

ROAD BUILDING



COLD AGGREGATE FEEDER



2 x 2 bin aggregate feeder unit is with total capacity of 20 T.

Cold aggregate feeder includes a 500 mm wide gathering cum slinger conveyor belt driven by a 3 HP AC motor. It also includes Auxiliary conveyor under each bin which are driven by 2 HP variable speed drive and fitted with adjustable quadrant gates.

Fuel tank for dryer burner of capacity 1500 liters is included with feeder.

Gathering cum slinger conveyor	500 mm x 8.3 meters
Auxiliary conveyor	460 mm x 2.2 meters
No. of bins	Four (2 x 2 type)
Each bin capacity	5.0 MT
Gathering cum slinger conveyor motor	3 HP AC
Gathering cum slinger conveyor reduction gear	20:1 D-Type
Auxiliary conveyor motor	2 HP Variable
Auxiliary conveyor reduction gear	20: 1 C-Type
Pump for fuel tank of dryer burner	3/4" x 3/4"
Motor for fuel tank of dryer burner	1 HP

DRYER DRUM

Dryer drum is 1.110 meters x 3.550 meters long complete with flights; bitumen and fines piping;



sprocket drive with a 10 HP electric motor; frame mounted exhaust fan and drive with a 10 HP electric motor. A frame mounted chamber at discharge end of drum has a special configuration to remove dust particles from the exhaust gas. A dust transfer screw at the bottom of the chamber has a 2 HP electric drive to collect waste dust.



The burner of the dryer unit is capable of heating the aggregate to required temperature without any un burnt fuel or carbon residue on the aggregate and to reduce the moisture content of the aggregate to the specified minimum. The plant will be fitted with suitable type of thermometric instrument at appropriate places so as to indicate the temperature of exhaust gases, bitumen and mix.

Dryer diameter	1.110 meters
Dryer length	3.550 meters
Dryer capacity	20 to 30 tph
Dryer motor	10 HP
Dryer Gear ratio	25: 1
Exhauster capacity	6500 CFM
Exhauster motor	10 HP AC
Screw Conveyor Motor	2 HP AC
Screw Conveyor Gear	40: 1

DRYER BURNER FOR MDM 25

Burner for asphalt drum mix plant includes a high pressure jet burner with a 5 HP fan motor and a 2 HP fuel coil pump with a 12 KW electric pre heater with an auto on off control for the burner.

The auto on-off system is to maintain the desired set temperature.

Burner blower	5 HP
Fuel pump	2 HP
Heater (Optional)	12 KW



MINERAL FILLER AND DUST CONVEYING SYSTEM



Mineral filler / Lime filler is of capacity 0.5 Ton. Lime filler is fabricated with steel plates and has loading doors with pneumatic dust and filler conveying system. Rotary valve is with a 1 HP variable speed drive motor adaptor chute with piping to allow the fines back to drum mixer, compressor included is with a 7.5 HP electric motor.

Mineral filler rotary valve motor	1 HP variable
Mineral filler compressor	7.5 HP

BITUMEN TANK

A bitumen storage tank of capacity 12 Tons with direct coil heater is standard with DM series plant. "O" or "U" shaped single compartmental bitumen tank is fitted with internal heat transfer coils. It is fully insulated from all the sides by a 2" thick mattresses of glass wool and is with vent, pipes, two fill return connection draw of connection and drain. Our bitumen tanks are complete with a dial type thermometer; manhole; socket for thermostat insertion; exterior access ladder to the tank top with walk way and handrails.



Motor	3 HP Variable
Reduction gear	10: 1
Bitumen pump	1 1/2" x 1 1/2"
Hot oil pump motor	1 HP

Asphalt auto burner rating	20-30 LPH
Hot oil pump	3/4" x 3/4"

TILTING TYPE LOAD OUT CONVEYOR WITH GOB HOPPER





Loading of the trucks is done by an inclined load out conveyor which is provided with a heat resistant belt. Load out conveyor is equipped with a GOB hopper which is with a hydraulically operated cam shell gate in order to provide surge capacity when changing trucks and it also controls segregation in the mix.

Load out motor: 5 HP AC
Load out Gear: 20:1 D-Type
Conveyor Belt – Heat Resistant: 500 mm x 11.250 meters
Hydraulic Power Pack motor: 2 HP AC

CONTROLS

Our control cabin is fully insulated and strategically placed so that a complete view of the plant is easily available. The cabin is fully prewired and complete with weather proof exteriors, interior lightning, fitted with toughened glasses and flush entrance door with lock. It is the house to factory installed asphalt plant controls. It also has provisions to fit an air-conditioner.



The control cabin houses:

- (A) Main circuit breaker
- (B) Basic motor control centre which includes-base starter enclosure, power distribution system, control system, transformer starter mounting hardware and safety interlock system, transformer starter mounting hardware in starter panel enclosure doors.
- (C) Cold feed aggregate controls: It controls the

aggregate flow from the four cold feed hoppers at the predetermined percentage at the desired level of feeding (between 20 TPH to 90 TPH). The total flow rate of the aggregate is displayed digitally on the panel through electronic weighbridge (load cell) mounted on gathering conveyor/ slinger conveyor.

(D) Bitumen synchronization and metering: It provides volumetric measurement of bitumen flow in liters / minute & cumulative reading of total liters.



The speed of the pump is automatically controlled to discharge amount of bitumen at desired percentages of aggregate flow.

(E) The calibrated fines metering system to indicate fines feeding rate from the fines storage.

(F) Burner for hot oil as well as drum includes automatic controls for maintaining the set temperature.

(G) The temperature indicators (Digital) includes:

1. The temperature of Bitumen Passing through the pump
2. The temperature of Mix Material out of the drum
3. The temperature of exhaust gases at the exhaust fan
4. The temperature of hot oil
5. The temperature of exhaust gases at the oil heater

PLC PANEL IS ALSO AVAILABLE

POLLUTION CONTROL DEVICE



VENTURI TYPE Wet dust collectors are highly efficient and are known to maintain required environmental standards. The extreme turbulence leads to superb entrapping of dust laden exhaust gas. Large size stainless steel nozzles provide a clog free operation to ensure optimum cleaning efficiency.



POWER BREAK UP DETAILS FOR ATLAS INDUSTRIES ASPHALT DRUM MIX PLANT

Sr. No.	Description		Qty	Power consumption (in HP)	
				MDM 25 (20-30 tph)	
1	<u>COLD AGGREGATE FEEDERS</u>		Auxiliary conveyor	4	8
			Gathering conveyor	1	3
			Vibrator	1	1
2	<u>THERMO DRUM UNIT</u>	Drum drive		1	10
		Exhauster		1	10
		Screw conveyor		1	2
		Dryer Burner	Blower	1	3
			Pump	1	2
			Heater	1	16
3	<u>LOAD OUT CONVEYOR</u>		Power pack	1	2
			Conveyor	1	5
4	<u>MINERAL FILLER BIN (LIME FILLER)</u>		Rotary valve	1	1
			Compressor	1	10
5	<u>BITUMEN TANK</u>		Bitumen pump	1	2
			Hot oil pump	1	1
6	<u>VENTURI TYPE WET DUST COLLECTOR POLLUTION CONTROL UNIT</u>		Water pump	1	5
TOTAL POWER CONSUMPTION					81 HP

NOTE: With continuous product improvement, specifications are subject to change without prior notice. Accessories shown may not be a part of standard equipment.



An ISO 9001:2008 Company

ATLAS INDUSTRIES

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