

### **MIXING PLANTS**

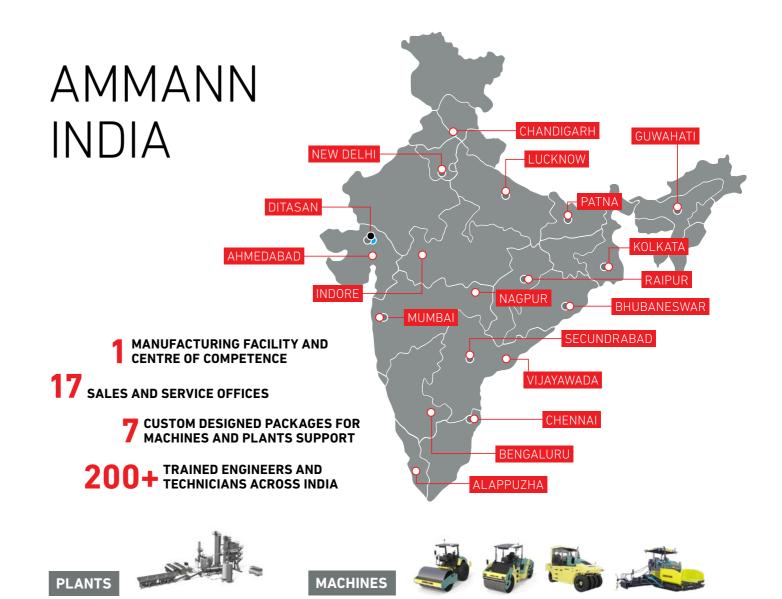
ASPHALT-MIXING PLANTS PROGRAM FOR INDIA





## AMMANN GROUP WORLDWIDE





SOIL & ASPHALT COMPACTION

**ASPHALT PAVERS** 

### AN INNOVATIVE FAMILY FIRM

Ammann is a world-leading supplier of mixing plants, machines and services to the construction industry, with core expertise in road-building and transportation infrastructure. Our strengths are the forthcoming approach of a family firm that has been operating for many years, coupled with our strong and well-established international presence. Since 1869, we have been setting benchmarks in the road-building industry, thanks to countless innovations and solutions that are as competitive as they are dependable.

True to our motto, "Productivity Partnership for a Lifetime," we gear our activities to the needs and requirements of our customers around the globe. We are aware that plants and machines that prove their merits day after day under tough operating conditions are the only way to give our customers the critical, competitive edge they need. As you would expect, we provide a well-developed service network and reliable supply of spare parts, together with support throughout the lifetimes of the plants and machines that we offer.



**ASPHALT-MIXING PLANTS** 

### DISTRIBUTION AND SERVICE NETWORK AMMANN INDIA

- MANUFACTURING FACILITY
   AND CENTRE OF COMPETENCE
- O SALES AND SERVICE OFFICES
- WAREHOUSES
- TRAINING CENTRE

Ammann India, Ditasan

### **ASPHALT-MIXING PLANTS**

### **CONSISTENT FROM START TO FINISH**

Ammann offers batch and continuous plants to ensure customers have the method that works best for them. Both options provide the consistency in its respective class that is crucial to your mix quality. All plant processes and components are carefully developed to ensure that feeding, heating, drying, screening and mixing seamlessly blend together.



ABA 140–260 UNIBATCH
ADVANCED



ABC 100-260 VALUETEC CLASSIC



ABC 120 ECOTEC
CLASSIC



ACC 90-120 COUNTERMIX
CLASSIC



### **ABA 140-260 UNIBATCH**

### **ADVANCED ASPHALT-MIXING PLANTS**

### OPTIMISED WITH **CUTTING-EDGE TECHNOLOGY**

Versatility makes ABA 140–260 UniBatch one of the most popular Ammann plants. The Plant is amongst the strongest plant offering from Ammann and is also a great value for money.

ABA 140–260 UniBatch offers more flexibility than some other plants. It is easily customisable and often involves on-site Ammann engineering to ensure the potential of the plant is fully realised. Its layout is flexible and the plant is adaptable as a start-up or is easily integrated into existing sites.

#### **HIGHLIGHTS**

- Wide output range from 140 t/h to 260 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
- Can be fitted and extended with numerous options
- Engineered for easy integration of future options and







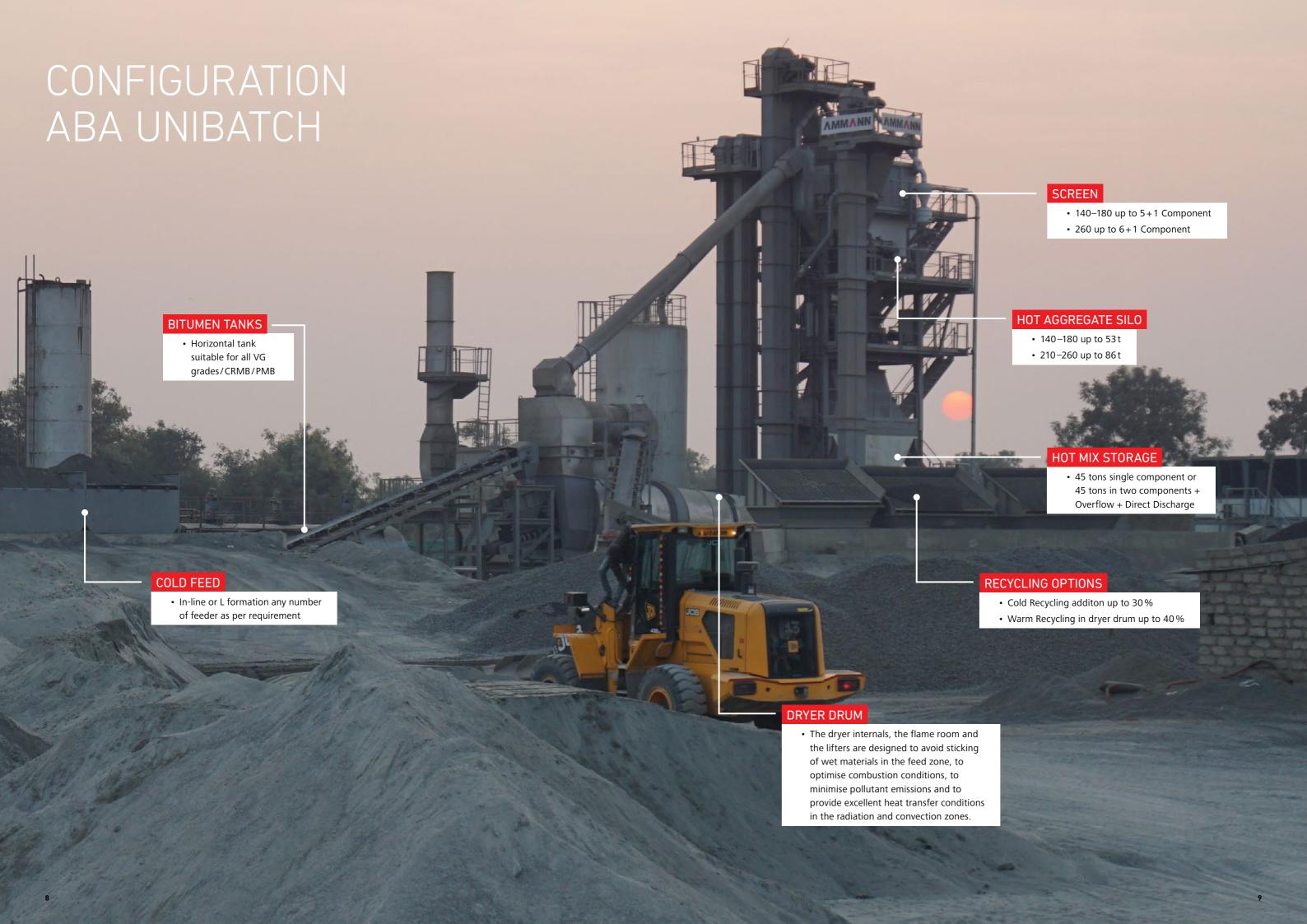




PLANT TYPE*	140	180	260	
CONTINUAL PLANT CAPACITY AT 3% MOISTURE	140 t/h	180 t/h	260 t/h	
NUMBER OF COLD FEEDERS	4x (addition on request)	4x (addition on request)	6x (addition on request)	
CONTENT COLD FEEDERS	7.5 m³–15 m³			
TYPE DRYING DRUM	T 1870	T 2080	T 2390	
BURNER POWER OUTPUT	10 MW	14 MW	18 MW	
FUELS	Natural gas, LPG, light oil, heavy oil			
FILTER CAPACITY AFA G5	28 000 Nm³/h	37 000 Nm³/h	57 000 Nm³/h	
TYPE SCREEN	VA 1536	VA 1536 S	VA 1840 S	
SCREENING	4- or 5-	5- or 6-fraction		
SCREEN SURFACE	15-20 m²	15-20 m²	27–33 m²	
HOT AGGREGATE SILO 1-ROW	Basic module: 29 t Basic module: 36 t Additional module 24 t Additional module 25 t + 25 t (total max. 53 t) (total max. 86 t)			
AGGREGATE SCALE	2500 kg 4155 kg			
FILLER SCALE	300 kg		456 kg	
BITUMEN SCALE	200 kg		264 kg	
MIXER SIZE / MAX. CONTENT**	1.7 t	2.2 t	3.3 t	
MAX. MIXER CAPACITY	145 t/h	187 t/h	280 t/h	
BITUMEN TANK CAPACITY	15 m³, 30 m³ or 50 m³ – Horizontal – Thermic oil heated			
FUEL TANK CAPACITY (LIGHT AND HEAVY OIL)	18 000 l, 24 000 l — Vertical — Thermic oil heated for heavy oil			
FILLER SUPPLY	Reclaimed and imported filler silos			
HOT MIX STORAGE SILO CAPACITY	45 t (one compartment)	45 t (one compartment)	100 t (two compartments)	
RECYCLING ADDITION	up to 40-45 % (cold + hot recycling)	up to 40-45% (cold + hot recycling)	up to 40-45% (cold + hot recycling)	

<sup>\*</sup> The improved addition of filler and bitumen into the mixer increases mix efficiency of 85 batches per hour.

<sup>\*\*</sup>Hot mix production capacity based on following conditions: 10 % bitumen and filler addition, input moisture of aggregate 3 %, aggregate temperature increase 175 K and 0/2 fraction share max. 40 % | Mixing cycles 85 per hour.



### ABC 100-260 VALUETEC

### **CLASSIC ASPHALT-MIXING PLANTS**

### THE LATEST TECHNOLOGY AT AN AFFORDABLE COST

The ABC ValueTec plants are efficient, productive and ideally suited to business owners who want straightforward processes and the ability to further customise with options.

The plants can range from very basic to much more advanced, depending on your needs.

#### **HIGHLIGHTS**

- An unbeatable cost / performance ratio
- Easily customised with a host of compatible options
- Fits into standard container for cost effective and easy transport
- The burner and the drying drum harmonise well together for a fuel-efficient drying performance
- Twin-shaft paddle mixer ensures good quality of mix at consistent production rate



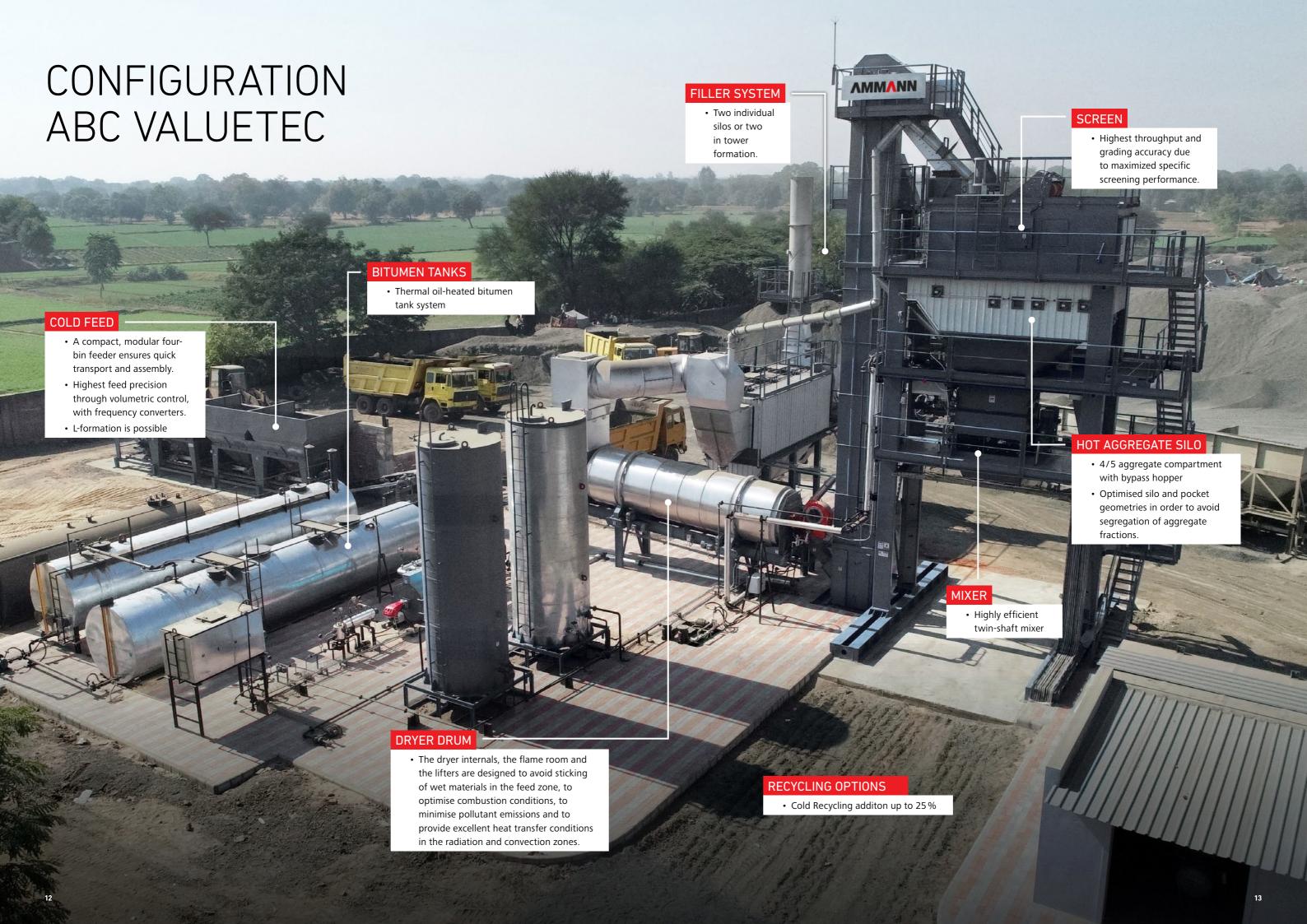


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PLANT TYPE	100	140	180	260
CONTINUAL PLANT CAPACITY AT 3% MOISTURE**	100 t/h	140 t/h	180 t/h	260 t/h
NUMBER OF COLD FEEDERS	4	4–5	4–5	5–6
CONTENT COLD FEEDERS	8 m³	12 m³	12 m³	15 m <sup>3</sup>
DRUM DRIVE	4 × 4 kW	4 × 9.5 kW	4 × 11 kW	4 × 15 kW
BURNER POWER OUTPUT	7 MW	10 MW	14 MW	18 MW
FUEL TYPES	Light or heavy oil			
FILTER CAPACITY	20 000 Nm³/h	28 000 Nm³/h	37 000 Nm³/h	57 000 Nm³/h
FILTER SURFACE	200 m²	420 m²	483 m²	724 m²
SCREEN WIDTH / LENGTH	1.2 m / 3 m	1.5 m / 3.6 m	1.5 m / 3.6 m	1.8 m / 4 m
SCREENING	4-fraction	4- or 5-fraction	4- or 5-fraction	5- or 6-fraction
SCREEN SURFACE	13 m²	20 m²	20 m²	33 m²
HOT MINERAL SILO	16 t	29 t	29 t	56 t
AGGREGATE SCALE	1200 kg	2500 kg	2500 kg	4155 kg
FILLER SCALE	200 kg	300 kg	300 kg	456 kg
BITUMEN SCALE	150 kg	200 kg	200 kg	264 kg
MIXER SIZE / MAX. CONTENT*	1.2 t	1.7 t	2.2 t	3.3 t
BITUMEN TANK CAPACITY	15 m³, 30 m³ or 50 m³ — Horizontal — Thermic oil heated			
FUEL TANK CAPACITY (LIGHT AND HEAVY OIL)	18 000 l, 24 000 l — Vertical — Thermic oil heated for heavy oil			
FILLER SUPPLY	Reclaimed and imported filler silos			
HOT MIX STORAGE SILO CAPACITY	50 t (one compartment)	45 t (one compartment)	45 t (one compartment)	100 t (two compartments)
RECYCLING ADDITION	up to 25 % (cold RAC)	up to 40-45 % (cold + hot recycling)	up to 40-45 % (cold + hot recycling)	up to 40-45 % (cold + hot recycling)

<sup>\*</sup> The improved addition of filler and bitumen into the mixer increases mix efficiency of 85 batches per hour.

<sup>\*\*</sup> Hot mix production capacity based on following conditions: 10 % bitumen and filler addition, input moisture of aggregate 3 %, aggregate temperature increase 175 K and 0/2 fraction share max. 40 % | Mixing cycles 85 per hour.





### **ABC 120 ECOTEC**

### **CLASSIC ASPHALT-MIXING PLANT**

### COMPACT AND EFFICIENT

The Ammann ABC EcoTec Asphalt-Mixing Plant provides a cost effective solution.

The plant 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's desirable for any business.

#### **HIGHLIGHTS**

- An unbeatable cost in its market segment
- The baghouse ensures suspended particulate matter (SPM) levels are within the prescribed limits
- Large feeder bins, hot bins and hot-mix storage silos
- Utilisation of up to 25 per cent cold RAP

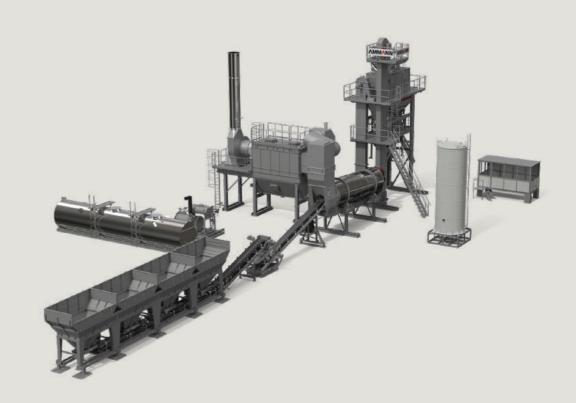




PLANT TYPE	120		
CONTINUAL PLANT CAPACITY AT 3 % MOISTURE **	120 t/h		
NUMBER OF COLD FEEDERS	4		
CONTENT COLD FEEDERS	8 m³		
DRYING DRUM: DIAMETER / LENGTH	1.8 m / 7 m		
DRUM DRIVE	7.5 × 4 kW		
BURNER POWER OUTPUT	10 MW		
FUEL TYPES	Light or heavy oil		
FILTER CAPACITY	33 000 m³/h		
FILTER SURFACE	254 m²		
SCREEN WIDTH / LENGTH	1.2 m / 3 m		
SCREENING	4- fraction		
SCREEN SURFACE	13 m²		
HOT MINERAL SILO	15 t		
AGGREGATE SCALE	2000 kg		
FILLER SCALE	200 kg		
BITUMEN SCALE	150 kg		
MIXER SIZE / MAX. CONTENT*	1.7 t		
BITUMEN TANK CAPACITY	15 m³, 30 m³ or 50 m³ – Horizontal – Thermic oil heated		
FUEL TANK CAPACITY (LIGHT AND HEAVY OIL)	18 000 l, 24 000 l – Vertical – Thermic oil heated for heavy oil		
FILLER SUPPLY	As per project requirement		

<sup>\*</sup>The improved addition of filler and bitumen into the mixer increases mix efficiency of 85 batches per hour.

<sup>\*\*</sup>Hot mix production capacity based on following conditions: 10 % bitumen and filler addition, input moisture of aggregate 3 %, aggregate temperature increase 175 K and 0/2 fraction share max. 40 % | Mixing cycles 85 per hour.





### ACC 90-120 COUNTERMIX

### **CLASSIC ASPHALT-MIXING PLANTS**

#### EFFICIENT COUNTERFLOW TECHNOLOGY

ACC CounterMix plants are efficient and environmentally friendly. They combine the simplicity of existing continuous drum-mix plants with the added efficiency achieved through counterflow technology.

The plants produce mix at a lower cost than traditional parallel flow drum-mix plants. They require less energy to heat materials, and therefore reduce emissions as well. The plants also can easily incorporate recycled asphalt and other additives.

The counterflow technology results in cost savings, helping the plant deliver a low cost of ownership. Disposal costs are minimised because the plant re-uses coarse and fine dust.

#### **HIGHLIGHTS**

- Minimal energy usage
- Reduced VOC content in exhaust gases
- Counterflow continuous drum for high fuel efficiency and lower carbon foot print
- Cold RAP addition solutions
- Efficient, environmentally friendly bag filter and pre-separator
- Produces high-quality mix
- Utilises radiation heat from burner flame to aggregates





PLANT TYPE*	90 L	90	120	
CONTINUES DI ANT CADACITY AT 2 % MOISTUDE	90 t/h	90 t/h	120 t/h	
CONTINUAL PLANT CAPACITY AT 3% MOISTURE  NUMBER OF COLD FEEDERS	90 (/11	4	120 1/11	
CONTENT COLD FEEDERS	6.25 m³ each bin with extension plates	8 m <sup>3</sup> each bin with extension plates		
AUXILLIARY CONVEYOR BELT AND DRIVE	450 mm × 1.4 m–1.5 kW × 4 nos = 6 kW	450 mm × 1.4 m / 1.1 kW × 4 nos = 4.4 kW		
GATHERING CONVEYOR BELT AND DRIVE	500 mm × 9.4 m / 3.7 kW	500 mm × 11 m / 2.2 kW	600 mm / 3.7 kW	
BIN VIBRATOR MOTOR		0.18 kW		
OVERSIZE REMOVAL SCREEN MESH AND DRIVE	45 × 45 mm / 0.56 kW	45 × 45 mm / 0.18 kW		
SLINGER CONVEYOR BELT AND DRIVE	500 mm / 3.7 kW	500 mm / 3.7 kW	500 mm / 4.5 kW	
TYPE DRYING DRUM		Cylindrical, inclined counter flow		
DIAMETER / LENGTH (DRUM)	1550 mm / 9115 mm (with RAP ring) (Including Inlet and discharge Breeching)	1650 / 7080 mm (with RAP ring)	1800 / 8500 mm (with RAP ring)	
DRUM DRIVE	18.5 kW (with RAP ring)	7.5 × 4 = 30 kW (Total 4 nos) (with RAP ring)	9.5 × 4 = 38 kW (Total 4 nos) (with RAP ring)	
BURNER POWER OUTPUT	6.59 MW (long nose S8 burner)	6.59 MW (long nose S8 burner)	7.67 MW (long nose S10 burner	
FUELS	Standard burner for LDO / Diesel	Standard burner for LDO / Diesel. Heavy oil as an option		
RAW GAS DUCT WITH PRESEPARATOR	Raw Gas duct between Drum Inlet to CV , Baffle plate type Preseparator			
WET DUST COLLECTOR EXHAUSTER	26 000 m <sup>3</sup> /h Capacity / 22 kW Motor Power	-	-	
WET DUST COLLECTOR WATER PUMP	3.7 kW	-	-	
LOAD-OUT CONVEYOR CAPACITY	200 m <sup>2</sup>	-	-	
FILTER CAPACITY	-	15 000 Nm³/h	31000 Nm³/h	
FILTER SURFACE	-	200 m²	420 m²	
EXHAUSTER CAPACITY	45 kW motor power	45 kW motor power	75 kW motor power	
LOAD-OUT CONVEYOR BELT WIDTH		600 mm		
LOAD-OUT CONVEYOR DRIVE		5.5 kW		
GOB HOPPER CAPACITY	-	1.5 t		
HYD POWER PACK	-	3.7 kW		
FILLER SUPPLY	Mineral filler tank capacity 1.5 m³, Drive 1.5 kW. Air compressor 5.5 kW. Other sizes and types on request.	Mineral filler tank capacity 1.5 m³, Drive 1.5 kW. Air compressor 11 kW. Other sizes and types on request.		
BITUMEN TANK	20 kl U Shape Horizontal type (Direct Heating)	-	-	
FUEL TANK	2000 ltr.	-	-	
OPTIONAL ITEMS				
DRAG SLAT CONVEYOR CAPACITY	200 t/h	100 t/h	120 t/h	
HOT MIX STORAGE SILO		50 t		
BITUMEN TANKS	15 kl / 20 kl / 25 kl Horizontal type. Direct heating	20 kl / 30 kl Horizontal type. Direct heating / Hot oil heating.		
RECYCLING ADDITION	Throug	h RAP addition ring in the drum (up	to 25%)	
SPECIAL SIZE ON REQUEST				

\*Hot mix production capacity based on following conditions: 10 % bitumen and 12 % filler addition, input moisture of aggregates 3 %, hot mix temperature of 150 °C and 0 / 2 fraction share max. 40 %.



# CUSTOM-MADE RECYCLING SOLUTIONS

"Ammann RAP feeds individually adapted to customer requirements."

The use of reclaimed asphalt, or recycling, is an absolute necessity of today. We are able to offer you custom-made solutions relating to recycling. Our modern plant technology guarantees you extremely high quality asphalt using recycling asphalt (RAP).

### **HIGHLIGHTS**

- Significant reduction of production costs due to lower costs of bitumen, minerals and transport costs
- Supported or promoted by statutory legislation (country specific)
- Less effect on natural resources (fewer oil and mineral requirements)
- CO<sub>2</sub> reductions



#### **BENEFITS**

- New minerals can be screened off
- Batch quantity variable with
- Max. flexibility (recipes
- Independent from rest of process



### **BENEFITS**

- Processes RA proportions of up to 40 %
- Energy savings of up to 15%
- · Efficient processing of new material
- Protected by international patents
- Works in combination with the cold feed system



### AMMANN CORE COMPONENTS

#### **EVERYTHING FROM ONE SOURCE**

Ammann premium asphalt-mixing plants utilize complex process engineering that requires perfect interaction between all individual components. So essential is this integration that Ammann engineers all core components, including drums, burners, filters, screens, controls and mixers in house.

Doing so is the only way to guarantee that our plants will meet the demanding requirements and standards of the modern market environment. Ammann is currently the only manufacturer of asphalt-mixing plants to offer this single-source approach, establishing us as a professional partner to handle every aspect of your asphalt-mixing plant. We provide answers when you need them and keep an open mind in order to fully understand your needs.



#### **BURNERS AND DRYERS**

Ammann burners and dryers are highly reliable, productive and feature cutting-edge technology. Robust, compact and energy-efficient designs minimize maintenance requirements and reduce fuel consumption. The burners and dryers are adaptable to multiple Ammann plant types and built for easy operation. A wide range of options is available.



#### **FILTERS**

Flow is optimized through a highly technical analysis. The filters perform well from top to bottom and minimize service time. Ammatex filter bags offer high temperature resistance and eliminate the need for a fresh air damper. PTFE coating and seams create exceptional resistance and longer life. Improved thermal insulation contributes to the plant's efficiency.



#### **SCREENS**

Ammann screens are highly reliable and properly sort materials. Optimal material load maximizes available screen area usage. A dust-free screen house is among the expertly engineered features. The screens are easy to operate and require minimal maintenance. A wide range of options is available.



### **MIXERS**

Mixers are highly reliable with short mixing times.

Maintenance is minimal and all components work seamlessly and efficiently because of Ammann's quality engineering.

The operator-friendly mixers are an integral part of Ammann plants.

### **AS1 CONTROL SYSTEM**

POWERFUL. RELIABLE AND PROVEN WORLDWIDE

The powerful and future-oriented as 1 system concept combines proven Ammann software with specially matched industrial hardware. The as 1 computing environment has been designed and tested for use in tough environments. Its networking capability also has been optimised. Customers profit from the flexible workstation configuration, networking and administration.

#### THE FIELD BUS SYSTEM

### GUARANTEED FOR RELIABLE SIGNAL TRANSFER

The proven field bus system is robust and reliable under tough operation. Faults can be detected efficiently and rectified by means of the diagnostic tools, even via remote support.



### THE POWER CABINET'S COMPONENTS DESIGNED FOR TOUGH, ROUND-THE-CLOCK OPERATION

The power cabinet's components have to withstand extreme stress 24 hours a day, which is why Ammann only uses tried-and-tested, globally available quality components from renowned manufacturers.

#### **HIGHLIGHTS**

- Comprehensive system functionality
- Quick and easy to learn
- Safe to operate
- Proven, reliable field bus and load-sharing
- Professional hotline and support organisations ready for service worldwide

#### **HOTLINE AND SUPPORT**

### PLANT AVAILABILITY ASSURED

Electromechanical faults can be quickly resolved by the customer's own personnel with the help of the electrical circuit diagrams and the as1 diagnostic tools.

Ammann's knowledgeable customer service team staffs the hotline, which can be called for fault diagnosis or maintenance at any time. Modern telecommunications

media increase the availability of the plant and reduce the need for costly on-site servicing.



### **AFTER SALES**



### **COVERING ALL NEEDS**

Contracted maintenance services and technician training provided by Ammann help protect your investment, while operator training ensures your team is able to utilise all the features and benefits built into your plant. When your needs change, Ammann offers retrofit options that can provide you with a good-as-new plant at a low cost.

### PUT AMMANN EXPERTISE TO WORK

Ammann offers service packages that ensure all maintenance is current, making your plant efficient and also protecting it from premature wear that can result from poor service practices. A variety of technical service packages are available. Or, if you prefer, an Ammann representative can visit your plant and together you can develop a plan that perfectly fits your needs.

### VALUE AND AVAILABILITY

Ammann parts provide the best value over the life of your plant. The parts are built to last and have a longer life than low-cost products on the market. Ammann parts also are a perfect fit for your plant, enabling other components to run more efficiently and last longer. Availability is another key Ammann focus. The Ammann logistics team recently overhauled stocking centres and processes to ensure the most essential parts are always nearby.

### READY WHEN YOU ARE

Ammann experts are ready to assist you in emergency situations 24 hours a day, seven days a week. The help line team is highly trained and experienced. Representatives can talk you through the challenges – in many different languages – with a remote connection to your system that will minimise the troubleshooting time.

### **TRAINING**



#### AMMANN ACADEMY

Over the years, road construction equipment manufacturers have provided the equipment to build and maintain the world's infrastructure. As technology changed, so did the equipment, increasing the ability of the user to perform more efficiently.

Developments in equipment technology have altered the job specifications and requirements. In order to stay up-to-date with these changes, Ammann Academy brings you the training courses for Fresh and Experienced youngsters. These programs will enhance the employment opportunities with certification by **Infrastructure Equipment Skills Council (IESC)**.

#### **BASIC TRAINING**

This course helps to use the Employment Opportunity for Fresher and who are helpers to become Junior Operator by learning production sequence, processes and safety of Road Construction Equipment.

Instructors also explain the Equipment's components and their functions as well as proper operation and basic maintenance and the control system for the Equipment.

#### **ADVANCED TRAINING**

Operators who want to move beyond the basics and get promoted to the next level or get Employment opportunities as Senior Operator enroll in AIA Advanced training. This course provides detailed overviews of Road Construction Equipment operation Safety and parameter settings, maintenance and troubleshooting, also the importance of the control systems software integrated into the Equipment.

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