



# BE TOWER

COMPACT AND HIGH-PERFORMANCE



F A Y A T M I X I N G P L A N T S

# BE TOWER

MARINI responds to market demands with its new generation of BE TOWER batch plants producing up to 240 t/h.

BE TOWER is designed and manufactured in Italy and combines state-of-the-art technology with excellent performance at an attractive price.



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# THE BE TOWER RANGE

Our global presence



Be Tower 2500 -  
Bosnia and Herzegovina



Be Tower 2000 -  
Argentina



Be Tower 2500 -  
Nigeria



Be Tower 2000 -  
UAE



Be Tower 2000 P -  
Peru



Be Tower 2000 P -  
Argentina



Be Tower 2500 -  
Colombia

## BE TOWER: RANGE UP TO 160 T/H

Type	BT 1500	BT 2000	BT 2000 P
Maximum output	120 t/h	160 t/h	
Plant capacity (3% humidity)	120 t/h	160 t/h	
Plant capacity (5% humidity)	95 t/h	120 t/h	160 t/h
Cold feeders: capacity and number	on customer request		
Dryer drum	E180 (L=7.5 m/D=1.8 m)	E180 (L=8.5 m/D=1.8 m)	E206 (L=8.5 m/D=2.06 m)
Burner power	7 MW	9 MW	13.4 MW
Recovered fines hopper	15.4 t	22 t	25.3 t
Filter surface	413 m <sup>2</sup>	525 m <sup>2</sup>	663 m <sup>2</sup>
Total screen surface	4 sel.= 14.6 m <sup>2</sup> / 5 sel.= 17.6 m <sup>2</sup>		4 sel.= 16.5 m <sup>2</sup> / 5 sel.= 20.8 m <sup>2</sup>
Under screen compartments	4 (5 optional)		
Hot aggregate storage under screen	17.3 t	20 t / 52 t	
Mixer capacity	1.5 t	2 t	
Imported filler storage	on customer request		
Bitumen storage	on customer request		
Product storage / compartments	<p>direct loading; under mixer 30 t in 1 compartment;</p> <p>storage on side 36 + 45 t in 2 compartments;</p>	<p>direct loading; under mixer 30 t in 1 compartment; 60 t in 2 compartments; 140 t in 2 compartments;</p> <p>storage on side 36 + 45 t in 2 compartments; (optional up to 221 t)</p>	
Recycling	30% of RAP into the mixer	40% of RAP into the mixer	



Be Tower 1500 - Argentina

## BE TOWER: RANGE UP TO 240 T/H

Type	BT 2500	BT 2500 P	BT 3000	BT 3000 P
Maximum output	200 t/h		240 t/h	
Plant capacity (3% humidity)	200 t/h		200 t/h	240 t/h
Plant capacity (5% humidity)	180 t/h	200 t/h	180 t/h	220 t/h
Cold feeders: capacity and number	on customer request			
Dryer drum	E206 (L=8.5 m/D=2.06 m)	E220 (L=9 m/D=2.2 m)	E206 (L=8.5 m/D=2.06 m)	E220 (L=9 m/D=2.2 m)
Burner power	13.4 MW	16.8 MW	13.4 MW	16.8 MW
Recovered fines hopper	25.3 t	27.5 t	25.3 t	27.5 t
Filter surface	663 m <sup>2</sup>	750 m <sup>2</sup>	663 m <sup>2</sup>	750 m <sup>2</sup>
Total screen surface	5 sel.= 26.9 m <sup>2</sup> / 6 sel.= 32.1 m <sup>2</sup>			
Under screen compartments	5 (6 optional)			
Hot aggregate storage under screen	20 t / 52 t			
Mixer capacity	2.5 t		3 t	
Imported filler storage	on customer request			
Bitumen storage	on customer request			
Product storage / compartments	<p>direct loading;  under mixer  30 t in 1 compartment;  2 x 30 t in 2 compartments;  2 x 70 t in 2 compartments;  up to 320 t in 6 compartments;</p> <p>storage on side  36 + 45 t in 2 compartments (optional up to 221 t);</p>			
Recycling	40% of RAP into the mixer			

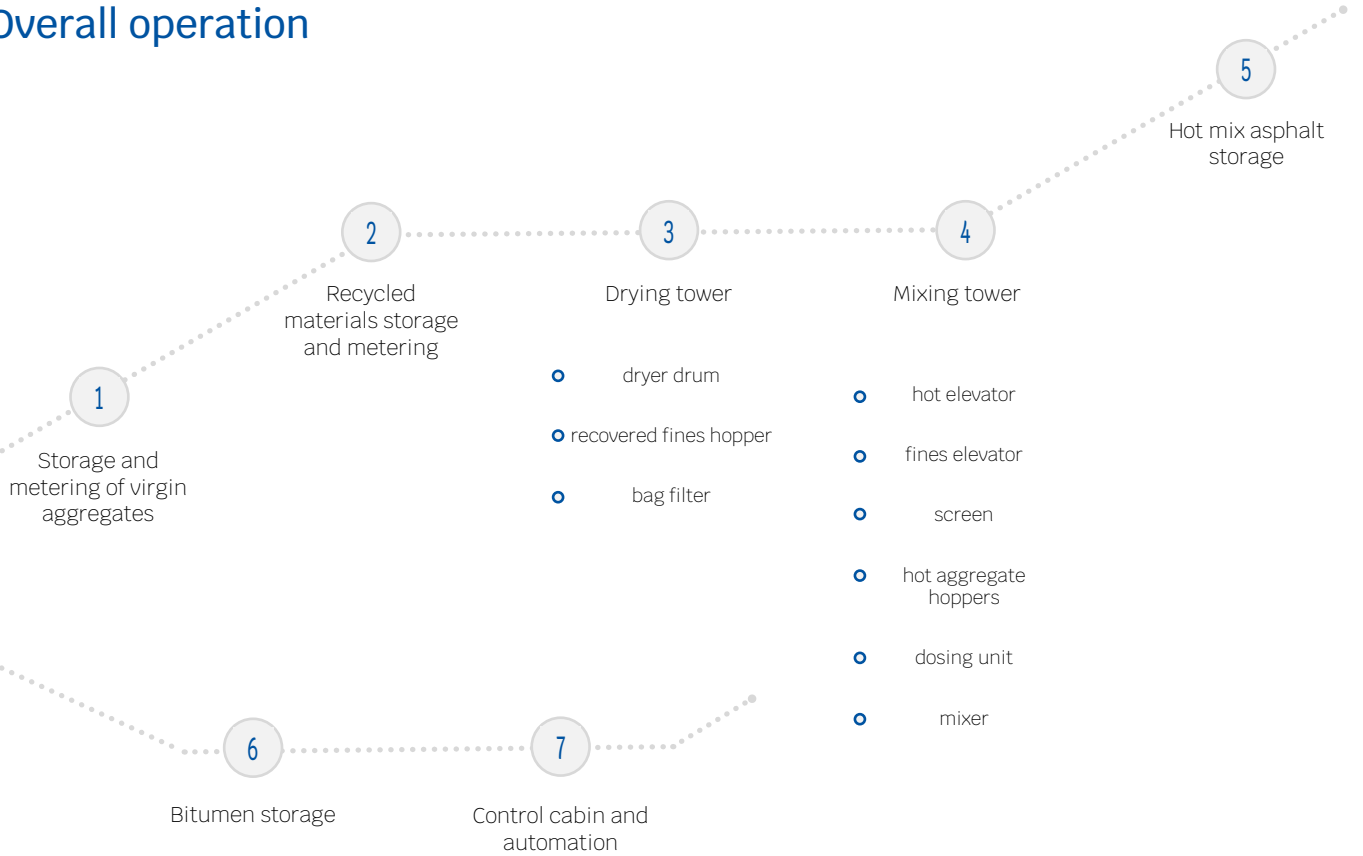




Be Tower 3000 P - Saudi Arabia

# CONFIGURATIONS AND TECHNICAL SPECIFICATIONS

## Overall operation





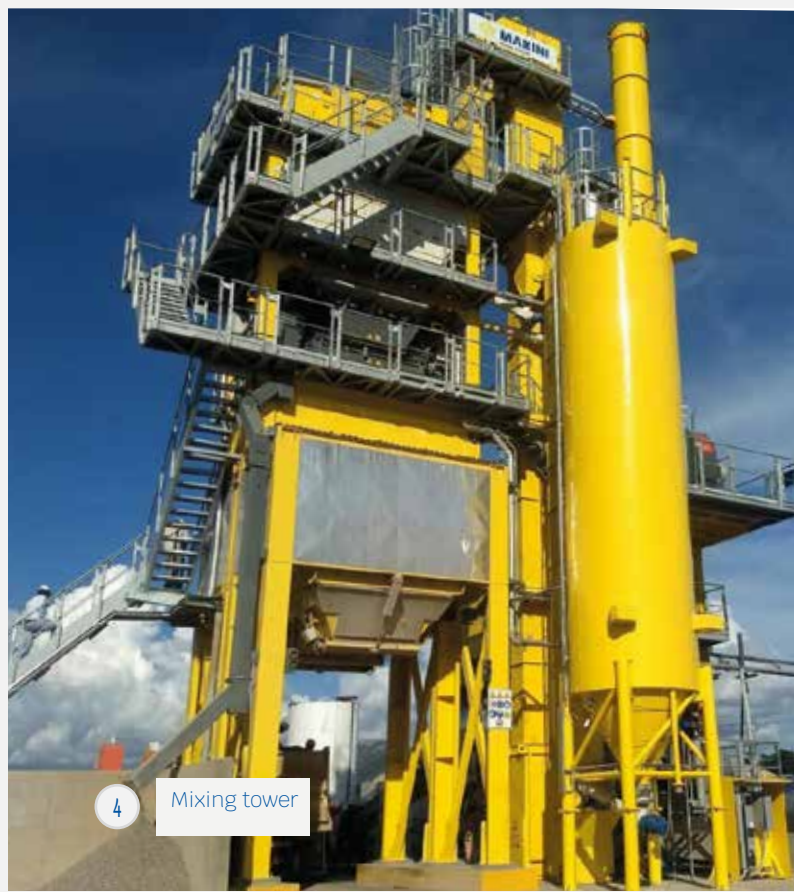
1 Cold feeders with hopper - width: 3.5 m / 4 m capacity: 11 m<sup>3</sup> / 18 m<sup>3</sup> / 20 m<sup>3</sup>



2 RAP cold feeders



3 Drying tower



4 Mixing tower



5 Hot mix asphalt storage



6 Bitumen storage



7 Control cabin

# WHAT MAKES OUR PLANT UNIQUE

Be Tower 2000 P - Argentina



### TECHNOLOGY AND INNOVATION

Attention to emissions and odours



### TRANSPORT, ASSEMBLY, MAINTENANCE, AND SAFETY

Plants designed with users for you



### RECYCLING

High RAP use percentage to optimise binder and aggregate consumptions.



### EVOLUTION

New software developments for the client



### ROI

Savings on the overall cost of each component per HMA ton



# TECHNOLOGY AND INNOVATION

For accessible competitiveness

## COMPACT AND HIGH-PERFORMANCE

The original compact design means optimum jobsite organisation. It comes at a competitive price and ensures reduced operating, management, transport, assembly and maintenance costs.



### MAIN CHARACTERISTICS

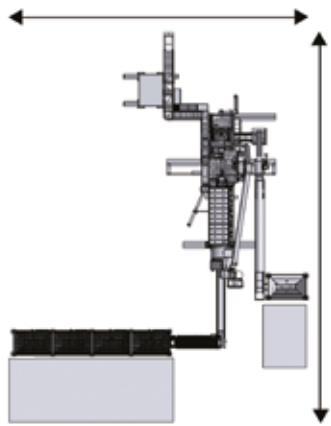
REDUCED FUEL CONSUMPTION

HEAT EXCHANGE OPTIMISATION

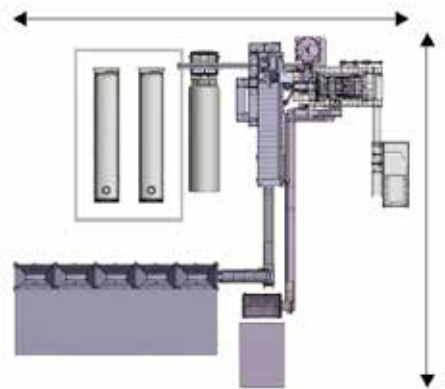
ENERGY SAVINGS AND REDUCED  
CO<sub>2</sub> EMISSIONS

OPTIMISED JOBSITE SPACES

- 1 OPTIMISED PERFORMANCE**  
optimised fines and gas circuit thanks to the filtration and drying tower configuration
- 2 COMPACT DESIGN**  
thanks to a reduced overall surface on the ground, BE TOWER easily integrates with the environment. Compared to a traditional plant with components on the ground, BE TOWER saves you up to 40% of site space
- 3 CONSUMPTION CONTROL**  
advanced software and inverters optimise the plant's consumption, keeping it under control
- 4 OPTIMISED INSULATION**  
The plant's main points (screen, under-screen hoppers, storage bins, bag filter, etc.) and bitumen storage tanks are clad with oversized insulating material with reduced thermal bridges



2 Be Tower 1500 jobsite layout



2 BT 2000, BT 2500, BT 3000 jobsite layout



# TRANSPORT, ASSEMBLY, MAINTENANCE, AND SAFETY

Plants designed for operators

- 1 TRANSPORT:**  
any truck, train, or ship can house our containers and ship them worldwide in the shortest time possible.  
  
Every part is protected against weather agents (harmful in case of sea shipping), accidental damage resulting from handling, and theft of component parts
- 2 QUICK ASSEMBLY:**  
all modules are pre-assembled at the factory, where we also carry out wire testing before shipment to save time and prevent problems at the assembly jobsite
- 3 MAINTENANCE:**  
Easy access to all its parts ensure increased safety and faster maintenance operations.  
  
Recent deposited patents allow for the quick replacement of screen meshes, whereas the SMART WIRING technology helps carry out electrical interventions in the cabin
- 4 SAFETY:**  
we create plants keeping the safety of your personnel in mind. Moreover, we strive to ensure safety to prevent accidents and unpleasant situations





# RECYCLING

## An essential step in plant management

### THE REASONS FOR MARINI'S CHOICE

All over the world, the government authorities work to ensure the protection of the environment for a number of reasons:

waste reduction resulting from the deterioration of the road network

high amount of RAP with related storage problems

reuse of raw materials: aggregates are lacking due to the decreasing number of active quarries on a national and international basis

energy savings: consumption is lowered due to the reduction in aggregate quarrying, transport and traffic hold-ups

bitumen recycling: because not just aggregates are reutilized, but also the bitumen is partially reused

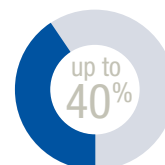
### METERING SYSTEM IN THE MIXER

RAP can be fed in the mixer through a special feeding line, which consists of:

cold feeder and feeding belt

cold RAP metering unit, which includes a bucket elevator, a surge hopper, and a weighing conveyor belt with a variable RAP metering management system based on the moisture content

modular exhaust system for the RAP produced in the mixer, with a fume stopping system from the virgin dryer drum to the filter



# EVOLUTION

## A new plant vision

### ADDITIVES

The plant's innovative design allows the use of all types of additives. An optional kit can be integrated into the plant at any time to use cellulose fibres, pigments, and polymers to modify the bitumen (wax, EVA, SBS, Latex), transparent bitumen, rubber powder, anti-stripping agents.

### WARM MIX ASPHALT (WMA)

Usually, WMA is produced at a temperature lower than 30 °C compared to HMA. However, like HMA, it ensures high performance. The energy saving achieved producing WMA is possible with an easy installation.

#### FOAMING SYSTEM KIT

- pressurised water dosing unit
- a foaming ramp for water injection in the bitumen supply pipe
- software integration into the plant (for new plants) or independent panel in case of retrofitting



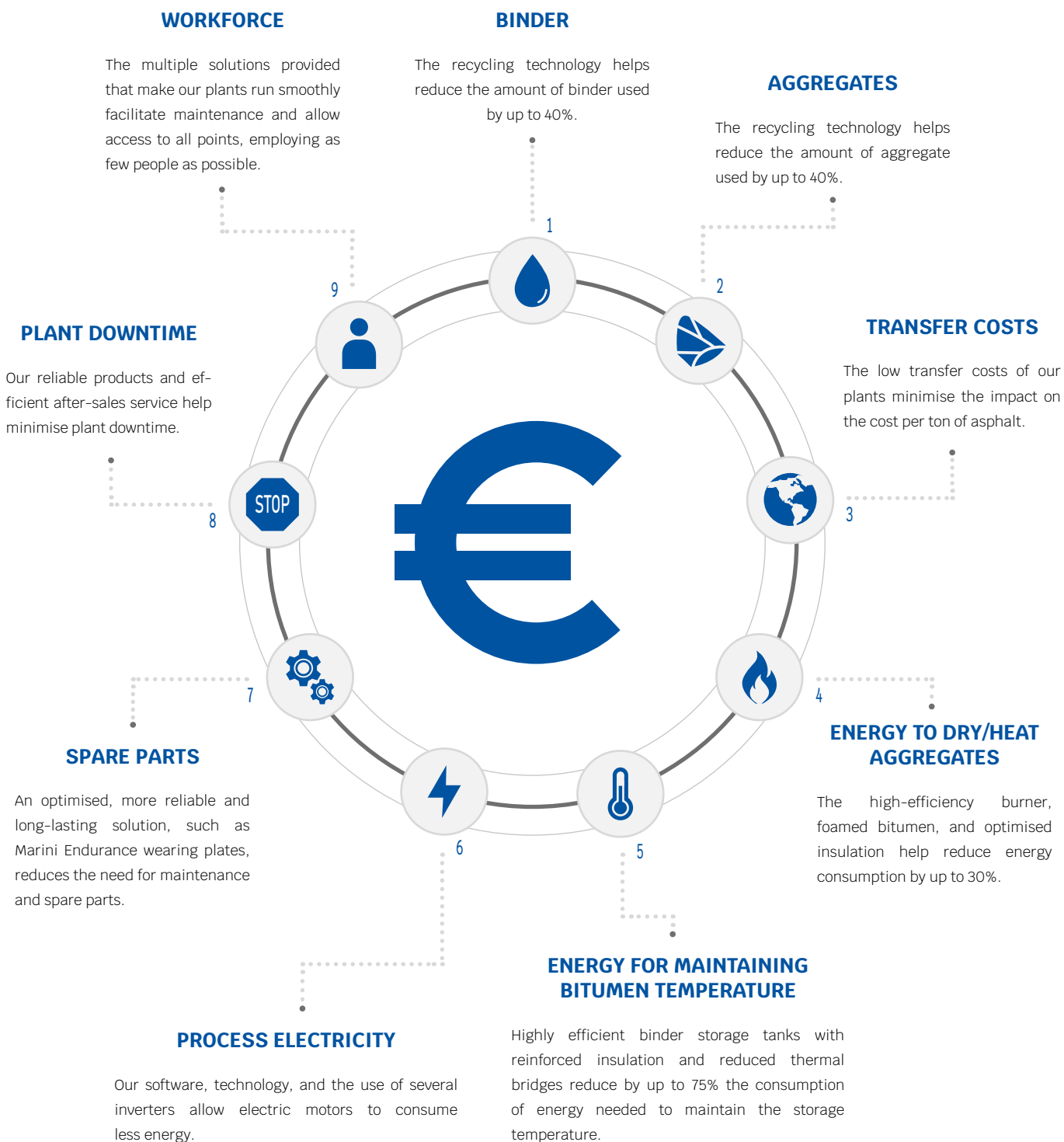
# RETURN ON INVESTMENT

Our solutions for optimal ROI.

## OPTIMISED COMPONENTS TO REDUCE CONGLOMERATE COST

Investing in the MARINI BE TOWER allows you to produce top-quality HMA (Hot Mix Asphalt) at unbeatable cost.

Every component of the overall cost of one ton of HMA is taken into consideration with the following solutions:





# CYBERTRONIC

Optimised production management

## PLANT MANAGEMENT SOFTWARE

Cybertronic is Marini's plant management software.

It can be expanded using complementary software kits that ensure energy saving, fewer problems at the jobsite and a high percentage of RAP.



### NEW FUNCTIONS

“DRYING PROCESS CONTROL” PACKAGE

“COLD RAP” PACKAGE

“ENERGY” PACKAGE  
Optimised energy management

“APPLICATION FOR TRUCK LOADING” PACKAGE

“DYNAMIC RAP” PACKAGE

“MAINTENANCE REPORT” PACKAGE



correct fume temperatures  
inside the filter



fuel consumption  
optimisation



thermal exchange  
efficiency

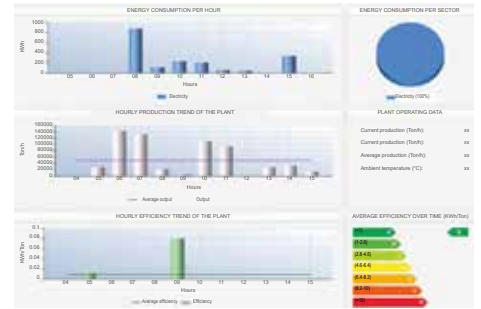
### AUTOMATIC CONTROL OF THE DRYING PROCESS

By adjusting the burner's power and the drum's rotation speed based on the production (t/h) and humidity of the infeed materials, the software stabilises the outlet temperature of the material leaving the dryer and the inlet temperature of the fumes in the filter. This process reduces fuel consumption, optimising heat exchange efficiency.



## OPTIMISED ENERGY MANAGEMENT

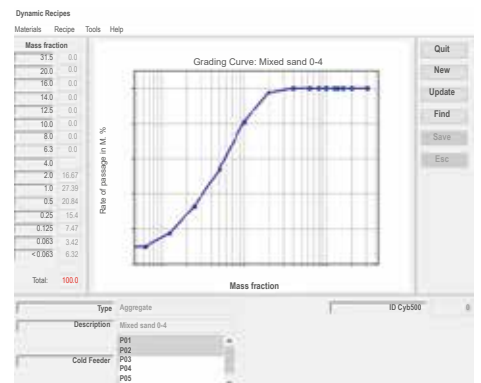
This software integration can control the energy consumption resulting from the production of various recipes. This makes it easier to analyse potential production process improvements, allowing for the optimisation of consumption and emissions in the atmosphere.



## OPTIMISED AND DYNAMIC RAP MANAGEMENT

You can dynamically adapt the percentage of RAP by inserting the particle size curves of the aggregates, bitumen types, RAP used and the asphalt to be produced.

This software allows you to check the maximum amount of RAP that can be used based on the aggregates and RAP available and thus stay within the particle size curve. It also allows you to instantly vary the formula to adapt to any operating condition (especially when using the cold RAP line in the mixer).



## HANDLING COLD RAP IN THE MIXER

The new function calculates the correct speed of the RAP weighing belt during the metering step. The user can manually adjust the RAP inlet speed based on the mixer's depression value.



# ECO-RESPONSIBILITY

## OUR VALUES

For us, clients and the environment always come first.

### INNOVATION

Our company was established almost 120 years ago. Since then, it has always found innovative solutions for hot-mix asphalt plants. That's why we can take on the most difficult challenges and help our clients develop their business

### CUSTOMER SATISFACTION

Meeting our clients' needs is our priority. We work in partnership with our clients, providing them with appropriate and bespoke solutions throughout the life cycle of their asphalt plants

### ENVIRONMENT AND SAFETY

we design and manufacture our asphalt plants to minimise their environmental impact. Ensuring safety for the operators and our personnel at the construction site is our priority

### TEAMWORK

MARINI is a human-scale, family-run company of the Fayat Group, where teamwork is our strength

### CORPORATE SOCIAL RESPONSIBILITY

we are committed to developing sustainability by implementing social and environmentally-friendly activities while valuing the relationship with our employees and partners





## OUR TOP PRIORITY: PROTECTING THE ENVIRONMENT

We design our asphalt plants to minimise their environmental impact. We consistently integrate our products with innovations that help protect the environment.

### LOW VISUAL IMPACT

MARINI'S BE TOWER RANGE features a compact structure that can fit into small spaces, thus minimising its visual impact.

### LOW EMISSIONS

BE TOWER complies with the most stringent regulations on atmospheric emissions.

We can ensure low emissions as we rely on a high-efficiency burner, handle RAP correctly (protecting the bitumen contained in it) and use a high-performance bag filter.

### CO<sub>2</sub> EMISSIONS

How do we keep CO<sub>2</sub> emissions low? By ensuring high recycling rates, locating the plant near the worksite, and using biofuels.



### SOIL PROTECTION

By storing sensitive products (chemical additives) in appropriate containers and no longer using diathermic oil, we have eliminated any accidental risk of environmental pollution.

### OLFACTORY POLLUTION REDUCTION

MARINI technologies minimise VOC emissions and unpleasant odours associated with bitumen vapours.

### LOW NOISE EMISSION

Noise is reduced upstream thanks to various solutions, including a frequency inverter on filter/burner fans or silencers on pneumatic cylinder exhausts. This way, the plant can be easily integrated into the environment.

# AFTER-SALES SERVICE

We at Marini have implemented a strategy including the plant's whole life cycle, which represents solid and unifying values:

- We focus on customer service to support our clients every step of the way.
- Our technical support is based on a competent team and an organization that is willing to listen to its customers.

## RETROFITTING

Our experts help you find the best configurations to improve the asphalt-production plant's functionality and operating life and preserve the initial investment value.

## TRAINING

The MARINI ACADEMY is addressed to companies from the road industry and specialises in technologies for the industrial production of HMA. The course portfolio includes in-person and online classes, combining theory and practice.



## SPARE PARTS

Our spare parts help maintain your plant's performance high. Our spare parts service aims at meeting any deadline and safety issues.

## AFTER-SALES SERVICE

Our expert technicians help you make your investment profitable and keep your plant efficient over time. The emergency toll-free number is active 24/7 to answer your doubts on use, maintenance, and troubleshooting. Moreover, our technicians are also available to commission and repair your plant at any time.

## PARTNERSHIP AND PROXIMITY

Marini has always worked to meet the requirements of its clients.

A team of expert project managers is always available to find a solution that complies with the regulations in force and technical specifications and minimises energy expenditure, CO<sub>2</sub> and odour emissions.

Our best engineers will find state-of-the-art solutions while our technicians will provide technical support during every step of the plant's life cycle.

That's how we stay by our clients' side. Because your success is our success.



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