



ALFAMIX ASPHALT ASPHALT PLANT and Equipment

www.alfamixasfalt.com





COMPANY PROFILE

It is an engineering firm based in Ankara. Since its establishment, it has been manufacturing asphalt machinery, asphalt plants, and bitumen processing facilities. With its founders' 30 years of industry experience, it is growing rapidly. Having commenced our commercial activities with maintenance, repair, and spare parts supply, we continue to expand our production and service portfolio by adding new experiences to our existing ones throughout this long journey.



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We handle all stages of the products we add to our portfolio in-house, including R&D, project management, work preparation, production, quality control, and assembly. When designing our products, we focus on ensuring they are functional, efficient, and high-performing, while also paying attention to ease of maintenance and an impressive appearance. High-quality materials and high-quality workmanship are essential for producing a high-quality product. For this reason, ALFAMIX never compromises on quality in its material selection and offers its valued customers the highest quality materials combined with the best workmanship.

We continue to develop and grow with a commitment to stand behind all the products we manufacture throughout their commercial life, just as we have done since the beginning. On this long journey, we will continue to build long-term friendships by working in a solution-oriented manner, in line with the demands of all our valued customers who have trusted and valued us since our establishment.



MISSION & VISION

At ALFAMIX, we strive to set an example for future generations in the field of asphalt plant machinery, providing flawless, high-quality, timely and problem-free service.

As ALFAMIX, with our state-of-the-art asphalt plants, our knowledge base, experience, technology, qualified human resources and innovative approach, we aim to be Turkey's leading asphalt company providing the highest quality service.



Over 25 years of **EXPERIENCE**

01

Over 27 years of experience in asphalt plant production, production quality in line with international standards, smooth and rapid installation

02

Manufacturing based on TSE standard welding processes with sandblasted and primed sheets

03

Our extensive reference pool comprising directorate of highways, municipalities, special administrations and the private sector

04

ALFAMIX, which can design and manufacture its own dryer burner, bitumen pump, mill, and elevator chain based on years of production experience and user suggestions, will be at your side for all your needs with its seamless and limitless service approach.

05

Our experienced domestic and international after-sales team is at your service 24/7.

06

Your spare part requirements are met as quickly as possible and in accordance with the original specifications, either from our extensive product inventory or by manufacturing.

07

We are here for you with our experience and references in the overhaul of your old or worn-out machines, in increasing the capacity of your small machines, and in repairing faults you cannot resolve.



PRODUCTS



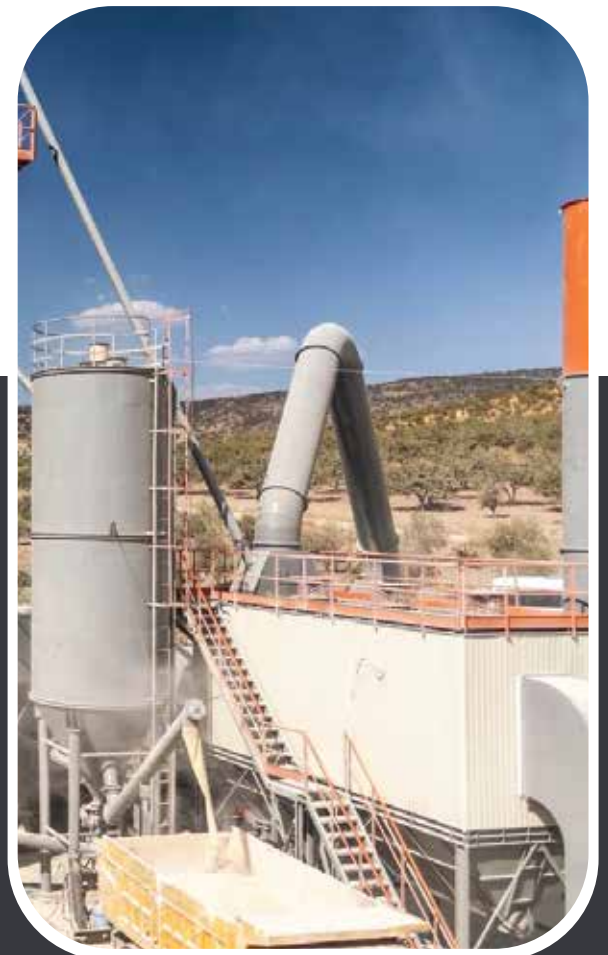
ASPHALT PLANT

Our asphalt plants are batch type and are manufactured with a capacity range of 60–240 tonnes per hour.

Utilising all its capabilities and expertise in asphalt plants and equipment, ALFAMIX Asphalt manufactures durable, user-friendly, fully automated plants for high-quality asphalt production.

FILTER SYSTEM

- It is manufactured according to calculations made taking into account the altitude and weather conditions of the location where the dust collector will be installed, in accordance with the capacity and geographical location of the dust collector.
- Dust emission values provided in accordance with international standards
- Easy replacement with a vertical cassette bag system.



ADVANTAGES OF THE ALFAMIX FILTER

- Reverse flow system ensures zero air consumption and electricity savings.
- The reverse flow system ensures easy maintenance and long-lasting operation. The electric actuators used in the reverse flow system have an operating power of 0.18 kW and, unlike jet pulse and pneumatically driven reverse flow systems, do not require a compressor. Furthermore, as no separate pneumatic pistons are used for each eye, there will be no operating or maintenance costs.
- Temperature control is provided by two independent methods using a PT100 and a thermostat, and the burner automatically shuts off when the set temperature is exceeded. This prevents filter fires.
- Optionally, a blower system can be added to the filter system to improve the cleaning quality of the filter bags. This provides extra dust removal and comfortable operation, especially in humid areas.
- An optional fresh air damper can be added to the system. The purpose of this damper is to open the filter inlet to the atmosphere when excessive heat is detected in the filter, thereby ensuring the filter unit is cooled rapidly.
- As the filter body has a cyclone section, there is no need for a separate cyclone unit.
- As our filter system has a cyclone section, coarse and fine fillers are collected separately. Thanks to the weighted flap or air lock (rotary valve) placed on these compartments, the filter operates at maximum efficiency.



PRODUCTS



FAN

The fan is manufactured to suit your machine's capacity and your facility's conditions.

Selection of sheet metal with appropriate thickness and properties for strength calculations

SKF-FAG brand heavy-duty bearings and grease-lubricated bearings

On special coating benches, coating suction inlet openings to ensure air flow with minimum loss

BALANCED in accordance with DIN 1940 G 6.3

Direct drive, belt-driven or coupling-driven production types

AGGREGATE BUNKER

- Adjustable according to prescription, speed-controlled dosing belts with automation
- Desired number of compartments in volumes between 10–25 m³
- A vibrating motor is used as an option to ensure smooth flow.
- Warning and stop (emergency stop) system
- Manufacturing and design suitable for loader width
- Robust, long-lasting manufacturing and design
- Optionally, dosing belts with band bars can be used.



PLANTS

DRYER

- Our rings are manufactured from forged steel. They are weld-free and have no joints, thanks to a special opening method.
- Our rings can be easily removed and installed thanks to the bolted connection plates.
- Dryer drive rollers specially manufactured from KESTAMID material that does not wear down the rings and can operate in all weather conditions (optional).
- Optional cast or 4140 steel material dryer drive rollers.
- The dryer's operating distance is limited by the two limiting rollers in the system.
- From the dryer inlet to the discharge throat, the special bucket design ensures smooth heating of the aggregate, efficient and economical combustion of the burner, and easy extraction of dust generated inside the dryer.
- Highly efficient, economical and trouble-free heating with our own production of dryer burners. Fully automatic, manufactured in compliance with TSE and CE standards, capable of operating with liquid, gas fuel or in combination.
- Manufacture of bodies and buckets using wear-resistant or heat-resistant sheet metal.
- It is driven by four wheels. It is driven by a soft starter or speed inverter, which ensures easy and smooth starting under load.
- Insulation with 50 mm rock wool and stainless steel (chrome) sheet metal



ELEVATOR

- The most preferred type in load transport, known as the single-line (H), is utilised, and we use our own production chains. Single-row or double-row chain and bucket designs are selected according to capacity.
- Elevator buckets manufactured from wear-resistant sheet metal with reinforced discharge openings.
- Heavy-duty gearboxes suitable for the capacity are used.
- Safe operation is ensured with a reverse lock.
- Custom manufacturing and hardened gears. İsteğe bağlı soft starter ile tahrik.
- Easy and hassle-free maintenance and repair with a wide and long manhole cover.



MIXER UNIT

- Thanks to their special design, these arms and shoes provide seamless mixing, are easily replaceable, resistant to wear and heat, and have a long service life.
- Wear-resistant body wear plates that can be easily replaced thanks to the overall design of the mixer body.
- A drive system enhanced with synchronised gears that enable the millers to operate in synchronisation with each other and allow operation with a single reducer in the event of a fault.
- A discharge cover system with a design that prevents material leakage, controlled by pneumatic pistons on both sides.
- Wide manhole covers for easy maintenance and repair.
- Internal mixer design that ensures a complete and homogeneous mixture.
- Project design that allows the mixer to be easily removed from the floor it is located on when required.



PRODUCTS

SIEVE

- Capacity-dependent vibration motor or eccentric shaft drive options
- We manufacture standard 5 or 6-layer screen systems. As ALFAMIX does not produce 4-layer screens, there is no need to change the wire when switching between binder wear or bituminous base production. This saves time and fuel.
- Thanks to the flap located at the screen inlet, the system can operate either in bypass mode or with the screen, as required. This flap is controlled by a pneumatic actuator.
- Easy maintenance and wire replacement thanks to wide maintenance covers
- Steel drawn wire mesh
- Dust-proof body design



STOCK SILO

- It can be divided into 5 or 6 types of aggregate.
- If desired, the filler eye on the stock silo body can be divided into one piece or two pieces. This creates a storage area for coarse fillers, fine fillers or mineral additives.
- Optional lower limit, upper limit or capacitive level sensors can be added to the system.
- Samples can be taken from the desired material using the sampling ports on the stock silo.



DOSING SYSTEM

- Aggregate scales are manufactured in various sizes according to the plant capacity. Precise weighing is performed using 4 load cells.
- Our aggregate feeder valve system has two pneumatically controlled valves for each material hopper: one large and one small. This ensures that the materials are dispensed according to your recipe.
- There are two discharge hatches on our aggregate weighbridge. These hatches are driven by one piston each. This ensures rapid discharge. There is one filler weighbridge in the filler dosing system. This weighbridge is weighed by three load cells.
- Under the filler hopper, there is one pneumatic actuator butterfly valve and one screw conveyor that transports the filler to the mixer.
- Additionally, there is one air lock between the hopper feeding the weighbridge and the weighbridge itself. This air lock ensures that the desired amount of filler is dispensed. Optionally, a sliding flap can also be added on top of the air lock.
- Precise weighing is ensured by three load cells in our bitumen weighbridge.
- There is one pump in the bitumen weighbridge discharge system. As the material inside the weighbridge is fed into the mixer via the pump, it is faster and provides more effective discharge.
- The risk of bitumen spillage is minimised with a magnetic switch and stainless steel body float system.



PRODUCTS

BITUMEN EMULSION PLANT

Our Emulsion Production plant, featuring a compact design that is quick and easy to install and facilitates transport, can be produced with optional features such as a preheating tank, additional bitumen tank, and additional storage tank.

We use our own emulsion mills and bitumen pumps in our emulsion production facilities. This means that in the event of a breakdown, you can receive service without any disruption to your production, backed by the ALFAMIX guarantee for spare parts.



Production: The emulsifier and acid required for the formula are weighed separately in tanks made of AISI304 grade stainless steel using load cells and added to the mixing tank, which contains water (softened) and is heated by hot oil or electricity. The solution obtained by heating and mixing is then conveyed to the colloidal mill via an in-line AISI304 grade stainless steel pump and a Krohne brand water/liquid meter.

The bitumen drawn from your existing tanks or from an additional tank (optional) using a pump is passed through our Krohne brand bitumen meter and delivered to the colloidal mill within the specified measurement range. The solution and bitumen mixture entering the mill is broken down at high speed and transported directly to the distributor or storage tank (optional), completing the emulsion production process.

Products taken from the sampling valve can be tested to observe their compliance with the prescription. All processes are controlled and managed by a PLC, either fully automatically or manually.

- Surface treatment (single layer – multiple layers – seal coat)
- Patching work
- Primer coat
- Tack coat
- Cold mix
- Dust suppression layer
- Bituminous stabilisation
- Sealing work
- Darkening layer



WHAT ARE THE ADVANTAGES OF ASPHALT EMULSION?

- It is more economical than cut-base asphalt and resin-based water-based emulsions,
- There is no risk of ignition or combustion, and the road construction period is shorter as it can be used on wet surfaces,
- It can be used on wet and damp aggregates,
- It has no harmful effects on the environment or human health,
- It can be used at low temperatures,
- It can be easily stored at ambient temperature,
- It saves energy,
- It has high adhesion properties,
- It allows the road to be opened for use in a short time,
- It does not pose a direct threat to worker health.



POLYMER MODIFIED BITUMEN PLANT



Depending on the project, we produce either compact systems with two 6 m³ tanks on a single chassis, or systems where tanks can be added in the desired capacity and as many independent tanks and mills as required.

The mill, pump and valve used in the system are entirely manufactured in-house to high standards and quality. Our mills provide ideal cutting efficiency with their precise design and adjustable gap system. Our pumps feature a spur gear system and are among the most sought-after pumps on the market.

The user can pass the product through the mill and transfer it from tank to tank as many times as desired, either manually or automatically, using the pneumatic valves in the system. Both mechanical and electronic temperature controllers are available in the system to control the temperature of the products in the tanks. This allows the product to be processed at the desired temperature. The system has one polymer scale and one screw conveyor. This scale is used to add polymer to tank number 1 by performing fully automatic weighing. The mill used in the system is a 4-stage mill. The mill is driven by a 160 kW motor. This ensures ideal cutting. At the same time, your production will be ensured without interruption with a very powerful mill.

The mill has been designed to allow the user to adjust the gap. The gap adjustment allows for precise adjustment down to 0.05 mm. As the gap decreases, the amount of product produced will decrease, but the cutting precision will increase. Therefore, the user can adjust the desired precision and product capacity as desired. The control panel and switchgear components have been designed using high-quality products from well-known and reputable brands (Siemens, Schneider, ABB, Phoenix, etc.). The software has been developed by our own engineers and features a user-friendly interface. The system is fully controlled by a computer under PLC control and also allows for manual operation if desired.

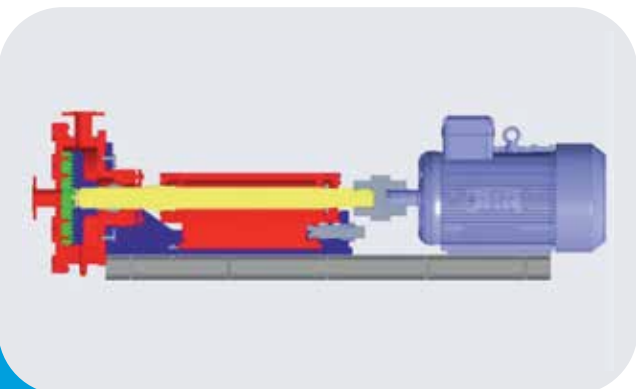
PRODUCTS

PMB and EMULSION MILL

We manufacture specially designed colloidal mills for polymer-modified bitumen plants and emulsion production plants. Our production is carried out entirely in-house, using our own project and our own factory facilities.

As one of only a few companies in Turkey capable of manufacturing mills for the asphalt industry, we use our own mills to secure cost advantages for use in our own facilities and to avoid issues arising after sales. With these advantages, we take pride in offering our customers fast, high-quality and cost-effective services.

Thanks to its specially designed and adjustable-gap gear system, it offers the most suitable solution with its highly efficient fixed and moving discs.



The colloid mill operates by cutting, grinding and mixing at high speed. The grinding process occurs through the relative movement between particles. There are two teeth, one rotating at high speed and the other stationary, which ensures that the material between the teeth undergoes powerful cutting. High-frequency vibration and high-speed vortices are created. As a result, the material is evenly distributed, emulsified, and fragmented.

- Easily adjustable clearance (0.1–3 mm) and corrosion-resistant rotor and stator
- The discs are manufactured from special alloy steels, their surfaces are hardened by heat treatment, and their working surfaces are designed to enable high-precision cutting.
- High-efficiency mill provides low ampere consumption per production speed.
- Mechanical or soft-sealed leak prevention measure.

BITUMEN PUMP

ALFAMIX Asphalt, drawing on our 30 years of experience, manufactures durable bitumen pumps in-house for use in asphalt production plants, bitumen storage facilities, and locations requiring bitumen transfer.

- Herringbone gear design that provides maximum efficiency and flow, operating silently
- Hot oil or electrically heated systems
- Pump options in sizes 2' – 2.5' – 3' – 4'
- Optional mechanical or soft-sealed sealing
- Heat resistant up to 300°C
- Capacity options up to 50 m³/h
- Pressure resistance up to 30 bar
- Overpressure relief valve
- Two-way suction-compression capability
- Direct drive or belt-driven
- Cast body, bronze bearing
- Our positive displacement rotary pumps operate on the principle of high efficiency at low speeds.



CUSTOM PRODUCTS

DRYER BURNER

- Production at any desired capacity
- PLC-controlled, all functions fully automatic
- Viewable on a touchscreen
- Air and fuel can be adjusted proportionally with the Schimpf Servo Motor
- Bergonzo Nozzle
- Stainless steel barrel and air deflector
- Can operate with axial or radial fans
- Combi burner capable of burning either single or dual fuel, as required
- Safe high flame combustion control with photocell
- Optional diesel or fuel oil pumping and filtering stations
- High-temperature resistant paint
- Easy maintenance and repair thanks to its modern structure and design, quiet operation



ELEVATOR CHAIN

- We use 51CrV4 quality steel imported for our manufacturing to provide you with long-lasting chains of the highest quality.
- Enhanced and specially designed earpiece construction for long-lasting and trouble-free operation
- Extra strength through the use of thicker sheet metal than its competitors

KESTAMID DRIVE REEL

The largest item in dryer maintenance costs is rings. Removing, turning and refitting both new and old rings can be quite costly for businesses. Furthermore, removing and maintaining the rings will also cause your facilities to be out of operation for a long time. At ALFAMIX ASPHALT, we use rollers made of kestamid material that does not damage the rings in order to reduce costs.

- Our reels operate in all weather conditions.
- Thanks to its special hub and shaft design, it can be easily removed and installed.
- Provides quiet operation
- Does not require heat treatment and the associated additional costs



COATED BITUMEN VALVE

We manufacture our bitumen valves as two-way and three-way manually operated or pneumatically actuated. You can use our jacketed, conical valves in industries where bitumen and all types of high-density fluid materials are used.



ROTARY VALVE

We manufacture flaps (air locks) with feed capacities of 200 mm – 300 mm – 350 mm – 400 mm, used to control the flow of fillers.



REFERENCES



elgöB .6
İRESYAK



elgöB .8
ĞİZALE





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