

ASPHALT BATCH CLASSIC

SOLIDBATCH

BUILT FOR HARD WORK
HIGH PERFORMANCE
HIGH RETURN ON INVESTMENT



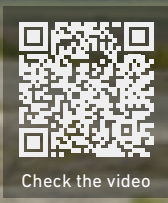
READY FOR TODAY AND TOMORROW
EASY UPDATES THROUGH SMART DESIGN

AMMANN

A WINNING RATIO

**THE ABC SOLIDBATCH ASPHALT-MIXING
PLANT REPRESENTS THE PERFECT
BALANCE BETWEEN INVESTMENT COST
AND PERFORMANCE.**





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AMMANN BATCH PORTFOLIO

CONSISTENT FROM START TO FINISH.
AMMANN BATCH PLANTS PROVIDE THE HARMONY
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. 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.

BATCH PORTFOLIO

	T/H	80	90	100	120	140	150	160	180	210	240	260	300	320	340	400
HRT	100%															
UNIVERSAL	100%															
UNIBATCH	100%															
SOLIDBATCH	40%															
VALUETEC	45%															
ECOBATCH	50%															
ECOTEC	25%															
SPEEDYBATCH	60%															
QUICKBATCH	60%															
EASYBATCH	25%															

AMMANN SOLIDBATCH PLANT PERFORMANCE

TYPE	PLANT ASPHALT MAX. PRODUCTION [T/H]		DRYER DRUM TYPE	BURNER [MW]	FILTER TYPE [SURFACE M ²]	SCREEN [N° SEL.]	HOT MINERAL SILO HMS [1.6 TON]	MIXER TYPE CAPACITY ASPH. PROD. IN T/H AT 85 BATCH/H	READY MIX SILO
	3%	5%							
100	100	80	T-1650	7	AFA 2238 [277 M ²]	VA 1230 [4-5]	20	AMIX 1.12 1'200 KG 102	UP TO 60 TON
180	180	140	T-2080	14	AFA 3042 [483 M ²]	VA 1536 S [4-5]	29	AMIX 1.22 2'200 KG 187	UP TO 110 TON
260	260	210	T-2390	18	AFA 3062 [724 M ²]	VA 1840 S [5-6]	36-86	AMIX 2.30 3'300 KG 280	
340	340	260	T-25100	24	AFA 3075 [885 M ²]	VA 2050 S [5-6]	40-115	AMIX 2.40 4'300 KG 365	

RECOMMENDED CONFIGURATION – PLEASE CONTACT AMMANN SALES FORCE FOR TUNING YOUR ASPHALT PLANT



A SIMPLE AND CLEAR CONCEPT

THE SOLIDBATCH LINE HAS PLANTS WITH OUTPUTS RANGING FROM 100 TO 340 TON PER HOUR, ENSURING CUSTOMERS HAVE THE PRODUCTION THAT MATCHES THEIR NEEDS.

New ABC SolidBatch Plants provide value through their unique, compact design and advanced drying and filtration. Production is maximised while operating costs are minimised.

The standard ABC SolidBatch Plant meets key customer requirements including:

- Reliability
- Limitless performance, including the use of up to 40% RAP
- Safe and simple maintenance
- The highest quality
- An ability to upgrade the plant over time and build on the initial investment

The ABC SolidBatch provides a solid foundation. The plant is designed for customers who need to deliver production under time pressures. It represents the best value on the market with its lowest total cost of ownership. The savings start with a competitive purchase price and then continue with low costs for transport, installation and maintenance. This approach is part of Ammann's commitment to providing the best possible customer experience.



▮▮ REDUCING YOUR
TOTAL COST
OF OWNERSHIP
AND BOOSTING
YOUR PROFIT. ▮▮



SOLIDBATCH: ADVANTAGE OVER ALL OTHERS

EXCEPTIONAL PERFORMANCE, RELIABILITY AND QUALITY ARE THE CORNERSTONES OF OUR CUSTOMER COMMITMENT. THESE CRITERIA CREATE UNIQUE ADVANTAGES THAT SEPARATE THE SOLIDBATCH FROM COMPETITORS' PLANTS.

We continuously invest in technology and innovation to ensure the best solutions for efficiency, energy savings and sustainability. The utilisation of recycled asphalt lessens the plant's environmental impact while offering scalable solutions for specific needs.

Optimised transport and on-site assembly bring flexibility, cost effectiveness and immediate production to our customers.

Last, but certainly not least, is the highly advanced as1 Control System that furthers production efforts.



SUSTAINABLE SOLUTIONS

- Designed for using:
 - 15% RAP in the hot elevator
 - 40% RAP in the mixer
- Designed to produce COLD, WARM, and HOT mix
- Optimised and modular products can be upgraded at any time



EFFICIENCY & ENERGY SAVING

- Ammann technology provides efficient energy consumption compared to competitive plants
- Low energy consumption = low CO₂ emissions
- Low energy consumption = reduced operating costs

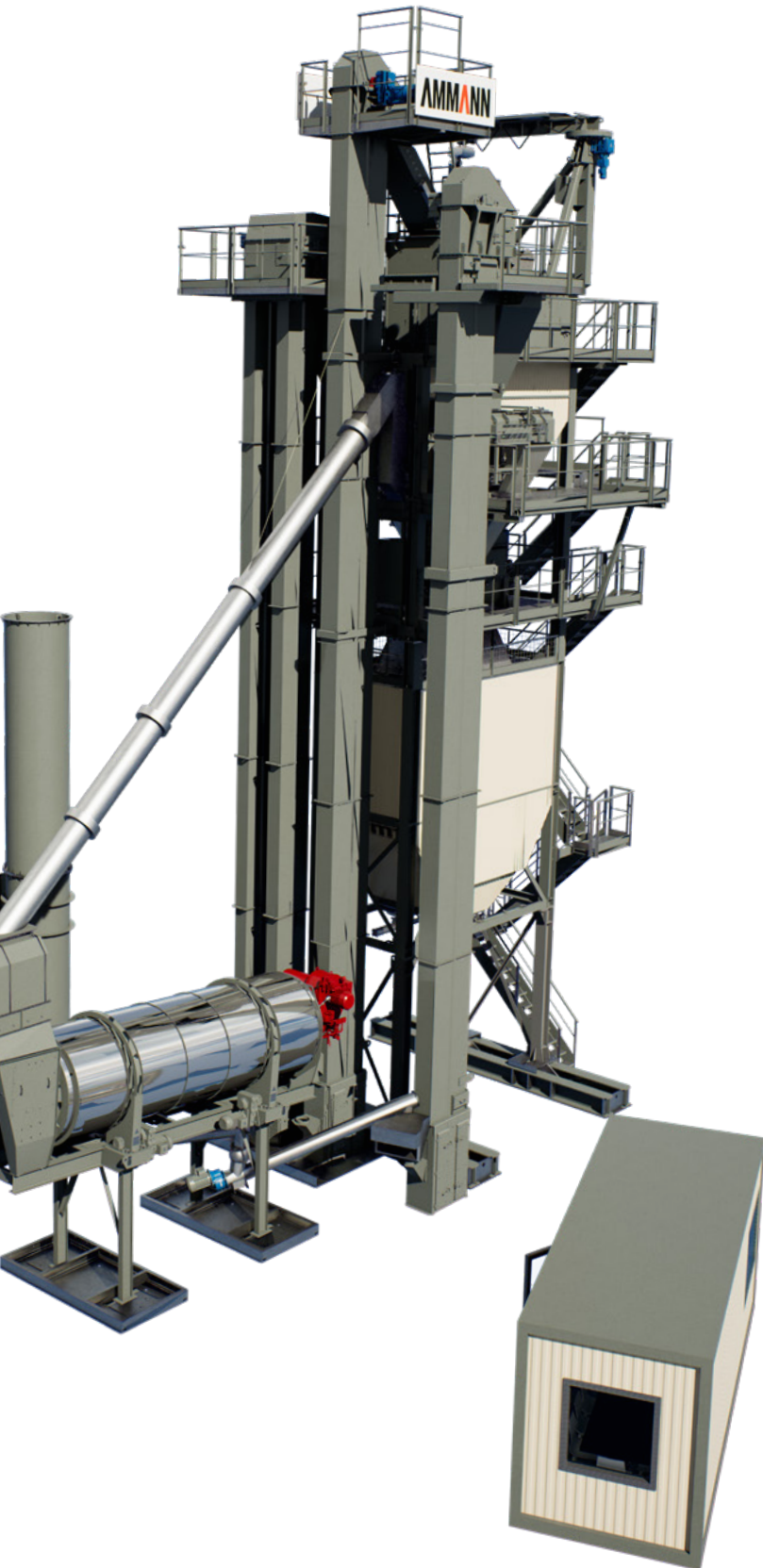


TRANSPORT & INSTALLATION

- Best TCO (Total Cost of Ownership) on the market
- Low-cost handling and transport
- Quick installation



Batch mixing
process



LOW ENVIRONMENTAL IMPACT

- All plants designed:
 - To be aesthetically pleasing or out of view
 - To provide scalable solutions for air, sound and odour emissions



QUALITY & RELIABILITY

- Ammann provides excellent value in dryers and burners, filter bags, screens and mixers, and control system
- All core parts are designed in Switzerland
- Special solutions such as Amdurit and Ammatex solve real customer problems



AS1 CONTROL SYSTEM

- At work in more than 3,000 plants globally
- Most innovative and complete system ever designed for asphalt plants



QUALITY & RELIABILITY



Learn more

AMMANN ASPHALT-MIXING PLANTS UTILISE COMPLEX PROCESS ENGINEERING THAT REQUIRES PERFECT INTERACTION BETWEEN ALL INDIVIDUAL COMPONENTS.

So essential is this integration that Ammann engineers all core components in-house – 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.

AMMANN



DRYER DRUM

- A single manufacturer provides all drying / heating / exhaust management processes, ensuring perfect attunement
- A wide range of dryer sizes for plant capacities up to 340 ton per hour to meet varied needs
- Optimised heat transfer stages and dryer insulation for maximum efficiency and fuel savings
- Low-wear, low-maintenance design with high material quality and easy exchange of wear parts
- Adaptable internal dryer design for use of varied aggregates and fuels



BURNER

- Multi-fuel firing with simultaneous or alternating combustion of up to three fuel types for maximum flexibility
 - A highly effective combustion process for low fuel consumption and emissions
 - Combustion of solid pulverised fuel without the need of a supporting flame
 - Integrated soundproofing for reduced sound; further reduction possible through a frequency converter
 - Safety concept meets regulations of all countries
- Available for varied liquid, gas and solid fuels:
 - Light oil
 - Heavy oil
 - Waste oil
 - Bio oil
 - Kerosene
 - LPG
 - Natural gas
 - LPG in a gas state



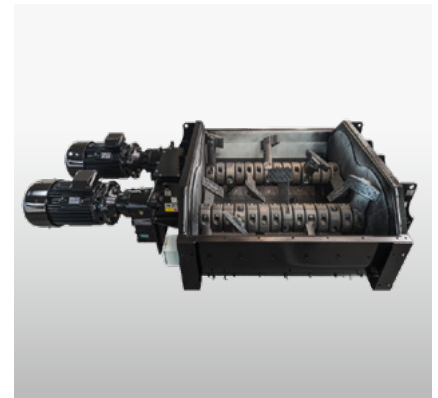
FILTER

- Proprietary rotor step mechanisms gently clean the filter bags
- Filtration efficiency of 99.9% ensures compliance
- The largest possible surface provides optimal filtration efficiency
- Minimal moving parts reduce maintenance and improve reliability
- High-quality aluminium supporting cages are acid resistant
- The CFD-supported baghouse design reduces temperature and pressure losses



SCREEN

- Precisely controlled variables include stroke angle, amplitude, frequency, screen body design and mesh geometry. The result is the highest-performing screens in the market
- Optimised for high temperatures
- The screen is state-of-the-art
- Easy integration due to identical interfaces



MIXER

- Minimal wear through protected components and an efficient mixing process
- Compulsory twin-shaft mixer provides highest shear forces
- Optimal homogeneity and mixing time through the unique Ammann paddle arrangement
- Maximum sequence design flexibility that enables production of special mixes



LOW ENVIRONMENTAL IMPACT

A SHORTAGE OF INDUSTRIAL LAND MEANS THAT ASPHALT-MIXING PLANTS MUST INCREASINGLY BE LOCATED CLOSER TO RESIDENTIAL AREAS.

THAT MAKES IT MORE IMPORTANT THAN EVER THAT PLANTS MINIMISE NOISE IN AN EFFORT TO BE GOOD NEIGHBOURS AND TO MEET LOCAL REQUIREMENTS.



- Ammann offers four levels of noise suppression.
- SolidBatch plants are designed for easy cladding.
- Cladding prevents dust and fumes from being released in the atmosphere.
- Plants with cladding are aesthetically pleasing, essential when seeking approvals in urban areas.

LEVEL 1

AN ECONOMICAL, EFFECTIVE APPROACH

Includes several basic cost-conscious efforts:

- The burners are equipped with variable speed drives so the electric motor can be slowed – and made quieter – when full power isn't needed
- A stack silencer, which is essentially a chute inserted in the chimney, acts as a sound suppressor
- Head stations of the elevators for reclaimed asphalt pavement (RAP) and virgin aggregates (VA) are covered with panelled cladding to reduce sound levels from the inside
- Sound-inhibiting walls are placed around the plant exhauster to cancel noise from inside

LEVEL 2

COVERING MAIN EMITTERS

Builds on Level 1 and then offers several additions and upgrades:

- The burners are covered with panelled cladding
- The RAP and VA elevator shafts are insulated to minimise the sound of turning chains and falling material
- The RAP and VA transfer chutes are insulated
- Sound-inhibiting walls are placed around the plant exhauster to cancel noise from inside
- The mixer and weighing level are clad with trapezoidal panels
- The oversized coarse grain channel is insulated

LEVEL 3

CLADDING FOR FURTHER REDUCTIONS

Builds on Levels 1 and 2 and then offers several additions and upgrades:

- The mixer and weighing level are clad with sound-absorption panels (An improvement from trapezoidal sheets in Level 2)

LEVEL 4

THE QUIETEST PLANT POSSIBLE

Builds on Levels 1, 2 and 3 and then offers several additions and upgrades:

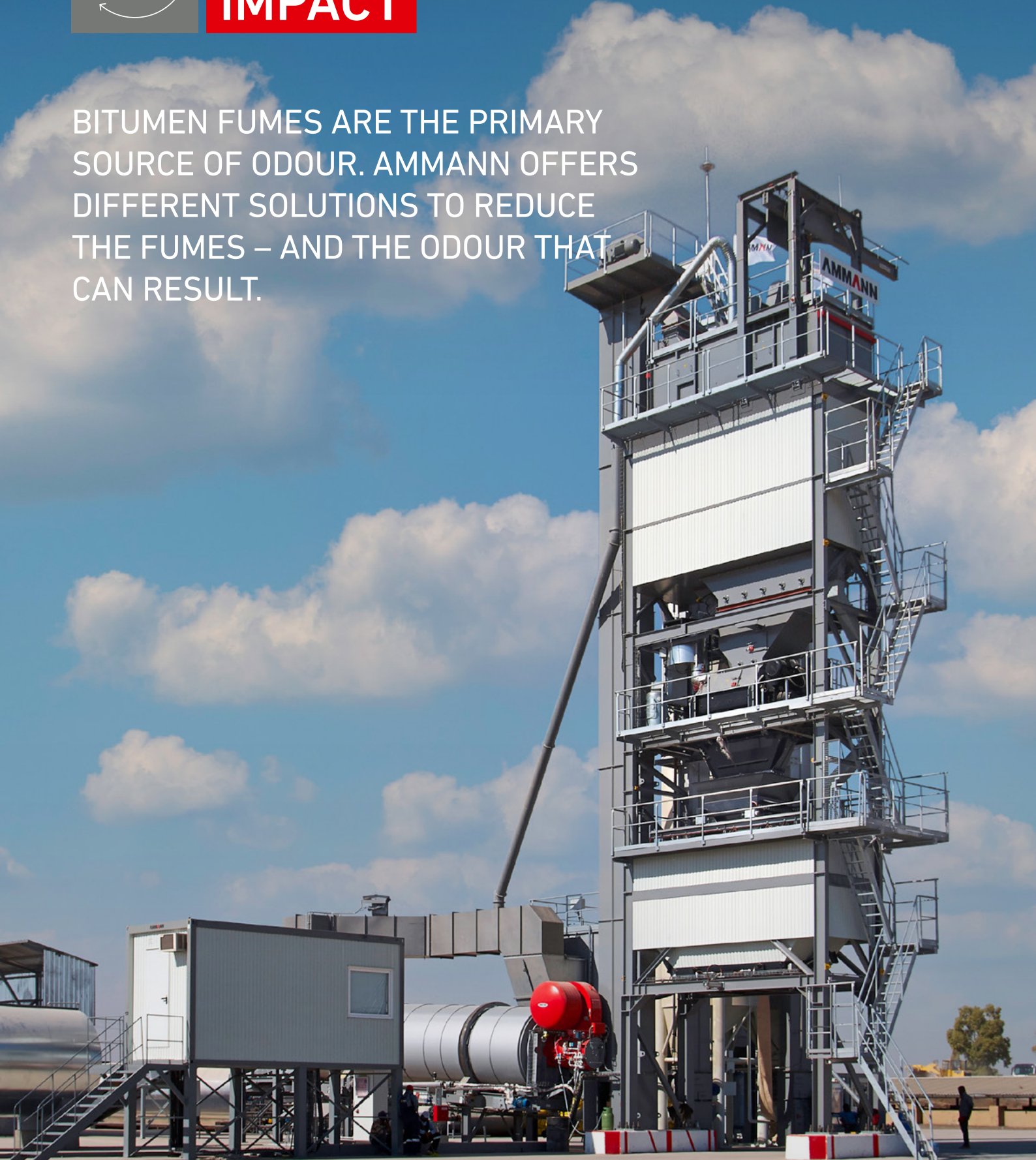
- The VA dryer and the burner are fully surrounded by a housing with sound-absorption panels
- The cold feeders utilise three-sided housing
- A sound-suppression housing is placed over the bitumen pump and compressor unit





LOW ENVIRONMENTAL IMPACT

BITUMEN FUMES ARE THE PRIMARY SOURCE OF ODOUR. AMMANN OFFERS DIFFERENT SOLUTIONS TO REDUCE THE FUMES – AND THE ODOUR THAT CAN RESULT.





BLUE SMOKE TREATMENT

The system, developed by Ammann, addresses the blue smoke that is released during truck loading.

With this process, the vapours are aspirated at the skip or diverted under the mixer – not near the discharge doors of the finished product silo.

The system is based on the principle that hot air rises, thus decreasing the volume above the finished product silo. At this point in the process, blue smoke is piped to a cooling system for the condensation of the oily phase – and subsequently to an oil separator for the capture of the finest oily particles. The treated gases are transferred to the burner and ignited.



ODOUR NEUTRALIZATION SYSTEM

The system attacks odour emissions at two key points. First, a special kit inserted in the chimney neutralizes emissions generated during production. In addition, a mist barrier blocks odours in the load-out area.



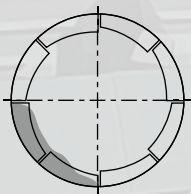


EFFICIENCY & ENERGY SAVING

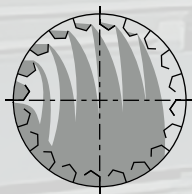
AMMANN PLANTS ENABLE CUSTOMERS TO CARRY OUT THEIR DUTIES EFFICIENTLY AND PRODUCTIVELY. THE PLANTS HELP CUSTOMERS WORK SMARTER, NOT HARDER.

DRYER

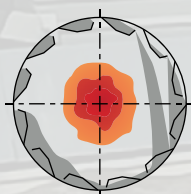
- SolidBatch dryers are highly efficient at production levels of up to 64 t/h at (3 % moisture content) per square metre – 22 % more efficient than the existing standard.
- This results in low energy consumption, which in turn reduces fuel costs and CO₂ emissions.
- Recycling rate up to 40% at 2% H₂O. Designed to produce cold, WMA, and hot mix asphalt.
- That temperature range is 20°C less than competitive dryer drums and can be measured in savings of 1 kWh/T.



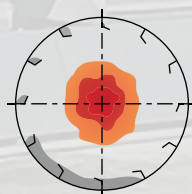
CONVEYING



CONVECTION



RADIATION



DISCHARGE



Our sustainable promise



FILTER

- Less pressure lost means lower energy consumption.
- The new design ensures uniform distribution of exhaust air inside the filter.
- Proper distribution/filling utilises more of the bag surface and improves efficiency.

BURNER

- New technology controls the flame shape.
- More power can be given in smaller dryers, resulting in efficiency and energy savings per ton of aggregates dried and heated.
- A special software optimises air/fuel mixing for increased combustion efficacy, leading to significant annual savings in fuel.



EFFICIENCY & ENERGY SAVING

AMMANN FOAM

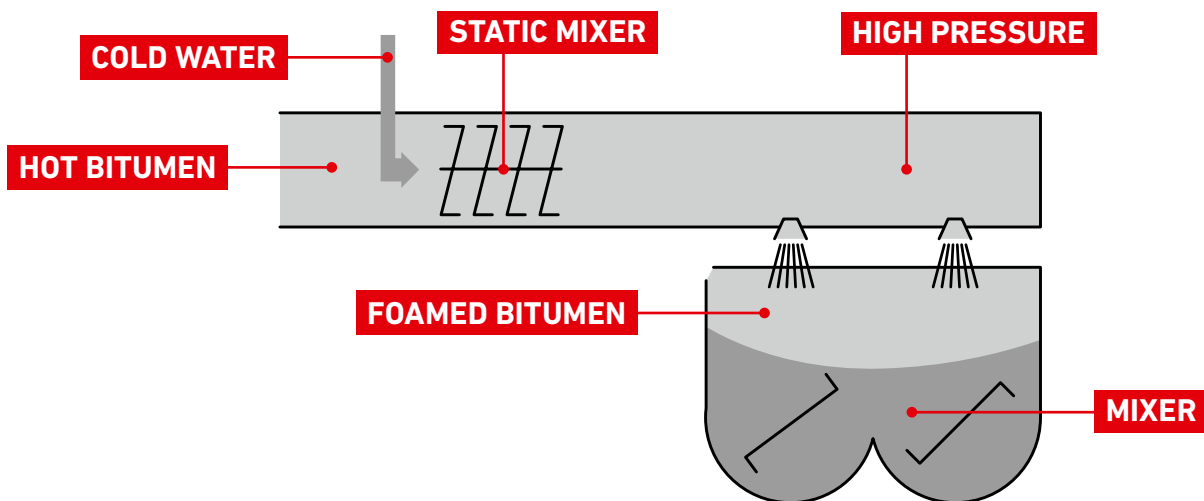
AMMANN BELIEVES LOW TEMPERATURE ASPHALT MIXES ARE THE FUTURE OF THE ASPHALT INDUSTRY. THEREFORE, WE DEVELOPED THE AMMANN FOAM SYSTEM IN COLLABORATION WITH OUR CUSTOMERS AND INTERNAL EXPERTS.

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

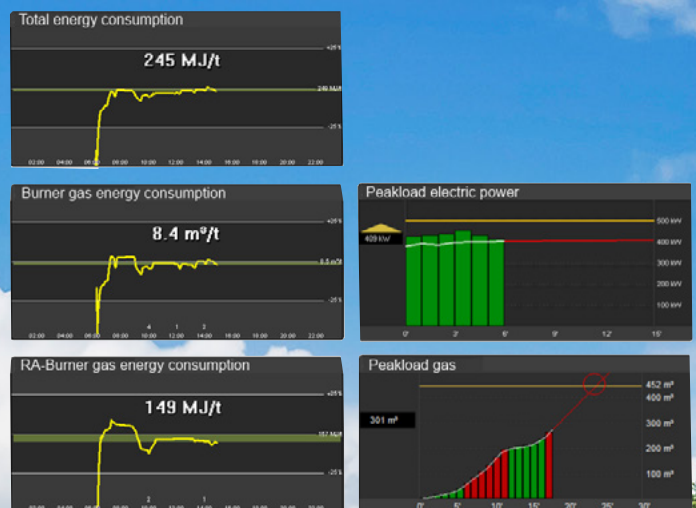
THIS AS1 MODULE HELPS UNCOVER AND ELIMINATE ENERGY WASTE.

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

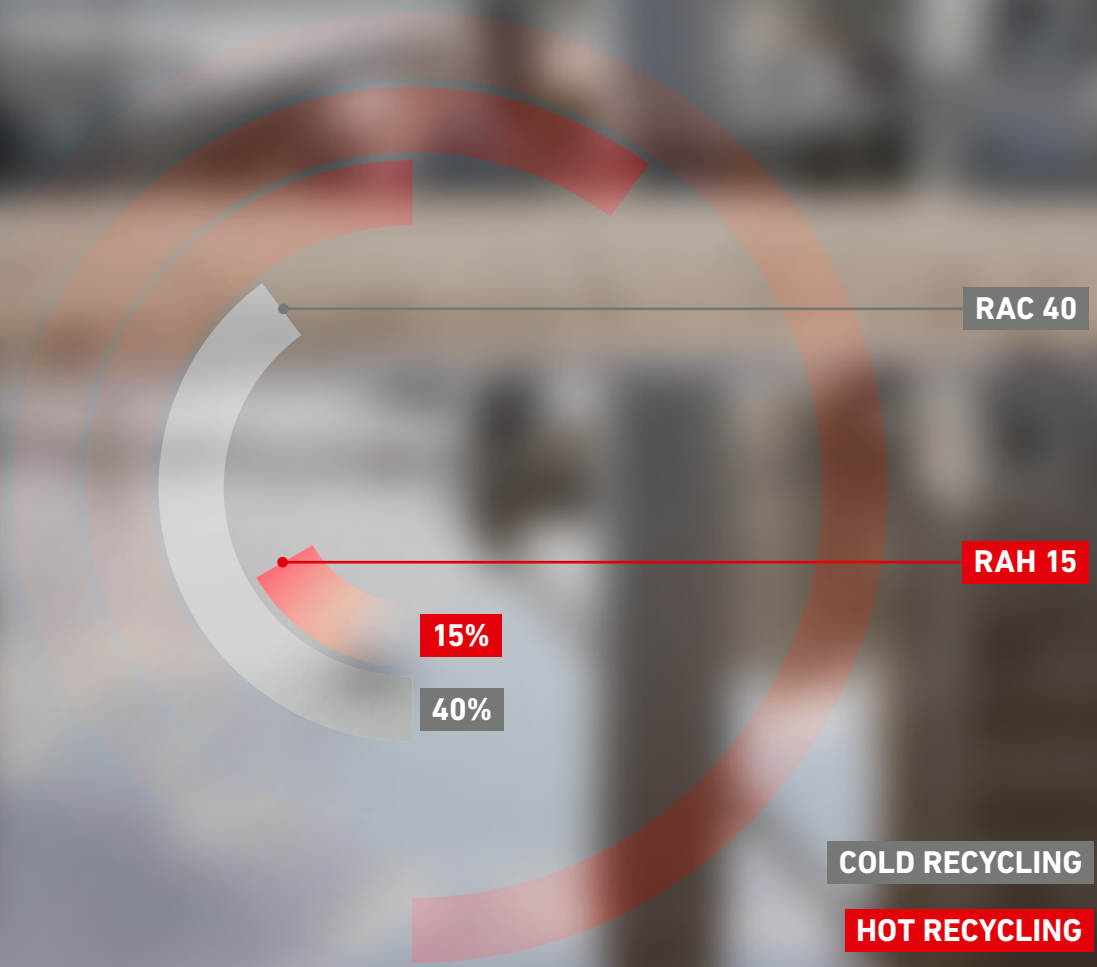
- Intuitive operator display showing how efficient the plant runs
- Displays key values and enables comparison to reference values and previous periods
- Determines the emitted CO₂ values
- Determines the resulting energy costs





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 % COLD FEED INTO THE MIXER

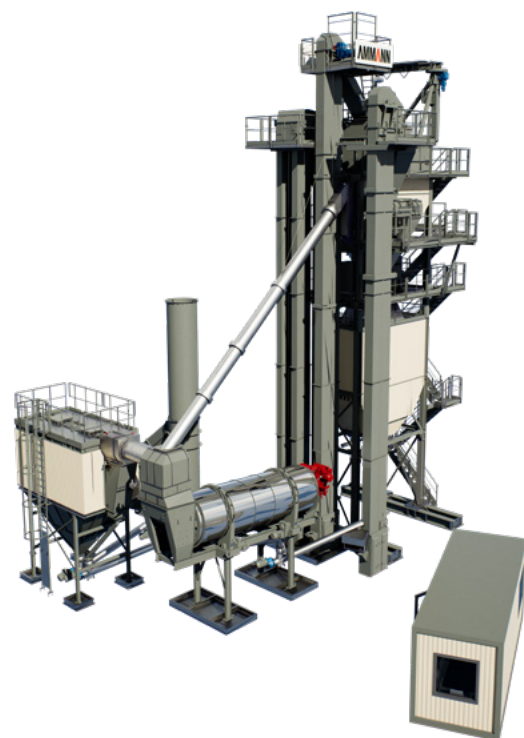
BENEFITS

- Recycling rate up to 40%
- Limited initial investment
- RAP is dried-heated directly in the mixer in contact with overheated aggregates
- Can always be produced via the screen
- Can dose a minimum quantity according to technical norms
- No sticking in mixing tower

UP TO 15% HOT FEED INTO THE HOT ELEVATOR

BENEFITS

- Recycling rate up to 15%
- Limited initial investment
- RAP is dried-heated directly in contact with overheated aggregates, starting from the hot elevator's bucket and later into the HMS silo
- Can always be produced via the screen up to 15%
- Can dose a minimum quantity according to technical norms
- No sticking in mixing tower





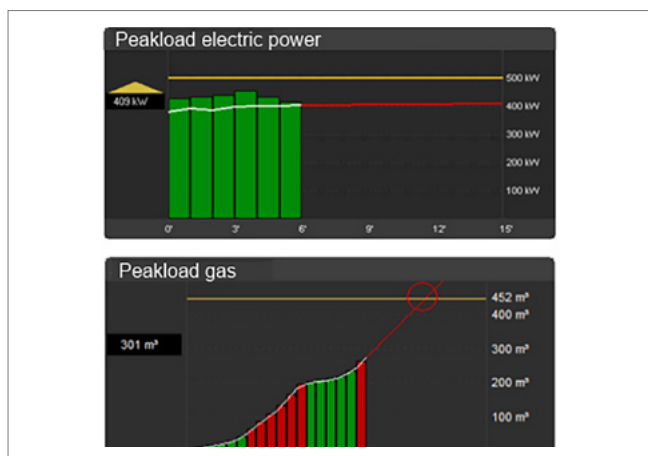
AS1 PEAK LOAD MANAGEMENT

Energy suppliers typically base pricing on usage or capacity. For the latter, the measured peak sets the price. Therefore, it is in the best interest of plant owners/operators to keep usage as low as possible during peak loads.

The as1 Peak Load Management module continuously monitors peak usage against critical values. It predicts peak times and reduces load during the costliest periods.

Some plant devices can be switched off during these periods. The module also utilises automatic stepping based on forecasts.

Peak Load Management works seamlessly with the as1 EcoView module and is available for both electricity and gas.



HIGHLIGHTS

- Prevents short-term, expensive usage during peak loads
- Forecast function
- Automatic switch off for electrical consumers

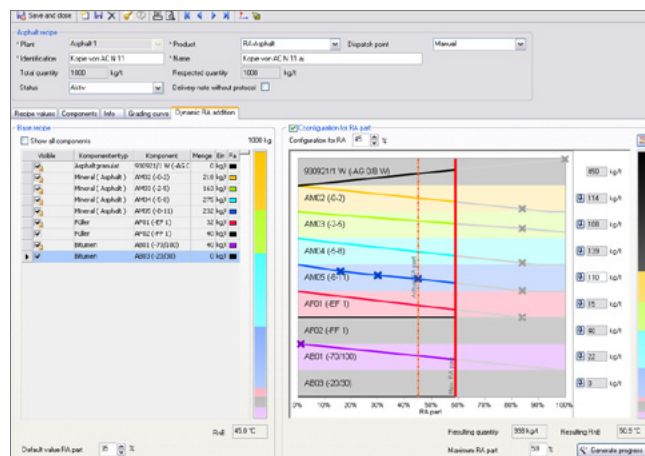
AS1 DYNAMIC RECYCLING ADDITION

The RAD module makes it easy to modify the RAP ratio. An integrated wizard guides the operator through the recipe input process. Slide controls enable adjustment of the RAP ratio during production.

It is designed to ensure that RAP addition, and therefore binder saving, are always maximized: This gives operators the confidence to keep throughput high while maintaining quality as the overarching priority. This, in turn, ensures that efficiency is excellent and therefore profitability is maximized.

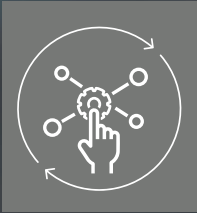
VARIOUS RAP RATIOS IN A SINGLE RECIPE

Use of reclaimed asphalt protects natural resources and also offers economical advantages. The optional as1 module "dynamic RAP addition" makes it easy to modify the RAP ratio in accordance with requirements, even during production.



HIGHLIGHTS

- The integrated wizard guides operator through the recipe input process
- One recipe is sufficient for numerous RAP ratios
- Change the RAP ratio by using the slide controls during production



AS1 CONTROL SYSTEM

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.

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.

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





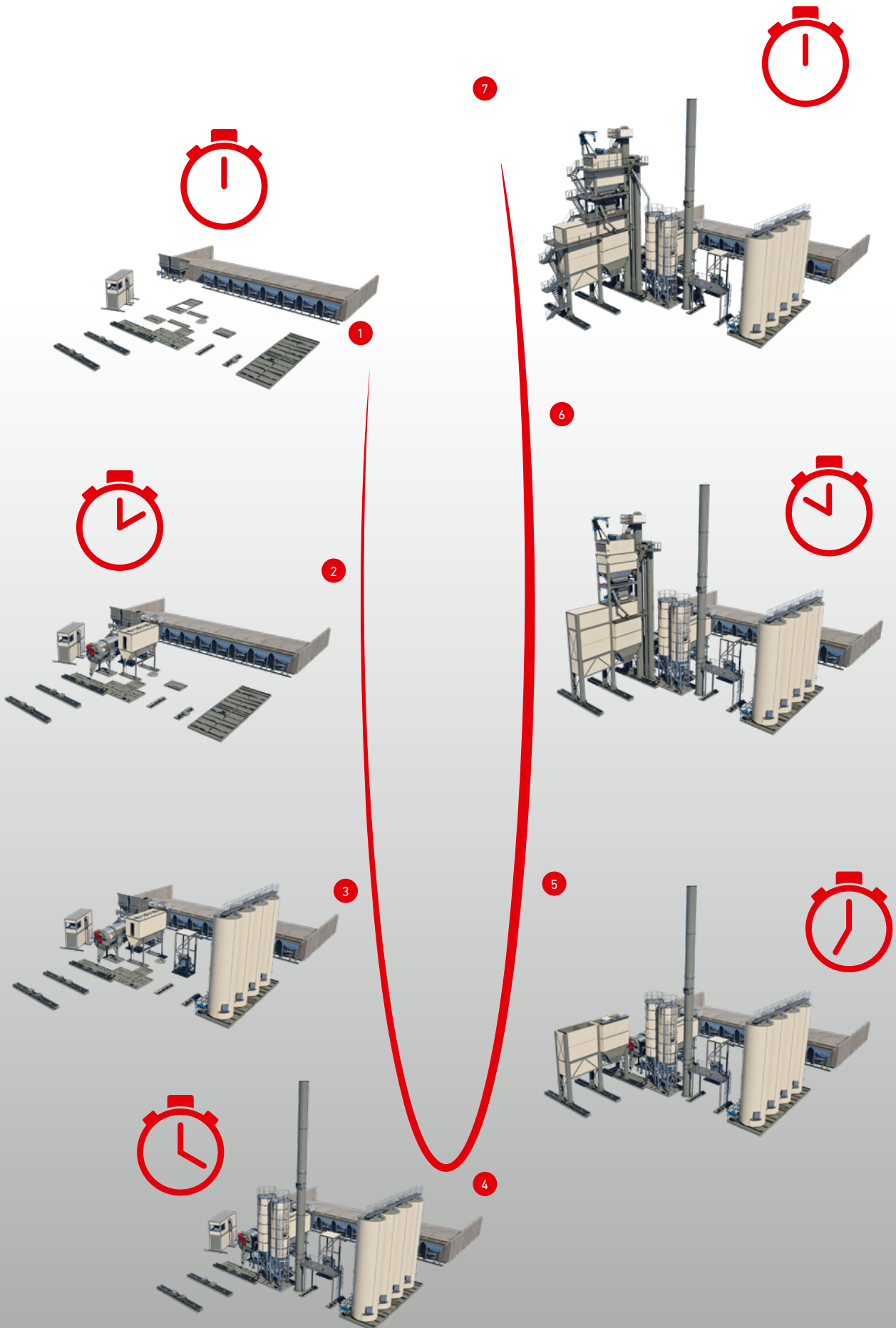
TRANSPORT & INSTALLATION

THE SOLIDBATCH IS DESIGNED AND ENGINEERED TO SIMPLIFY TRANSPORT AND ON-SITE ASSEMBLY.

Cost-effective transport and erection are essential to customer value. Plant options include steel bases that enable installation on stabilised soil – without the need of a concrete foundation. All cables are pre-assembled and tested in house.



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



TRAINING

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

TECHNICAL SERVICE

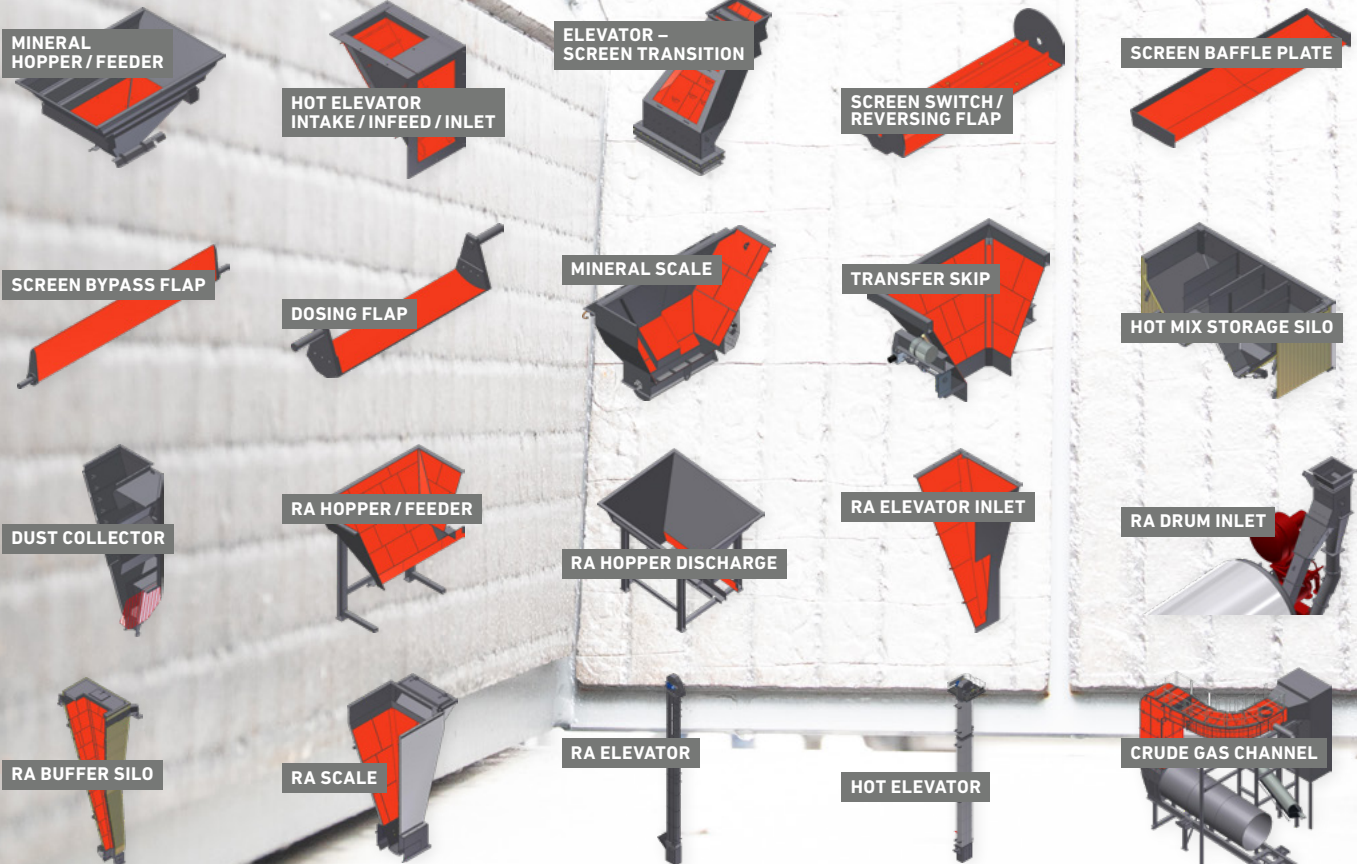
- Assembly and professional testing of the system
- Technical assistance
- Preventative maintenance

AMDURIT

AMDURIT, AMMANN'S PROPRIETARY WEAR-PROTECTION SYSTEM, PROVIDES UP TO THREE TIMES THE SERVICE LIFE OF WEAR-RESISTANT STEEL AND PROTECTS VALUABLE PARTS AND COMPONENTS.

BENEFITS

- Three times more durable than wear-resistant steel
- Lower operating costs
- Longer lifetime
- Fast installation
- Reduced downtime



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

13 MANUFACTURING FACILITIES & CENTRE OF COMPETENCE

13 WAREHOUSES

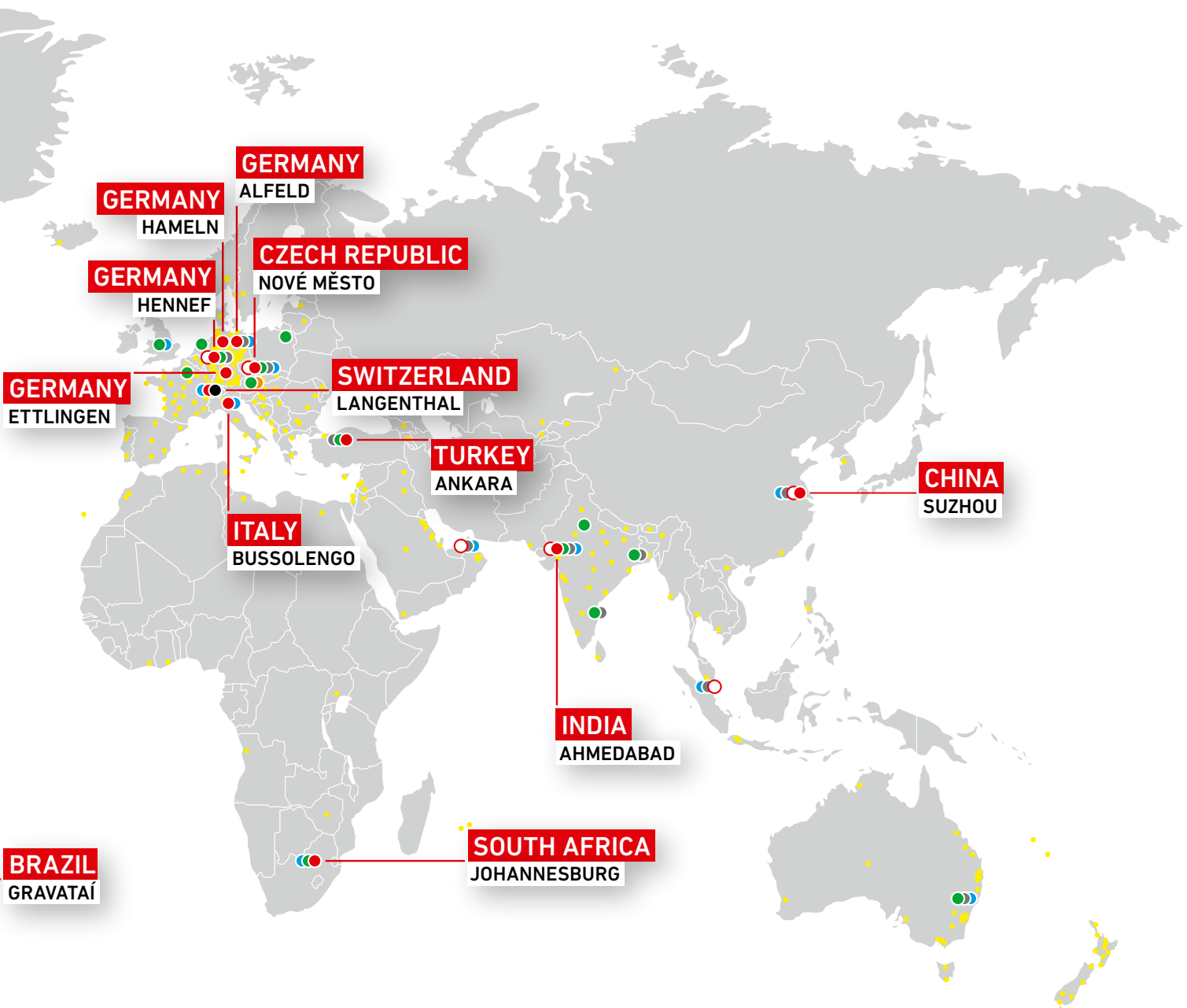
12 TRAINING CENTRES



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



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

