

ASPHALT BATCH MIX PLANT



QUALITY



R&D



PRODUCTS



SERVICES



MAN POWER

**COMMITTED FOR SUPERIOR
QUALITY - RESULTS & SERVICES**

**WE INTRODUCE
ASPHALT BATCH MIXING
PLANTS SPECIALLY
DESIGNED TO SUIT
COUNTRY - SPECIFIC
NORMS AND
REQUIRED AGGREGATE
CONDITIONS.**



KESAR BATCH MIX TYPE HOT MIX PLANT

MODEL	KBP-1000	KBP-1200	KBP-1500	KBP-2000
PLANT CAPACITY-TPH	80	100	120	160

KESAR Offer above capacities of batch plants at an average 3% initial moisture content in cold aggregate at 45seconds batch cycle time:

We, Kesar Road Equipments India Pvt. Ltd. are one of the leading manufacturers / suppliers of major road construction equipments in India like: Asphalt Drum-Mix Plants, Wet-mix Plants, Asphalt cum wet-mix Paver Finisher & Bitumen Pressure Distributor etc. since last 10-years in Indian road industry.

Kesar Asphalt Batch Mixing Plants are specially designed to suit India's normal aggregate conditions, input dust levels, average moisture content, government's environmental pollution control standards, fuel availability and asphalt hot-mix production variables for every road project around the country.

Therefore, our customers have absolutely no surprises to see a full capacity range of batch plants. Kesar batch plants reflect one of the most exhaustive plant systems available in Indian market. Standard configuration of our systems is perfectly matched to the plant capacity, production demands and site requirements of each plant model.

Kesar Asphalt batch plant produces high quality asphalt mix and its popularity lies in the fact that we guarantee rated production of final mix with minimum maintenance, fast plant delivery and the best after sales services to our valued customers.

The Standard configuration of the plants comprise of the following units :

SCOPE OF SUPPLY

- ◆ Cold Aggregate Feeder
- ◆ Over Size Removal Screen
- ◆ Inclined Feeding Conveyor
- ◆ Dryer Drum & Burner Unit
- ◆ Bucket Elevator of Hot Aggregate
- ◆ Screening Unit
- ◆ Hot Bins Discharge Section
- ◆ Weighing System & Mixing Unit
- ◆ Bitumen Heating & Storage Tanks
- ◆ Thermic Hot Oil Heater
- ◆ Fuel Storage Tank
- ◆ Filler Silo
- ◆ Bag House Filter Unit
- ◆ Exhaust Fan
- ◆ Control Panel with Control Cabin
- ◆ Incline Storage Silo



Kesar has always been proactive in rising to customer demands and expectations by providing quality engineered products and services. Reliability, consistency, efficiency, lower maintenance & operating costs are the hallmark of Kesar products, which add value for money. Continuous improvement in quality and up-gradation of technology has been the key to Kesar's success and an enviable customer base.

COLD AGGREGATE 4-BIN FEEDERS

4-Bins of cold aggregate feeders are all-welded and modular in construction, permitting easy addition of bins to meet growing needs. Steep bin walls and valley angles allow free flow of aggregates from the feeders minimizing hold-up of materials in the corners and bridging with sticky aggregates. There is bin vibrator mounted on walls of dust bin. The bins supplied with adjustable calibrated gate openings and variable speed feeder drives together offer a total proportional control, greater flexibility and accuracy of operations. Belt scrapper perfectly cleans wet dust stick on return belt of gathering conveyor.

DRYER DRUM

KESAR's field proven Dryer drum with high aggregates drying efficiency at low maintenance cost has gained top reputation among present day's asphalt batch plant manufacturers in India.

The drum is equipped with 4-wheel drive by gear motors. The dryer also features an unique air preheat system, which improves drying efficiency, aid power saving, reducing the thermal stresses on the drying drum and noise emissions from the burner. Two heavy trunnion tyres & 4-trunnion rollers with pressure fitted shafts have long working life which are special design features of Kesar dryer.

The dryer burner is of high pressure jet type suitable for LDO / F.O. fuels, with automatic controls, and of proportionate(modulating)type with a wide turn down ratio.

HOT ELEVATOR

The continuous flow of dried hot aggregates discharged from dryer is lifted onto a vibrating screen on top of batch tower by a totally enclosed bucket elevator. The elevator top wheel has a split design and elevator chain with a numbers of buckets rides on this wheel. Elevator bottom wheel works as an idler to keep chain in alignment to top wheel. The bottom shaft is spring loaded to keep chain always in tension.

BATCHING TOWER

Complete Batch Tower consists of a vibrating screen, hot-bins, weighing section and a mixer section.

VIBRATING SCREEN

The inclined circular motion 4-deck vibrating screen is run by two electro vibrators. The vibrating screen has special design feature to keep each screen cloth always in tight position by a numbers of springs. This gives the screen cloth a longer life and no dead zone found on it to yield the best screening efficiency. Entire screen basket is enclosed in a fixed casing. The free-floating screen design(supported on heavy action springs) prevents from any vibration being transferred to the weighing scales to give accurate weighing efficiency. A wider platform with easy access eases the maintenance of the screens.

HOT BINS

Four partitioned hot aggregate bins below vibrating screen has ample storage capacity and each bin has clamshell type discharge gate at it's bottom. Level switches helps to control a smooth flow of each size aggregates in required quantity without any over flow/short fall of hot aggregates.

WEIGH BINS

There are three weigh bins: for aggregates, for filler material and for bitumen, each suspended by a S-type load cell. Highly reliable weighing system requires no maintenance and their an easy calibration system makes Kesar Plant highly popular to site engineers and plant operators. Weigh hoppers for aggregates and for filler have clam shell type discharge gates at bottom. Bitumen weigh hopper is hot-oil jacketed.

MIXER SECTION

The three dimensioned twin shaft type pug-mill mixer with a large live zone is the heart of 'KESAR'-Plant, realizing a quick mixing of asphalt. A high capacity bitumen spray pump sucks weighed batch of bitumen from weigh-hopper and sprays into mixer within few seconds to yield a longer mixing time and produces a perfectly homogeneous mix.

The pug-mill mixer also is hot oil jacketed and has low-maintenance oil-bath type chain drive. The paddle arms mounted on pug mill shafts, mixing tips and all body liners are made of hardened for wear resistance, high nickel cast alloy steel. The reversible design of the mixing tips ensures a lower operating cost. Pneumatically operated, sliding type discharge gate at mixer bottom also has same type liners.

POLLUTION CONTROL SYSTEM

PRIMARY DRY DUST COLLECTORS

Twin cyclone type dust collectors separate and collect coarse dust particles (larger than 75microns) from main flow of dust laden exhaust flue gases. The collected dust is again feed into main flow of aggregates going onto vibrating screen.

BAG-FILTER

The exhaust flow with finer dust particles further travel to a RA type bag-filter unit which has a number of filtering bags made from 180 deg.C heat resistant aramide fabric with ample filtering surface area. Emission level of unit is less than 50mg / Nm³. Longer life of filter-bags and less maintenance is another important feature of Kesar Plant. Fine dust is collected in bottom storage hopper which has a screw conveyor to discharge on to the hopper of filler elevator to further carry onto tower-top for making a filler-batch.

EXHAUST FAN WITH DAMPER-CONTROL & CHIMNEY STACK

The other end of Bag House filter is connected to a high capacity exhaust fan, capable to draw all burn flue gases from dryer drum. The inlet of this fan has a damper-gate, controlled /operated by an quarter turn electric actuator and a chimney stack at its outlet to deliver clean gases at height into atmosphere to keep environment clean at site.

PLANT CONTROL SYSTEM

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KESAR's Fully computerized air-conditioned control cabin, with on-board electrical power control console, distribution switch board, fully automatic process and sequence controls are a standard on our batch plants. User-friendly software on the computer with a parallel PLC man machine interface gives you total reliability and ensures top notch performance.

- ✦ Fail proof power interlocks and auto process controls.
- ✦ Online fault detection with remote connectivity and solution.
- ✦ Docket printing and inventory management.
- ✦ Provisions to print, store and email production details, mix proportions, etc.
- ✦ Automatic cold aggregate feeder controls linked with mix design and hot bin Levels.
- ✦ Automatic free fall compensation The control is equipped with function keys and numeric keys, and does not require special skills for operation. The operator can monitor the complete process control, motor status and pneumatic controls through the colour CRT display.

BITUMEN HEATING AND STORAGE SOLUTIONS

With Kesar, customers can opt for direct fired heating bitumen tanks or hot oil heated bitumen tanks. Storage capacity ranges from 15 to 50 ton each.

The indirect heating tanks with internal heating coils are supplied with a highly efficient 3-pass design thermic oil heater. The Thermic oil heater is supplied with independent automatic control panel including oil temperature indicator controller, low level switch, low circulation pressure switch, over temperature cut off thermostat burner control relays and burner operating circuits. The thermic oil heater is supplied with auto temperature controls to maintain precise bitumen temperature. The heater capacity may range from 3lackskcal/hr to 6lackskcal/hr. according required quantity of bitumen to be heated daily.

The direct heating tanks are supplied with automatic imported pressure jet burner. As a standard, all Kesar-tanks are supplied with auto thermostatic controls and level indicators.

Our every batch plant is supplied with hot oil jacketing on bitumen pipe line, asphalt pump, bitumen weigh hopper section and pug mill body. Opting for hot oil heating reduces asphalt pump binding, asphalt pipeline blocking, smoother bitumen weigh batcher and pug mill operations.

WE ASSURE OUR ALL CUSTOMERS THAT WE WILL PROVIDE THEM THE BEST QUALITY MACHINES AT AN ECONOMICAL COST - PROMPT SERVECES - BEST CO-OPERATION ALWAYS.

“LET'S UNITE & BUILD QUALITY ROADS”



FACTORY

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