

BRAC DRUM MIX ASPHALT PLANT

BRAC

Total Engineering Solutions

DM-Series

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You Benefit More!



UNIQUE FEATURES & BENEFITS

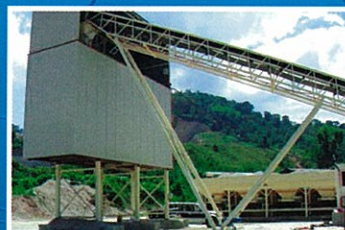
- **Wide Capacity Range ~ 150, 250 and 300 Metric Ton Per Hour**
- **Money-Back Guarantee on Rated Production Capacity**
- **Built Better and Last Longer ~ Uses Stronger Materials, State of Art Technology and Quality Components**
- **Produces Highly Consistent and Good Quality Asphalt Mix**
- **Operator Friendly ~ Fully Auto and Yet Supported by Manual Override Mode as Back-Up**
- **Approved Pollution Control System ~ Stainless Steel Made Wet Scrubber System Provides Effective Cleaning at Low Operation and Maintenance Cost**
- **Efficient and Economical**



Drying & Mixing Drum



Pollution Control System



Mixed Material Silo



Control Cabin

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Production Process

The diagram below illustrates the process of producing hot mix in BRAC's continuous drum mix asphalt plant.

Aggregates from the cold feed bins are fed in exact proportions by computer controlled weigh feeders. The throw belt then sends the aggregates into the drying drum at high velocity where the aggregates travel parallel with the flame through the combustion zone. Within the drying zone, aggregates are lifted by special bucket flights to create dense curtains for effective heat transfer.

Up to 50 percent of the recycling material can be fed into the drum through the recycle collar in the middle of the drum. The virgin aggregates curtains act as a shield between the flame and the recycling material preventing blue smoke and damage to the mix.

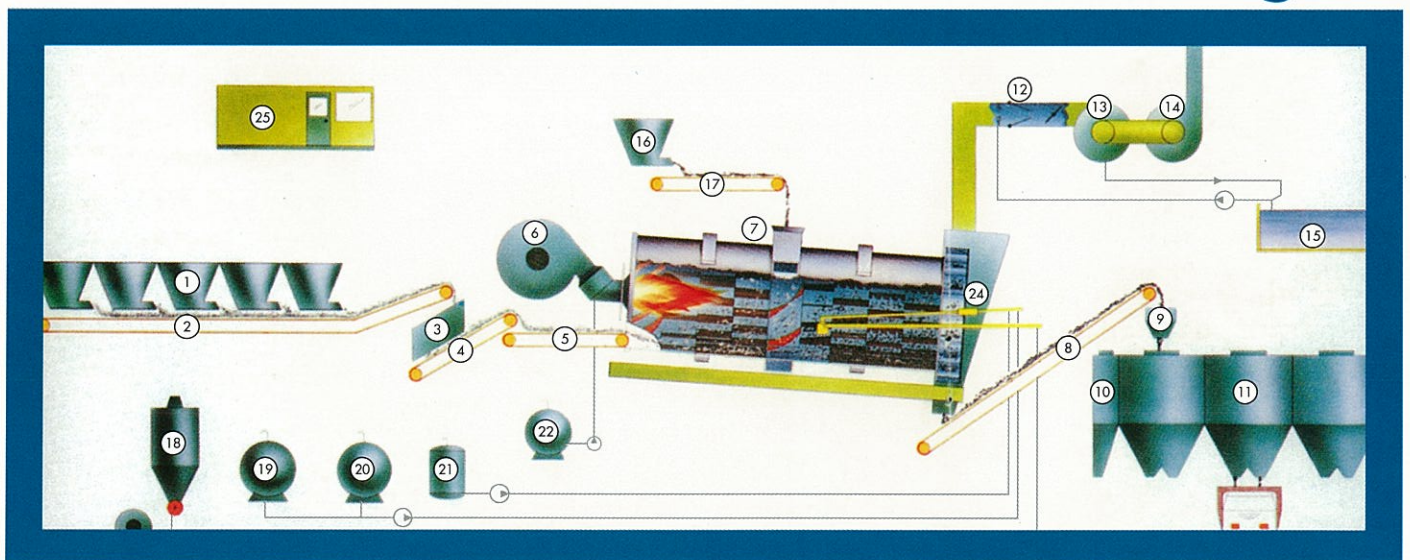
Bitumen and additive are metered by computer and mixed in the static mixer before mixing with the foreign filler in the cyclone mixer. Then the mixture is sprayed onto the aggregates in mixing zone.

Mixing is done in an inert atmosphere of water vapour and spent gasses of combustion from the drying zone, thus retarding oxidation and hardening of the bitumen. Furthermore, water vapour has the effect of foaming and assisting in the coating of the aggregates.

The durable heat resistance output belt transports the hot mix from the drum to the mixed material silo for storage via the gob hopper to minimize segregation in the silo.



Schematic Diagram



1. COLD FEED BINS
2. COLLECTING BELT
3. SCALPING SCREEN
4. TRANSFER BELT
5. THROW BELT
6. BURNER

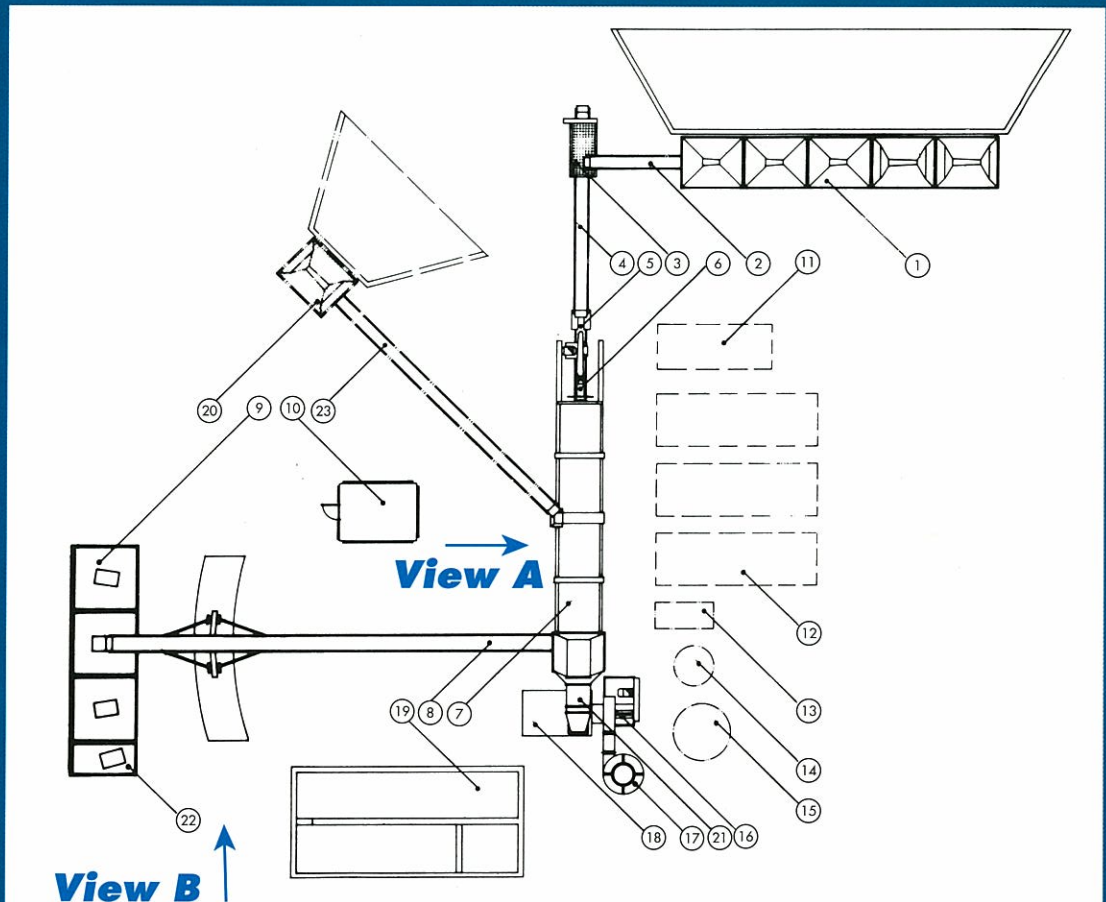
7. DRYING & MIXING DRUM
8. OUTPUT BELT
9. GOB HOPPER
10. REJECT MATERIAL SILO
11. MIXED MATERIAL SILO
12. VENTURI & AIR DAMPER

13. WATER SEPARATOR
14. EXHAUST FAN
15. SEDIMENTATION POND
16. RECYCLE BIN
17. RECYCLE BELT
18. FOREIGN FILLER SILO

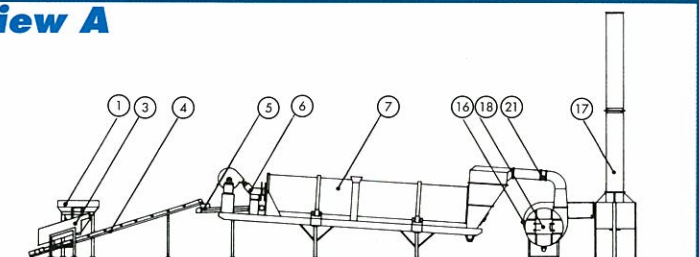
19. BITUMEN TANK
20. BITUMEN TANK
21. ADDITIVE TANK
22. DIESEL TANK
23. BITUMEN & FILLER MIXER
24. BITUMEN & ADDITIVE TANK
25. CONTROL CABIN

Typical General Plant Arrangement

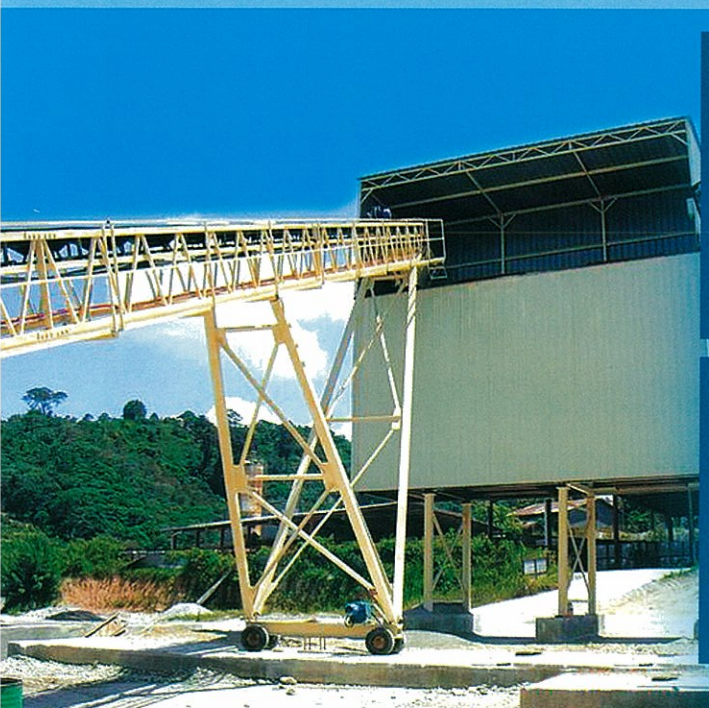
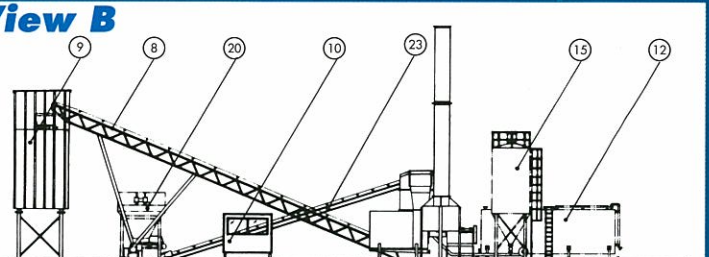
1. COLD FEED BINS
2. COLLECTING BELT
3. SCALPING SCREEN
4. TRANSFER BELT
5. THROW BELT
6. BURNER
7. DRYING & MIXING DRUM
8. OUTPUT BELT
9. MIXED MATERIAL SILO
10. CONTROL CABIN
11. DIESEL TANK
12. BITUMEN TANK
13. HOT OIL HEATER
14. ADDITIVE TANK
15. FOREIGN FILLER SILO
16. EXHAUST FAN
17. EXHAUST CHIMNEY
18. WATER SEPARATOR
19. SEDIMENTATION POND
20. RECYCLE BIN
21. VENTURI & AIR DAMPER
22. REJECT MATERIAL SILO
23. RECYCLE BELT



View A



View B



MODEL	DM-150	DM-250	DM-300
Type	Continuous Drum Mix Stationary/Mobile		
Capacity (3-10% H ₂ O)	65-170T/hr	110-250T/hr	140-330T/hr
Capacity at 3% H ₂ O	150T/hr	250T/hr	300T/hr
Capacity at 5% H ₂ O	120T/hr	200T/hr	250T/hr
COOL FEED SYSTEM			
*Number of Bins Standard	4	5	5
Volume of each Bin	9m ³	9m ³	11m ³
Dimensions (L x W x H)	3.0m x 2.5m x 3.0m	3.0m x 2.5m x 3.5m	3.5m x 2.9m x 3.7m
Feeder Belt Type	Flat Endless Belt	Flat Endless Belt	Flat Endless Belt
Drive Motor	A.C. Variable Speed 1.5kW	A.C. Variable Speed 2.2kW	A.C. Variable Speed 2.2kW
Collecting Belt Type	3-Trough 30° Endless Belt	3-Trough 30° Endless Belt	3-Trough 30° Endless Belt
Capacity	180T/hr	250T/hr	330T/hr
Drive Motor	4kW	5.5kW	11kW
Throw Belt Type	3-Trough 30° Endless Belt	3-Trough 30° Endless Belt	3-Trough 30° Endless Belt
Capacity	180T/hr	250T/hr	330T/hr
Drive Motor	2.2kW	3kW	5.5kW
*Additional cold feed bins and scalping screen are available as an option.			
DRYING AND MIXING			
Dimensions (Dia. x L)	1,676mm x 9,750mm	1,900mm x 10,750mm	2,400mm x 12,200mm
Drive	Friction Drive	Friction Drive	Friction Drive
Drive Motor	4 x 11kW	4 x 15kW	4 x 18.5kW
*Burner Type	High Pressure	High Pressure	High Pressure
	Air atomizing burner	Air atomizing burner	Air atomizing burner
Fuel for standard burner	Diesel oil	Diesel oil	Diesel oil
Heating Capacity	9.7 gigaCal/hr	14.5 gigaCal/hr	20.2 gigaCal/hr
Consumption max	900kg/hr	1350kg/hr	1870kg/hr
Fuel Pump Type	Gear Pump	Gear Pump	Gear Pump
Capacity	20ltr/min	30ltr/min	42ltr/min
Drive Motor	2.2kW	3kW	4kW
Burner Blower Type	High Pressure	High Pressure	High Pressure
Capacity	7300m ³ /hr	8750m ³ /hr	10500m ³ /hr
Drive Motor	30kW	37kW	45kW
*Burner may be equipped for use with heavy fuel oil, LPG or natural gas (earth gas) as an option.			
BITUMEN INJECTION PUMP			
Type	Gear Pump	Gear Pump	Gear Pump
Capacity	192ltr/min	288ltr/min	400ltr/min
Drive Motor	A.C. Variable Speed 5.5kW	A.C. Variable Speed 7.5kW	A.C. Variable Speed 11kW
POLLUTION CONTROL			
Type	Venturi Wet Scrubber	Venturi Wet Scrubber	Venturi Wet Scrubber
Exhaust Fan Capacity	37,100m ³ /hr	53,500m ³ /hr	77,300m ³ /hr
Drive Motor	55kW	90kW	132kW
*Bag filter is available as an option			
MIXED MATERIAL SILO			
Capacity	2 x 30T	2 x 50T	3 x 50T
Output Belt Type	3-Trough 30° Heat Resistant Endless Belt	3-Trough 30° Heat Resistant Endless Belt	3-Trough 30° Heat Resistant Endless Belt
Drive Motor	7.5kW	11kW	18.5kW
CONTROL CABIN			
Type	Built with all round glass windows, insulated, dust proof and air-conditioned		
Contents	Switch cabinets, circuit breakers, control desk, etc		
Control	Automatic with IBM compatible PC, multi-channel A/D & D/A Converters		
OPTIONAL EQUIPMENT			
RECYCLING KITS	Consist of recycling bin c/w scalping screen, recycle conveyor, recycle collar on the drum and control system		
BITUMEN TANK	20,000 litres, 30,000 litres and 45,000 litres heated by diesel burner, electrical heater or hot oil		
FOREIGN FILLER SILO	20m ³ , 30m ³ and 60m ³ capacity c/w standard filler blower, A.C variable speed rotary valve		
HOT OIL HEATER	200,000 Kcal/hr, 300,000 Kcal/hr and 400,000 Kcal/hr		

In accordance with our established policy of continuing improvement, we reserve the right to amend this specification at any time without prior notice.

Authorized Distributor:

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