

ALFAMIX ASPHALT MACHINES is an engineering company based in Ankara. Since the day we were founded, we have been producing asphalt machines, asphalt plants and bitumen processing plants. It is growing rapidly with its founders' 30 years of industry experience. In this long journey, where we started our commercial activities with maintenance, repair and spare parts supply, we continue to expand our production and service portfolio by adding new experiences.

We analyze all R&D, project, work preparation, production, quality control and assembly phases of the products we add to our portfolio within our own organization. While designing our products, studies are carried out to ensure that the product is useful, effective, high-performance, as well as easy to maintain and impressive in appearance, and these details are taken into consideration when designing our products. Quality materials and quality workmanship are required to produce a quality product. For this reason, Alfamix offers the best quality materials with the best workmanship to its valued customers, without compromising on quality in material selection.

We continue to develop and grow with an understanding that has made it our motto to stand behind all the products we produce throughout their commercial life, as we did yesterday. We will continue to establish long-term friendships by doing solution-oriented work in line with the demands of all our valued customers who have trusted and valued us since the day we were founded.

#### VISION

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

#### MISSION

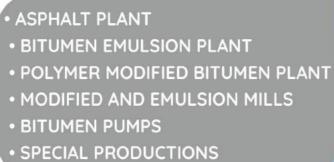
As Alfamix Asphalt, our aim is to provide perfect, high-quality, timely and problem-free service by ensuring that every asphalt plant machine we produce sets an example for future generations.





- More than 27 years of experience in asphalt plant production, production quality in accordance with international standards, trouble-free and fast installation
- Manufacturing based on sandblasted and primed sheets and welding processes in accordance with TSE standards
- Our wide reference pool consisting of Turkey Republic Highways, Municipalities, Special County Administrations and the private sector
- ALFAMIX, which can design and produce its own dryer burner, bitumen pump, mill and elevator chain in line with its years of production experience and user suggestions, will be at your service for all your needs with its problem-free and unlimited service approach.
- We are at your service 24/7 with our experienced domestic and international after-sales team
- Your spare parts needs are met in the fastest and most original way from our wide product stock or by manufacturing them.
- We are with you under the guarantee of our experience and references in the revision of your old or worn out machines, in the capacity increase of your small machines, and in the repair of malfunctions that you cannot solve.





### **ASPHALT PLANT**

Our asphalt plants are batch type and are produced in the capacity range of 60-240 tons/hour.

Using all its facilities and capabilities on production of asphalt plants and equipment, ALFAMIX ASPHALT produces long-lasting, durable, user-friendly, fully automatic facilities for the production of high quality asphalt.



#### FILTER SYSTEM

It is produced according to the calculations made in accordance with the capacity and geographical location of the plant, taking into account the altitude and weather conditions of the place where the plant will be installed.

Dust emission values provided in international standards

Easy change with vertical cassette bag system





#### ADVANTAGES OF ALFAMIX FILTER

- Provides zero air consumption and electricity savings thanks to the reverse flow system
- Easy maintenance and long-lasting operation are ensured with the reverse flow system. The electric actuators used in the reverse flow system have an operating power of 0.18kW and do not require a compressor, unlike jet pulse and pneumatic driven reverse flow systems. In addition, since a separate pneumatic piston is not used for each eye, there will be no operation and maintenance cost.
- Temperature control is provided by 2 different independent methods with PT100 and heat thermostat, and the burner automatically turns off when it exceeds the specified temperature. In this way, filter fires are prevented
- Optionally, the blower system can be added to the filter system to increase the cleaning quality of the filter bags. Extra dust stirring and comfortable working are provided, especially in humid regions
- Optionally, a fresh air damper can be added to the system. The function of this valve is to enable rapid cooling of the filter unit by opening the filter inlet to the atmosphere when excessive heat is detected in the filter
- Since there is a cyclone section on the filter body, a separate cyclone unit is not needed
- Since there is a cyclone section in our filter system, coarse filters and fine filters are removed from the compartments separately. Thanks to the weighted flap or air lock (rotary valve) placed in these compartments, the filter operates at maximum efficiency









#### FAN

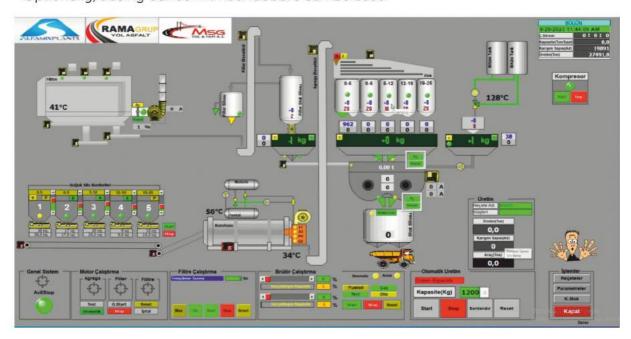
- ullet It is manufactured by selecting the fan that best suits your machine's capacity and the operating conditions of your facility
- Selection of sheet metal of thickness and quality appropriate to strength calculations SKF-FAG etc. brand heavy duty bearings and grease bearings
- In special plastering benches, plastering suction nozzle inlets to ensure air flow with minimum loss
- Balance in accordance with DIN 1940 G 6.3
- Directly coupled, belt-pulley or coupling-driven production types





#### AGGREGATE BUNKER

- Adjustable according to prescription, speed controlled dosing bands from automation
- Design of any number of eyes in volumes between 10-25m3
- Optionally, a vibrating motor is used to ensure comfortable flow
- Warning and emergency stopping system
- Manufacturing and design suitable for loader width
- Strong, long-life manufacturing and design
- Optionally, dosing bands with bandobars can be used





#### DRYER

- Our rings are made of forged steel. With its special opening method, it is weldless and has no joints
- Our rings can be easily disassembled and installed thanks to their bolted connection plates
- Dryer drive rollers specially produced from KESTAMID material, which does not corrode the rings and can operate in all weather conditions (Optional)
- Optional dryer drive rollers made of cast or 4140 steel material
- Thanks to the 2 limit rollers in the system, the working distance of the dryer is limited
- With the special bucket design from the dryer entrance to the pouring throat, trouble-free heating of the aggregate, efficient and economical combustion of the burner, and easy removal of the dust formed in the dryer are ensured
- Highly efficient, economical and trouble-free heating with our own production dryer burners. It can operate with liquid, gaseous fuel or combined fuel, is fully automatic and is produced in accordance with TSE and CE standards
- Body and bucket manufacturing with abrasion or heat resistant sheet metal
- It is driven by 4 wheels. It is driven by a soft starter or speed inverter that provides easy and trouble-free starting under load
- Insulation with 50mm rock wool and stainless sheet

## **ALFAMIXPLANTS**

#### ALFAMIX ASPHALT MACHINES AND EQUIPMENTS

#### **ELEVATOR**

- Chains of our own production, which are the type we call with ear (H) and are the most preferred for carrying loads, are used. Single row or double row chain and bucket design is preferred according to capacity
- Elevator buckets made of wear-resistant sheet metal and with reinforced pouring spouts
- Heavy duty reducers suitable for capacity are used
- Safe operation is ensured with backstop
- Special manufacturing and hardened gears
- Driven by optional soft starter
- Easy and trouble-free maintenance and repair opportunity with wide and long manhole cover







#### MIXER UNIT

- Long-lived arms and shoes that provide problem-free mixing thanks to their special design, are easily replaceable, and are resistant to abrasion and heat
- Wear-resistant, easily replaceable body wear plates thanks to the general design of the mixer body
- Drive system reinforced with synchronized gears, which ensures that the shafts work synchronously with each other and allows you to work with a single reducer in case of failure
- Discharge cover system with pneumatic piston control from two sides and a design that prevents material leakage
- Wide manhole covers that provide ease of maintenance and repair
- Internal mixer design that provides complete and homogeneous mixing
- Project design that allows the mixer to be easily taken out of the floor when desired

#### VIBRATING SIEVE

- Vibration motor or eccentric shaft drive options depending on capacity
- We produce standard 5 or 6 layer sieve systems. Since Alfamix does not produce 4-layer sieves, there is no need to change wires to switch between binder wear or bituminous base production. In this way, time and fuel are saved
- Thanks to the valve at the sieve inlet, the system can be bypassed or operated with a sieve. This valve is controlled by a pneumatic actuator
- Easy maintenance and wire replacement thanks to large maintenance covers
- · Steel drawn sieve mesh
- Dust-proof body design



- Can be compartmentalized for 5 or 6 types of aggregates
- If desired, the filler compartment on the stock silo body can be divided into one piece or into 2 parts. In this way, a stock area was created for coarse fillers, fine fillers or mineral additives
- Optional lower limit, upper limit or radar level sensors can be added to the system
- There are sampling eyes for each material on the stock silo









#### DOSING SYSTEM

- Aggregate scales are produced in various sizes according to plant capacity. Precise weighing is done with 4 load cells
- Our valve system that feeds the aggregate scale has 2 pneumatically controlled valves, 1 large and 1 small, for each material compartment. In this way, materials suitable for your prescription are purchased
- There are 2 discharge covers in our aggregate scale. These covers are driven by 1 piston each. In this way, rapid discharge is ensured
- There is 1 filler scale in the Filler dosing system. This scale is weighed with 3 loadceels
- Under the Filler Scale, there is 1 butterfly valve with pneumatic actuator and 1 screw carrying the filler to the mixer
- Additionally, there is an airlock between the feeder of the filler weighbridge and the filler pouring spout. With this airlock, the desired amount of filler can be taken. Optionally, a sliding valve can be added to the airlock
- Precise weighing is provided with 3 loadcells in our bitumen scale
- In the bitumen scale, there is 1 pump in the discharge system. Since the material in the scale is pressed into the mixer via the pump, it provides faster and more effective discharge
- $\bullet$  The risk of bitumen overflow is minimized with the stainless body float system with magnetic switch

#### **BITUMEN EMULSION PLANT**

Our Emulsion Production facility, which has a compact design that can be installed quickly and easily and provides ease of transportation, is produced optionally with a preheating tank, additional bitumen tank and additional stock tank.

In our emulsion production facilities, we use our own emulsion mills and our own production bitumen pumps. In this way, you can receive spare parts and service in case of malfunction, directly under the assurance of ALFAMIX, without interrupting your production.



Production; The emulsifier and acid required for

the recipe are weighed separately with the help of a load cell in tanks made of AISI304 quality stainless material and added to the mixing tank containing water (softened) for the mixture, heated by hot oil or electricity. Here, the solution obtained by heating and mixing is delivered to the colloidal mill by passing through the Krohne brand water/liquid meter with an in-line AISI304 quality stainless pump.

The bitumen drawn from your existing tanks or an additional (optional) tank with the help of a pump is passed through our Krohne brand bitumen meter and delivered to the colloidal mill within its size. The solution and bitumen mixture coming into the mill is broken down at high speed and delivered directly to the distributor or stock tank (optional) to complete the emulsion production.

Products taken from the sampling valve can be tested and their compliance with the recipe can be observed.

All processes are controlled and managed by a PLC, fully automatic or manual.

#### Usage areas:

- Surface coating (single layer-multilayer-seal coat)
- Patchwork
- Primer layer (prime coat)
- Agglutination layer (tack coat)
- Mortared payment layer (slurry seal)
- Cold mixture
- Dust retention layer
- Bituminous stabilization
- Isolation works
- Blackout layer





#### WHAT ARE THE ADVANTAGES OF ASPHALT EMULSION?

- It is more economical than cutback asphalts and resin-based emulsion,
- There is no danger of flashing or burning,
- Since it can be used on wet surfaces, road construction time is shorter,
- · Available in wet and moist aggregates,
- It has no harmful effects on the environment and human health.
- · Low capacities are available,
- Deterioration of the environment can be easily stored.
- · Provides energy savings,
- It has high continuity feature,
- Provides the opportunity to put into operation in a short time,
- Does not pose an individual threat to worker health,



Depending on the project, we produce systems either on a single chassis with 2 compact 6m3 tanks or with tanks of the desired capacity and independent systems that can be added as many tanks and mills as desired.

The mill, pump and valve used in the system are entirely our own production and are produced to high standards and quality. Our mills provide the best production with their precise design and adjustable clearance mechanism. Our pumps have a sergeant gear system and are among the most sought-after pump groups in the market.

The user can pass the product through the mill and pass it from tank to tank as many times as he wants, either manually or automatically, with the pneumatic valves in the system. Both mechanical and electronic temperature controllers are

available in my system to control the temperature of the products in the tank. In this way, the product can be evaluated in production at the desired temperature. There is 1 polymer scale and 1 screw in the system. This scale is used to add polymer to tank no. 1 by fully automatic weighing.

The mill used in the system is a 4-stage mill. The mill is driven by a 160kw engine. In this way, an ideal cutting is achieved. At the same time, your production will be ensured without any disruption with a very powerful mill. The mill is designed to allow the gap adjustment to be made by the user. With the gap adjustment, a precise adjustment can be made up to 0.05 mm gap. As the gap decreases, the amount of product produced will decrease, but the cutting precision will increase. Therefore, the user will be able to adjust the desired sensitivity and output product capacity as desired.



Control panel and switchgear materials are known and well-known in the market (Siemens, Scheneider, Abb, Phoenix) etc. It was designed by selecting quality products. The software was made by our own engineers and has a user-friendly interface. The system is completely controlled by a computer under PLC control and allows manual operation if desired.





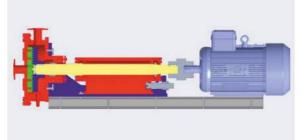
#### PMB AND EMULSION MILL

We produce separately and specially designed colloidal mills for polymer modified bitumen facilities and emulsion production facilities. Our production is carried out entirely with our own project and in our own factory, with our own resources.

As one of only a few companies in the asphalt industry that can produce mills in our country, we use our own mills to provide cost advantage for use in our own facilities and to get rid of post-sales problems. With these advantages, we are happy to provide fast, quality and affordable service to our customers.

Thanks to its specially designed and adjustable gear system, it offers the most suitable solution thanks to its highly efficient fixed and moving disks.









The colloid mill works by shearing, grinding and mixing at high speed. The grinding process occurs by relative motion between particles. It has two teeth, one rotating at high speed and the other fixed, which ensures that the material between the teeth receives a powerful cutting. High frequency vibration and high speed vortex are created. After all; It distributes, emulsifies and breaks the material evenly.

- Easily adjustable clearance (0.1 3mm) and corrosion-resistant rotor and stator
- Discs are made of special alloy steels, their surfaces are hardened by heat treatment and their working surfaces are ground to enable high precision cutting.
- High efficiency mill provides low amperage usage per production rate
- Mechanical or soft seal sealing measure
- Electric or hot oil heated production
- Heat resistant 1st class bearing



#### **BITUMEN PUMPS**

As ALFAMIX Asphalt, based on our 30 years of experience, we produce long-lived bitumen pumps that you can use in asphalt production facilities, bitumen storage facilities and places where bitumen transfer is needed.

- Sergeant gear design that provides maximum efficiency and flow and operates silently
- · Hot oil or electrically heated systems
- Pump options in 2"- 2.5"- 3"- 4" sizes
- · Optional mechanical or soft shaft sealing
- Heat resistant up to 300°C
- Capacity options up to 50m3/h
- Pressure resistance up to 30 bar
- Overpressure safety valve
- Bidirectional suction-compression capability
- Directly coupled or belt-pulley drive
- · Cast body, bronze bearing

Our positive displacement rotary pumps operate with the principle of high efficiency at low speeds.



- DRYER BURNER
- ELEVATOR CHAIN
- KESTAMID DRIVE ROLLER
- 2-WAY AND 3-WAY JACKETTED VALVE WITH PNEUMATIC ACTUATOR
   STAR VALVE

#### **DRYER BURNER**

- Production at any desired capacity
- PLC controlled, all functions fully automatic
- · Can be viewed via touch screen
- Air and fuel can be adjusted proportionally with Schimpf Servo Motor
- Bergonzo Nuzzle
- Stainless barrel and air diverter
- Can work with axial or radial fan
- Combi burner that can burn single or dual fuel if desired

Safe high flame combustion control with photocell

Optional diesel or fuel oil pumping and filtering stations

High temperature resistant paint

Easy of maintenance and repair, quiet operation thanks to its modern structure and design

### **ELEVATOR CHAIN**

- We offer you long-lasting and maximum quality chains by using 51CrV4 quality steel that we import in our production.
- Long-lasting and trouble-free operation with reinforced and specially designed ear structure design
- Extra strength due to the use of thicker sheet metal than its equivalents





# ALFAMIX PLANTS ALFAMIX ASPHALT MACHINES AND EQUIPMENTS

#### **KESTAMID DRYER WHEEL**

The biggest item in dryer maintenance costs is the rings. Dismantling, turning and installing both new and old rings can be very costly for businesses. In addition, disassembling the rings and performing maintenance will cause your facilities to stop for a long time. As ALFAMIX ASFALT, we use rollers made of xestamid material, which does not damage the rings, in order to reduce costs.



- Our reels work in all weather conditions
- It can be easily disassembled and installed thanks to its special hub and shaft design.
- Provides quiet operation
- •Does not require heat treatment and therefore no extra costs

#### JACKETTED BITUMEN VALVE

We produce our bitumen valves with 2-way and 3-way hand controls or pneumatic actuators. You can use our jacketed, conical type valves in industries where bitumen and all kinds of high-density fluid materials are used.





#### **ROTARY VALVE**

We produce valves (airlocks) with feeding capacities of 200mm-300mm-350mm-400mm, which are used to control the flow of filler.

























































