# WILSON ASPHALT HOT MIX PLANT



**EXPORTER OF ROAD CONSTRUCTION** 

**PLANT AND EQUIPMENTS** 



CAPACITIES FROM 20 T.P.H. TO 120 T.P.H.

Roads.... Lets build them

### ASPHALT HOT MIX PLANT CAPACITIES FROM 20 TPH TO 120 TPH

Wilson Asphalt Hot Mix Plant features standard four bin aggregate feeders mounted on a single frame, with No-flow indicator system and 4 Nos. Independent drive variably speed motors. The hopper design has been

accurately calculated to allow constant discharge of aggregate without bridge formation and plugging.

aggregate) is fitted with a vibrator to ensure continuous discharge of the aggregate. Adjustable opening gates with variable speed auxiliary conveyors are fitted there for meeting the requirements of any recipe. There is a provision to vary total capacity of plant output, without disturbing the preset setting of recipes, by means of master

The bin meant for macros (small size

control.

**Vibrating** 

Screen

**Cold Aggregate** 

**Feeder** 

(Four Bin)

Slinger Conveyor

Thermo Drum

Aggregate from all the bins are discharged on to the gathering belt fitted beneath on the same chassis to be fed into the single deck-vibrating screen for removal of over size aggregate.

A separate removable high-speed slinger conveyor is provided to transfer the aggregates received from the vibratory screen to feed it into the thermo drum's combustion region. Appropriate continuous electronic weighing system with load cell is mounted, for weighing the aggregates fed into the thermo drum and to synchronize the total plant operations.







The Wilson Thermo Drums come in various sizes ranging from 20 TPH to 120 TPH. All thermo drums are made of 10-12 mm thick heat and wear resistant steel plates.

The Thermo Drum is driven by Heavy Duty Offset chain of 3.075" pitch and supported by our machined trunnion roller. Adjustable trunnion plates along with heavy-duty thrust idlers ensure that the thermo drum steel tires are centered on the trunnions and are in proper position. These adjustable plates help in easy operation to raise or lower the slope of the thermo drum.

These thermo drums are equipped with very high efficiency flight system to ensure proper mixing and end product consistency.

Hot Mixed material conveyed from mixer chamber of drum and discharged into hydraulic storage hopper fitted



at discharge end of the conveyor driven by AC Motor coupled with SMSR Gear Box. The Hydraulic Dual gate hopper open via Cylinder powered by a compact Power Pack. The operation is automatic duly controlled from AC Panel. Hopper consist scrapper for cleaning the Load-Out Belt properly and assuring falling hot-mix material in to hopper.





Burner System The Wilson plant includes with Fully Automatic Burner and Jacketed Asphalt pumping station along with hot oil Tank, circulating pump and motor. A fuel-efficient, fully automatic burner with flame safeguard features, aggregate and exhaust gas temperature indicators with Photo Cell for over temperature safety set points, temperature ignition assembly, oil pressure gauge, dual oil shut-off valves and diesel fuel pumps.

Mineral Filler Unit The Mineral filler system is provided to add Lime / minerals from a separate

hopper in the mix to the extent pre-selectable from 1%-10% by weight of the aggregate. The unit is fabricated from 5 mm thick steel plates and mounted on strong steel structure. The piping is provided up-to mixing region in the dryer drum.



Asphalt Tank

Asphalt tanks are available for the Wilson Series plant system in various sizes wiz. **15000 ltr.**, **20000 ltr.** and **Above**, which is heated with automatic burners. Standard features include lines, access manhole with ladder, and insulation with Ceramic Glass Wool and cover with CRC outer skin.



Control Panel and Cabin

A fully automatic electronic type, computerized control panel board with printer which offer centralized operation of whole plant unit is provided in an insulated dust proof control cabin with glass provided for all-round vision to watch operation of the plant placed near the panel.



Air Pollution Control Unit (West Dust Collector) Wet dust collector is designed to achieve a most efficient control on air pollution to emission from exhaust chimney. The pollution control unit is based on the principal of wetting and trapping of dust particles entered in exhaust gases thereby converting these to droplets which is to be drained out from the system in the form of slurry.



**OPTIONAL** 

**Storage Silo** 

Insulated storage silo of various capacities equipped with a hydraulically operated discharge gate can be provided as an option.



SINCE OUR POLICY IS CONSTANT DEVELOPMENT TO IMPROVE QUALITY, WE RESERVE THE RIGHT OF MODIFICATION WITHOUT PRIOR NOTICE AND WITHOUT ANY BINDING ON FOR SUCH MODIFICATION ON THE EQUIPMENT ALREADY SUPPLIED.



## Technical Specification of Drum Type Hot-Mix-Plant

MODEL	DM-45	DM-50	DM-60
Capacity	40 TPH -60 TPH	60 TPH -90 TPH	80 TPH -120 TPH
Four bin Feeder			
No.of Bins	4	4	4
Storage Capacity	54 tons	54 tons	65 tons
Auxiliary Drive Motor	1.5 KW x 4 Nos.	1.5 KW x 4 Nos.	1.5 KW x 4 Nos.
Auxiliary Conveyor Belt	450 mm x 2.3 mtrs.x 4 ply	450 mm x 2.3 mtrs.x 4 ply	450 mm x 2.3 mtrs.x 4 ply
Auxiliary Conveyor Gear Box	SMSR x 4 Nos.	SMSR x 4 Nos.	SMSR x 4 Nos.
Gathering Drive Motor	3.75 KW	3.75 KW	5.62 KW
Gathering Gear Box	SMSR	SMSR	SMSR
Gathering Conveyor Belt	600 mm x 21 mtrs.x 4 ply	600 mm x 21 mtrs. X 4 ply	600 mm x 21 mtrs.x 4 ply
Bin Vibrator (1 No.)	0.75 KW	0.75 KW	0.75 KW
Feeding Capacity	200 tph	200 tph	200 tph
Overall Dimension (Approx.)	12.10 mtrs x 2.40 mtrs x 2.6 mtrs	12.10 mtrs x 2.40 mtrs x 2.6 mtrs	12.10 mtrs x 2.40 mtrs x 3.1 mtrs
Over Size Removal Screen	12.10 mas x 2.40 mas x 2.0 mas	12.10 mas x 2.40 mas x 2.0 mas	12. 10 mas x 2.40 mas x 0.1 mas
Drive Motor	0.75 KW x 950 rpm	0.75 KW x 950 rpm	0.75 KW x 950 rpm
Wire Mesh	53 mm x 53 mm	53 mm x 53 mm	53 mm x 53 mm
Slinger Conveyor	33 IIIII X 33 IIIII	33 IIIII X 33 IIIII	33 IIIII X 33 IIIII
Conveyor Drive Motor	3.75 KW	3.75 KW	5.62 KW
Conveyor Drive Gear Box	SMSR	SMSR	SMSR
Conveyor Belt	500 mm x 15 mtrs x 4 ply	500 mm x 15 mtrs x 4 ply	600 mm x 18 mtrs x 4 ply
Thermo Drum Unit	300 mm x 13 mm x 4 pry	300 mm x 13 mus x 4 pry	000 mm x 10 mus x 4 pry
Diameter (D) and Length (L)	1200 mm (D) X 6400 mm ( L)	1524 mm (D) X 6700 mm ( L)	1800 mm (D) X 6800 mm ( L)
Drive Motor	15.00 KW	18.75 KW	30.00 KW
Drive Gear Box	Heavy Duty Worm gear	Heavy Duty Worm gear	Heavy Duty Worm gear
Drive Chain Pitch	3.075"	3.075"	3.075"
Main Burner Connected Power	250 lph / 3.75 KW	350 lph / 5.62 KW	700 lph / 11.25 KW
Multicone Dust Collector	250 Ipi17 5.75 IVV	000 Ipi17 0.02 IXW	700 Ipi17 11:25 IXW
No.of Cones	19	19	21
Dust Screw Drive Motor	1.5 KW	2 KW	2 KW
Dust Sciew Drive Motor	1.5 KW	Z KVV	Z KVV
Fuel Tank Capacity	2000 liters	3000 liters	5000 liters
L/o Conveyor Belt Drive Motor	3.75 KW	5.62 KW	5.62 KW
L/o Conveyor Belt HR Grade	500 mm x 17.8 mtrs x 4 ply	500 mm x 17.8 mtrs x 4 ply	600 mm x 20 mtrs x 4 ply
Gob Hopper Capacity	1.2 ton	1.2 ton	1.5 ton
Hyd. Power Pack	2.25 KW	2.25 KW	3.75 KW
Bitumen Tank	2.20 100	2.20 1	0.70 100
Capacity & Shape	15 ton (U shape)	20 ton (U shape)	25 ton (U shape)
Bitumen Drive Motor	3.75 KW	3.75 KW	3.75 KW
Bitumen Gear Box	Heavy Duty Worm gear	Heavy Duty Worm gear	Heavy Duty Worm gear
Bitumen Pump (Jacketed)	2" x 2"	2" x 2"	2" x 2"
Hot Oil Drive Motor	0.37 KW	0.37 KW	0.37 KW
Hot Oil Pump	19.05 mm x 19.05 mm	19.05 mm x 19.05 mm	19.05 mm x 19.05 mm
Heating type	Direct Heating Type	Direct Heating Type	Direct Heating Type
Mineral Filler Unit	Birott roading Typo	Birott rodding Typo	Birott rodding Typo
Drive Motor	1.5 KW	1.5 KW	1.5 KW
Drive Gear Box	Heavy Duty Worm gear	Heavy Duty Worm gear	Heavy Duty Worm gear
Rotary Valve	150 mm	150 mm	150 mm
Chain Pitch	25.4 mm	25.4 mm	25.4 mm
Capacity	0.8 m <sup>3</sup>	1 m <sup>3</sup>	1.5 m <sup>3</sup>
Air Compressor	2.25 KW	2.25 KW	3.75 KW
CV Senes Wet Dust Collector	2.23 RVV	2.23 KVV	3.73 RVV
Type	Ventury	Ventury	Ventury
Exhauster Capacity	14500 cfm/kw	15500 cfm/kw	17500 cfm/kw
Exhauster Drive Motor	15.00 KW	18.75 KW	30.00 KW
Exhauster Drive Motor	15.00 KW	10.75 KW	30.00 KW
Total Connected Load	59.62 KW	72.61 KW	106.23 KW
Open Land Requirement	35 mtrs x 35 mtrs	35 mtrs x 35 mtrs	40 mtrs x 40 mtrs

#### Optional

Hot Mix Storage Silo

Capacity: 10/15/25/50 tons

#### WE ALSO DESIGN AND MANUFACTURE CUSTOMIZED PLANT AS PER REQUIREMENT.

- \* Due to continuous improvement being made from time to time, all the specifications, motor ratings, design are subject to change without prior notice.
- \* The output indicated are subject to vary according climatic and operational conditions.



## **WILSON ENGINEERING INDUSTRIES PVT. LTD.**

Regd. & Sales Office: Block-7B, 7th Floor, "Anuj Chambers",

24, Park Street, Kolkata - 700 016, India Phone : + 91-33-2226-2960/62/63 Fax : +91-33-2226-4045 Email : info@wilson.co.in

Web: www.wilson.co.in