



THE EXPERTS IN  
**ASPHALT & CONCRETE BATCH MIX PLANTS**

**Corporate Office:**

Off. T. J. Road, Opp. Sunder Tower,  
Hirji Baug, Shashikant Sawant Road,  
Sewri West, Mumbai 400 015.

**Tel:** +91.22.2419 1200

**Email:** info@ardent-india.co.in

**Factory:**

Plot # I-13 & 14, Kanhersar Village,  
Khed Industrial Area, Tal.: Khed,  
Dist.: Pune 410 505.

[www.ardentgroup.co.in](http://www.ardentgroup.co.in)



THE EXPERTS IN  
**ASPHALT & CONCRETE  
BATCH MIX PLANTS**

[www.ardentgroup.co.in](http://www.ardentgroup.co.in)

**ECOBATCH SERIES**





#### OUR GROUP COMPANIES



[www.ardentgroup.co.in](http://www.ardentgroup.co.in)



Ardent Maschinfabrik Pvt. Ltd. is the perfect mix of tradition & technology. Strategically located in Pune, India; Ardent group specialises in the development, manufacturing & marketing of Asphalt & Concrete Batch Mixing Plants used in paving highways & airports, road widening & development projects.

**WE DELIVER IN BLACK WHAT WE PROMISE ON WHITE**





# ARDENT ASPHALT BATCH MIXING PLANTS

Ardent Asphalt Batch Mixing Plants have a compact design which fits into containers for ease of shipment. The reduced footprint of the plant layout and the screen drum concept utilizes dual-functions of drying and screening of aggregates, ensuring very short route of aggregate flow to the hot bins. These plants deliver high capacity hotmix asphalt for highway projects, large airport runways, road resurfacing; the distinguished features incorporated in these plants is that it has no hot elevator, no vibrating screen and a dual purpose screen drum. These plants facilitates low cost production of Hotmix Asphalt due to lower fuel consumption without compromising on the quality resulting in competitive investment with lower cost of operation with high performance.



## EASY TRANSPORTATION

Plants are customised to fit into containers for the purpose of ease of shipment.



## ECONOMICAL OPERATIONS

Lower fuel consumption & lower maintenance cost results in lower operating and production cost.



## ADDITIONAL ATTACHMENTS

Due to the modular design it is easy to order various attachments basis the requirements & install it at the plant location with ease.



## LOWER MAINTANENCE COST

No need to change worn-off buckets, bearings, chains, sprockets as hot elevator is not required. No separate screening section required.



## QUICK INSTALLATION

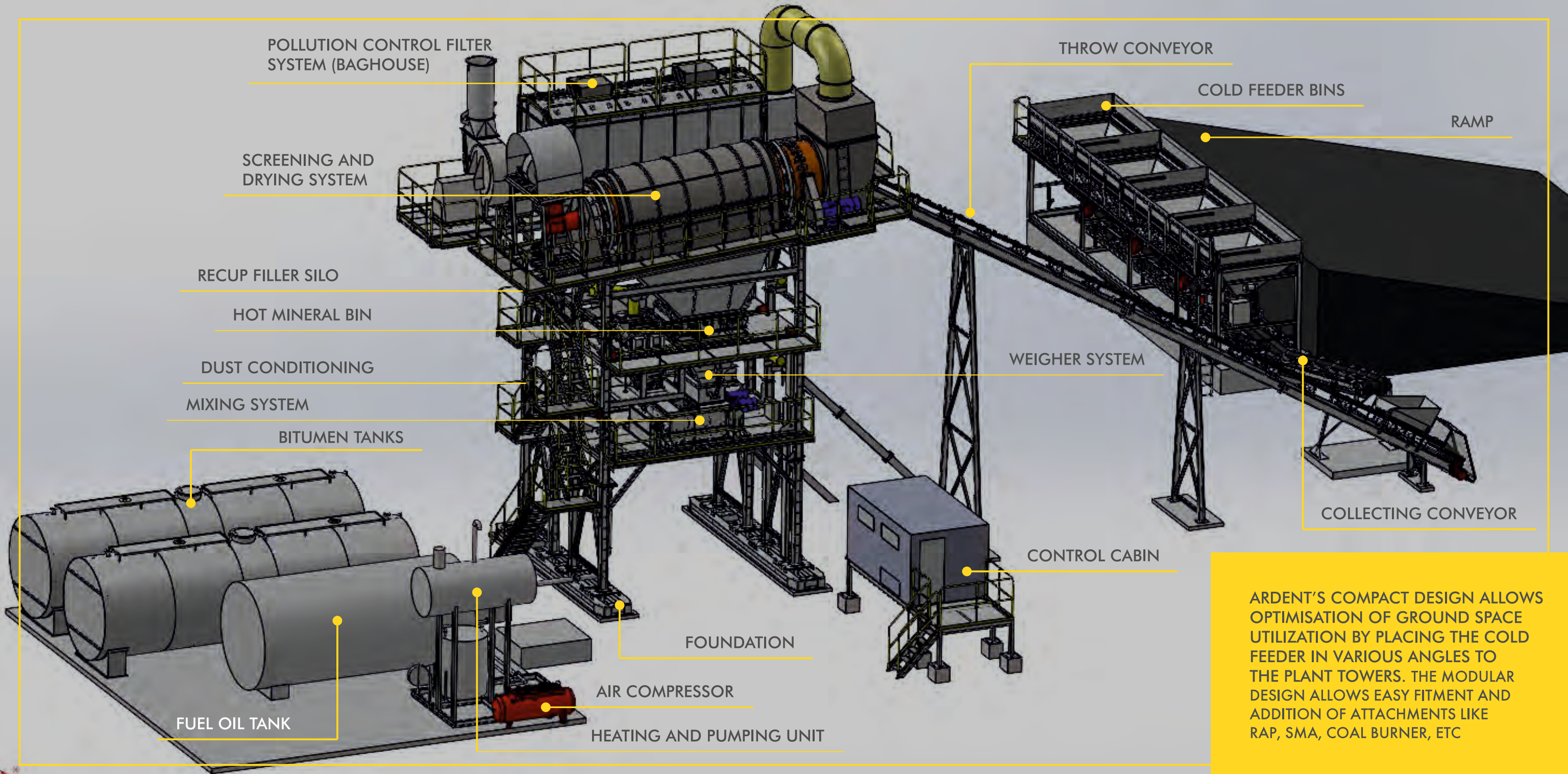
The preassembled stackable unit design of the plant makes it fast & easy to assemble & Commission.



## ECOBATCH PLANT VARIANTS

EcoBatch 80 (80 Tons per Hour)  
EcoBatch 120 (120 Tons per Hour)  
EcoBatch 160 (160 Tons per Hour)  
EcoBatch 200 (200 Tons per Hour)





POLLUTION CONTROL FILTER  
SYSTEM (BAGHOUSE)

SCREENING AND  
DRYING SYSTEM

RECUP FILLER SILO

HOT MINERAL BIN

DUST CONDITIONING

MIXING SYSTEM

BITUMEN TANKS

FUEL OIL TANK

AIR COMPRESSOR

HEATING AND PUMPING UNIT

FOUNDATION

THROW CONVEYOR

COLD FEEDER BINS

RAMP

WEIGHER SYSTEM

CONTROL CABIN

COLLECTING CONVEYOR

ARDENT'S COMPACT DESIGN ALLOWS  
OPTIMISATION OF GROUND SPACE  
UTILIZATION BY PLACING THE COLD  
FEEDER IN VARIOUS ANGLES TO  
THE PLANT TOWERS. THE MODULAR  
DESIGN ALLOWS EASY FITMENT AND  
ADDITION OF ATTACHMENTS LIKE  
RAP, SMA, COAL BURNER, ETC



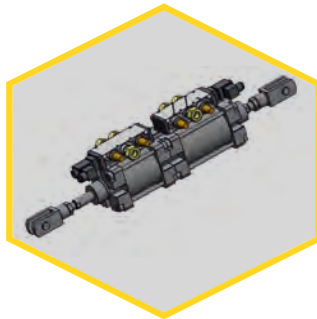
# FEATURES

Features that make Ardent Batch Mixing Plants to be the preferred choice of the Customers for development of Roads & Highways

## COMPACT AND EFFICIENT DESIGN



Large capacity hot bin storage to ensure quick batching



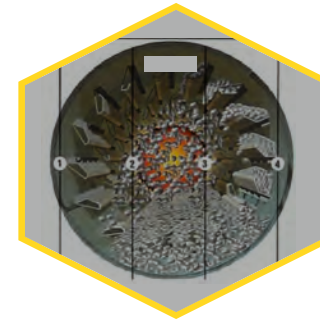
Two stage pneumatic cylinders ensure reduction in batch cycle time as there is no jogging of the cylinders.



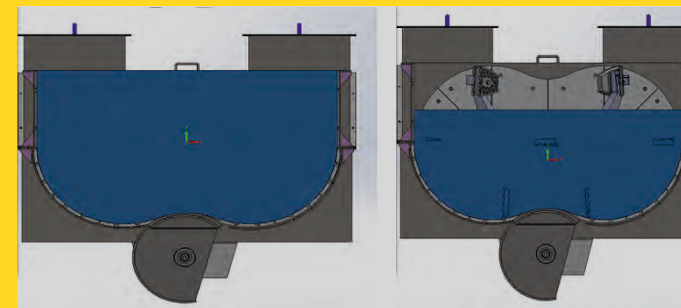
DESIGNED FOR QUICK & EASY INSTALLATION AND COMMISSIONING



Specially designed drum / dryer flights to ensure higher retention time and low fuel consumption



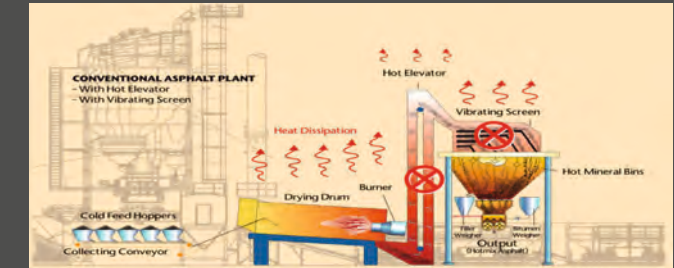
All cages are specially built in aluminium to ensure no rusting & ensure a good bag life



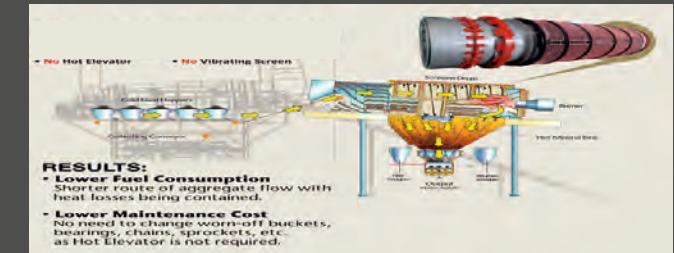
**THE GAME CHANGER**  
LARGE MIXER CAPACITY FOR EFFICIENT BATCHING

100% BATCH SIZE AT 70% FULL

## LOW OPERATION COST



No hot elevator required resulting in less heat loss & more output and low maintenance cost as no need to change worn off buckets, bearings, chains due to transport of hot aggregates as there is no requirement of the hot elevator

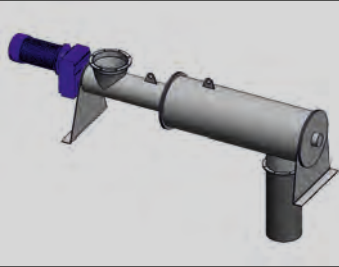


Drying & screening happens in single operation hence no separate screening deck required

Drum burner is stepless modulating for mix uniformity

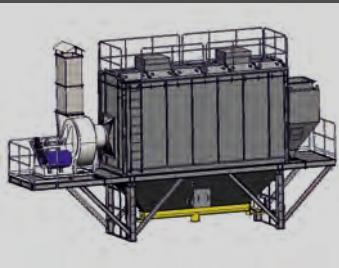
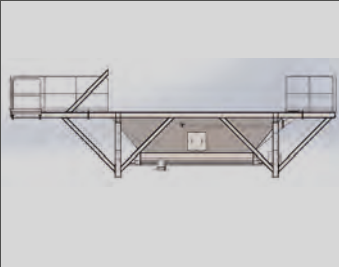


EFFICIENT POLLUTION CONTROL SYSTEM



Dust conditioner for easy disposal of dust resulting in better pollution control

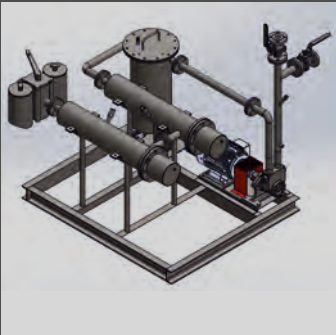
Specially designed recuperated Silo below baghouse to collect fine & feed back to the mix



Reverse air bag house with large surface area to collect dust efficiently

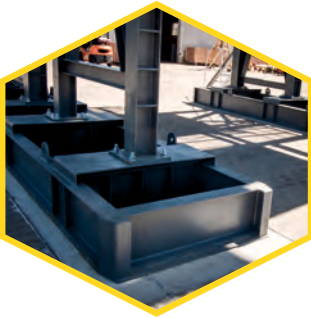
HEATING & PUMPING SYSTEM

Specially augmented fuel system complete with preheating & heating; pumping station to ensure optimised flow & temperature while using ISHS/FO



STABILITY AND ACCURACY

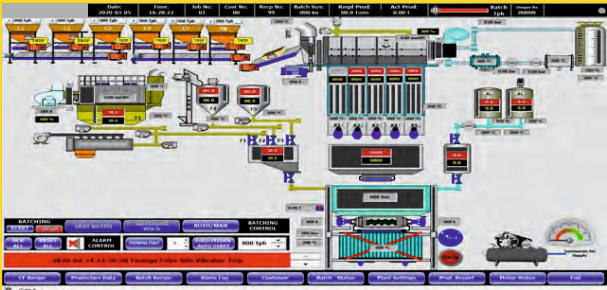
Robust steel foundations keeps the plant steady also avoids the need for PCC foundations



Buffer silo for filler / SMA in plant for faster batching

In flight control for weighing system to ensure high accuracy

PROPRIETARY SOFTWARE



Scada based software for best user friendly operation & experience

TECHNICAL SPECIFICATIONS ARDENT ECOBATCH PLANTS

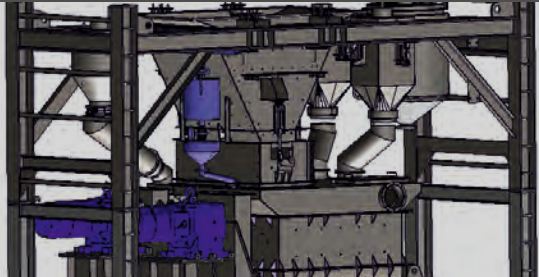
PLANT MODEL	ECOBATCH 80	ECOBATCH 120	ECOBATCH 160	ECOBATCH 200
Rated Output at 3% Moisture	80 TPH	120 TPH	160 TPH	200 TPH
Cold Feed Hoppers Capacity	4 X 9 M3	4 X 9 M3	4 X 9 M3	5 X 9 M3
Collecting Belt Including Grizzly to Remove Oversize Capacity	80 TONS/HR	120 TONS/HR	160 TONS/HR	200 TONS/HR
Screen Drum/Dryer Screening Area	17 M²	28 M²	32 M²	40.5 M²
Screening Method	SINGLE SCREENING			
Burner C/W Blower for Diesel & Heavy Fuel, Optional Gas, Output * Always subject to chosen burner and fuel type	6 MW	10 MW	12 MW	14 MW
Hot Mineral Bins - Total Capacity	8 TONS	20 TONS	30 TONS	32 TONS
No. of Compartments in Hot Bin	4 BINS			
Aggregate Weigher Capacity	1,250 KGS	1,500 KGS	2,000 KGS	3,000 KGS
Filler Weigher Capacity	100 KGS	150 KGS	300 KGS	300 KGS
Bitumen Weigher Capacity	150 KGS	150 KGS	200 KGS	300 KGS
Twin-Shaft Mixer (@70% Full)	1,000 KGS	1,500 KGS	2,000 KGS	3,000 KGS
Average Batching Cycle Time	45 SECONDS			
Bitumen Supply Pump	250 LITRES/MIN	250 LITRES/MIN	500 LITRES/MIN	700 LITRES/MIN
Baghouse Ambient Air Cleaning System Filter Area	280 M²	385 M²	525 M²	750 M²
Recuperated Filler Silo With Dosing Screw Capacity	15 TONS	20 TONS	28 TONS	30 TONS
Control Cabin Electrical System 3 Phase, 4 Pole, 50 Hz	415 V	415 V	415 V	415 V
Recommended Power Supply (Minimum)	320 KVA	380 KVA	400 KVA	500 KVA
Plant Control & Monitoring System (Cabin Fitted with Aircon & Easy 3 Side View Cabin)	PRE-INSTALLED CONTROL SOFTWARE WITH SCADA BASED SYSTEM			
Foreign Filler Silo with Bucket Elevator & Screw, Capacity with Inclined Screw / Elevator	NOT INCLUDED	INCLUDED	INCLUDED	INCLUDED
Steel Foundation for Plant	INCLUDED			
Dust Conditioner to Treat Fines	INCLUDED			
Bitumen Tank - Capacity	INDIRECT HEATED 1 X 30 KL	INDIRECT HEATED 2 X 30 KL	INDIRECT HEATED 2 X 45 KL	INDIRECT HEATED 3 X 45 KL
Thermal Hot Oil Heater - Capacity Per Hour - Light / Heavy Oil, Option Of Gas / Dual Fuels / Coal Gas	200,000 KCALS	300,000 KCALS	400,000 KCALS	500,000 KCALS
Fuel Oil Tank - Capacity	18 KL	24 KL	24 KL	24 KL
Pipelines for Fuel Oil / Bitumen / Thermal Oil	INCLUDED			

# Materials and Specifications are subject to change without prior notice.



# OPTIONAL ACCESSORIES

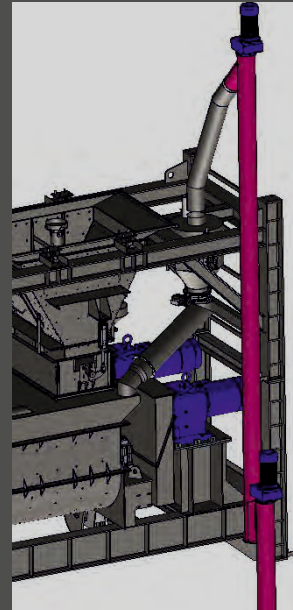
Additional accessories that can be ordered as per the requirement and can easily be installed at the plant location.



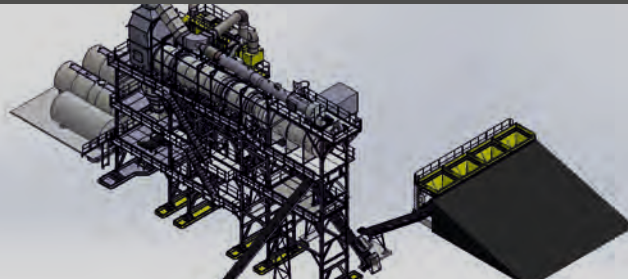
Colour Asphalt Liquid Loading System



Rap Sieving System with Conveyors



SMA Dosing System (1.5% Dosing)



Hot Recycling



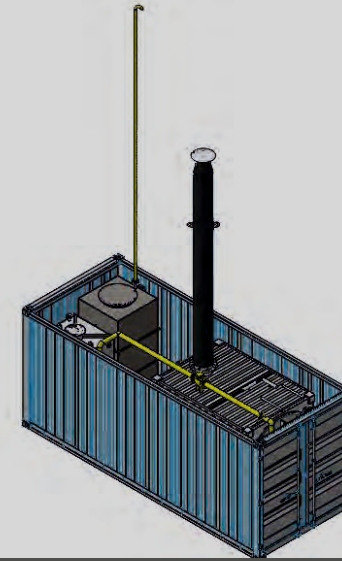
Cold Recycling



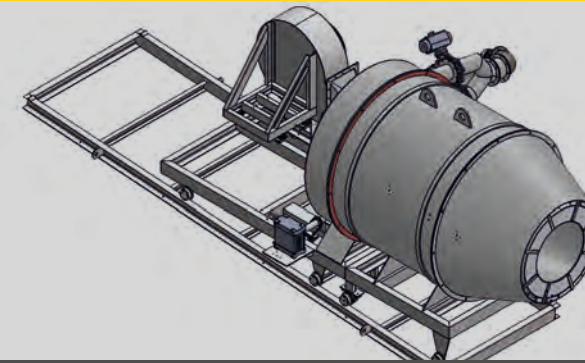
Gussphalt / Mastic Option



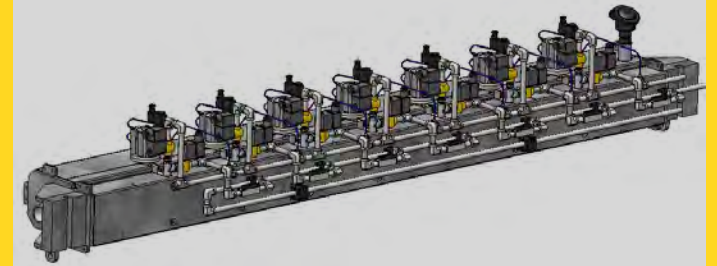
Drum Decanting System



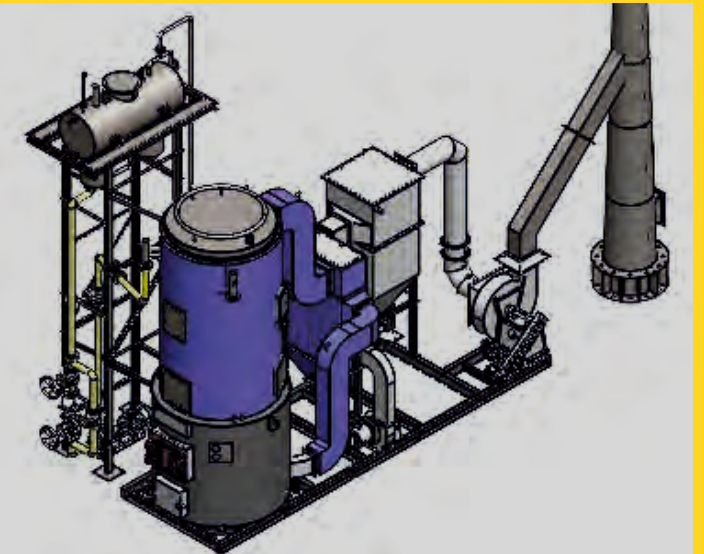
Thermal Oil Heater in Container



DustPro® Coal Burner Complete with Accessories & Storage



Warm Mix (Water Based)



Coal Fired Thermal Oil Heater

## OTHER OPTIONAL ACCESSORIES

- RAP Granulator
- Fuel / Gas Metering System
- Hot RAP with Counter Flow Drum
- Waste Heat based Coal Dryer

- Optional Hot Storage Silo Side Skip from 100 to 1600 tons
- Optional Hot Storage Silo Below Mixer Capacity from 15 to 100 tons
- Dedust Covers for Cold Feeder with Suction Fans Connected by Duct to Bag House During Loading
- Bitumen Tank Vent Connection to Common Ground Filter for Clean Air Fume Control