

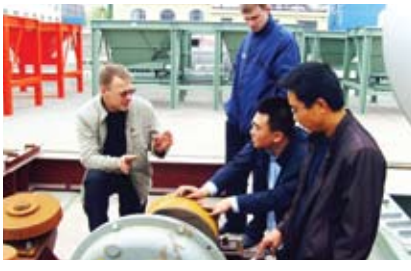


TM

# D&G ASPHALT MIXING PLANT

European Technology at Asian Price





## Welcome to D&G!

D&G Asphalt Mixing Plant is designed and built based on 30 years of experience. The D&G design team utilizes the latest 3-D design software coupled with sophisticated manufacturing process management systems to ensure product quality and stability. Plants are well tested with our proprietary testing platform for mixer, vibrating screen, dryer drum and control system before leaving the factory.

- **Advanced European Technology Applied.**
- **Renowned Global Brands Used for Key Plant Components.**
- **Used by Top International Road Construction Companies.**
- **ISO9001:2000 Quality Management System Certified.**
- **CE Certified.**
- **PCT Certified.**



DC4000  
China

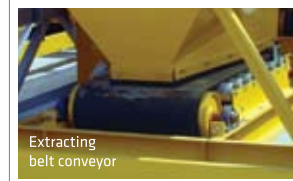
## D&G Asphalt Mixing Plant

The D&G Asphalt Mixing Plant production base has over 150,000sqm factory space and is able to produce 70 units of asphalt plants annually. The asphalt plant capacity ranges from 100 t/h to 400 t/h.



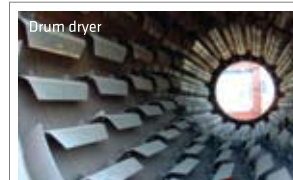
# 1. Cold Aggregate Dosing System

- Bin volume and number is customizable (8m<sup>3</sup>, 10m<sup>3</sup> or 18m<sup>3</sup> for each bin, maximum 10 bins)
- Detachable structure design significantly reduces dimension for shipment while ensuring sufficient capacity.
- Seamless ring belt is highly reliable and durable. Flat belt with stop plate is more convenient for maintenance and belt replacement.
- **SIEMENS** motor is controlled by frequency converter. Stepless variable-speed adjustable feature ensures accuracy and energy saving.



# 2. Drying System

- Italian renowned **ABS** burner comes with high combustion efficiency. Diesel, diesel/heavy oil or gas as fuel is available. The burner is customized for D&G drum dryer to achieve ultimate performance.
- Drum dryer is specially designed for higher heat-exchange efficiency and lower caloric loss.
- The flights are made of Sweden **HARDOX** high wearable thermal-resistant steel.
- American **HONEYWELL** burner controller and igniting device are applied.
- **ABB** or **SIEMENS** drum drive motor and **BONFIGLIOLI** gear box are applied.



# 3. Dust Collecting System

- Two-stage dust collecting system is equipped with high and low temperature protective devices.
- Filter bag is made of American **NOMEX** material.
- Exhaust fan controlled by frequency converter, which can significantly reduce current and energy consumption.
- Optional **FERRARI** exhaust fan can be applied for much higher efficiency and reliability.



## 4. Filler System

- The standard stack-up filler silo design is more convenient for connection with main tower and requires less space for installation.
- Volume and number of filler silo are customizable.
- **NORGREN** pneumatic components and **WAM** screw conveyor are applied.



## 5. Main Tower

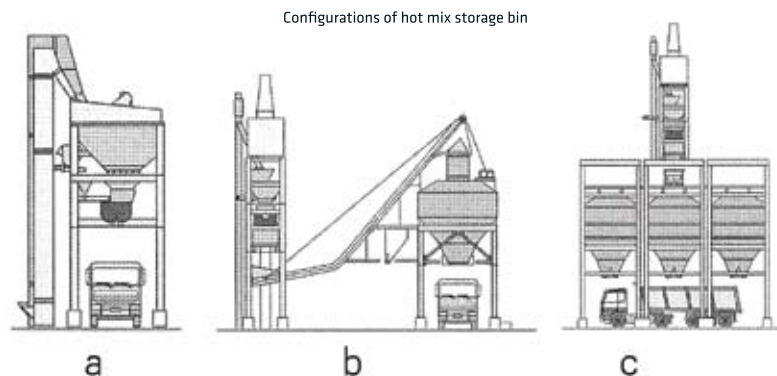
- Both aggregate and filler elevators are equipped with double-ring chain buckets, which are more reliable and convenient for maintenance.
- Specially designed screen is driven by maintenance-free vibrating motors and is easy for mesh changing and maintenance.
- Double stroke aggregate bin door control (by 2 cylinders each door) is for a higher weighing accuracy. The weighing deviation can be automatically compensated by computer.
- Two stage bitumen weighing system with automatic compensating function ensures the weighing accuracy and keeps the determined production recipe.
- Bitumen is sprayed into mixer through a specially designed spraying bar with high pressure to reduce feeding time and increase mixing uniformity.
- Frequency-converter-driven filler screw conveyor for conveying filler to weighing hopper results in high precision.



- Each scale is equipped with 3 numbers of pull-type load cells, which becomes the most stable and reliable weighing solution.
- Specially designed twin-shaft compulsory asphalt concrete mixer (the mixing arm is cross arranged with switchable girded mixing blade) brings higher mixing efficiency and durability. Mechanical synchronized **ROSSI** mixer gear box results in a simple structure with low possibility of failure.

## 6. Hot Mix Storage Bin

- Optional configuration of hot mix storage bin is available, beside (Fig. b) or under (Fig. c) the main tower.
- Elevated tower design allows direct discharge under main tower without storage bin (Fig. a).
- Capacity and number of storage bins are customizable.
- Frequency-converter controlled winch with compact design and low driving power.



## 7. Control System

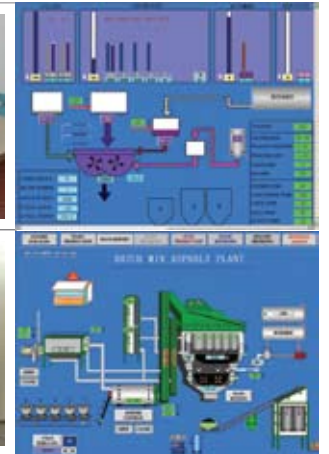
- Equipped with D&G-developed **DCLeap** computerized plant control and production management system.
- Designed with parallel redundant plant control system. The plant can be controlled by fully-automatic industrial computer or touch screen control device.
- Supported with fully-graphic control interface, the plant can be easily operated. Different languages can be applied as per request.
- Applied with **SIEMENS / VIPA PLC** and other world-renowned electronic control components, such as the frequency-converter (**SIEMENS** or **PANASONIC**).



Control desk



Control cabinet



Control Interfaces

## 8. Bitumen Heating & Storage System



Bitumen system

- Volume and number of bitumen tanks are customizable.
- Individual bitumen storage and heating system also available.

## 9. Others



Generator set



Mobile steel base

- Optional metallic foundation is available for quick installation and transportation convenience.
- Recycling solutions for 15%, 35% and 50% of RAP are our highlights.
- Other additional components, such as fiber feeding device, recover filler disposal equipment and generator set, are also available.



50% RAP Recycling solution



Additive feeding device

# Technical Data of D&G Asphalt Mixing Plant

	DG1300	DG2000	DG2500	DG3000	DG4000	DG4000S	DG5000
Rated Production Capacity	100 t/h	160 t/h	200 t/h	240 t/h	320 t/h	320 t/h	380 t/h
<b>Cold Aggregate Feeder</b>							
Bin Number	4	5	5	5	5	6	6
Unit Capacity	8m <sup>3</sup>	10m <sup>3</sup>	10m <sup>3</sup>	18m <sup>3</sup>	18m <sup>3</sup>	18m <sup>3</sup>	18m <sup>3</sup>
<b>Drum Dryer</b>							
Model	T160	T190	T220	T250	T280	T280	T300
Length	8 m	8.5 m	9.0 m	9.0 m	12 m	12 m	12 m
Diameter	1.6 m	1.9 m	2.2 m	2.5 m	2.8 m	2.8 m	3.0 m
Burner Output	9 MW	11 MW	13.5 MW	18 MW	27 MW	27 MW	27 MW
Fuels	Diesel, heavy oil, natural gas, etc ~						
Drum Drive	22 kW	30 kW	4 × 15 kW	4 × 18.5kW	4 × 30 kW	4 × 30 kW	4 × 30 kW
Filter Efficiency	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>	≤20 mg/Nm <sup>3</sup>
<b>Mixing Tower</b>							
Screening	4 fractions	5 fractions	5 fractions	5 fractions	5 fractions	6 fractions	6 fractions
Hot Aggregate Bin	21 m <sup>3</sup>	21 m <sup>3</sup>	40 m <sup>3</sup>	40 m <sup>3</sup>	50 m <sup>3</sup>	75 m <sup>3</sup>	80 m <sup>3</sup>
Aggregate Scale	1300 kg	2000 kg	2500 kg	3000 kg	4000 kg	4000 kg	5000 kg
Filler Scale	130 kg	200 kg	250 kg	400 kg	500 kg	500 kg	800 kg
Bitumen Scale	130 kg	200 kg	250 kg	400 kg	500 kg	500 kg	500 kg
	Other scale options or additive feeders as per customer requirement. ~						
Metering Precision	Weighing Accuracy: Aggregate ±0.5%; Filler ±0.25%; Bitumen ±0.2% ~						
Mixer Rated Capacity	1300 kg	2000 kg	2500 kg	3000 kg	4000 kg	4000 kg	5000 kg
<b>Bitumen Storage &amp; Supply</b>							
	Horizontal tanks with hot oil heating ~						
Tank Capacity	35,000 L	35,500 L	50,000 L	50,000 L	50,000 L	50,000 L	50,000 L
Tank Number	2	2	2	2	3	3	4
<b>Filler Storage &amp; Supply</b>							
	Stand-alone, stack-up (in standard configuration) or elevated version ~						
Filler Silo Capacity	16+16 m <sup>3</sup>	24+24 m <sup>3</sup>	30+30 m <sup>3</sup>	30+50 m <sup>3</sup>	40+50 m <sup>3</sup>	40+50 m <sup>3</sup>	40+50 m <sup>3</sup>
Filler Silo Number	2 silos as standard (one for reclaimed and one for imported filler) or as desired ~						
<b>Hot Mix Storage Bin</b>							
	Beside (in standard configuration) or under mixing tower ~						
Bin Capacity	50 m <sup>3</sup>	50 m <sup>3</sup>	50 m <sup>3</sup>	80 m <sup>3</sup>	120 m <sup>3</sup>	120 m <sup>3</sup>	120 m <sup>3</sup>
<b>Reclaimed Asphalt Pavement System</b>							
	Optional, several solutions for brand new plants or modification of existing plants ~						
Percent of RAP Adding	from 15% to 50% ~						
Installed Power (approx.)	310 kW	420 kW	510 kW	620 kW	860 kW	870 kW	900 kW
Control System	DC Leap redundant control system computer + PLC + HMI, with dual monitors and printer. ~						
Environment Index	Dust density ≤20 mg/Nm <sup>3</sup> , Ringelmann Blackness Class I, Noise in control cabin ≤70dB ~						

**Note:**

Some components can be customized as per requests. However, D&G Machinery reserves the right to remain or make any changes without prior notice or obligation.



## D&G ASPHALT MIXING PLANT

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