

CONTINUOUS PROCESS

ACM PRIME

ASPHALT-MIXING PLANTS
MOBILE



AMMANN

MOBILITY AND QUALITY

KEY TO ACM PRIME PLANTS

Mobile asphalt plants need to be easily transported. Yet they also need to be productive once they arrive at their destination. Ammann mobile ACM Prime plants succeed on both fronts.

Ammann strictly adheres to international transport codes when developing mobile plants to make border crossings efficient. Plug-in components also reduce costs and speed setup.

Ammann provides all this while still offering benefits typically associated with stationary facilities. The result is highly mobile plants with production capacity of 100 up to 210 tonnes per hour.

ACM PRIME



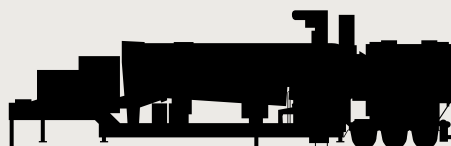
ACM 100 PRIME

MIXER SIZE: 0.9 t
CAPACITY: 100 t/h



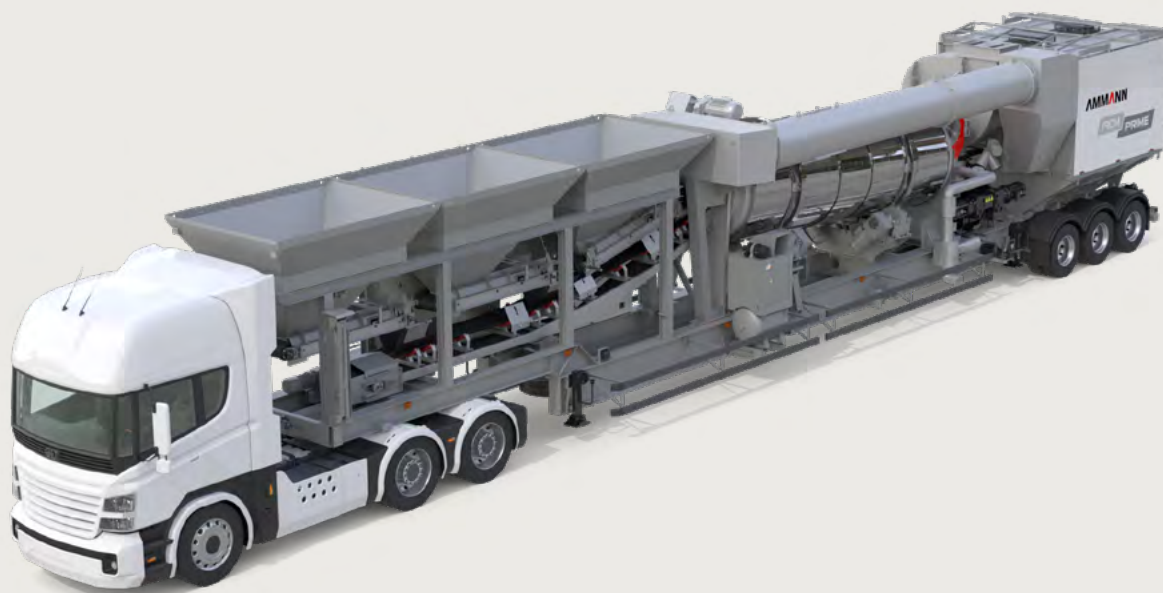
ACM 140 PRIME

MIXER SIZE: 1.5 t
CAPACITY: 140 t/h



ACM 210 PRIME

MIXER SIZE: 2.1 t
CAPACITY: 210 t/h





TECHNOLOGY THE DRIVER

ACM 100 PRIME, ACM 140 PRIME AND ACM 210 PRIME

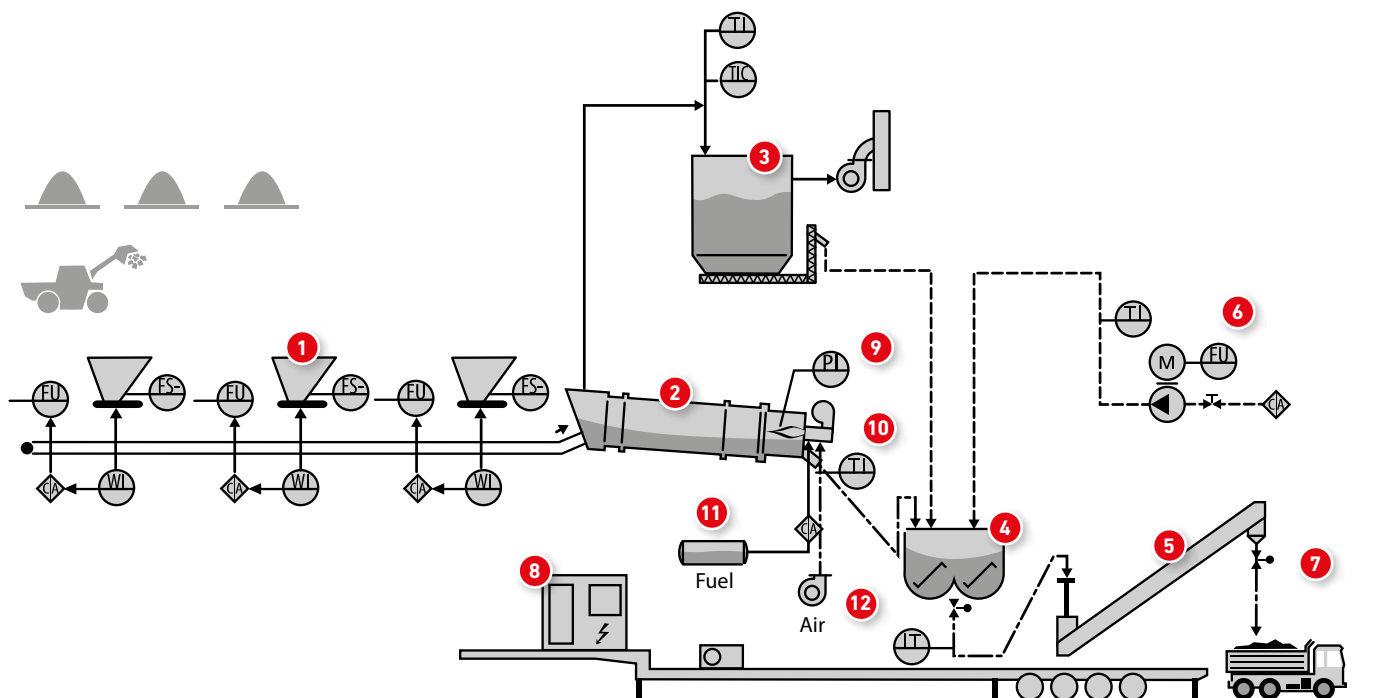
The ACM 100 Prime, ACM 140 Prime and ACM 210 Prime are the highly mobile versions of the successful Ammann continuous asphalt-mixing plants.

The plants maintain key aspects and benefits of other Ammann plants, including the innovative as1 Control System and tried-and-tested core components. A special benefit of the plants is a controllable outlet gate that enables the filling height and therefore the mixing time to be set depending on recipe and output.

The ACM 100 Prime has output capability of 100 t/h, the ACM 140 Prime's output is 140 t/h while the ACM 210 Prime's output is 210 t/h.

HIGHLIGHTS

- Highly mobile with a compact design
- Excellent mixing performance and quality
- Clearly separated heating and mixing processes
- Ability to utilise up to 40% RAP in mix
- Adjustable mixing times based on recipe and capacity
- Optimised heat transfer during all stages
- Well-insulated dryer for fuel efficiency and cost savings
- Highly efficient burner
- Gentle filter cleaning for reduced wear



- | | |
|---------------------------------------|---|
| 1. Cold feeders with belt scale | 7. Truck loading station |
| 2. Dryer drum with Ammann burner | 8. as1 control system |
| 3. Filter | 9. Pressure measurement |
| 4. Mixer | 10. Temperature measurement with control function |
| 5. Drag slat conveyor with batcher | 11. Fuel tank |
| 6. Electrically heated bitumen system | 12. Compressed air system |



OPTIONS

PROTECTION GRID FOR OVERSIZED MATERIAL

EXTENSIONS (AVAILABLE FOR ACM 100 & ACM 140 PRIME)

ADDITIONAL WALL VIBRATOR



ADDITIONAL ONE OR TWO COLD FEEDERS



MOBILE OR STATIONARY BITUMEN AND FUEL TANKS



HOT MIX STORAGE SILO LATERAL



HEATER FOR
HEAVY OIL

OIL METER

BITUMEN COUNTER FOR GRAVIMETRIC DOSING OF BITUMEN

RECYCLING ADDITION

IMPORTED FILLER ADDITION

FIBER ADDITION

RECLAIMED FILLER DOSING SYSTEM

BITUMEN FOAM GENERATOR

CUSTOM-MADE RECYCLING SOLUTIONS

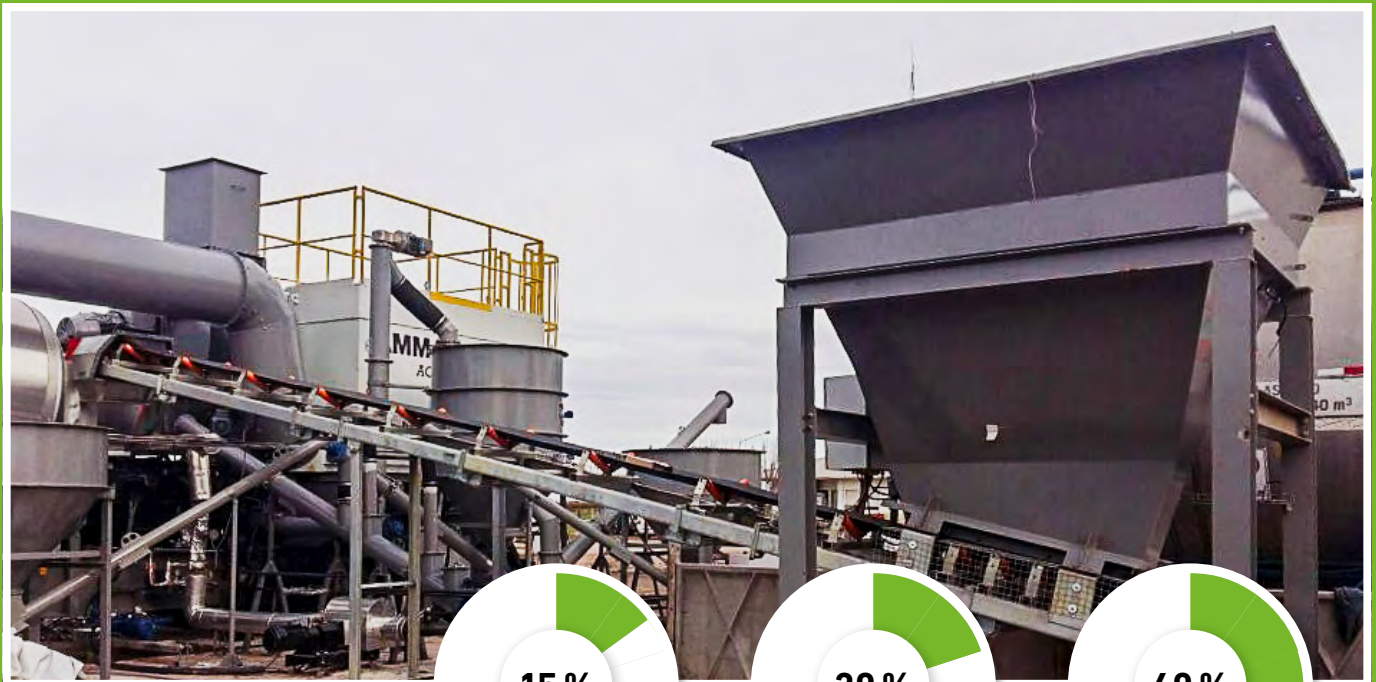
The use of reclaimed asphalt, or recycling, is an absolute necessity of today.

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)
- Reduction of expensive storage facilities
- CO₂ reductions

UP TO 40 % COLD FEED INTO THE MIXER



BENEFITS

- Accurate dosage
- Max. flexibility (recipes)
- Independent from rest of process

15 %

ACM 100 PRIME

20 %

ACM 140 PRIME

40 %

ACM 210 PRIME

LOW-TEMPERATURE ASPHALT

ENERGY-EFFICIENT, LOW-EMISSION AND CO₂- OPTIMISED

Manufacturing asphalt at reduced temperatures offers many benefits: asphalt production consumes less energy, the asphalt plant emits less CO₂ and on-site emissions drop dramatically. Whilst conventional hot asphalt is manufactured at around 170 °C, modern low-temperature processes allow production temperatures of around 100 °C.

The Ammann range offers a number of these technologies. Foam bitumen, waxes and other additives, WAM Foam or special bitumen are suitable for use depending on the application.

WE OFFER DIFFERENT PLANT COMPONENTS DEPENDING ON THE REQUIRED TECHNOLOGY, FOR INSTANCE:

- Foam generator
- Additive feed (solid and liquid)
- Addition of cold or wet aggregate
- Process management system

HIGHLIGHTS

- Achieves the quality of conventional hot asphalt
- Low energy consumption
- Low emission of CO₂
- Fewer emissions on the road construction site

COMBINATION OF COLD / LOW-TEMPERATURE ASPHALT AMMANN FOAM®

Ammann is convinced of low temperature mixes and their future. In collaboration with customers and laboratories, we developed the Ammann Foam System. Based on the foaming effect with water, our foam generator works on continuous and on batch plants all over the world. Ammann Foam works without additional chemicals and can be fitted to any existing plant.

IDEAL SUPPLEMENT: FOAM BITUMEN

A foam bitumen installation enables you to expand the product portfolio of your mixing plant. The Ammann foam bitumen systems allow the foaming of carriageway construction bitumen to various degrees of hardness as well as polymer bitumen. For example even with cold base courses can be manufactured with 100 % recycled materials. This means that the use of foam bitumen optimally supplements the recycling feed in the mixer.



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 develops and manufactures all core components, including drums, burners, filters, screens, controls and mixers. 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.

ACM PRIME CORE COMPONENTS



BURNERS AND DRYERS

Ammann burners and dryers are highly reliable, productive and feature cutting-edge technology. Robust, compact and energy-efficient designs minimise 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 optimised through a highly technical analysis. The filters perform well from top to bottom and minimise service time. Ammatex filter bags offer high temperature resistance and eliminate the need for a fresh air damper. The low-pressure, gentle cleaning process reduces wear of the bags.

MIXERS

Mixers are highly reliable and provide a perfect homogeneous mixes. Maintenance is minimal and all components work seamlessly and efficiently because of Ammann's quality engineering. Automatic adjustment of the outlet gate controls the mixing time and the volume of the material inside the mixer as required by different types of asphalt mixes.



AS1 CONTROL SYSTEM

POWERFUL, RELIABLE AND PROVEN WORLDWIDE

The powerful and future-oriented as1 system concept combines proven Ammann software with specially matched industrial hardware. The as1 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



FULFILL YOUR PLANT'S POTENTIAL WITH TRAINING

Your plant features components engineered for productivity and technology that can deliver benefits unheard of just a few years ago. Yet those components and that technology are only as good as the operator using them. How can you help operators make the most of the tools at their disposal? The answer is training.

WORLDWIDE TRAINING CENTRES

Ammann has more than 10 regional training centre locations around the world. Key teaching themes connect them all.

- A good balance: The centres combine a traditional classroom setting with hands-on experience, including the availability of plant components for maintenance lessons.
- Experiment without consequences: The as1 control system simulator provides operators with realistic scenarios without running the risk of wasting material or causing plant downtime. Operators can experiment and learn from their mistakes – without costly consequences to your operations.
- Learn from peers: Operators from other facilities attend the training. Participants say the conversations with their peers – and learning how they overcome challenges – is another key benefit.
- Learn in your language: Lessons are taught in many languages, ensuring your team understands key terms and lessons and makes the most of your investment.

In addition, Ammann experts can customise a curriculum for your needs and work with operators and managers at your facility. The advantages include hands-on experience with your equipment and the ability to involve more of your staff than would likely be sent to a regional training centre. Choose from the Ammann training modules.

SPECIFICATIONS

ACM PRIME

PLANT TYPE *	100	140			210	
CONTINUAL PLANT CAPACITY AT 3 % MOISTURE	100t/h	140t/h			210t/h	
NUMBER OF COLD FEEDERS	Standard: 3 + Option 4 or 5				Standard: 4 + Option 5 or 6	
CONTENT COLD FEEDERS	7 m³ each Option: 10 m³ each with extension plates				10 m³ each with extension plates	
TYPE DRYING DRUM	T 1650	T 1860			T 2080	
BURNER POWER OUTPUT	7 MW	10 MW			14 MW	
FUELS	Standard: Light oil, heavy oil Option: Natural gas, LPG					
FILTER CAPACITY	22 000Nm³/h	30 000Nm³/h			44 000Nm³/h	
AGGREGATE SCALE	Belt scale with 2 load cells by cold feeder					
BITUMEN DOSING SYSTEM	Volumetric Option: massflow system					
TYPE MIXER	Amix twin-shaft paddle mixer with mix dwell time for filling level					
MIXER SIZE / CONTENT	0.9 t	1.5 t			2.1t	
NUMBER OF AGITATOR PLANES	24	20			28	
CONTROL SYSTEM	as1					
COLD RECYCLING ADDITION AT 3 % MOISTURE	Up to 15 % directly into the mixer	Up to 20 % directly into the mixer			Up to 40 % directly into the mixer	
MOBILITY	1 chassis	1 chassis or 2 chassis			2 chassis	
TRANSPORT DIMENSIONS WITHOUT TRUCK	1 chassis	1 chassis	2 chassis Cold feeder module	2 chassis Dryer module	2 chassis Cold feeder module	2 chassis Dryer module
Overall length	21 m	22.7 m	13.5 m	13.6 m	14.6 m	18.4 m
Length (from kingpin)	17.9 m	19.6 m	12.5 m	12.7 m	12.9 m	17.5 m
Width Height	3.2 m 4.4 m	3.2 m 4.4 m	3.2 m 4.4 m	3.2 m 4.4 m	3.2 m 4.4 m	3.2 m 4.4 m
Number of axles	2	3	1	2	2	3
Maximum load per axle	8.5 t	8.5 t	7.1t	9.5 t	7 t	8.3 t
Maximum on kingpin	17 t	17 t	7.1 t	12 t	10.1 t	16.4 t
Overall weight approx.	34 t	42.5 t	14.2 t	31 t	24 t	41.2 t
OPTIONS	Extensions plates for cold feeders (available for ACM 100 Prime & ACM 140 Prime) Additional one ore two cold feeders Protection grid for oversized material for cold feeders Additional wall vibrator for cold feeders Tri-fuel burner for additional combustibles (natural gas, etc.) Mobile or stationary bitumen and fuel tanks Heater for heavy oil Recycling addition: directly into the mixer Imported filler addition Reclaimed filler dosing system Bitumen counter for gravimetric dosing Oil meter Bitumen foam generator Fiber addition Hot mix storage silo lateral More options upon request					

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

SOUTH AFRICA

ACM 140 PRIME



CENTRAL AFRICA

ACM 140 PRIME



SOUTH AMERICA

ACM 100 PRIME



BRASIL

ACM 210 PRIME



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

