

Bitumen Processing Equipment

E-MAK
Innovation and Reliability



Emulsion

"E-MAK EMULSION" series bitumen emulsion production plants are 4-15 ton/hour capacity and suitable for all types of road and asphalt applications.

All equipment used in "E-MAK EMULSION" series bitumen emulsion production plants are chosen for long life and high efficiency and environmentally friendly and economical.

"E-MAK EMULSION" easy to install and maintain as well as ease transportation.

"E-MAK EMULSION" series bitumen emulsion production plants have different options and can meet all needs of customers.



ADVANTAGES

- > 50 t/h capacity, 15 kw Bitumen pump
- > Polymer Modified-Granule (SBS) feeding unit has Feeding hopper with feeding opening 500x500, 2m³ weighing chamber with load-cell and 30m³/h capacity screw conveyor
- > Hot oil jacketed bitumen valves and filter
- > Double Control System: Semi-Automatic - Fully automatic with PLC control
- > All valves used in the system can be controlled from the operator panel via pneumatic actuators
- > Mixer tanks temperature is digitally and manual, the weight is digitally by load-cells and Mill's temperature is digitally followed up and controlled
- > Thanks to electrical heating it is possible to transport and installed in desired places easily
- > Universal design, piping network inlets and screw conveyors connecting points are on both sides of the plant. So there will be no problem if bitumen tanks are on right or left side of the plant
- > Possibility of transport with 1 trailers



Modified Bitumen Plant

"E-MAK PMB" series modified bitumen production plants are 15 ton/hour capacity, homogenizing Polymers (SBS, APP etc.) and bitumen by grinding

All equipment used in "E-MAK PMB" series modified bitumen production plants are chosen to provide long life and high efficiency, environmentally friendly and economical.

"E-MAK PMB" Easy to install and maintain as well as easy transportation.

Polymer Modifying Mill: Resists up to 220°C, 20t/h pumping capacity and 160 kw

Mixing Tank: Vertical type, 100 mm rock wool isolation, manufactured to be containerized, hot oil heating serpentine pipe, 22 kw mixer and 10 m³ volume (Operating capacity 6m³)

Heating Tank: Horizontal type, 10m³ volume, internally has 400 lt hot oil heating serpentine pipe (28m²), 100 mm rock wool isolation, manufactured to be containerized, upper surfaces is 3-4 mm checkered steel plate, 5000 kg capacity 4 Pcs load-cell and stainless steel body.

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- > Thanks to electrical heating it is possible to transport and installed in desired places easily
- > Universal design, piping network inlets and screw conveyors connecting points are on both sides of the plant. So there will be no problem if bitumen tanks are on right or left side of the plant
- > Possibility of transport with 40 trailers

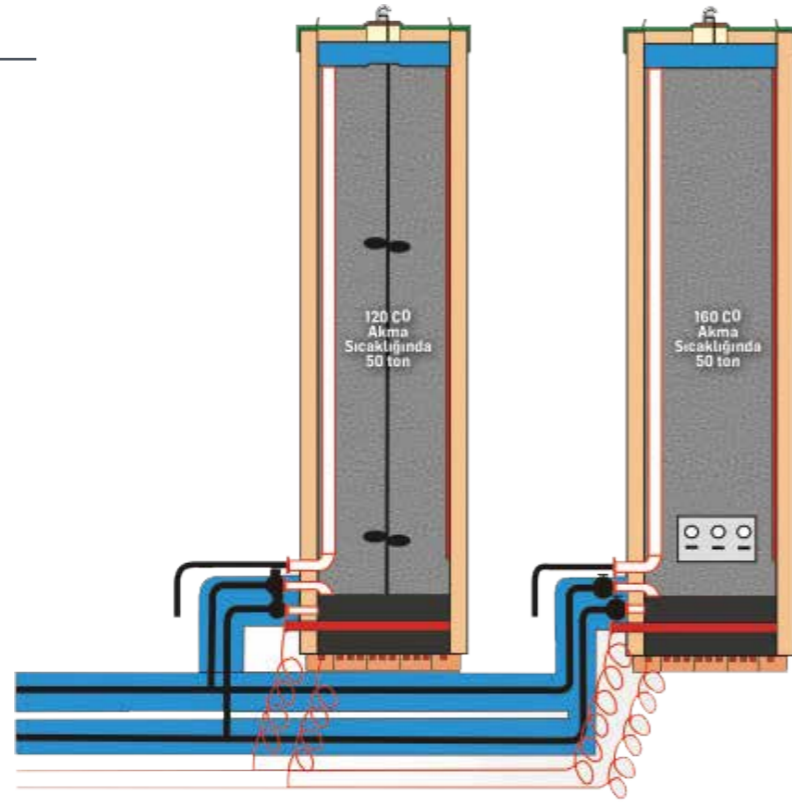


E-MAK Bitumen Tanks Advantages

- Insulated with 200-250 mm rock wool, thus heat losses are minimized
- Zero CO₂ emissions since hot oil burner is not needed
- No heat losses due to heat transfer process as heat is generated directly in the tank

Can be heated during cheaper electricity rates
Heat loss 20wh/m²

For modified bitumen option, tanks with agitation shaft & mixer are available.



Horizontal or vertical type in desired capacities



- No oil leakages as hot oil is not used anymore
- Using vertical tanks provide minimum surface contact with air to minimize oxidation
- Safe in terms of occupational health and safety
- 3 tanks can be installed in an area where 1 horizontal tank space occupies



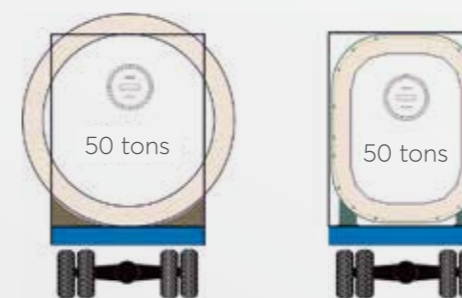
AUTOMATION

Bitumen level and temperature monitored from the control cabin. In case of temperature drops, electrical heating turns on automatically.



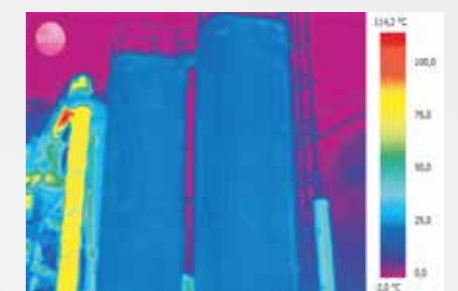
TRANSPORTATION

E-MAK vertical prismatic type bitumen tanks with dense insulation have high stocking capacity and enables easy international transportation.



INSULATION

Vertical type tanks upper, lower and side surfaces are insulated with up-to 25 cm rock wool. Thus, heat losses prevented.



E-MAK BiSAS Bitumen Tank Sets

E-MAK SAS Bitumen tanks can be used as both service and stocking purposes simultaneously

- There is no more need to buy any additional service tanks other than stock tanks
- Several bitumen types can be used in the same set
- Unlike conventional tanks, there is no more need to heat the stocking tanks all the way to be able to transfer bitumen to service tank

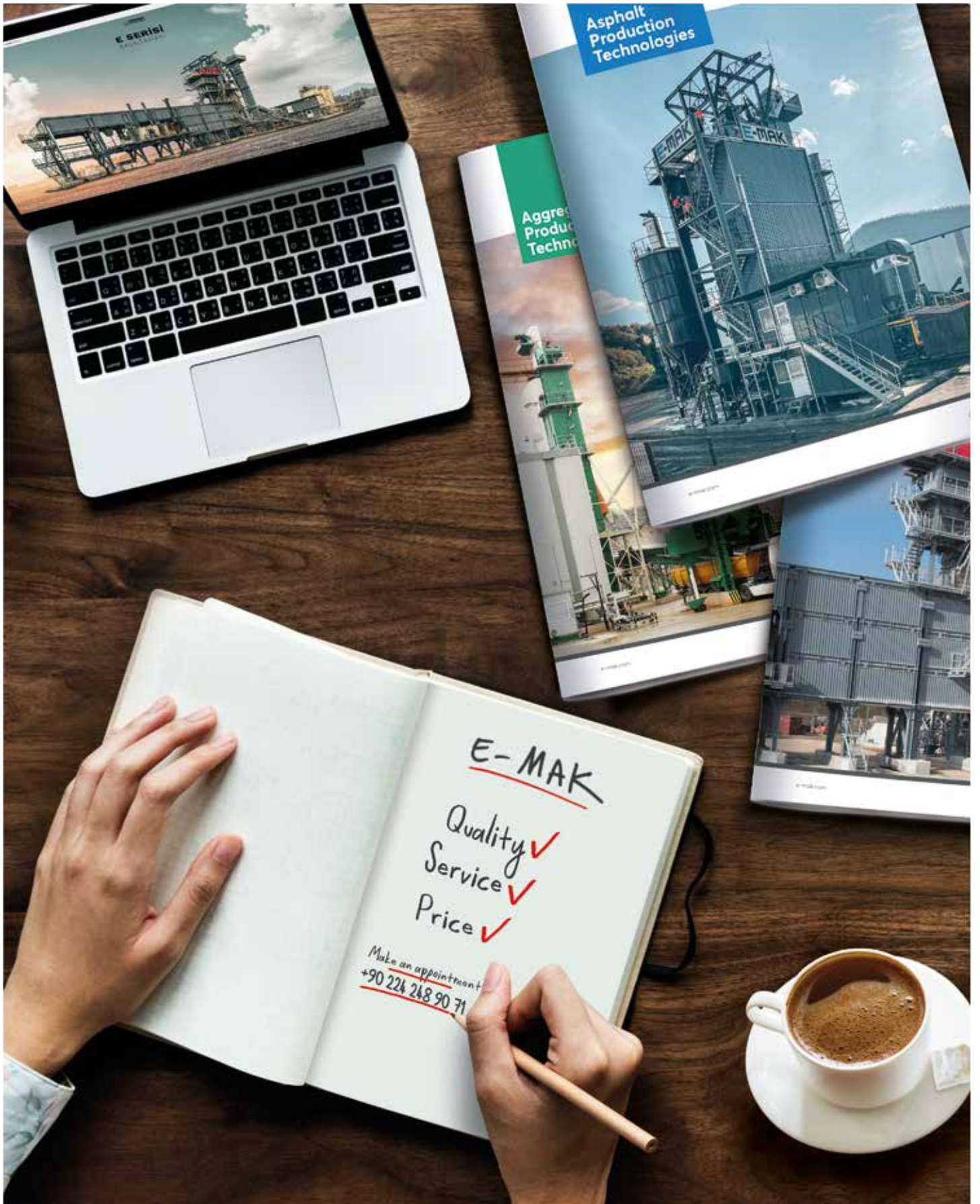
No more stock tanks are necessary for the projects within 40 km radius



E-MAK BiSAS Bitumen tank Sets can be designed in different quantities depending on the project.

- Surfaces subjected to wind are covered with additional insulation (sidewalls and roof) to minimize surface area and heat losses
- Each tank can be easily transported individually
- Easy to dismantle and re-mount to different locations for multiple projects
- Each tank can be operated individually
- Each tank can maintain different pre-set temperatures separately
- Mixing unit can be added for modified bitumen





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E-MAK reserves right to change or modify technical data and specifications at any time without notice.

