TO NATURAL GAS OR HEATING OIL. THIS IS AN ADVANTAGE WHICH MANY OTHER ASPHALT-MIXING PLANTS IN AUSTRIA LACK. ”

Stefan Kogler

Head of plant support at Fröschl Asphalt

MULTIPLE MIXES, THREE-FUEL BURNER KEY TO FACILITY

Fröschl Asphalt Kitz GmbH & Co KG in Oberndorf in Tyrol supplies the public and private sectors throughout the state, located in the Alps. To be best prepared to satisfy the growing demands of customers, the company has invested in an innovative asphalt-mixing plant from Ammann.

There has been an asphalt-mixing plant in operation at the Oberndorf site since 1974. In 1980, this market area, including the asphalt plant, was taken over by the late senior boss Eduard Fröschl. For many decades, the existing plant had ensured a reliable supply of asphalt to the region. The main customer for the mix was the company Fröschl Tiefbau Oberndorf, which has earned an excellent reputation in the region as a reliable partner for projects of all sizes.

In recent years, however, the supply of spare parts for the asphalt-mixing plant had become increasingly difficult. Ammann proved a valuable partner in solving this problem, providing support both by supplying spare parts and by deploying its experienced team to perform the maintenance work on the existing plant.

The performance of the existing plant was increasingly reaching its limits in responding to the increasing demands of the market, so a plan for the construction of a new plant began. When the contract for the new asphalt-mixing plant was awarded, the Ammann company came out on top for several reasons. In addition to a very good price-performance ratio, the capability offered by Ammann to integrate components of the most recent partial modernisation of the old plant – for example in the metering devices – into the new Ammann ABA 210 UniBatch plant was crucial.

When developing the new plant, the specialists at Ammann also had to consider a number of factors. For instance, all components must be arranged on a single base plate with the least possible installed volume. The existing weighbridge also had to be integrated into the new plant concept in such a way that the new loading units were arranged above it, at the same time increasing the clearance height from the old 3.5 m (11.5 ft) to the new 4.2 m (13.8 ft). These were challenges that required many online meetings during the pandemic.



ABA 210
UniBatch





In contrast to the old plant, the new Ammann ABA UniBatch asphalt-mixing plant has a facility for incorporating cold recycled material, allowing up to 6,000 t (6614 U.S. short t) of old asphalt to be recycled every year. That is a reduction equal to elimination of 220 lorry journeys carrying new stone every year. The operating sequence for heating the stone was also optimised. In addition, due to its technological design and energy-saving enclosure, the new asphalt mixing plant will save a huge amount of electricity and gas .

Stefan Kogler, head of plant support at Fröschl Asphalt, comments: "Thanks to its innovative technology, the new asphalt-mixing plant from Ammann gives us more flexibility. In practice, this means that with around 50 different formulations, we can now also provide mixes at short notice – and at a significantly greater hourly output."

"Especially in the current energy supply situation, the three-fuel burner from Ammann gives us a significant advantage. With a simple click of the mouse, we can switch from liquid gas to natural gas or heating oil. This is an advantage which many other asphalt-mixing plants in Austria lack."

He also praised the cooperation. "Quite apart from the technical strengths of the plant, I would also like to emphasise the good cooperation we experienced. In more than 20 years of professional experience, I have never experienced such a smooth plant installation. The deliveries came in exactly as agreed and

the regular advance information meant that we were able to prepare in good time, for instance to cater for the heavy transport vehicles on the access road in winter."

Thomas Barth, Project Manager at Ammann Austria GmbH in St. Martin im Mühlkreis, adds: "The overall project presented our team with some challenges, starting with the spare parts for the old plant, some of whose components dated back to 1973. The development of the new asphalt-mixing plant in compliance with all specifications also required some planning effort."

He continues, "From a technical point of view, we have succeeded in integrating into the new plant several of the components that we installed when we modernised the old plant. The company Fröschl Asphalt actively supported us in the implementation. Working together we successfully pursued the goal of having the plant ready on time."

Before the new asphalt mixing plant was put into operation, the employees received comprehensive training over two days at the Ammann branch in St. Martin. With the help of a simulation computer, the processes and settings of the system were explained and practised. In another training session, the maintenance team was also familiarised with the maintenance of the Ammann asphalt-mixing plant.

Preliminary work for construction of the new asphalt mixing plant started in December 2021 with the dismantling work. The old plant was removed

with an excavator and all parts were professionally recycled. The new installation and foundation work was carried out by Fröschl Hochbau Kitzbühel in a very short time. A full 35 t (38.6 U.S. short t) of structural steelwork and more than 1,200 m³ (42 378 ft³) of concrete were incorporated in the foundations. The foundations were handed over to the Ammann company on 01.01.2022, ready to take the weight of the new plant.

The erection work started at the beginning of February. The material was delivered on 30 lorries and 13 km (8 mil) of power cables were installed. In the beginning, the weather did not quite cooperate, and the transport vehicles had to be pulled onto the construction site using a wheel loader. For the storage of the required sand, two arched halls were built to protect the sand from the weather. It takes about 1 litre (0.26 gal) of heating oil just to get 1% of the moisture out of a tonne of sand. Despite further challenges, the installation was completed on schedule. The outdoor plant was completed on time, allowing the plant to deliver its first asphalt on 19 April 2022 for a driveway at a family home. Just a few days later, the plant was already running at full capacity.

Fröschl Asphalt has not only invested in a new asphalt-mixing plant, but also in an environmentally conscious future, as the new plant saves 356.3 t (393 U.S. short t) of CO₂ per year. Absorbing that amount of CO₂ emissions would require the planting of about 35,630 trees.

ARW 65-S

A TRIUMPH OF TECHNOLOGY

Walk Behind Roller Utilises Expanded Steering Control. Control Handle Moves and Turns Machine to the Left, Right, Forward and Back.

Ammann announces the release of the ARW 65-S Walk-Behind Roller, a machine that represents a steering breakthrough sure to resonate with business owners, rental houses and operators.

The S version has a pivoting mechanism that enables the control handle to control the machine in all directions.

The existing version utilises a guide handle, but it only engages forward and reverse movements. With the S version, the machine can be turned to the right and left by pressing a switch at the top of the control handle.



ARW 65-S

VALUE: A 2-IN-1 MACHINE

The ARW 65-S offers two applications (both soil and asphalt compaction) in one machine – with one acquisition cost.

- The 0.5 mm (0.02 in) high amplitude setting makes the walk-behind roller ideal for compacting soil and substructures.
- The operator can switch to a lower amplitude of 0.3 mm (0.012 in) that is perfect for compacting asphalt and bitumen.
- The machine is always ready to work on bituminous surfaces thanks to two scrapers on every drum and a 60-litre (15.8-gal) water tank with sprinkler system.

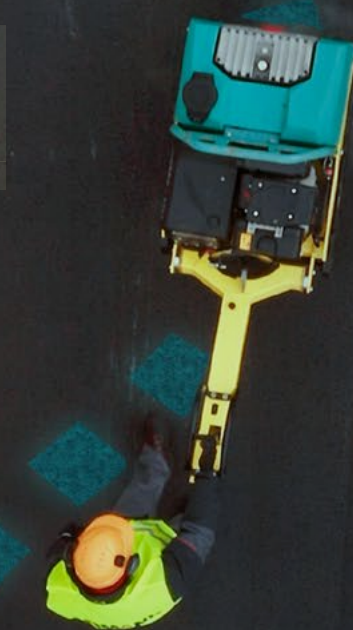
KEY NEW BENEFITS

The effortless lateral movement is a significant advantage. Body weight is not required to direct the machine. This improvement prevents operator fatigue, eliminates surface irregularities and provides consistency throughout the shift.

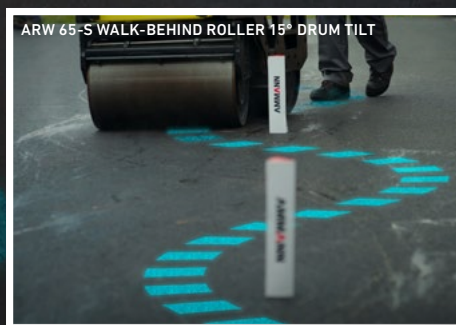
Simply put, the lateral control makes operating the machine much, much less physically demanding.

OTHER NEW KEY FEATURES:

- A hydraulic drum tilt enables the movement when going forward or backward.
- The drum tilts 15° to the left and right by simply pressing the button on top of the steering unit.
- The drawbar is slightly lower, which makes the machine even more compact and improves the overall handling.



ARW 65-S WALK-BEHIND ROLLER 15° DRUM TILT



POPULAR FEATURES THAT HAVE BEEN RETAINED

The ARW 65-S retains all the features and benefits of the ARW 65 version.

ENGINE CHOICES. It is available with engines from Hatz and Yanmar. Both deliver great power and fulfill global emission standards worldwide.

ELECTRIC START. The Hatz version comes with an electric starter as an option. The Yanmar version offers an electric starter as standard.

ISOLATED GUIDE HANDLE. The height-adjustable handle is designed to prevent unwanted vibration from reaching the operator. It's a significant comfort provider.

CLEARANCE. The roller offers clearance on both drum sides, allowing compaction work extremely close to curbstones, retaining walls and other obstacles. No extra time-consuming work on edges and in confined areas is needed.

REDUCED MAINTENANCE COSTS. The roller is built without mechanical fast-wearing parts such as V belts and a clutch, helping reduce maintenance needs. In addition, no special tools are required for daily maintenance work.

SAFETY. The ergonomic guide handle includes the dead man's handle that immediately puts the machine in neutral position if the operator releases his or her grip. In reverse mode, the roller's speed limit is set to 2.5km/h as a safety regulation.

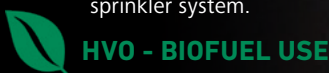
SMOOTH OPERATION. The hydraulic drive ensures variable speed adjustment and smooth starting/braking action.

TRACTION. The drive system utilises individual drive motors in each drum. This enables high traction and gradeability.

SPRINKLING SYSTEM. It prevents asphalt from caking on the drums and is integrated into the machine for convenience and to protect the system.

LARGE WATER TANK. The tank is fabricated from anti-corrosive materials and has a large capacity (60 litres/15.8 gallons).

HIGH-CAPACITY COOLING SYSTEM. It utilises cooling fins on the hydraulic tank, helping the machine perform in even the hottest conditions.



FACILITY TOUR AND DEMO IN CZECH REPUBLIC

Infrastructure-related businesses from throughout the Czech Republic participated in a plant tour at the Ammann facility in Nove Mesto nad Metuji, Czech Republic.

An Ammann Dealer, Kuhn Bohemia, brought its customers to the training centre. The Ammann team demonstrated several machines for the group.

Highlighted was the Ammann eARX 26-2 Light Tandem Roller, a completely electric machine with the same power as a diesel compactor of a comparable size.

"The machine was well-received by the customers," said Jan Formanek, Commercial

Manager Machines. "Customers were impressed by cab comfort and the HMI (human machine interface) simplicity, especially on the new heavy ARX 140 and 160. We also noticed a lot of interest in the eDrive (eARX 26-2)."

Also featured was the Ammann ARP 75 Pivot-Steer Tandem Roller and the Ammann ARX 140 and ARX 160 Heavy Tandem Rollers. The machines utilise a new rotating operation station and a 10-inch display.

Nove Mesto nad Metuji is the manufacturing site for Ammann tandem, single-drum, pneumatic-tyred and trench rollers.

MAGAZINE HONORS AMMANN E-DRIVE ROLLER



The Ammann eARX 26-2 Light Tandem Roller has been given a 2023 Top 30 Editor's Choice Award from the editorial team at Asphalt Contractor Magazine. Asphalt Contractor is a key U.S.-based publication dedicated to asphalt producers and contractors.

"We are happy and honored to receive this prestigious award," said Christopher Perkins, Region Director Americas at Ammann. "Ammann is always working to bring innovative and high-value products to the marketplace to satisfy our customers' high expectations. The eARX 26-2 roller is another example of that commitment to the market."

The Ammann team searched for opportunities beyond replacing the diesel engine with an electric drive. The machine also utilises electrically powered drives for propulsion and vibration, dramatically reducing the lifetime costs of the roller.

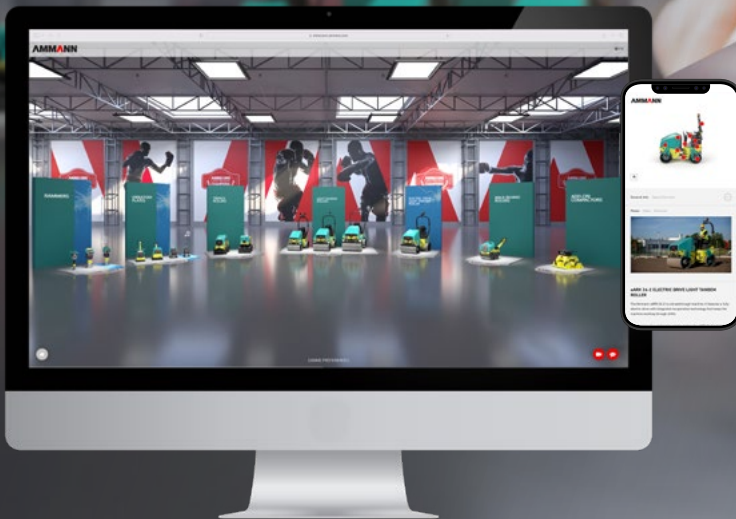


“ THERE ARE NO COSTS RELATED TO THE FLUIDS OR FILTERS OF THOSE COMPONENTS. ”

Christopher Perkins
Region Director Americas at Ammann

VIRTUAL SHOWROOM OPEN

Ammann's virtual showroom continues to be popular for those searching for light equipment. The showroom allows visitors to view details of key machines online. The virtual showroom, which can be found at showroom.ammann.com, offers all the conveniences of an in-person visit to a real showroom. Visitors to the site are able to navigate from one product to another and review key features.



Virtual Showroom



LIGHT EQUIPMENT DISPLAYED AT ARA SHOW

The American Rental Association's annual trade show, held in Orlando in February, gave rental businesses a close look at Ammann's products. Machines displayed offer low maintenance, high productivity, intuitive operation and versatility.



A LARGE STAND IN LAS VEGAS



Ammann
ConExpo 2023

There was a great deal of traffic at the Ammann stand at CONEXPO-CON-AGG 2023 in Las Vegas in March. Visitors were able to see a side-free drum roller ... a plant on wheels ... and the smallest soil compactor in the Ammann lineup. That's in addition to the many plant models and compactors – both heavy and light – on display.



NEW OFFERINGS PRESENTED AT SAMOTER

Asphaltica-Samoter 2023 in Verona was a great success for Ammann, with hundreds of attendees visiting the booth.

The Ammann booth focused on new innovations that make products more connected, sustainable and productive. Products and services presented on the stand included Blue Smoke Treatment (BST), a new sustainable technology and several new Ammann Mini Excavators.



E-DRIVE MACHINES FEATURED AT EXECUTIVE HIRE SHOW

Ammann's electric-drive machines, including the recently launched eARX 26-2 Light Tandem Roller, were the highlights of the Executive Hire Show, held in Coventry, England, in February. Other e-drive machines also at the fair included the Ammann eATR 68 Rammer and the Ammann eAPF 12/40 Forward Moving Vibratory Plate.



E-DRIVES PRAISED AT DEMO

Ammann's electric-drive compactors impressed the crowd at TiefbauLIVE at the RATL.

The German show features live demonstrations that allow attendees to compare machines against the competition. Visitors were impressed by the performances of Ammann electric-drive compactors as well as the new Ammann ARS 70 Single Drum Roller and the Ammann AMX 95DDP Mini Excavator.

POLISH ROADBUILDING EVENT HELD

Ammann participated as co-organiser in the second Asphalt Days Forum, held in Bukowina Tatrzańska, Poland, in March.

The forum is coordinated by the Polish Road Congress. The theme of this year's event was: "Asphalt market and technologies in the light of new opportunities, challenges and risks."

The conference was built off the success of last year's forum. This year's topics included the current status of the road construction market; asphalt supply and demand; asphalt technologies/innovations; and asphalt recycling.



SAVE THE DATE – AMMANN GREEN DAYS

SUSTAINABILITY
@AMMANN

Roadbuilding technology is constantly evolving, and those in the industry want to know where we're at – and where we're going next.

Ammann will address these changes during the Technology Show, to be held in Verona, Italy, Oct. 24-25. The two-day event will include new asphalt-mixing

plants that employ the industry's most sustainable innovations.

The Green Plant Initiative and its role in providing sustainable asphalt production will be examined. The initiative focuses on renewable fuels, reduced emissions, recycling and retrofits.

UPCOMING FAIRS

1 – 4.AUG.2023
BRAZIL EQUIPO
SHOW
JAGUARIÚNA,
BRAZIL

4 – 6.OCT.2023
SIM CONGRESS
BORDEAUX,
FRANCE

22 – 25.NOV.2023
SMOPYC
ZARAGOZA,
SPAIN

12 – 16.DEC.2023
EXCON
BANGALORE,
INDIA



Shows &
Events

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