



# Asphalt Drum Mix Plant

KEW Series 30-150 Tph







### **THERMO DRUM UNIT**

The Drying and Mixing unit of the asphalt plant demands complex flight design and heat transfer technology. With our passion to build the best machines, continuous R & D and incorporation of the latest design up-gradations, KEW thermodrum is way ahead of competition.

The KEW thermodrom unit follows a triple heat transfer system that ensures a total transfer of heat to the aggregates, translating into higher productivity and lower fuel consumption. The heat is transferred to the aggregates using the conductive, connective and radiation techniques.

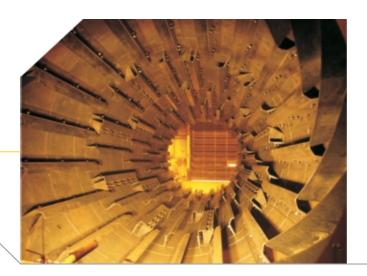
The field proven unique flight design ensures total heat transfer, a thorough mixing & coating, lower emissions and prevention of bitumen oxidation.

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#### **DRUM MECHANICS**

The 30-120 Tph plants are supplied with a low maintenance cradle type drum drive. The auto lubrication system ensures proper and adequate lubrication on the chain drive thereby ensuring long life of machine with trouble free service. Optionally a four wheel friction drive, which is a standard on the 120 Tph and higher models, can be supplied.

Specially treated sprockets, thrust wheels, trunion rings & trunion rollers, engineered precisely for flawless and trouble free dryer drum rotation, ensures unlimited productivity.



#### **COLD AGGREGATES BIN FEEDERS**

The bins are all-welded and modular in construction, permitting easy addition of bins to meet growing needs. Steep bin walls and valley angels allow free flow of aggregates from the feeders minimizing hold up to materials in the corners and bridging with sticky aggregates. The bins supplied with adjustable calibrated gate openings and variable speed feeder drives, together offer total proportional control, greater flexibility and accuracy of operations.





## **BITUMEN INJECTION**

A high capacity hot oil jacketed gear type pump, controlled by an AC variable speed drive feeds the metered amount of Bitumen into the mixing section of the thermodrum unit. The fully automatic SCADA / PLC / Microprocessor control ensures a precise metering of bitumen.

# **CONTINUOUS ELECTRONIC BELT WEIGHING SYSTEM**

The State-of-the-Art SCADA system processes and meters the mix proportioning. The feedback from the Load cell is processed by the PLC, which further automatically controls and processes the bitumen and filler proportioning.

## **FILLER STORAGE UNIT**

Kaushik Engineering Works offers a wide range (1.5-50 tons) of filler storage and feeding solutions for the customers to choose form, depending on the site requirements. A variable speed computerized synchronized metering system ensures the right proportioning in the mix.

# **OVERSIZE REMOVAL VIBRATORY SCREEN**

The KEW Series asphalt plants are supplied with oversize aggregate removal vibratory screens. It is positioned at the end of cold aggregate feeder. Any oversize material, detrimental for the heating and mixing thermodrum internals, are screened out ensuring better performance and safety of the plant.



#### **BITUMEN HEATING & STORAGE SOLUTIONS**

With Kaushik Engineering Works, customers can opt for a direct heating type or hot oil heated bitumen storage tanks. Storage capacities range from 10 tons to 50 tons.

The indirect heating tanks are supplied with a Japanese design thermic oil heater. The Direct heating tanks are supplied with automatic imported pressure jet burner.

As a standard, all KEW tanks are supplied with auto thermostatic controls, hot oil circulating systems and jacketed bitumen pump. The tanks are fully insulated to minimize the heat loss and are provided.



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#### **BURNER**

The high pressure atomized, fully automatic remotely controlled burner unit has already gained an enviable reputation for its fuel efficiency, ease of operation and high uptime. Completely automatic process controls with system interlocks ensure conformance to high safety standards.

This burner is suitable to use LDO /Diesel/FO as fuel and is fitted with remote control system to detect flame failure and have electric spark ignition system. Our unique nozzle system allows cleaning during running condition thus allowing zero downtime.

#### **CONTROLS**

Fully computerized control cabin with on board electrical power control console, distribution switch board, fully automatic process and sequence controls are a standard on our KEW series plants.

A user friendly software gives you total reliability and ensures top notch performance.

- Fail proof interlocks and auto process controls
- Online fault detection
- Online printing facility
- Provisions to print, store and edit production details, mix proportions, etc.
- Display of all process control parameters
- Automatic, semi-automatic & manual operation
- The control is equipped with function keys and numeric keys and does not require special skills for operation.





#### **CV SERIES – WET DUST COLLECTORS**

CV Series is a venturi type high efficiency wet dust collector that maintains the required environmental standards in specific areas. The extreme turbulence type venturi design ensures a very good entrapping of the dust laden exhaust gas. Large stainless steel spray nozzles provide a clog free operation and assure minimum water make up requirements. The adjustable venturi throat permits "fine tuning" to get optimum cleaning. efficiency for the plant operating conditions.

## **BAG HOUSE FILTER UNIT**

We have developed a state of the art free air flow type bag house filter unit especially for asphalt application with specially treated metaaramid filter elements. This zero maintenance design keeps emissions at less than 50 mg/Nm3, which meets international pollution control norms. This environment friendly unit has low operation cost & long life.

## **HOT MIX SILO**

Kaushik Engineering Works offers a complete range of customized solutions for asphalt storage. The standard range includes MONOPAK and TWINPAK systems. MONOPAK silos are available with storage capacities from 10 to 80 Tons. The TWINPAK silos are available with storage capacities ranging from 50 to 80 Tons with an additional feature of storing different mix designs. Various storage combinations can be availed by opting for customized MULTIPAK designs. The silos are supplied with automated standard safety controls and process interlocks. The storage silos can be supplied with skip hoist arrangement, hot bucket elevators or swiveling loadout conveyors.



# **Technical Specifications\***

# Stationary type ASPHALT DRUM MIX PLANT

	KEW-45 (45-60 TPH)	KEW - 50 (60-90 TPH)	KEW-60 (90-120 TPH)	KEW-65 (90-120 TPH)
Four Bin Feeder				
No. of Bins	4	4	4	4
Storage Capacity	31MT	40 MT	54 MT	54 MT
Hopper Size (LxW)	2500mm x 2200mm	3000mm x 2200mm	3650mm x 2060mm	3650mm x 2060mm
Auxillary Drive Motor	1.1 KW x 4 Nos	1.5 KW x 4 Nos	2.2 KW x 4 Nos	2.2 KW x 4 Nos
Auxillary Conveyor Belt	400mm x 2.2 Mtr	450mm x 2.92 Mtr	450mm x 3.78 Mtr	450mm x 3.78 Mtr
	3.70 KW	3.70 KW		5.50 KW
Gathering Convoyor Polt			5.50 KW	
Gathering Conveyor Belt Bin Vibrator (1 No)	500mm x 22.5 mtr	600mm x 25.6 mtr 0.75 KW	600mm x 29.6 mtr	600mm x 29.6 mtr 0.75 KW
	0.75 KW		0.75 KW 200 TPH	200 TPH
Feeding Capacity	100 TPH	150 TPH		
Overall Dimension (Approx)	11.6 mtrx2.55mtrx2.45 mtr	13.5 mtrx 2.55 mtrx 2.45 mtr	16.25 mtrx2.55 mtrx2.75 mtr	16.25 mtrx2.55 mtrx3.00 mtr
Total Connected Load	8.85 KW	10.45 KW	15.05 KW	15.05 KW
OVER SIZE REMOVAL SCREEN				
Drive Motor	0.75 KW	0.75 KW	0.75 KW	0.75 KW
Wire Mesh	45mm x 45mm	45mm x 45mm	45mm x 45mm	45mm x 45mm
Screening Area	800 x 1200 mm	800 x 1200 mm	900 x 1200 mm	900 x 1200 mm
SILNGER CONVEYOR				
Conveyor Drive Motor	2.20 KW	3.70 KW	3.70 KW	3.70 KW
Conveyor Belt	500mm x 15 mtr	600mm x 15 mtr	600mm x 15 mtr	600mm x 15 mtr
THERMO DRUM UNIT				
Drive Motor	11.00 KW	18.50 KW	30.00 KW	45.00 KW
Burner Connected Power	4.45 KW	6.25 KW	13.2 KW	13.2 KW
Exhauster	11500 CFM	14500 CFM	18000 CFM	21000 CFM
Diameter	1230 mm	1540 mm	1850 mm	1850 mm
Length	6000 mm	6700 mm	7310 mm	8000 mm
Burner Rating	350 LPH	550 LPH	750 LPH	1100 LPH
Exhaust Drive Motor	11.00 KW	18.50 KW	30.00 KW	45.00 KW
Multoclone Primary Dust Collector				
No. of Cones	10	15	21	21
Dust Screw Drive Motor	0.75 KW	0.75 KW	1.50 KW	1.50 KW
Fuel Tank				
Capacity	3000 ltr	5000 ltr	5000 ltr	7500 ltr
Loadout Conveyor				
Conveyor Drive Motor	3.70 KW	5.50 KW	5.50 KW	5.50 KW
Conveyor Belt HR-Grade	500 mm x 17.9 mtr	600 mm x 17.9mtr	600 mm x 20.3mtr	600 mm x 20.3mtr
Gob Hopper Capacity	550 kg	750kg	1500 kg	2000 kg
Hyd.Power Pack	1.50 KW	2.20 KW	3.70 KW	3.70 KW
Bitumen Tank (O shape Or U Shape)				
Capacity & Shapes	15 Tons	20 Tons	20 Tons	25 Tons
Bitumen Drive Motor	3.70 KW	3.70 KW	3.70 KW	3.70 KW
Bitumen Pump (Jacketed)	50 mm x 50 mm	50 mm x 50 mm	50 mm x 50 mm	50 mm x 50 mm
Hot Oil Drive Motor	0.75 KW	0.75 KW	0.75 KW	0.75 KW
Hot Oil Pump	19 mm x 19 mm	19 mm x 19 mm	19 mm x 19 mm	19 mm x 19 mm
Mineral Filler Unit	12111111 12111111	12111111 \ 12111111	12 11111 A 12 111111	12111111 / 12111111
Drive Motor	0.75 KW	0.75 KW	0.75 KW	1.5 KW
Rotary Valve	4"	4"	4"	6"
Capacity Blower	1.5 m3	1.5 m3	1.5 m3	1.5 m3
Total Connected Load	2.2 KW	3.7 KW	5.5 KW	5.5 KW
	100 1/1/1	125 1/1/4	103 1/1/4	250 10/4
Recommended Capacity of Genest	100 KVA	125 KVA	182 KVA	250 KVA
Open Land Requirement	35 mtr x 35 mtr	40 mtr x 40 mtr	45 mtr x 45 mtr	50 mtr x 50 mtr
F.O.KIT(Optional)				
Outflow Heater	4.5 KW	4.5 KW	4.5 KW	4.5 KW
In-Line Heater	14.5 KW	14.5 KW	14.5 KW	14.5 KW

# Secondary Pollution Control Unit (Optional) KEW Series Wet Dust Collector

Type : Water Scrubber

Exhauster Power: 30 KW, Water Pump: 2.2 KW
Dust Emission: < 150 mg/ Nm3

Overall Dimensions Without Ducts: 3500 mm (H) X 1500 mm (L) X 1800mm (W)

### **Bag House Type Filter**

Type:Reverse Air Flow
Exhauster Power: 55.93 kw
Dust Emission: < 50 mg/ Nm3
Overall Dimensions Without Chimney:

6600 mm (H) X 5720 mm (L) X 2100 mm (W)

#### Accessories (Optional)

Filler Silo Bitumen Tanks

Hot Oil Heater

Capacity Capacity Heating Type

Туре

Hot Mix Storage Silo Capacity
Capacity

4/10/15/25/40Tons 15/20/25/30/50Tons Direct/Hot Oil Heating Type Normal Pressure Horizontal-Tubular Boiler

Tubular Boiler 500 000 Kcal / hr. 25 / 50 / 25 x 2 / 80 tons

ADDRESS: Plot 520, Road No. 14 Kathwada GIDC, Odhav-kathwada Road,

Ahmedabad - 382430, Gujarat, India.

PHONE: +91 79 22901989, 22902714, 29701311

FAX: +91 79 22902815









<sup>\*</sup>With KEW's policy of constant up gradation of products, specifications are subject to change without prior notice.