



Mfg. & Exp. of Road Construction Machinery



**RELIABLE EQUIPMENT**

FOR BUILDING DURABLE ROADS



S.P. Enterprise is an ISO 9001:2015 certified Manufacturer and Exporter of durable Road Construction Equipment's and Trommel Machine.

The company is promoted by a team of professionals with hard core experience of around two decades in serving the Road Construction Equipment's & Construction Machinery in Indian as well as overseas market.

With more than 20 years in the industry, the company is today recognized as customer centric quality conscious organization that believes in analyzing the customers need and fulfilling it to give them optimum solution.

Quality and Excellence is the order of the day at S.P. Enterprise. Right from machining, fabrication and fitting of the bought out items all tasks are meticulously implemented and go through quality checks and test before they are fitted to give the optimum end results. Finishing is given due importance and every care is taken to give utmost aesthetic looks with durable paints to the plant/equipment to withstand the rough weather environment.

S.P. Enterprise design & develop equipment's as per customer's specific requirement apart from standard models and also serve clients with ready availability of spare parts / components and aftermarket services in any part of the world.



## WE MANUFACTURE **HIGH QUALITY ROAD CONSTRUCTION EQUIPMENT**

### **PRODUCT RANGE**

- ASPHALT BATCH MIX PLANT
- ASPHALT DRUM MIX PLANT
- WET MIX MACADAM PLANT
- BITUMEN SPRAYER
- ROAD BROOMER
- CHIP SPREADER
- TROMMEL MACHINE

### ► **Mission Statement**

We are committed to provide quality road construction equipment's & services to the construction industry globally.

To provide wide range of quality construction machinery in compliance to customer's requirement that are fairly priced, delivered on time and backed up with prompt after sales service.

### ► **Vision Statement**

To grow & excel in every aspect of business and serve customers with value added products and services.

# ASPHALT BATCH MIX PLANT

*" Available in output capacity of 80 to 160 TPH to meet the contractor's project requirement "*



Our Asphalt Batch Mix Plant is the best option when a variety of mixes are needed, together with precise proportioning and homogenous blending. A durable, multipoint weighing system that is simple to calibrate helps to create a high-quality asphalt hot mix. Quality is further enabled by a twin shaft pugmill mixer and thoughtfully produced, user-friendly controls.

## ► Salient Features

- High accuracy aggregate feeder bins with no flow indicator switch
- Counter flow type glass wool insulated dryer drum covered with S.S. cladding
- Sturdy batching tower consisting of multi deck vibratory screen, hot bins and pugmill mixer
- Modulating burner for higher thermal efficiency and low fuel consumption
- Indirect heating asphalt tanks with thermic oil heater
- Reverse air flow type dry bag house filter for dust management
- Optional arrangement for RAP material
- PLC based control panel with HMI

## ► Standard Plant Components

Multiple Cold Aggregate Feeder Bins

Single Deck Scalping Screen

Cold Aggregate Slinger Conveyor

Rotary Drying Drum

Dryer Burner

Batching Tower

Asphalt Tank

Bag House Dry Dust Collector

Thermic Oil Heater

Fuel Service Tank

Control Panel

Control Cabin

<b>Models:</b>	ABMP - 80	ABMP - 100	ABMP - 120	ABMP - 160	ABMP - 200
<b>Capacity:</b>	80 TPH	100 TPH	120 TPH	160 TPH	200 TPH

# ASPHALT DRUM MIX PLANT

" Manufactured as per MoRT&H specifications to produce best quality Hot Mix Asphalt "



S.P. Enterprise offers Parallel flow type Asphalt Drum Mix Plant to produce quality hot mix asphalt for roads and highway construction. Simple and modular design of our Asphalt Drum Mix Plant ensures ease of operation and maintenance, while robust construction ensures durability to the plant. Manufactured as per modern drum mix technology to produce best quality HMA with low dust emission and at low fuel consumption.

## ► Salient Features

- Manufactured in output capacities ranging from 30 TPH to 150 TPH in different models
- Available in stationary and mobile versions
- Manufactured with latest technology meeting MoRT&H and international standards
- Fully automatic operation with manual override facility
- High accuracy aggregate feeder bins with no flow indicator switch
- Glass wool insulated dryer drum covered with S.S. cladding
- Two stage, high & low pressure jet auto burner for fuel economy
- Microprocessor based electronic control panel with A.C. drives
- Can be customised as per client's requirement.

## ► Standard Plant Components

Multiple Cold Aggregate Feeder Bins

Single Deck Scalping Screen

Cold Aggregate Slinger Conveyor

Rotary Drying cum Mixing Drum

Load out Conveyor

Asphalt Tank

Mineral Filler Unit

Wet Scrubber (PCU)

Fuel Service Tank

Control Panel

Control Cabin

<b>Models:</b>	DM - 35	DM - 45	DM - 50	DM - 60	DM - 65
<b>Capacity:</b>	30-40 TPH	40-60 TPH	60-90 TPH	90-120 TPH	120-150 TPH

# ASPHALT DRUM MIX PLANT COMPONENTS

## ► Cold Aggregate Four Bin Feeder

- Tapered side walls of bins ensure even flow of aggregates eliminating plugging & bridging problem.
- Each bin fully adjustable radial gate system in conjunction with variable speed endless multi-ply feeder belt controls aggregate flow rate and transfers them to the gathering conveyor as per set percentage.
- Rubber skirting is provided to prevent leakage between bin bottom and belt surface.
- Bin vibrator is fitted on one bin for free flow of fines.
- Multi-ply rubber belt gathering conveyor running beneath the feeder bins collects the different size aggregated discharged from them and transfers to slinger conveyor through single deck scalping screen.



## ► Scalping Screen and Slinger Conveyor



- Single deck scalping screen for removal of oversize material.
- Scalping screen, fitted at the end of feeder bin gathering conveyor, consisting of heavy duty frame with legs and drive unit with eccentric shaft.
- Slinger conveyor transfers the screened aggregates from the feeder bins to the rotary drum through inlet beneath the burner.
- Multi-ply rubber belting running over idler rollers fixed in stand bolted to robust frame constructed from structural steel.
- Slinger conveyor Inclined at 14-15 degrees.
- Drive system consisting of TEFC motor and shaft mounted gear box.
- Uniformly placed idler & return rollers support the belt without any sagging.

## ► Drying and Mixing Rotary Drum

- Parallel flow type wherein drying takes place in primary zone and mixing takes place in secondary zone.
- Dryer Burner, Rotary Drum, Discharge Chamber, Primary Dust Collector & Exhaust system is mounted inline on robust and sturdy frame fabricated from heavy duty structural steel
- Rotary drum is insulated with ceramic wool and covered by S.S. sheet for reducing heat loss and fuel consumption.
- High efficiency lifters arrangement provides a complete dense veil across the burner flame within the dryer resulting in best heat transfer.
- Fuel efficient, two stage, high and low pressure jet type automatic burner suitable for LDO / Diesel fuel.



## ► Load out Conveyor



- Special Heat Resistant Multi-ply rubber belting running over idler rollers fixed in stand bolted to robust frame constructed from structural steel.
- Inclined at 22-24 degrees.
- Drive system consisting of TEFC motor and shaft mounted gear box.
- Uniformly placed idler & return rollers support the belt without any sagging.
- Spring loaded scrapper blade is installed to scrap the hot mix material sticking the belt.
- Gob hopper fitted at the discharge end of the conveyor is with hydraulically operated gates as per set timers to deliver the hot mix in lump & avoiding segregation.
- Power pack unit is provided for operating the gates of the gob hopper

## ▶ Asphalt Tank



- Cera wool insulated tank of adequate capacity with provision of coupling the auxiliary / additional storage tank.
- Flue tube designed for optimum surface area to affect necessary heat transfer.
- Asphalt pumping station consisting of positive displacement type jacketed asphalt pump coupled with variable speed drive unit.
- Hot oil jacketed delivery & return lines for smooth functioning.
- Automatic burner suitable for LDO / Diesel fuel.

## ▶ Mineral Filler Unit

- Adequate capacity filler hopper for storing the mineral filler material.
- Filler material is conveyed pneumatically by compressor / blower into the mixing section of the drum.
- Rotary valve controlling the flow rate of the filler material is coupled with the variable speed drive unit to meter the filler material.
- Filler unit can also be used to recycle the dust, gathered from primary dust collector, into the mixing zone.



## ▶ Wet Scrubber Unit



- Secondary Dust Collector (Pollution Control Unit) that absorbs & traps the hazardous gases and dust particles escaping along with the exhaust gases from primary dust collector.
- Venturi and nozzles designed to create the necessary fog of water for absorbing the gases and dust.

## ▶ Control Panel

- The body of the panel is fabricated from CRC sheet duly Powder Coated to protect against weather effect.
- It is equipped with the emergency stops, on / off buttons, selector switches, riders, volt meters, current meters, totalizer on the front desk with ease access to operator in logical manner.
- Other electrical items like MCB, fuses, drives, interlocks, starters etc. are housed on the rear side of the panel.
- Totalizer displays all the set parameters like aggregate percentage, asphalt percentage, filler percentage, asphalt & filler flow in kg/min., asphalt temperature, hot mix output, hot mix output temperature etc.



## ▶ Control Cabin



- It is insulated and houses the control panel for centralized operation of the Asphalt Plant.
- The cabin has glass windows all around, so the operator has full view on all sides from the cabin for ease of operation & control.

# WET MIX MACADAM PLANT

" For production of wet mix macadam used in pavement base & sub base construction "



Wet Mix Macadam Plant, popularly known as Wet Mix Plant or WMM Plant, are manufactured for producing homogenous mixture of sand, cement and water with aggregates / gravels used for pavement base & sub base construction. They are designed to produce best quality wet mix macadam at low power consumption.

## Salient Features

- Designed and manufactured as per MoRT&H specifications
- Modular construction ensures ease of installation, operation & maintenance
- High accuracy aggregate feeder bins with no flow indicator switch
- Twin shaft pugmill mixer with replaceable liner plates and wear resistant paddle arms & tips for efficient mixing
- User friendly electronic control panel with A.C. drives
- With water tank and monoblock water pump
- Can be customised as per customer's requirement

## Standard Plant Components

Aggregate Feeder Bins

Single Deck Vibratory Screen

Charging Conveyor

Twin Shaft type Pugmill Mixer

Mix Material Output Conveyor

Gob Hopper / Storage Silo

Water Tank with Water Pump

Control Panel

Control Cabin

<b>Models:</b>	WMM - 100	WMM - 150	WMM - 200	WMM - 250
<b>Capacity:</b>	100 TPH	150 TPH	200 TPH	250 TPH

## Hot Mix cum Wet Mix Plant

Designed to provide the cost-effective solution to the construction companies for their road projects. It is a combination of hot mix plant and wet mix plant with common aggregate feeder bins. With common aggregate feeder bins in center, hot mix plant components are installed on one side and wet mix plant components on the other side of the bins. With change over switch, operator can switch between the two plants; and at a time only one plant can be operated.

# TRUCK MOUNTED BITUMEN SPRAYER

*" Skid Mounted Bitumen Sprayers suitable to be mounted on standard truck chassis "*



Our Skid Mounted Bitumen Sprayer is suitable to be mounted on standard truck chassis offering the advantage of utilizing used or locally available truck. Bitumen Sprayer is used for uniform spraying of hot bitumen on road surface before laying hot mix asphalt. Bitumen tank and functional components like diesel engine, bitumen pump, air compressor etc. are fitted on heavy duty frame, fabricated from structural steels, to make a single unit.

**Bitumen tank** is elliptical / rectangular in shape and is insulated by cerawool & covered by galvanized, aluminum or stainless steel sheet as per customer's requirement. Constructional features of bitumen tank are baffle plates for load stabilization in motion, U-shaped flue tubes for maximum heat transfer, manhole for bitumen filling and inspection.

**Prime mover** is air cooled diesel engine generating 25 H.P. @ 2000 rpm.

**Burner** is manually fired high pressure jet type or optionally auto-ignition type suitable to use LDO/Diesel as fuel.

**Bitumen Pump** is positive displacement internal gear type and hot oil jacketed.

**Air Compressor** is twin cylinder, 3.0 H.P., 360 LPM capacity with working pressure of 9 Kg/cm<sup>2</sup>.

**Foldable Spray Bar** with a basic width of 2.4 mtr. and extendable up to 4.2 mtr. The fully circulating spray bar delivers bitumen at pressures ranging from 0-6 kg/sq m. The bar is supplied with nozzles at a standard pitch of 225 mm, pneumatically operated and easily adjustable.

**Hand Spray Bar** attachment with shut-off valve is provided for spraying of bitumen in narrow or irregular shaped areas that are inaccessible to the spray bar.

**Controls & Gauges** are provided to deliver a uniform and precise amount of bitumen at desired temperature and rate.

<b>Models:</b>	BS - 40	BS - 60	BS - 80	BS - 100
<b>Capacity:</b>	4000 ltrs	6000 ltrs	8000 ltrs	10000 ltrs

# TROLLEY MOUNTED BITUMEN SPRAYER

" Tractor towable, bitumen sprayer constructed on trolley type chassis with wheels and tow bar "



S.P. Enterprise Trolley Mounted Bitumen Sprayer are ideal for low volume and rural roads construction and rehabilitation. They are also suitable for maintenance of city roads and streets. Our Trolley Mounted Bitumen Sprayers are equipped with Insulated Bitumen Tank, Diesel Engine prime mover, Positive Displacement type Bitumen Pump, Bitumen Piping with mechanical valves, Air Compressor, LAP Burner, Hand Spray Bar, Pneumatic tyres, Tow Bar and Chain Pulley Block.

## ► Salient Features

- Tractor towable
- Insulated bitumen tank covered with galvanised sheet
- Powered by 8 / 10 H.P., single cylinder air cooled diesel engine.
- Bitumen pumping system comprising of positive displacement gear type bitumen pump.
- Air compressor with air hose
- Hand spray bar fitted with nozzle.
- Mounted on trolley with 2 / 4 nos. tyres & tow bar.
- Air hose for cleaning road surface with compressed air prior to bitumen spraying.
- Chain Pulley Block with stand for handling bitumen drums.
- Suitable for emulsion spraying

<b>Models:</b>	BS - 25	BS - 35
<b>Capacity:</b>	2500 ltrs	3500 ltrs

## ROAD BROOMER

*" Tractor towable road broomer for cleaning pavement surfaces, specially designed for road construction industry "*

Our Hydraulic Road Broomer Machine is specially designed for road construction industry. It is tractor towable and used for cleaning the pavement surface before bitumen spraying or laying hot mix asphalt or concrete mix. The Road Broomer machine is manufactured from pressed steel consisting of broom shaft, two heavy duty wheels, hydraulic motor and adjustment screws. Hydraulic motor is powered by the hydraulic pump of tractor.



### ► Salient Features

- Tractor towable hydraulic road broomer for cleaning pavements
- Broomer shaft driven by hydraulic motor powered by tractor hydraulic drive
- 2000 mm clear sweeping width
- Mechanical jacks on both sides for adjusting pressure on broom brushes as per the surface slope
- Replaceable nylon bristle brushes and option of steel wire brushes
- Broomer sweeps away the dust towards the pavement shoulder
- Three point linkage system for quick mounting and towing
- Easy to operate and maintain

## CHIP SPREADER

*" Tailgate Chip Spreader suitable to be mounted on standard tipper truck "*



Our Chip Spreader is designed and manufactured to mount on a standard truck body in place of the tailgate. It is a gravity feed chip spreader generally used to spread, uniformly and efficiently, coated / uncoated aggregate chips on road surface for surface treatment. Ultimate solution for surface dressing works.

### ► Salient Features

- Tailgate Chip Spreader suitable to be mounted on standard tipper truck
- Suitable for spreading chips of upto 60 mm
- Spreading width maximum 2500 mm and can be adjusted in steps of 300 mm
- Guides for uniform chips spreading across the width
- Spreading roller driven by electric motor
- Suitable for spreading in forward and reverse truck motion

# TROMMEL MACHINE

" For solid waste segregation, vital for bio-mining / bioremediation of legacy waste "



Trommel machines are vital for the municipal waste and legacy waste segregation in the initial screening process to sort the sizes of solid waste. Our Trommel Machine are designed rugged to deal with all type of waste materials including construction wastes, metals, plastics and organic waste.

## ► Salient Features

- Modular in design – can be incorporated in to an existing process or can be easily set up near the source of solid waste material
- Robust and heavy duty frame structure
- Extremely efficient and easy to maintain trommel screen
- Steel dust enclosure to minimise noise & dust pollution
- Can handle a wide range of material and can break compacted material
- Wide feeder bin to accommodate loader bucket to avoid spillage of feeding material
- Option of air blower on feeding or reject conveyor
- Available in single, double or triple stage configuration

## ► Standard Components

Loading Hopper

Angled Frame Bed and Enclosures for Trommel Screen Drum

Trommel Screen Drum

Feeding Conveyor

Process Conveyor

Reject Conveyor

Air Blower (Optional)

C&D Separation Conveyor (Optional)

Control Panel for Operation

<b>Models:</b>	TM - 50	TM - 100	TM - 200	TM - 300	TM - 500
<b>Capacity:</b>	50 TPD	100 TPD	200 TPD	300 TPD	500 TPD



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