

ASPHALT CONTINUOUS PLANTS

ACM PRIME 2.0

MOBILITY, PRODUCTIVITY AND
SUPERIOR QUALITY PERFORMANCE



**HIGH MOBILITY
READY TO WORK**

AMMANN

Mobile asphalt plants need to be transported easily and, at the same time, they need to be productive when they arrive at their destination. Ammann's ACM Prime 2.0 mobile plants are a success in both these aspects.

Ammann strictly adheres to international transportation regulations in developing its mobile plants, in order to make border crossings efficient. The plug-in components also reduce costs and speed up installation.

Thanks to the advanced twin-shaft continuous mixer, the ACM Prime 2.0 produces asphalt mixes of high homogeneity and constant quality. Ammann offers all this together with the benefits that are normally associated with stationary installations.

The result? Ultra-mobile plants capable of producing from 35 to 210 tons per hour.





AMMANN

ACM PRIME 2.0

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AMMANN CONTINUOUS PORTFOLIO

Consistent from start to finish.

All plant processes and components are carefully developed to ensure that feeding, heating, drying, screening and mixing seamlessly blend together. Helping integrate all the moving parts is the as1 Control System, which provides leading technology with a user-friendly interface.

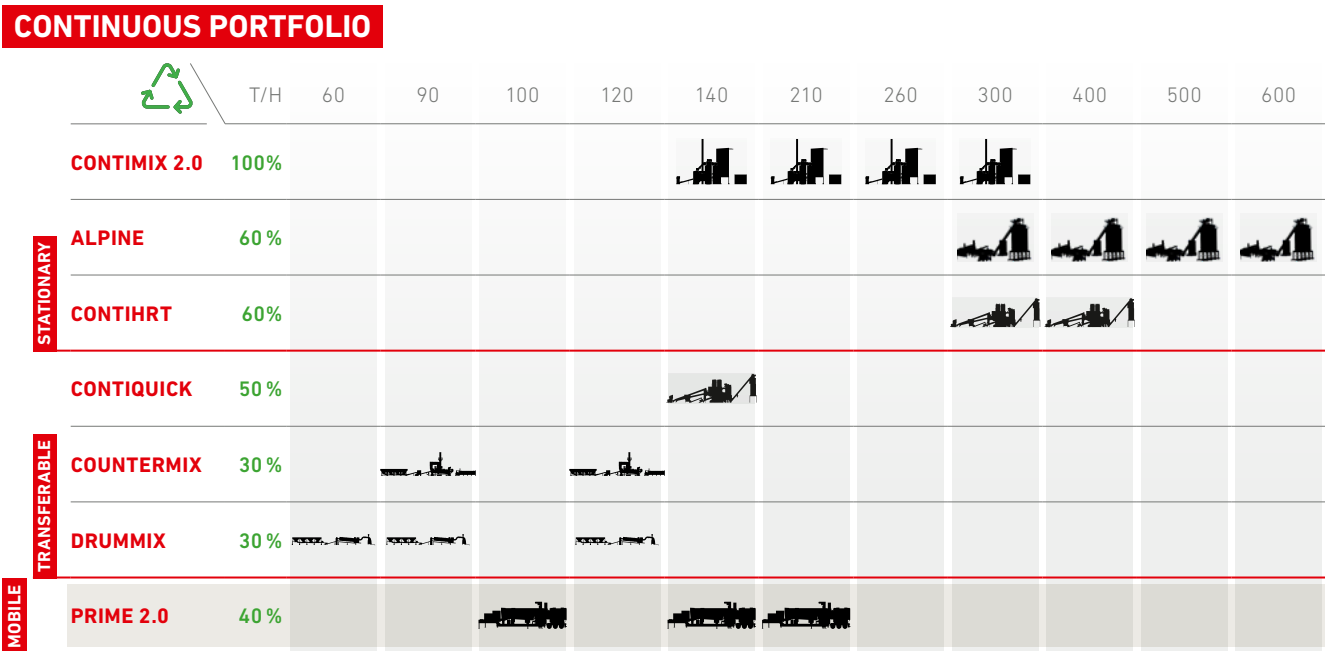
Some things never change

Ammann has had a presence in road construction equipment for over 150 years, collecting experiences and know-how and developing the technologies of the future.

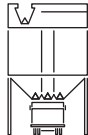
What hasn't changed is how Ammann does business. To this day all core components are engineered and

manufactured in-house to create a perfect fit and ultimately provide quality, efficiency and long life. This approach also means a single point of contact for virtually all plant needs.

A century of industry expertise, meanwhile, ensures an understanding of your business and the development of plants that provide real-world solutions.



PERFORMANCE OF THE AMMANN PRIME 2.0 PLANT

MODEL	 MAX. PRODUCTION . OUTPUT with % bitumen and % filler input [t/h]		 DRYER DRUM MODEL	 BURNER [MW]	 FILTER		 MIXER MODEL CAPACITY [T/H]	 READY MIX SILO
	3%	5%			MODEL SURFACE [m²]	AIR FLOW Nm³/H		
100	100	70	T 1650	7	AFA 22 PRI [265]	22	AMIX 0.09 AC [35-100]	Standard 0.9 t OPTIONAL: Silo 1.8 t RMS 27 t RMS 50 t
140	140	110	T 1860	10	AFA 30 PRI [330]	30	AMIX 1.125 ACR [35-140]	Standard 1.4 t OPTIONAL: Silo 1.8 t RMS 27 t RMS 50 t
210	210	165	T 2080	14	AFA 44 PRI [518]	44	AMIX 1.20 ACR [75-210]	Standard 3.6 t OPTIONAL: RMS 50 t

Recommended configuration; Contact the Ammann sales team to adapt your asphalt plant as required.

EXPERIENCE, MOBILITY AND RELIABILITY

The new Ammann ACM Prime 2.0 plants set the standard for asphalt mix production in capacity classes from 35 to 210 tons per hour.

The ACM 100 Prime 2.0, ACM 140 Prime 2.0 and ACM 210 Prime 2.0 are the ultra-mobile versions of Ammann's successful continuous asphalt plants.

The second generation of the Prime family retains the main features and benefits of the first version, including unbeatable mix quality through the control of the mixer discharge gate opening, which allows the filling height and therefore the mixing time to be set depending on the recipe and production, and the perfect heat exchange between the gases generated by the burner flame and the aggregates, as well as the gentle low-pressure sleeve cleaning process, which together have set new standards for the production of asphalt mix in ultra-mobile continuous plants.

Now, in addition to all these advantages, the Ammann ACM Prime 2.0 features the new Ammann as1 Argon View control system, a new bag filter gas exhaust device and new mixing blades made of ultra wear-resistant material.

The ACM 100 Prime 2.0 has a production capacity of 35 to 100 tons per hour, the ACM 140 Prime 2.0 produces 35 to 140 tons per hour, while the ACM 210 Prime 2.0 produces 75 to 210 tons per hour.



HIGHLIGHTS

- Ultra-mobile and compact design;
- Clearly separated mixing and heating processes;
- Excellent mixing performance and quality;
- Adjustable mixing time, based on formula and capacity;
- Optimized heat exchange with the aggregates in all sections of the dryer;
- High efficiency burner;
- Air filter cleaning system at atmospheric pressure, reducing wear on the bags;
- Low energy consumption = reduced operating costs + low CO emissions₂;
- Ability to use up to 40% RAP in the mix.



■ EQUIPPED WITH
THE LATEST
TECHNOLOGY
AND ALREADY
DESIGNED FOR
THE FUTURE. ■







AMMANN

AMMANN

RCM
PRIME 20

COMPRIMENTO 25,00m

LARGURA 3,20m

ACM PRIME 2.0: AN INTELLIGENT CONTINUOUS PROCESS

Exceptional mobility, reliability and performance are the cornerstones of our plants. These criteria create unique advantages and separate the new Prime 2.0 from competing plants.

We continually invest in technology and innovation to guarantee the best solutions in terms of efficiency, energy savings and sustainability. The use of recycled asphalt reduces the plant's environmental impact while offering scalable solutions for specific needs.

Optimized transport and easy on-site assembly bring flexibility, savings and immediate production to our customers.

Last but certainly not least, the ultra-advanced as1 Control System, now in the ARGON VIEW version, further optimizes production results.

SUSTAINABLE SOLUTIONS

- Prepared to use up to 40% RAP in the mix;
- Capable of producing WMA (warm mix).

TRANSPORT & INSTALLATION

- Fully mounted on chassis (one or two trailers);
- Complies with international transport codes;
- Compact design;
- Available with plug-in components for quick assembly or relocation.





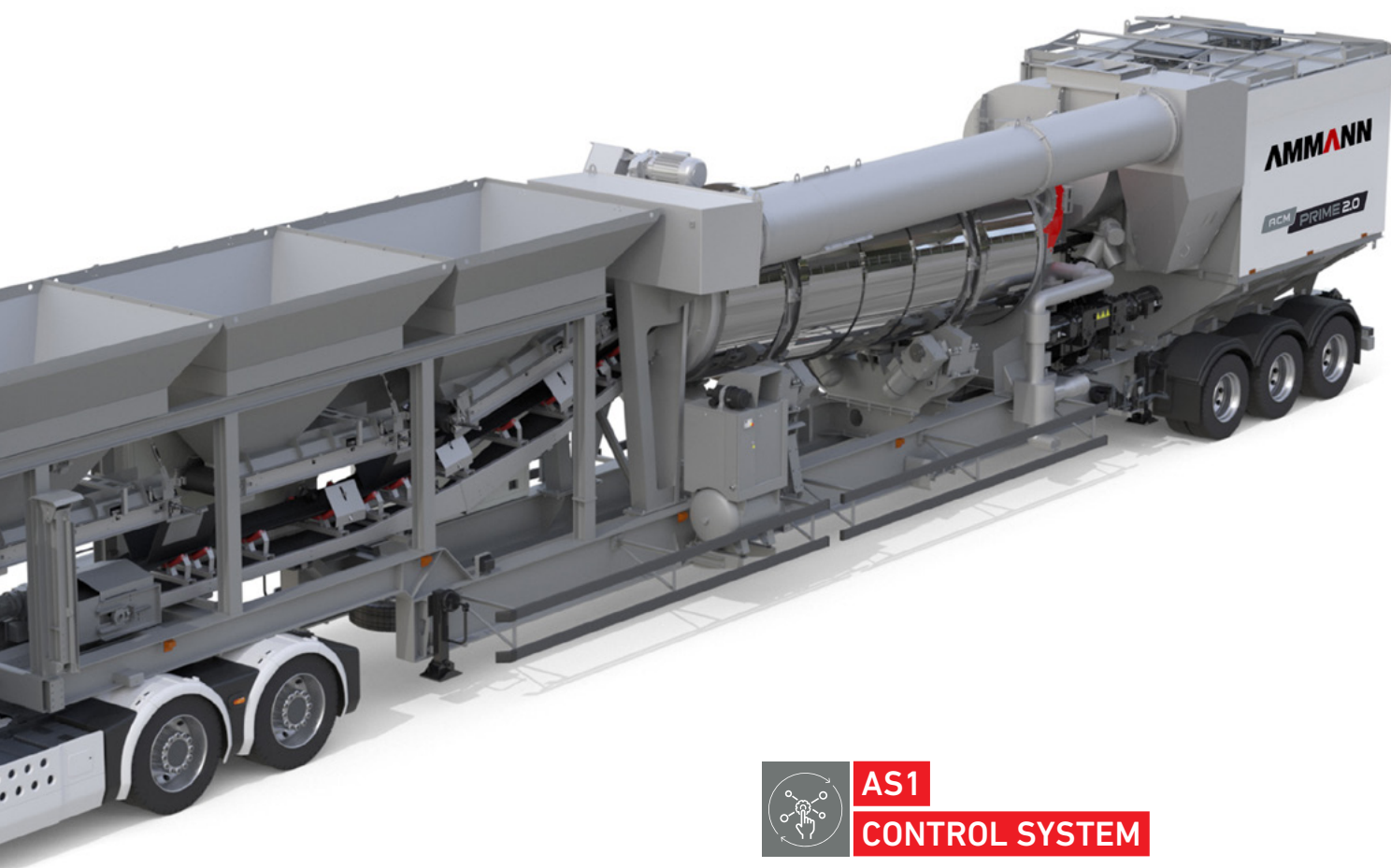
EFFICIENCY & ENERGY SAVING

- Ammann technology provides efficient energy consumption compared to competing plants;
- Low energy consumption = low CO emissions₂;
- Low energy consumption = reduced operating costs.



LOW ENVIRONMENTAL IMPACT

- Minimal material waste at the beginning and end of the production process;
- Solutions available to reduce noise emissions.



QUALITY & RELIABILITY

- Ammann offers excellence in dryers and burners, bag filters, mixers and control systems;
- All the main components are developed in Switzerland;
- Components and wear parts have a long service life.



AS1 CONTROL SYSTEM

- At work in more than 3000 plants worldwide;
- The new as1 Argon View features an intuitive user interface, making it easy to operate the production process;
- The most innovative and complete system ever designed for asphalt plants.



QUALITY & RELIABILITY

Ammann asphalt plants use complex process engineering that requires perfect interaction between all the individual components.



This integration is so essential that Ammann designs all the core components (Ammann Core Components) in-house - including dryer drums, burners, filters, screens, control systems and mixers.

This way is the only one to guarantee that our plants will meet the demanding requirements and standards of the modern market environment. Ammann is currently the only asphalt plant manufacturer to offer this single-source approach,

establishing itself as a professional partner to handle all aspects of your asphalt plant. We provide answers when you need them and keep an open mind in order to fully understand your needs.



DRYING DRUM

- A single manufacturer provides all the drying, heating and discharge processes, ensuring a perfect match;
- Optimized heat transfer stages and dryer insulation for maximum efficiency and fuel savings;
- Low-wear, low-maintenance design with high-quality materials and easy replacement of wear parts;
- Internal dryer designed to use various aggregates and fuels;
- Possibility of using a frequency inverter to control the speed of the dryer drum drive motors.



BURNER

- Highly efficient combustion process for low fuel consumption and emissions;
- Integrated silencer for noise reduction (optional for ACM 100 / 140 Prime 2.0);
- Safety concept meets the standards of all countries;
- Available for a variety of liquid and gaseous fuels:
 - Light oil
 - Heavy oil
 - Liquid LPG
 - Natural gas
 - LPG in gaseous state



FILTER

- Patented stage rotor mechanisms gently clean the sleeves;
- 99.9% filtration efficiency ensures compliance with the strictest environmental standards;
- "On-demand" exhaust system: exhaust fan motor controlled by frequency inverter, minimizing energy consumption by ensuring that only the minimum RPM is used;
- The largest possible surface area provides the best filtration efficiency;
- Minimum number of moving parts reduces maintenance and improves reliability;
- CFD-supported bag filter design reduces temperature and pressure losses.



MIXER

- The twin-shaft pugmill mixer provides high shear force;
- Excellent homogeneity and mixing time thanks to Ammann's unique paddle arrangement;
- An electro-pneumatic cylinder automatically adjusts the opening of the discharge gate:
 - controls the level (volume) of material inside the mixer and the mixing time according to the specified recipe;
 - ensures perfect homogenization with the asphalt binder in any production.
- Minimal wear thanks to protected components and an efficient mixing process;
- Grease-lubricated labyrinth seals guarantee a long service life for the drive assembly.



LOW ENVIRONMENTAL IMPACT

The scarcity of industrial land means that asphalt plants must be located closer to residential areas.



Minimal material waste

All Ammann Core Components work cohesively, minimizing material waste at the beginning and end of the production process.

Reduced noise emission

The burner equipped* with a silencer makes the plant's production quieter - even when working at full power.

*Optional for ACM 100 and 140 Prime 2.0



**■ IT IS MORE IMPORTANT
THAN EVER THAT
PLANTS MINIMIZE
NOISE IN AN EFFORT
TO BE NEIGHBORLY
AND MEET LOCAL
REQUIREMENTS. ■**





EFFICIENCY & ENERGY SAVING

Ammann plants enable customers to carry out their tasks efficiently and productively, helping them to work smarter, not harder.

Filter

- No need for cold air intake vents - less pressure loss means lower energy consumption;
- The filter design ensures even distribution of the exhaust air inside the filter;
- Proper distribution/loading uses more of the sleeve surface and improves efficiency;
- New exhaust gas system provides maximum optimization of the filter components, ensuring greater control of the flow and pressure of the assembly.

Asphalt pump

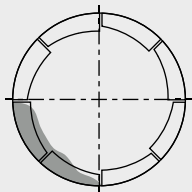
- Asphalt dosing system using a four-inch pump with internal gears*;
- Superior accuracy in dosing the PAC.

Burner

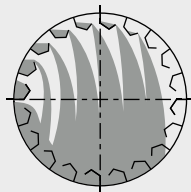
Special software dedicated to the burner optimizes the air/fuel mixture, increasing combustion efficiency and leading to significant annual fuel savings

Dryer

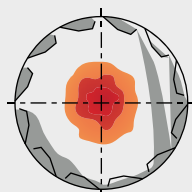
- ACM Prime 2.0 drying drums are highly efficient, with production levels of up to 64 t/h per square meter (at 3% humidity): 22% more efficient than existing standard models;
- Complete thermal insulation;
- Fully sealed seals between the dryer and chamber.
- All this results in low energy consumption which, in turn, reduces fuel costs and CO emissions₂.



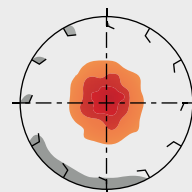
CONVEYING



CONVECTION



RADIATION



DISCHARGE





EFFICIENCY & ENERGY SAVING



AMMANN FOAM

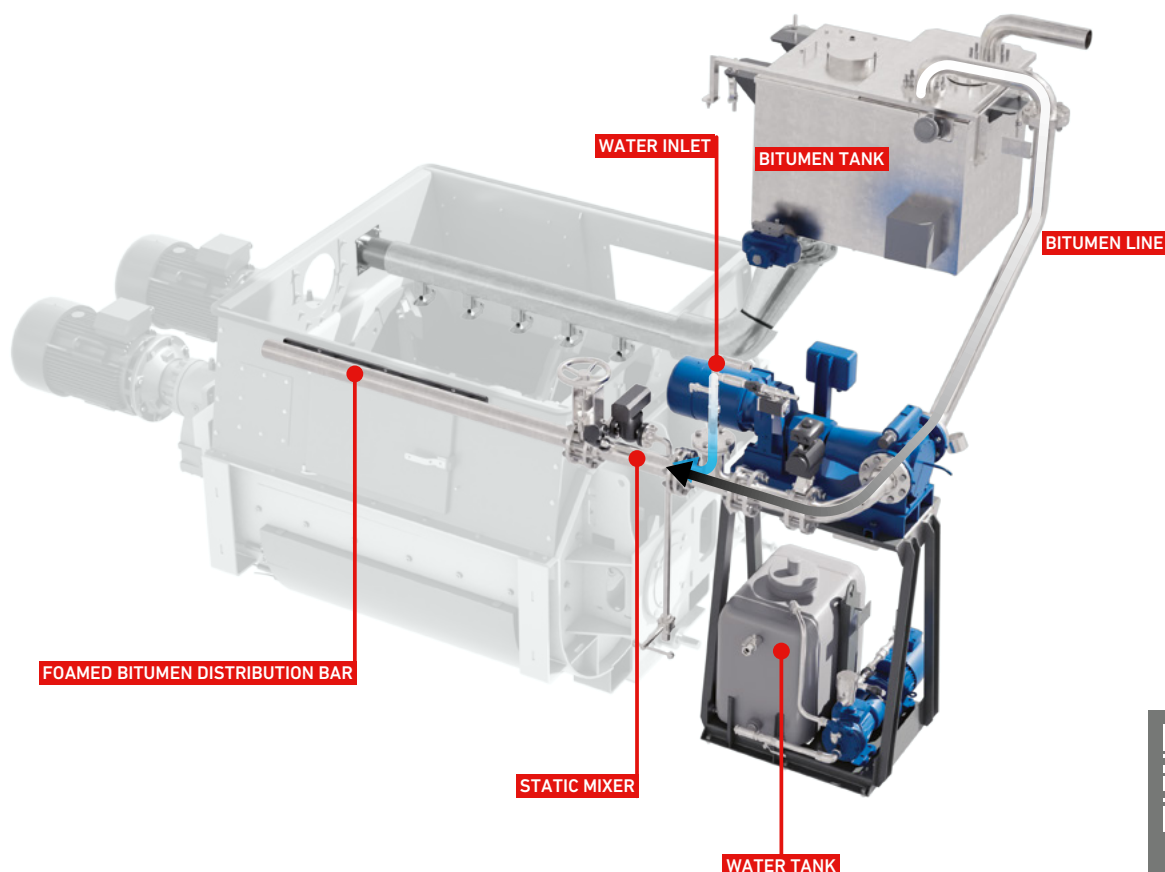
Ammann believes low temperature asphalt mixes are the future of the asphalt industry. Therefore, we developed the Ammann Foam System in collaboration with our customers and internal experts.

The low temperatures associated with the use of Ammann Foam provide big advantages:

- Higher workability during mix production and placement;
- Improved compaction performance;
- Extension of the paving season;
- An ability to deliver mixes longer distances;
- Better recycling performance.

Using Ammann Foam to produce warm mix asphalt (WMA) provides additional benefits:

- Reduced VOC emissions from bitumen;
- Lower levels of gas emissions and CO₂ from savings in drying and heating of virgin aggregates;
- Diminished fumes, emissions and odours;
- Quicker opening of roads to traffic;
- Savings in production costs through reduced energy consumption.



Learn more

AS1 ECOVIEW

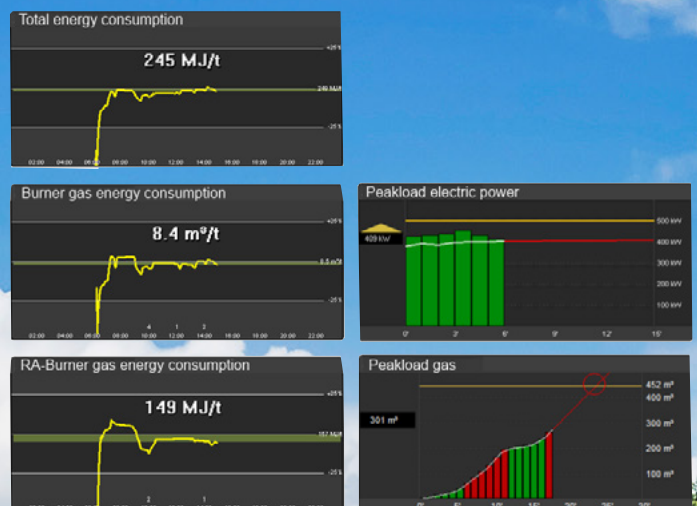
This as1 module helps uncover and eliminate energy waste.

An intuitive display informs operators and enables immediate adjustment. This gives operators the data they need to make decisions around throughput and material control to maximize savings and efficiencies

EcoView also determines the values of emitted CO₂ and calculates energy costs that result when adjustments are made, and operations become more efficient.

HIGHLIGHTS

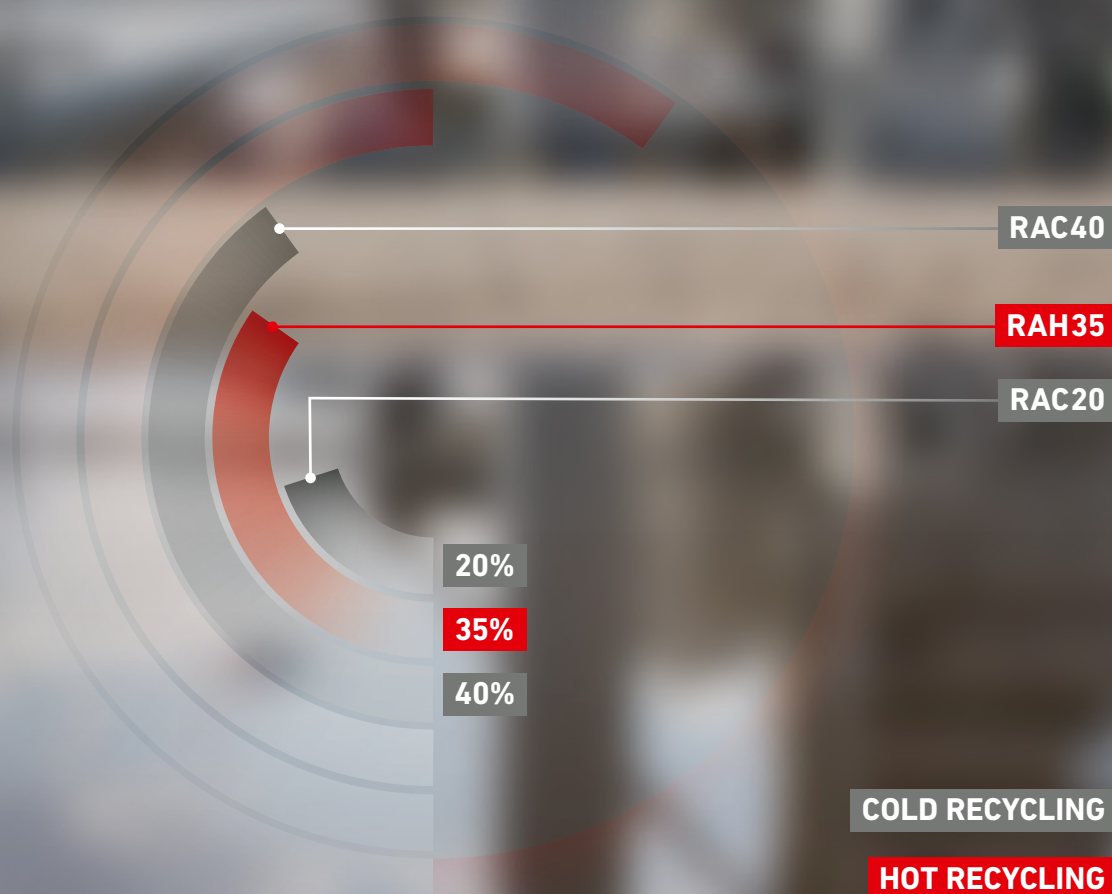
- Intuitive operator display showing how efficient the plant runs;
- Displays key values and enables comparison to reference values and previous periods;
- Determines the emitted CO₂ values;
- Determines the resulting energy costs.





SUSTAINABLE SOLUTIONS

The use of recycled asphalt is a necessity given today's sustainability needs. Ammann is a world leader in the development of RAP technology.



**UP TO 40% FEED
COLD IN THE MIXER**



HIGHLIGHTS

- One or two feed silos;
- Vibrating screen to prevent oversize material from entering and to prevent this material from accumulating;
- Dynamic weighing system with two load cells and quick calibration device;
- Direct discharge into the mixer along with heated virgin aggregates for prior mixing;
- 400 mm diameter steam extraction duct between the mixer and the gas pipe;
- Injection of PAC into the mixer at two points with selection via a three-way valve with electro-pneumatic drive (according to RAP %).

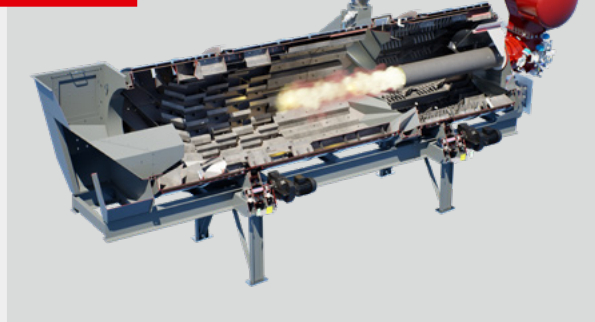
**UP TO 20% FEED
COLD IN THE MIXER**



HIGHLIGHTS

- Dynamic weighing system with two load cells and quick calibration device;
- Direct discharge into the mixer along with heated virgin aggregates for prior mixing;
- Steam extraction duct between the mixer and the gas pipe.

**UP TO 35 % HOT FEED
RAH 35**



BENEFITS

- Processes RAP proportions of up to 35%;
- Optimal investment/performance ratio;
- Energy savings through efficient processing of new material;
- Lower emissions, thanks to gentle heating of RAP;
- Advanced technology – as proven by Ammann's industry leadership and three international patents.



AS1

CONTROL SYSTEM

The reliable and innovative as1 Control System combines Ammann's renowned software with specially matched industrial hardware.

The as1 ARGON View increases the enjoyment of using the system, which is an important aid to the motivation, involvement and efficiency of the operating team. The dynamic visual attractions of the as1 ARGON View help the operator to stay focused and the intuitive user interface makes it easier to manage the complex production process.

THE FIELD BUS SYSTEM

Ensuring reliable signal transmission

The field bus is proven to be robust and reliable for critical operating conditions. Faults can be detected and eliminated efficiently using diagnostic tools, even via remote support.

ELECTRICAL PANEL COMPONENTS

Developed for hard work, 24 hours a day

Switchgear components must withstand the most extreme working stresses, 24 hours a day. For this reason, Ammann only uses components of proven quality, from renowned manufacturers and available worldwide.

HIGHLIGHTS

- Innovative appearance;
- Active and important elements are displayed larger and brighter;
- Smooth animations provide a clear overview;
- Drag and drop interactions;
- Different levels of information;
- Inactive elements are placed in the background allowing easier monitoring of ongoing tasks;
- Use of vector graphics for scalability and dynamics;
- Based on web technology, offering countless new possibilities.



HOTLINE AND ASSISTANCE TO GUARANTEE PLANT AVAILABILITY

Electromechanical faults can be quickly resolved by the customer's own technical team with the help of as1's electrical diagrams and diagnostic tools. Ammann's experienced hotline service team can be called on at any time to support fault diagnosis or maintenance. Modern means of telecommunication increase the operational availability of plants and reduce the need for local service visits.



Truck

AS1 PIP

Plant Information Point *web application*

WITH THIS OPTION,
MONITOR YOUR PLANT'S
PRODUCTION ANYTIME,
ANYWHERE.

HIGHLIGHTS

- Mobile data solution;
- Plant KPIs;
- Latest production information;
- 7-day production performance;
- Operating data;
- Plant status information (e.g. asphalt tank temperature);
- Daily performance data;
- Production protocols in PDF.





TRANSPORT & INSTALLATION

ACM Prime 2.0 is designed and manufactured to simplify transportation and assembly on site.

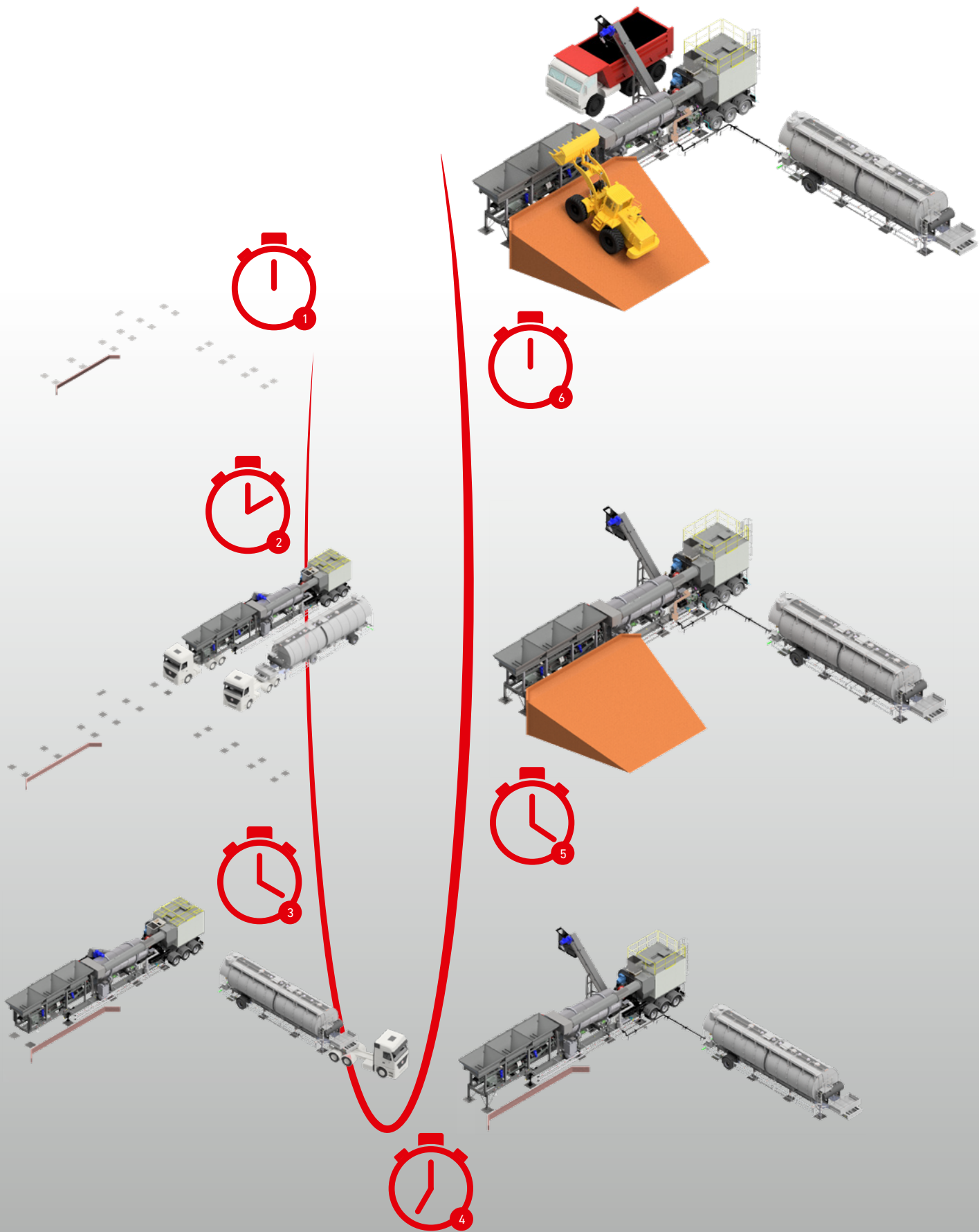


HIGHLIGHTS

- The compact design ensures that all the equipment can be mounted on one or two chassis;
- Transport is easy and economical;
- Adheres to international transportation standards;
- ACM Prime 2.0 occupies a small installation area and site preparation is minimal;
- The plant's components are tested at the factory and most are pre-assembled on the chassis;
- Plug-in components also speed up assembly;
- The plant can operate at full capacity within just ten days of arrival.



QUICK INSTALLATION



AMMANN AFTER SALES FOR PLANTS

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.



Retrofitting

- Improve the technological level of the plant;
- Increase component life;
- Increase the plant's efficiency.

Original Spare Parts

- Maintain the initial performance of the plant;
- Maximise plant use times (no stops in production);
- Monitor the maintenance costs.

A large, grey, modular AMMANN mobile screening plant is shown in a quarry setting. The plant has a large hopper at the top, a central processing unit with a yellow safety platform, and a conveyor system at the bottom. The background shows a blue sky with white clouds and a pile of aggregate material.

**■ AMMANN PARTS,
SERVICES AND TRAINING
PROTECT YOUR
INVESTMENT, ENSURING
EFFICIENT OPERATION
AND AFFORDABLE
RETROFITTING. ■**

Training

- Increase the plant's efficiency;
- Reduce unnecessary costs;
- Maximise plant use time.

Technical Service

- Assembly and professional testing of the system;
- Technical assistance;
- Preventative maintenance.

ASPHALT FLOW METER

The Coriolis-type mass flow meter directly measures the "mass" of the liquid asphalt and is immune to temperature variation (density/viscosity) of the asphalt.

BENEFITS

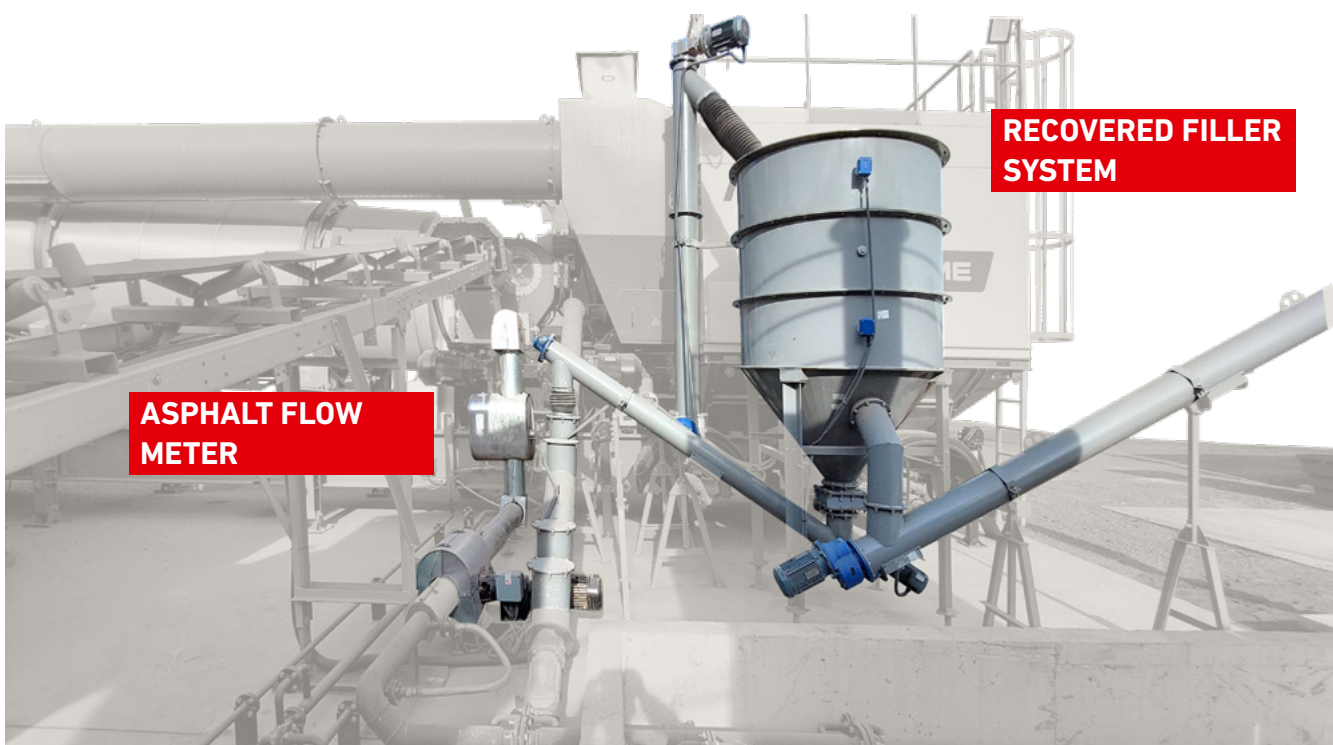
- Highest accuracy among all types of flow meters;
- Automatic and instantaneous control of the asphalt pump;
- Significant reduction in production costs.

RECOVERED FILLER SYSTEM

The recovered filler control system includes an intermediate silo that stores the filler extracted from the bag filter, allowing it to be accurately dosed in the plant's mixer.

BENEFITS

- **Precision** in the dosage of fines;
- **Automatic** control;
- **Better** homogeneity of the mixture;
- **Savings** on asphalt consumption.



AUTOMATED LUBE SYSTEM

What if a single procedure could extend the life of your plant, reduce fuel costs and improve safety, too?



BENEFITS

- The Ammlub system is directly mounted on the lubrication point and guarantees continuous relubrication at short intervals;
- Lubricants can be replaced while the plants are running, optimising routine maintenance while keeping your plant productive;
- Improves safety by removing workers from the process;
- Reduces energy costs up to 10%.

AMMATEX FILTER BAGS

Multiple filter bag types are available to ensure you have a perfect fit at your plant.

BENEFITS

- Precise manufacturing ensures quick installation and a perfect fit;
- Suitable for all fuel types;
- Exceptional price/performance ratio;
- Low emission values thanks to proper sealing and fitting;
- Reduced plant operating costs due to extended life of bags.



AMMANN'S GLOBAL PRESENCE

An Innovative, Sustainable Business

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. We are committed to sustainability – in both the products we make and the ways we make them.

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. Plants and machines that consistently prove their merits under demanding conditions are the best way to give our customers the critical, competitive edge they need.

Our reliable, punctual service network provides the essential spare parts that keep our customers working – and supports the plants and machines throughout their lifetimes.

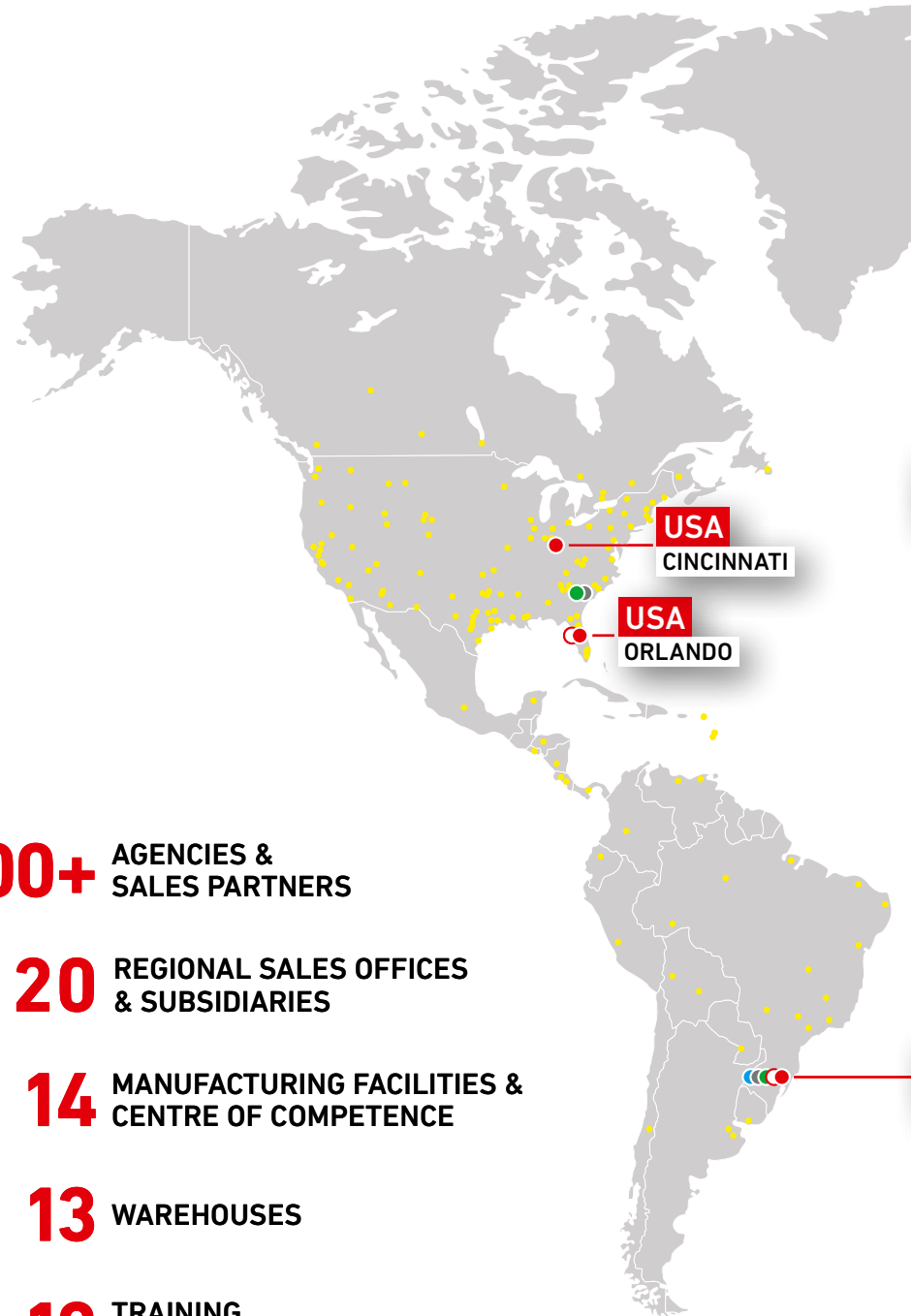
200+ AGENCIES & SALES PARTNERS

20 REGIONAL SALES OFFICES & SUBSIDIARIES

14 MANUFACTURING FACILITIES & CENTRE OF COMPETENCE

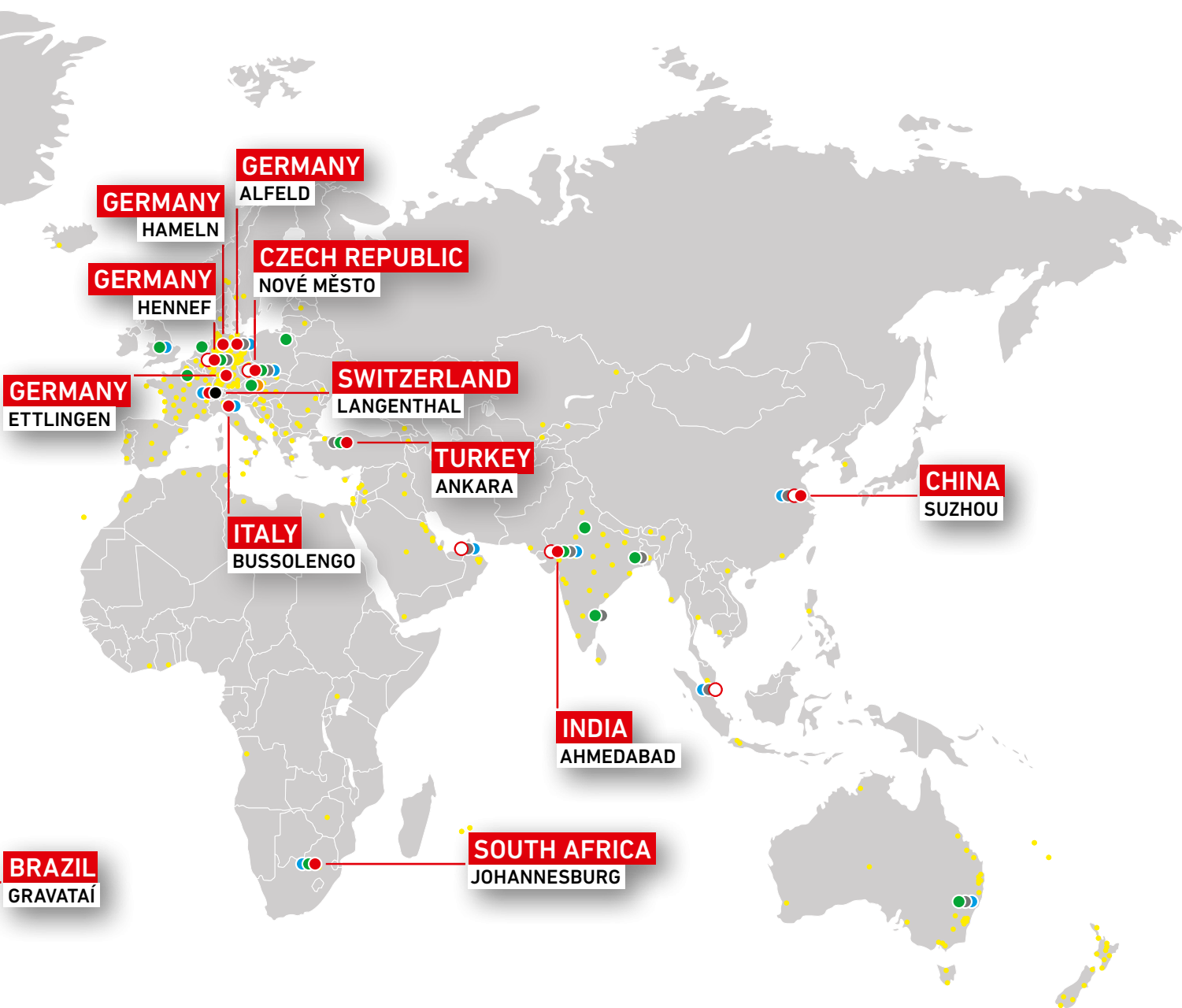
13 WAREHOUSES

12 TRAINING CENTRES



PLANTS

ASPHALT-MIXING PLANTS
CONCRETE-MIXING PLANTS



GLOBAL DISTRIBUTION & SERVICE NETWORK

- HEADQUARTERS
- REGIONAL SALES OFFICES
- SUBSIDIARIES
- AGENCIES & SALES PARTNERS
- MANUFACTURING FACILITIES & CENTRE OF COMPETENCE
- GLOBAL RETROFIT CENTRE
- WAREHOUSES
- TRAINING CENTRES



MACHINES

LIGHT COMPACTION
SOIL & ASPHALT COMPACTION
ASPHALT PAVERS



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