

#### TABLE OF CONTENTS



PG 3
PREPARING RAP
Shredder is key to recycling

PG 4
NEW PRODUCTS
The latest plants and

The latest plants and machines

PG 6
RETROFITS
Upgrading older plants

PG 8
CONNECTED JOBSITE
Information hub explored

PG 10
MARMARA MOTORWAY
ABA UniBatch boosts Turkish project

PG **11** THE RIGHT MIX

ValueTec provides quality, timeliness
PG 12

SUCCESSFUL DEBUT
Large paver proves productive

PG 13
MINI PAVER'S BIG SAVINGS
Perfect fit for Oman jobsite

PG 14
BRANCHING OUT
Elba plant helps firm adjust

PG 16
ABA UNIBATCH
Plant turns waste into profit

PG **18** NEWS & EVENTS



**AMMANN.COM** 

Specifications are subject to change. GMC-1423-05-EN | © Ammann Group

## SOPHISTICATED TECHNOLOGY THAT'S EASY TO USE

Advances Evident in Plants, Light and Heavy Machines, and Service



Technology plays a key role in our daily lives – at home and at work. This is similarly true for those of us in the roadbuilding, construction and landscaping industries.

More than ever, we see a demand for sophisticated plants and machines. Customers want the efficiencies these high-tech products provide in terms of fuel usage, emissions and safety.

Such enhancements make plants and machines complicated tools. The danger is they become so complex

that there is a steep learning curve before operators can use them properly.

At Ammann, our focus has been and will continue to be developing the most advanced technology that works quietly in the background. Yes, the plant or machine may be a complex piece of equipment, but the operation itself is simple for a business to reap all the benefits.

This issue of the Ammann Customer Magazine showcases our efforts to incorporate intuitive technology across the product line.

Among the new products featured are ValueTec Asphalt Mixing Plants, which utilise the CS100 Control System. The system delivers efficiencies to reduce costs and improve profits – and it does so in a user-friendly manner.

The new product pages also include several compactors with advanced engineering for quick adjustment on the jobsite. The ART Pneumatic Tyred Roller features an easy-load ballasting system that helps operators make changes and then return to compaction. New tandem compaction machines include an articulated joint that enables quick drum adjustment from in-line to offset configurations. These adjustments greatly improve productivity while causing minimal inconvenience.

Another new release is ServiceLink Plus, an advanced fleet management system that can track a paver's idling time, travel time, fuel consumption, paving speed – and more

There is evidence of technological advances in previously released products, too. Page through the magazine and you will see numerous examples of technology at work on jobsites for asphalt and concrete plants as well as pavers, compactors and light equipment.

In developing those advanced high-tech products, the Ammann team will ensure the plants and machines remain intuitive so customers can fully leverage all the advantages.

Hans-Christian Schneider

Mr. Samider

CEO, Ammann Group

## **RSS 120-M HELPS FIRM UTILISE RAP**

#### Portable Machine Arrives Ready to Work



Panagiotis Anagnostopoulos, Civil engineer, Intrakat

Asphalt-mixing plants are crucial to the successful utilisation of recycled asphalt (RAP). But firms like Intrakat, one of the top construction companies in Greece, know that proper preparation of RAP is essential to the process, too.

That knowledge led Intrakat to purchase an Ammann RSS 120-M Shredder, Iron Separator and Screener – a mobile machine that prepares recycled asphalt for use in an asphalt plant.

"We use the shredder to ensure we meet the ratios required so that we can recycle at the production plant," said Panagiotis Anagnostopoulos, a civil engineer with Intrakat who often works on airport projects in Greece

Given Intrakat is a Greek firm, there is much work done between islands where aggregate can be limited – and easy transport of the machine is a priority. "The shredder is especially important on islands and other areas that are not easy to access," Anagnostopoulos said. "Also for environmental reasons, it is essential that we use recycled materials to limit our needs."

Installation of the RSS 120-M is easy, too. "It requires less than an hour to set up and start work," Anagnostopoulos said. "It is fully portable. It can be transported anywhere on a truck."

A single operator can run the machine, which includes a shredder that utilises two low-speed, electrically driven shredder-rotating shafts. The RSS 120-M features toothed interchangeable armored plates and hydraulic fingers that gently crush the material. This patented technology significantly reduces the power requirement, which leads to substantial fuel savings.

The technology enables crushing of bituminous conglomerates, both milled and slabs. It also minimises fines (filler) that can make RAP sticky and difficult to work with.

Electric motors ensure consistent crushing and screening, regardless of the working environment or weather. The machine is able to process up to 180 tonnes of recycling materials per hour.

A variety of green efforts are built into the machine to minimise dust, sound and emissions.

With its mobility, productivity and patented shredding-crushing technology, the RSS 120-M is ideal for Intrakat – or any company looking to advance their recycling efforts.

The RSS 120-M is able to process up to 180 tonnes of recycling materials per hour.





The new Ammann ART 280 Pneumatic Tyred Roller features a redesigned cab and ballasting system.

### **NEW PRODUCTS**

#### The Latest Plants and Machines

#### **Light Tandem Compactors**

New light tandem compactors from Ammann make it even easier for operators to work next to obstructions such as curbs.

The ARX 23-2 T4f. the ARX 23-2C T4f. the ARX 26-2 T4f and the ARX 26-2C T4f feature Kubota engines that meet U.S. Tier 4 Final emissions standards and are EU Stage 5 ready. The "C" versions are combination machines, which utilise steel drums in front and four pneumatic tyres in the rear.

Other improvements include a new articulation joint that enables quick drum adjustment from in-line to offset configurations. Compactors that are offset are able to work close to obstructions. Operators need watch only one drum, knowing the second will be a safe distance from the obstruction. The inline setting, which enables equal distribution of compaction forces, is preferred on more open jobsites.



The line of light tandem compaction machines enables quick drum adjustment from in-line to offset configurations.

The articulation joint, which makes the in-line/offset adjustment possible, is maintenance-free.

#### **ART Tyred Roller**

Ammann's new ART 280 Pneumatic Tyred Roller features a redesigned cab and a ballasting system that can be quickly and significantly adjusted. Excellent serviceability is another key feature.

The compactor is available with engines that meet varied emissions levels. It performs well on both asphalt and soil. Applications include motorways, railways, airfields, industrial zones and residential areas.

Ammann's modular, easy-load ballasting system enables the machine weight to be adjusted from 9 t to 28 t (10 to 31 short tons) in a single hour with the help of only a forklift. This translates into a load-per-tyre adjustment from 1.125 kg to 3.500 kg (2480 to 7717 lb). The ease and weight of the ballast adjustment are unique to the market.





**ValueTec** plants can range from basic to much more advanced, depending on the needs of the customer.



#### ValueTec Asphalt Mixing Plants

Ammann has introduced the ValueTec Asphalt-Mixing Plants, perfect fits for business owners who want straightforward processes and the ability to further customise with options.

"These plants can range from very basic to much more advanced, depending on the needs and desires of the business owner," said Sunil Sapru, Ammann's Regional Director for India. "ValueTec offers the lowest product life cycle cost of all plants in this segment. These plants are all about value."

The batch plants also have recycling potential. "Customised options include components that enable utilisation of 25 to 40 per cent RAP," said Martinho Fernandes, Commercial Manager for Ammann India. "There is a foam mix option for the production of energy-saving warm mix, and capabilities for liquid and solid additives that help the customer to adjust mixes to a specific design."

Key to the plants is the intuitive CS100 Control System, tried and tested in the world's toughest environments. The system provides efficiency during production and also delivers built-in statistical reports to uncover cost-saving opportunities.

Many of the plants' features are also built around providing efficiency – and ultimately reducing costs and thereby improving profits.

#### **ServiceLink Plus for Pavers**

Ammann's highly advanced fleet management system is now available for asphalt pavers.

ServiceLink Plus is an intelligent telematics system that helps optimise fleet usage, reduces maintenance costs and provides other efficiencies that result in improved profitability.

ServiceLink Plus can track a paver's idling time, travel time, fuel consumption, paving speed and other productivity indicators.

A Microsoft Excel feature enables data to be exported and processed for further analysis.

Ammann first introduced ServiceLink for light equipment earlier this year. The innovative digital fleet management system was recently awarded the prestigious DLR Service Innovation Award by a jury of construction industry experts and professionals.

## WHAT DO YOU GET WITH A RETROFIT?

Some asphalt-mixing plant owners choose retrofits to meet ever-changing industry codes and standards. Others select retrofits to take advantage of new technology and components that can boost profits.

Ammann has a tested retrofit process. It costs a small fraction of the price of a new plant and is available for asphalt-mixing products made by Ammann and other manufacturers.

What key benefits do you get with a retrofit?

#### **Environmental Upgrades**

6 AMMANN GROUP MAGAZINE

**Bitumen Tank:** Ammann's electrically heated E-Bit bitumen tank system provides so much energy savings that the

replacement pays for itself in just a few years. The savings result from intelligent control of various heating circuits and the utilisation of low-cost power rates. Operational safety also is improved.

**Baghouse:** Are you still using a wet dust extraction process? Ammann baghouse filters utilise updated methods that meet stricter emission guidelines and reduce operating costs, too. Installation is quick, and maintenance is easier.

**Noise Reduction:** Reduced noise levels are always welcome, and in many urban

locations sound requirements are being tightened. The Ammapax® Flue Noise Suppressor is economical and easy to install. It's effective, too, with noise pressure levels reduced up to 20 dB. The suppressor does not impact daily production.

**Low Temperature Mixes:** Lower temperature asphalt delivers multiple benefits – including reductions in fuel usage and emissions. A retrofit enables the use of foam bitumen, waxes and other additives. Special bitumen and alternative mixing cycles can be utilised as well.



#### **Technological Improvements**

**Burners:** New burners feature built-in technological advantages and engineering that improve cost efficiency and production. An updated burner allows the use of multiple fuel types and reduces noise levels. The retrofit is fully integrated to precisely match the existing plant. The design is robust with long life.

**Mixer:** The tried-and-tested Amix mixer is a perfect replacement for nearly all plants. It is a high capacity mixer with a compact design and built-in technology, making it the least costly – and most effective – solution to increasing plant capacity.

Control System: Conversion to the as1 Control System from an old Ammann system, or that from another manufacturer, provides immediate results. Operators will instantly notice improved functionality, reliability, intuitiveness and ease of maintenance. The control system can be converted gradually.

**Recycling System:** The use of reclaimed asphalt is a necessity today. Ammann offers custom-made recycling solutions. The quality of the asphalt is maintained, even with the addition of high percentages of RAP.

**The E-Bit bitumen tank** system provides energy savings.



An **updated burner** allows the use of multiple fuel types and reduces noise levels.

#### **A Rejuvenated Plant**

**Dryer:** A new dryer optimises heat transfer and can incorporate an expanded range of materials.

**Mixer:** Uptime will be improved, and maintenance reduced.

Wear Protection: Amdurit® protects valuable parts and components up to three times longer than wear-resistant steel. Ammann's proprietary wear protection system will also improve uptime and reduce maintenance and labor costs.

A RETROFIT MORE CONVINCING THAN
EVER. AMMANN OFFERS A FREE ANALYSIS
OF YOUR PLANT TO HELP FIND THE BEST
OPPORTUNITIES FOR IMPROVEMENT.

Conversion to the **as1 Control System** from an old Ammann system, or that from another manufacturer, provides immediate results.





Intelligent control of the construction process, including paving, is the ultimate goal.

# SMART SITE CONNECTS ENTIRE JOBSITE

Process Improved from the Plant Through the Compactors

The Internet makes relevant information from the real world accessible, links it together and makes it available in a network. Will the next step be the "Internet of Road Construction Machines"? It's a strong possibility.

Smart Site, a research project with the participation of consortium partners from research and industry, focused on the integration of the entire logistics chain and the work process of an asphalt construction site within an overall system, via intelligent cloud-based networking. The project's final demonstrator – renewal of the carriageway surfacing on the L1206 highway in Filderstadt, Swabia

(Germany) – provided impressive proof of the practicality of this solution. The project participants included Ammann.

A fundamental cause of inadequate quality is that road construction involves large numbers of players working together with rigid central planning, control and reporting systems. System providers usually offer solutions for individual segments of the value chain; in actual practice, these can only be linked together to create an added-value network by manual inputs and a high degree of local effort.

Until now, there have been no standard processes based on coordinated planning to

enable forwarding of control-relevant information from the mixing plant to the compaction machines. The result: inter-company cooperation and the deployment of different types of construction equipment are inadequately supported within a construction project – if at all. Moreover, downstream quality assurance and documentation of the building operations are hampered by system failures and manual activities

Kuno Kaufmann, Ammann Head of Digital Products Machines, notes: "We've been wanting to tackle this issue for a long time. That's why it was clear to us from the outset that the Smart Site project harbours



compaction control, but there is a risk that isolated solutions of this sort could stand in the way of end-to-end digitization in the long term. However, it is precisely this type of end-to-end digitization that Ammann aims to achieve.

Q Point AG is producing a manufacturer-independent open digital platform for the construction sector. The motto here is: moving from local analogue construction sites to regionally networked digital sites.

"Intelligent control of the construction process is the goal," Kaufmann explains. "This is based on developing BIM-integrated processes, and on feedback, analysis and monitoring of semantically enriched and context-based construction-specific data that is situationally and autonomously concentrated. The goal is achieved through autonomously controlled information exchange among construction machines, between the environment and the construction machine, and between the construction management and the construction machine."

In this way, an information hub is created for all the parties involved in a construction project. The result is that all the links in the value chain for asphalt road construction can be closely meshed. This also implies that the information platform should be manufacturer-independent. "It should be open to all, independently of specific machine manufacturers, software and hardware providers, or users such as road construction companies," Kaufmann says. "We are not aiming for isolated standalone solutions but, on the contrary, for one overall solution with open interfaces where all the participants in the system are equally welcome. In fact, we explicitly want them to take part."

Knowledge garnered from the Smart Site project has also been incorporated into Ammann's development work on further products. Within Smart Site, for example, a conceptual study was undertaken on a roller that is driven autonomously. Safety is another aspect that features prominently. A video shows that as well as continuously monitoring the degree of compaction of the road surface, the compactor is also equipped with integrated protection against collisions. It stops automatically if a person is in the way, so accidents are prevented.

Road construction sites, with their major logistical outlay, are particularly well suited to digitization. The Smart Site project received support from the German Federal Ministry of Economics and Technology through its "Autonomics for Industry 4.0" programme.

enormous potential."

As a full-service provider for road construction, Ammann was an ideal partner for this project. "The Smart Site research project impressively demonstrated the potential available from automation, networking of all players and dynamic process control," Kaufmann says.

"Smart Site collects and documents data that can be evaluated regarding the environment, the construction machine and the construction process control along the entire value chain for road building. Based on central planning for the entire value chain, dynamic and decentral information is provided to all players during execution; this information relates to the mixing plant, the transportation logistics, the automated paver and the assistance-controlled rollers," Kaufmann says.

Of course, Kaufmann warns, solutions are already available for aspects such as



Compaction control will be coordinated with other elements in order to move beyond isolated solutions.

# AMMANN PLANT PLAYS MAJOR ROLE IN CONSTRUCTION OF TURKISH HIGHWAY

Cold-Mix Plant Also Utilised on Marmara Motorway

Due to its production capacity and ability to utilise fibres, an Ammann asphalt-mixing plant is taking on a crucial role in the construction of the Northern Marmara Motorway in Turkey.

A large portion of the motorway, which serves as a bypass of Istanbul, has been completed. Handling a good deal of the remaining work is Nalbantoğlu İnşaat, a family-owned business founded in 1995.

The company has completed a number of high-profile projects, including creating mix for 70 per cent of the roads in Kayseri, the city where it is headquartered.

The Northern Marmara Motorway is much of the company's focus through the end of 2018. Nalbantoğlu İnşaat is producing a great deal of mix for the fourth section of the highway, which will be connected to the Osmangazi Bridge. The company's portion of the work is a 36-km (23 miles) stretch that has been under construction for about three years.

When completed, travel to Istanbul's third international airport will be much faster, and traffic relieved in some high-congestion areas.

"It is a profound investment from which the economy, sociocultural structure and tourism will benefit," said Ali Nalbantoğlu, chairman of the board of the asphalt company. "The size and the importance of the project are huge. To be part of such an important project is very exciting both for me and the whole company. For more than 20 years, we have improved our roadbuilding techniques and engineering, and with this experience and know-how, we will complete the project in due time and with success."

Nalbantoğlu İnşaat initially utilised a single Ammann ABA UniBatch plant on the project. The plant was chosen because of its low operational costs and high capacity. The optional additive system, which enabled use of FiberTEK, was another consideration.

So successful was the first ABA UniBatch that Nalbantoğlu İnşaat recently purchased a second such plant for the project. In addition, the company acquired an ABA UniBatch 340 with RAH 50 recycling dryer for use near Kayseri. The company now owns five Ammann asphalt plants.



#### **ABA UNIBATCH**

#### Features & Benefits

- Wide output range from 100 t/h to 340 t/h (111–387 short tons/hr)
- 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 (111–387 short tons/hr) **MIXER SIZE:** 1.7–4.3 t (1.9–4.8 short tons)

HOT AGGREGATE SILO: 29-40 t (32-44 short tons)

**HOT MIX STORAGE SILO:** 40 or 30 t (44 or 33 short tons), 2 Compartments

CONTROL SYSTEM: as1

RECYCLING SYSTEM: RAC / RAH 50 / RAH 60

## **QUALITY AND TIMELINESS**

#### ValueTec Plant Provides Business With Competitive Edge

Rana Builders (Pvt.) Ltd. sets itself apart from competitors by meeting tight deadlines and delivering quality mix in the process.

The Dhaka, Bangladesh-based firm specialises in road construction, bridges and building development. When purchasing a new asphalt-mixing plant, Rana wanted a product that could help it keep its promise of providing on-time, quality mix. That's why it selected the ValueTec 80.

"The biggest challenge our business faces today is maintaining quality," said MD Alam, managing director of Rana Builders. "We provide that quality to our customers. That's what separates us."

Quality and timeliness certainly help the company make a profit. Yet the ValueTec 80

Asphalt-Mixing Plant delivered other profit-building benefits, too.

"We also chose the ValueTec Plant because of the cost efficiencies it brought to our business," Alam said. "It is fuel efficient and required less shipping time, so the plant could be up and running sooner."

The plant has a capacity of 80 tonnes per hour (88 short tons/hr). Rana required production of only 70 tonnes per hour (77 short tons/hr), or 840 tonnes (926 short tons/hr) per day. The capacity helps ensure mix is available when customers need it. There is the element of quality, too. "The mixing is wonderful," Alam said.

He also praised ValueTec's reliability, which helps the business meet deadlines and

maximise operating efficiencies.

The plant has delivered on its promise of fuel efficiency. "Fuel consumption is much less when compared to other plants," Alam said.

Alam noted that the plant requires less maintenance and praised the exceptional customer support his business received.

Would Alam recommend the plant? "Yes," he said. "ValueTec helps us meet our needs of quality and timeliness. It's an effective plant, with low fuel consumption and long life."

#### **VALUETEC**

#### Features & Benefits

- Direct coupled geared motors that reduce fuel and maintenance costs
- A screen that uses robust vibratory motors, enabling uniform distribution of aggregate on the screen mesh surface
- An efficient burner and baghouse that ensure suspended particulate matter (SPM) levels are within limits and the carbon footprint is minimal
- · High safety standards to protect plant personnel
- A future-ready design that enables the seamless addition of upgrades

#### **TECHNICAL SPECIFICATIONS:**

**CAPACITY:** 80–260 t/h (89–287 short tons/hr) **MIXER SIZE:** 1.2–3.3 t (1.4–3.7 short tons)

**HOT AGGREGATE SILO:** 16–56 t (18–62 short tons) **HOT MIX STORAGE SILO:** 50–110 t (56 or 122 short tons)

CONTROL SYSTEM: CS100





Urs Zimmerli (front), a service engineer at Ammann, brings an Imboden paver operator up to speed on PaveManager 2.0.

## **AFT 700-3 SHOWCASES PRODUCTIVITY**

#### Large Paver Makes Its Debut

Ammann completed the first delivery of the new AFT 700-3 Large Premium Tracked Paver to road construction company Imboden. The demonstration at the InfraSuisse convention left the paving crew with no doubts about the technological advantages and the smart PaveManager 2.0 machine control system.

"The size category delivers exactly what we are looking for in a paver," said Felix Böni, foreman of the Imboden paving team. "It has the production output we need combined with a long service life, thanks to tried-and-tested components and new features such as the TruckAssist docking system."

A large parking area for a pharmaceutical company in the Swiss canton of Valais was the scene of the paver's first jobsite. The machine needed two days to lay the high-quality seeping layer that can also accommodate

heavy rainfall. The entire parking area is intentionally designed without any additional drainage. The asphalt was supplied by an Ammann asphalt-mixing plant operated by Imboden.

The team needed less than a day for the base layer and one day for the top layer. The large 5,400 m² (58125 ft²) parking area was paved at a width of 4-5 m and a layer thickness of 8.5 cm (3.4 in). Paving widths of up to 10 m are theoretically possible with the AFT 700-3.

Productivity was impressive. The AFT 700-3 successfully demonstrated its output capacity of up to 800 metric tonnes per hour (882 short tons/hr.

Learning to use the PaveManager 2.0 machine control system was very easy for the crew. The modern system monitors the entire paving process and provides accurate feedback.

Also intuitive is the optional TruckAssist, a system that simplifies communication between the machine operator and the truck driver and enables smooth docking and filling. The Safe Impact System – a hydraulically dampened start-up system that helps with mat smoothness – is standard. It enables the use of any popular truck model for filling. Ammann's service scope also includes training documentation for truck drivers.

Fast and seamless integration in the construction company's work process exemplifies Ammann's leadership in the field of customer service. "Ammann's support and service are uncontested," said construction manager Mario Truffer.

An expert from Ammann and a service engineer helped get things started. "Ammann's comprehensive customer service is a further plus point for us," Böni said.

#### Features & Benefits

- · Smooth material flow reduces segregation
- Unmatched operator comfort with full process control
- Efficient drive concept reduces operating costs
- Stable screed design offers excellent surfaces for all working widths
- · Intelligent control system gives best-in-class paving results

#### TECHNICAL SPECIFICATIONS:

**WEIGHT (INCLUDING STANDARD SCREED):** 18 500 kg (40 786 lb) **STANDARD PAVING WIDTH:** 2.55–5.1 m / 3–6 m (101–201 in / 119–237 in)

**HEATING SYSTEM:** Gas or Electric **HOPPER CAPACITY:** 13 t (15 short tons)

**ENGINE:** Cummins

**TYPE:** QSB 6.7 – C190 (C200)

**RATED POWER:** 142 kW (149 kW) | 191 HP (200 HP)

PERFORMANCE AFT
700-3 TRACKED PAVER
IS AVAILABLE WITH
A COMBINED TAMPING/
VIBRATING SCREED,
A HIGH-COMPACTION
SCREED OR A RIGID SCREED
WITH A MAXIMUM PAVING
WIDTH OF 10 M. PP

## MINI PAVER PROVIDES BIG SAVINGS

#### Improved Quality at Reduced Costs

The Ammann AFW 150-2 Mini Paver trimmed expenses by half during a recent waterline construction project in Barka. Oman.

"The use of the mini paver provided 50 per cent savings in time and cost," said Mr. Jeganathan of SM Infra LLC, which specialises in projects such as water pipeline

> installation, concrete reservoirs, water treatment plants, shopping malls, and commercial and industrial buildings. "The speed of operations also greatly



The AFW 150-2 was utilised on a pipeline installation project that stretched over 8 km (5 miles). The project had a significant social impact, giving 130,000 residents access to an improved water system.

A portion of the existing road was removed and the underground water pipe installed.

Aggregate backfilling and compaction were undertaken, followed by closing of the trench with the Ammann Mini Paver – which placed an 80 mm (3.1 in) layer of asphalt. Paving widths varied from 600 mm to 1000 mm (23.6–39.4 in) at different stretches, and the flexibility of the Ammann Mini Paver provided significant advantages.

SMC Infra also observed that quality and finish were greatly enhanced when compared to the paving methods that they initially employed. For example, the asphalt would have been dumped by skid steer loaders, raked and compacted.

"The previous work was manual, which was very slow and the quality was poor," said Mr. Jeganathan. "Now the work is easier and faster and the quality is better, too.

The paver moved at a pace of 10 metres (394 in) per minute, which is outstanding in this application. The paving lasted two months and involved placement of 4000 tonnes (8818490 short tons) of mix."

Mr. Jeganathan also touched on how much easier the Ammann Mini Paver made the work. "Some of the roads were narrow with heavy traffic," he said. "If we were to use our conventional manual method, the progress would have been really slow. However, with the Ammann Mini Paver, we could work at a rapid pace even in constrained high traffic locations. Even loading using skid steer loaders was a simple, quick process."

The paver even helped the firm avoid fines. "Thanks to the Ammann Mini Paver, we completed the project on time and avoided getting into penalties with the local authorities," said Mr. Jeganathan.

"If we had done this project manually, we would have been penalised by the local municipality because of delays. But with the help of this paver, we finished the project on time"

#### Features & Benefits

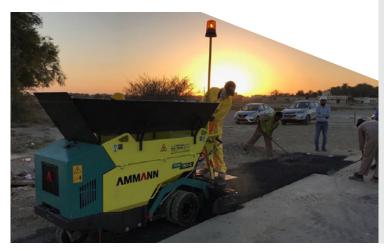
- Ideal for narrow jobsites due to clearance width and tight turning radius of 950 mm
- Simple operation through an intuitive dashboard and ergonomic steering
- Large auger with 120 mm diameter optimizes material distribution across the length of the screed
- New, unique divider systems controls flow toward the screed
- Hydraulically extendable gas-heated screed
- · Optional hydraulic vibrating screed
- Fully hydrostatic transmission with electronic control

#### **TECHNICAL SPECIFICATIONS:**

**OPERATING WEIGHT (CECE):** 1150 kg (2536 lb) **PAVING RANGE:** 250–1650 mm (10–65 in) **HOPPER CAPACITY:** 0.6 m³ (22 ft³)

ENGINE: Hatz TYPE: 1B40

RATED POWER: 6.3 kW (8.5 HP)



The AFW 150-2 mini paver improved quality and productivity.



## A NEW AMMANN CBS 105 ELBA CONCRETE MIXING PLANT IN THE HAUTS-DE-FRANCE REGION

GTP is an independent family company owned and managed by the Pruvo brothers at Cauchy-à-la-Tour near Béthune in the Hauts-de-France region of France. Housed in a former brickworks, the firm specialises in recycling various materials with a particular focus on road residues. With the aim of diversifying its activities, GTP turned its attention to ready-mixed concrete and the production of treated gravel in order to satisfy local demand and also to meet its own production requirements.

The performance specifications were clear. The two entrepreneurs wanted

a high-quality stationary plant with capacity for expansion; it had to offer a variety of technical options as well as short delivery periods.

Following an invitation to tender, GTP narrowed its choice to Ammann's concrete mixing plants, which enjoy an excellent reputation worldwide. The CBS 105 Elba plant was selected because of its modular concept, which allows adaptation of its components. Mr. Arnaud Pruvo, President of GTP, comments: "We chose Ammann because its sales department is so responsive and its after-sales service is of such high

quality. Ammann knew how to listen to our requirements."

Designed to ensure production of standard concrete at 105 m<sup>3</sup>/h (3708 ft<sup>3</sup>/h), mixed in 30 seconds, this plant is currently equipped with four

80 m³ (2825 ft³/h) aggregate storage silos. In order to expand the installation, the siting study envisages an additional aggregate silo in the near future to provide 100 m³ (3531 ft³/h) in total, as well as a fourth 60-tonne (66 short tons) binder silo. These aggregates are transferred to the horizontal-shaft mixer (volume: 2 m³ / 71 ft³) via



a skip. The mixing scaffolding is entirely galvanised to provide high-grade protection against corrosion.

Very little maintenance work is required for the plant and in particular the mixer: its trough shielding is fitted without screws, so servicing work is kept to the minimum.

The Ammann as1 Control System provides production support and follow-through. "The as1 is an effective cornerstone of our efforts to ensure quality. This technology collects and processes data and key indicators that enable us to offer our customers reliable production while optimising consumption of raw materials and energy. For individual customers and multinationals alike, our plant is ready to provide a vast number of formulas for all types of use, ranging from standard concrete to technical concrete varieties and the new decorative concretes," Arnaud Pruvo notes in conclusion.

#### **CBS ELBA**

#### Key features

- Generously dimensioned mixing platform
- Assembling at +/- 0; no feeding pit is required
- Significant dust reduction through optional dedusting plant
- Optional addition of special products and additives
- Foundation-free installation on steel frames as an option

#### **TECHNICAL SPECIFICATIONS:**

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

**CONCRETE:** 107–138 m<sup>3</sup>/h (3779–4874 ft<sup>3</sup>/h)

**MIXER VOLUME:** 2000–3333 litres (529–881 gal)

ACTIVE AGGREGATE STOCK:  $105-312 \text{ m}^3 (3708-1118 \text{ ft}^3)$ 

**MAX. COMPONENTS:** 3–12 / 4–12

**MAX. CEMENT TYPES:** 6



The ABA UniBatch's ability to add hot and cold recycling material was a key reason RKC Infrabuilt chose the plant.

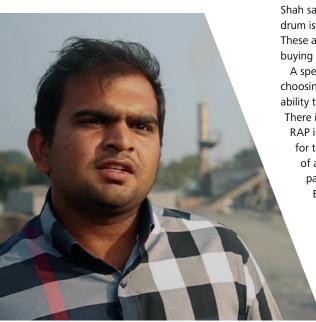
## **TURNING WASTE INTO PROFIT**

Ammann Asphalt-Mixing Plant Utilises Recycled Asphalt

## DOES AN AMMANN ABA UNIBATCH ASPHALT-MIXING PLANT HELP BUSINESSES PROFIT?

Yes – and the numbers prove it, according to Siddharth Shah, director at RKC Infrabuilt Pvt. Ltd., Ahmedabad, India.

**Siddharth Shah,**Director at RKC Infrabuilt Pvt. Ltd.



"It's very economical compared to all other plants," Shah said. "We have been saving great amounts."

An ability to utilise recycled asphalt (RAP) in place of fresh aggregate is the key cost saver. In addition, ABA UniBatch is able to maintain high mix quality while repurposing the RAP.

"The plant provides excellent asphalt mix," Shah said. "The baghouse is amazing. The drum is good for recycled asphalt as well. These are the things that attracted us to buying this plant."

A specific and significant factor in RKC choosing the ABA UniBatch was the plant's ability to add hot and cold recycling material. There is a growing demand for the use of RAP in India, so the plant is a good fit for the Indian market. It's an example of a plant that is built in India, for that particular market, but also utilises European technology.

The plant can also access a foam generator that produces asphalt at a reduced temperature. This low-temperature asphalt (called "warm asphalt" in India) has the same quality as a traditional mix but requires less fuel to produce. Emissions are lower,

too, and the paving crew is more comfortable working with the lower temperature mix.

Shah said the intuitive nature of Ammann's proprietary as 1 Control System makes production of all the mixes possible.

"The as1 is amazing software," Shah said.
"I've never seen such a software before.
It gives you a total description of the entire plant."

Shah also was pleased that the ABA UniBatch meets the expected production levels. "Ammann is the only provider that keeps its promised plant capacities," Shah said. "Others brag about large capacities and then only reach 70 per cent to 80 per cent. Ammann always reaches the promised capacities."

RKC has needed high production on some recent large-scale roadbuilding projects. "The plant has produced 130 000 tonnes (143 300 short tons) in fewer than 100 days," Shah said

Martinho Fernandes, the Regional Commercial Manager Plants - India, has reviewed many plants in that country and locations around the world. He is often able to put hard numbers to the efficiencies and ultimately the cost savings the ABA UniBatch plant provides.



The plant's owner says the **ABA UniBatch** is able to maintain high quality when utilising recycled asphalt.

and 25 per cent cold RAP. It also offers a foam mix option and solid additives.

• Uptime of the RKC plant is close to 100 per cent.

• Parts life is extended by 25 per cent because of the ABA UniBatch's advanced metallurgy.

• The direct-drive system of gear motors reduces power consumption by 10 per cent and maintenance by 20 per cent.

• Research and development has led to green technology efforts, including an efficient burner and baghouse that ensure less than 20 mg/Nm<sup>3</sup> (0.04 lbs/ft3) of dust emissions. This also provides customers with additional carbon credits.

Fernandes says the plant is ready for the next round of challenges, too. "The ABA UniBatch is also 'future ready,' meaning customers can easily incorporate new technology as it becomes available," he said.



Please scan the QR code to view an accompanying video.

Martinho Fernandes, Regional Commercial Manager Plants - India





## **NEWS & EVENTS**

#### Ammann Australia Moves into New Facility

Solid growth has led Ammann Australia to relocate its headquarters, warehouse and training centre to better serve its customers in the region.

The facility was moved from Narangba to a new location about 10 km north in Caboolture.

"This move is a reflection of Ammann's growth in the region, and our commitment to serving customers through training, service, and product and parts availability," said Hans-Christian Schneider, CEO of Ammann. "We have grown and become a leader in that market, and this investment reflects that."

The new facility includes a warehouse that is 40 per cent larger, a 50 per cent increase in office space and a new, improved training centre.



Attending the grand opening were (left to right) Martin Knott, Rohan Anderson, Hans-Christian Schneider, Paul Vandersluis, Rico Loeppen and Scott Rickards.

The RSS 120-M was featured at **Hillhead 2018**, a quarrying show held in June in Buxton, United Kingdom.



Attending from Ammann were (left to right) Stephen McDonough,
Sandro Baumgartner, Stefan Gosebrink, Patrick McKelvey and Michael Halada.

Ammann participated in CTT RUSSIA 2018, a construction equipment and technology show held in Moscow in June.



Ammann Dealer, gather in front of a compactor.

Left, a range of Ammann pavers and compaction machines are displayed.



Ammann India Private Ltd.'s expanded, state-of-the-art manufacturing facility was unveiled during Techno Days 2018 in April.



#### Ammann Compactors at Work on FIFA Project

Ammann compaction machines are helping advance a key construction project near Doha, Qatar.

The Orbital Highway, being built in phases, routes traffic around Doha. It is a crucial piece of the economic future of Qatar and will be of great service when the 2022 FIFA World Cup is held there.

The Al Shamal City portion of the Orbital Highway project is underway. To help

complete the project, contractor Bin Omran Trading & Contracting recently took delivery of 20 Ammann ASC 100 Soil Compactors and 20 ARX 23 and ARX 26 Tandem Rollers.



#### **Key features:**

- Capacity of 180 tonnes per hour
- Minimised sound and dust emissions
- Local or remote management of parameters
- From installation to production in 30 minutes
- Standard transport by flatbed truck

