

ROAD BUILDING



**COLD AGGREGATE FEEDER**

Stationary four bin cold aggregate feeder unit is with each bin capacity of 8 T (in DDM 45), 11 T (in DDM 50) and 14 T (in DDM 60).

Cold aggregate feeder includes a 600 mm wide gathering conveyor belt driven by a 5 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.



Gathering conveyor	600 mm x 24.0 meters – DDM 45 600 mm x 26 meters – DDM 50 and DDM 60
Auxiliary belt	500 mm x 2.50 meters DDM-45 500 mm x 2.750 meters –DDM 50 and 60
No. of bins	Four
Each bin capacity	8.0 / 11.0 / 14.0 MT
Gathering conveyor motor	5 HP AC
Gathering conveyor reduction gear	20:1 D-Type
Auxiliary conveyor motor	2 HP Variable
Auxiliary conveyor reduction gear	20: 1 C-Type
Bin vibrator	1 HP

## DRYING DRUM



Drying drum diameter	1.220 meters / 1.520 meters / 1.830 meters
Drying drum length	5.0 meters / 6.0 meters / 6.4 meters
Dryer capacity	45 to 60 tph / 60-90 tph / 90-120 tph
Drying drum motor	15 HP AC / 20 HP / 30 HP
Drying drum gear ratio	20: 1

## MIXING DRUM



Mixing drum diameter	1.220 meters / 1.520 meters / 1.830 meters
Mixing drum length	2.5 meters / 3.0 meters / 3.3 meters
Drum capacity	45 to 60 tph / 60-90 tph / 90-120 tph
Mixing drum motor	10 HP AC / 15 HP / 20 HP
Gear ratio	20: 1
Exhauster capacity	10500 CFM / 16500 CFM / 18500 CFM
Exhauster motor	10 HP AC / 15 HP / 30 HP
Screw Conveyor Motor	2 HP AC
Screw Conveyor Gear	40: 1 / 40:1 / 40:1

### SINGLE DECK VIBRATORY SCREEN

A single desk vibratory screen is provided between the gathering and the slinger conveyor for the removal of the oversize material.

The vibratory screen net is 65 mm size and is driven by 0.5 HP vibrating motor at 440 V.

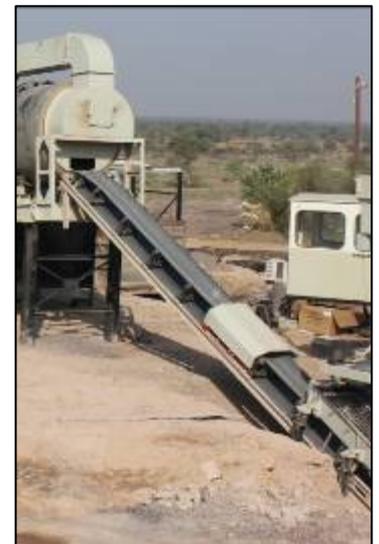


### SLINGER CONVEYOR

Slinger / charging conveyor is to load the aggregates into the dryer. It uses a 5HP AC motor.

Slinger conveyor is equipped with a load cell for continuously monitoring the weight of the aggregate in tph.

Conveyor belt	DDM-45	600 mm x 15 meters
	DDM-50	600 mm x 16 meters
	DDM-60	600 mm x 18 meters
Slinger motor	5 HP AC	
Reduction gear	5: 1 D- Type	



### DRYER BURNER

Burner for asphalt drum mix plant includes a high pressure jet burner with a 5 HP (in DDM 45), 7.5 HP (in DDM 50) and 15 HP (in DDM 60) fan motor and a 2 HP (in DDM 45), 3 HP (in DDM 50) and 3 HP (in DDM 60) fuel coil pump with a 12 KW (in DDM 45), 16 KW (in DDM 50), 24 KW (in DDM 60) 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 / 7.5 HP / 15 HP AC
Fuel pump	2 HP / 3 HP / 3 HP AC
Heater (Optional)	12 KW / 16 KW / 24 KW

## MINERAL FILLER AND DUST CONVEYING SYSTEM

1.5 Ton. Lime filler is fabricated with steel plates and has loading doors with pneumatic dust and filler conveying system. Rotary valve is with a 2 HP variable speed drive motor adaptor chute with piping to allow the fines back to drum mixer, compressor included is with a 10 HP electric motor.

Mineral filler rotary valve motor	2 HP variable
Mineral filler compressor	10 HP



## BITUMEN TANK

A stationary bitumen storage tank of capacity 15 Tons / 20 Tons with direct coil heater is standard with DDM 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.



Asphalt auto burner rating	20-30 LPH / 30-40 LPH
Hot oil pump	3/4" x 3/4"

Motor	5 HP Variable
Reduction gear	10: 1
Bitumen pump	2" x 2"
Hot oil pump motor	1 HP

## 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.

<p>Load out motor: 5 HP AC / 5 HP AC / 7.5 HP AC</p>
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<p>Load out Gear: 20:1 D-Type / 20:1 E-Type (DDM 60)</p>
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<p>Conveyor Belt – Heat Resistant: 500 mm x 16 meters / 600 mm x 18 meters / 600 mm x 20 meters</p>
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<p>Hydraulic Power Pack motor: 3 HP AC</p>
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## 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 120 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)			
				DDDM 45 (40-60 tph)	DDDM 50 (60-90 tph)	DDDM 60 (90-120 tph)	
1	<b><u>COLD AGGREGATE FEEDERS</u></b>	Auxiliary conveyor	4	8	8	8	
		Gathering conveyor	1	5	5	5	
		Vibrator	1	1	1	1	
2	<b><u>VIBRATING SCREEN</u></b>		1	0.5	0.5	0.5	
3	<b><u>SLINGER CONVEYOR</u></b>		1	5	5	5	
		Drying drum drive	1	15	20	30	
4	<b><u>THERMO DRUM UNIT</u></b>	Mixing drum drive	1	10	15	20	
		Exhauster	1	20	25	40	
		Screw conveyor	1	2	2	2	
		Dryer Burner	Blower	1	5	7.5	15
			Pump	1	2	3	3
			Heater	1	12	16	24
5	<b><u>LOAD OUT CONVEYOR</u></b>	Power pack	1	3	3	3	
		Conveyor	1	5	5	7.5	
6	<b><u>MINERAL FILLER BIN (LIME FILLER)</u></b>	Rotary valve	1	1	1	1	
		Compressor	1	7.5	7.5	7.5	
7	<b><u>BITUMEN TANK</u></b>	Bitumen pump	1	5	5	5	
		Hot oil pump	1	1	1	1	
8	<b><u>VENTURI TYPE WET DUST COLLECTOR POLLUTION CONTROL UNIT</u></b>	Water pump	1	5	5	5	
<b>TOTAL POWER CONSUMPTION</b>				<b>113 HP</b>	<b>135.5 HP</b>	<b>183.5 HP</b>	

**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

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