

SUBSIDIARY OF D&G TECHNOLOGY HOLDING CO., LTD. STOCK CODE 1301.HK







RESOURCE RECYCLING











**EUROPEAN TECHNOLOGY AT ASIAN PRICE** 

# **ASPHALT MIXING PLANT**







IN MANUFACTURING
ASPHALT MIXING PLANT

Established in 1999, **D&G MACHINERY** is a professional manufacturer and service provider of wide range high-end asphalt mixing plant and eco-friendly asphalt recycling plant. Thus far, we have over 150,000m<sup>2</sup> factory's space with production capacity of over 80 sets of plants annually.

With an inspired R&D team, we developed the advanced model DG4000 (320 t/h) asphalt plants in 2003. Our products are top of the class in quality. Up to now, around 70% of the asphalt mixing plants we sold were model DG3000 (240 t/h), DG4000 (320 t/h) and DG5000 (400 t/h). The latest model DG5000 is the market leader among the same model class and range. **D&G MACHINERY** is highly recognized by customers as the leading professional manufacturer in the industry.

The products, with a wide variety to meet the need of customers technically and geographically, are used by the road construction industry in nearly 30 Chinese provinces and have made great contributions to the construction of modern highways throughout the country. As from 2006, **D&G MACHINERY** extends its market from Asia to the other continents of the world. Over 80 sets of asphalt mixing plants have been installed in Australia, Russia, India, United Arab Emirates, Saudi Arabia, Algeria, Kenya, Angola, Ethiopia, Tajikistan, Kazakhstan, Turkmenistan and Mongolia. All the plants, with their respective customized features, have achieved outstanding performance levels in these countries.

**D&G MACHINERY** uses components from renowned international brands to ensure the quality of our products. We are proud of our innovations and proprietary technologies and strive to give customers the most advanced products in the market.

Service is our emphasis. Our experienced and efficient after-sales service team is expert in the installation, commissioning, training, maintenance and repair of asphalt mixing plants. Customer satisfaction is guaranteed.

The factory in Langfang is equipped with advanced computer control plasma cutters, super-large computer control bending machines, gas shielded welding machines, shot blasting rooms and high pressure spray painting rooms to ensure meeting international standard in all aspects. The plants undergo thorough pre-assembly and tests before delivery. **D&G MACHINERY** takes pride in its products' price to performance ratio.

We are dedicated to innovations in technology and continuous improvement in quality.

D&G MACHINERY keeps Asphalt Ahead with Great Passion.

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Trading of the shares on the Main Board of the Stock Exchange of Hong Kong began on 27 May 2015, under the stock code **1301**.

#### **SERVICESORIENTED**

**D&G MACHINERY** adheres to the tenet of "Sincerity and Innovation, Service First", its professional engineers provide pre-sale, on-sale and after-sales services to customers.



The After–Sales Service Division is responsible for the local and overseas equipment installation, commissioning, after–sales service, spare parts business and equipment renovation projects. At present there are teams of professionally trained service engineers in the after–sales service division, and most of the engineers have over 5 years of work experience in asphalt mixing plant installation and commissioning.

The team provides technical consultancy and support to overseas and domestic customers in a timely manner. It renders high–quality yet low cost spare parts, equipment renovation and upgrading service. The separate spare parts warehouse has over 3000 types spare parts storage (the wear parts include imported parts, cast parts, work–pieces, pneumatic elements and electric elements), ensuring the optimal supply of spare parts to users. Through continuous efforts, prompt and efficient technical services, training and spare parts provision, **D&G MACHINERY** after–sales service teams are determined to be your strong back–up and most reliable friends.



**Parts from Renowned Brands** 

- 1. SEW Reducer
- 2. HONEYWELL Burner Control
- 3. METTLER TOLEDO Digital Weighing Panel
- 4+5. NORGREN Pneumatic Elements
- 6. **SIEMENS -** Low Voltage Electric Components / Motors







## **D&G Machinery**

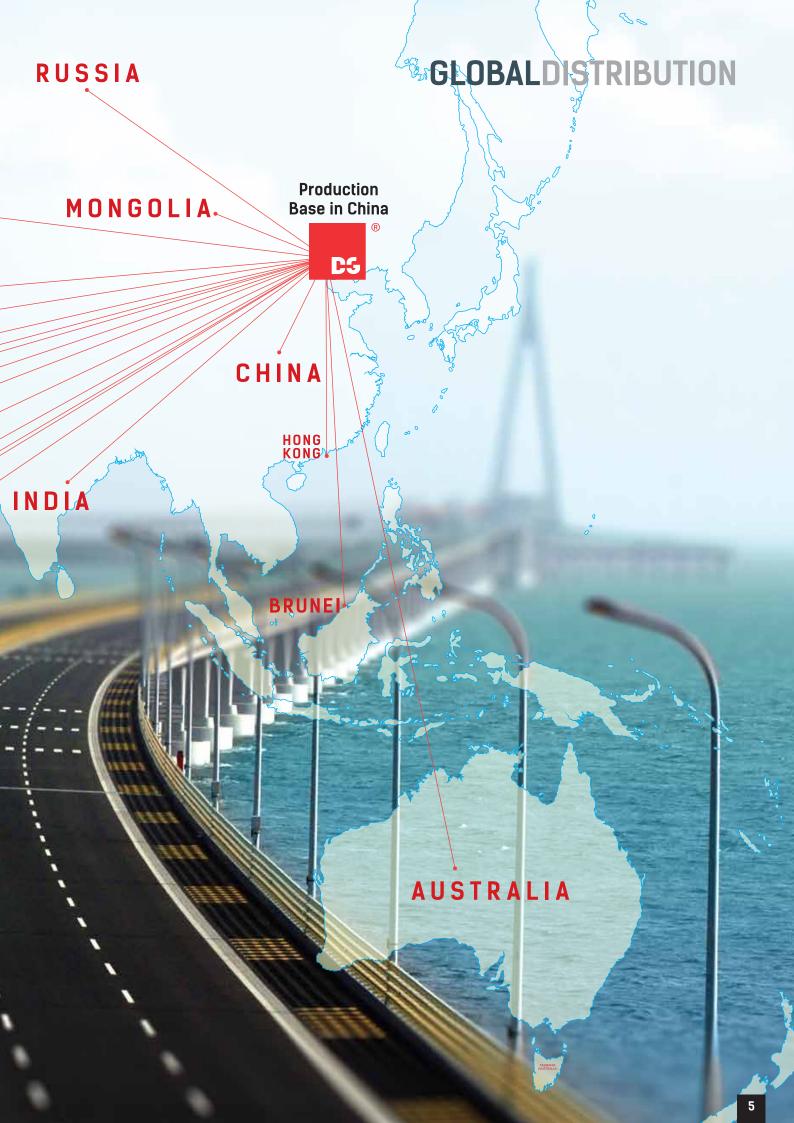
Builds the state-of-the-art Asphalt Mixing Plant



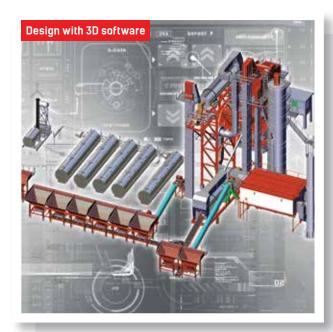








### **TECHNICALFEATURES 1/2**



#### A GLOBAL PERSPECTIVE TO BRING YOU

STATE-OF-THE-ART TECHNOLOGY

Our R&D Department at **D&G Machinery** keeps abreast of the latest technology and trend from around the world in developing state-of-the-art technologies. We ensure that **D&G Machinery** asphalt-mixing plants stay ahead of the international standards and offer the best performance at the most affordable prices; **D&G Machinery** adopts the latest 3D design technology, highly efficient production and processing technology, matching technological equipment and detection devices with testing platforms, such as mixer testing platform, vibrating screen testing platform, dryer testing platform and electrical system simulation test bench, to name a few. All these devices ensure **D&G Machinery** asphalt-mixing plants can and do maintain international standards.

## PRODUCTS CERTIFIED IN RUSSIA AND EUROPE

WITH GLOBAL RECOGNITION

Asphalt mixing plants from **D&G Machinery** are endorsed with CU-TR Certification in Russia and Kazakhstan. In particular DG3000 is endorsed with CE Certification, as verified by an European CE Certification Body, making it the first of its kind among brands developed in China. These products fully meet relevant European Union requirements in terms of health, safety and environment protection and are widely accepted in European countries, Japan and other international countries and regions.















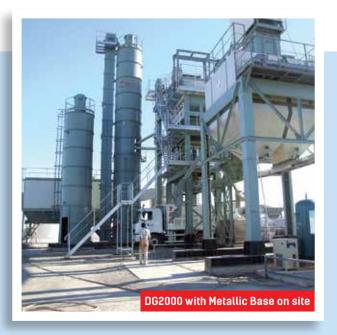




## **EXCELLENT MODULAR DESIGN** AND METALLIC BASE

**FOR FAST ERECTION** 

D&G Machinery has the world's most advanced asphalt mixing plant service and manufacturing experience, spanning more than 30 years time. This experience enables D&G Machinery to simplify the approach used to obtain the best results, making the configuration and layout of the asphalt mixing plant more compact and practical. A standard modular design, optional cable quick fittings, and a high degree of pre-set, pre-assembly enable a flexible configuration. Metallic base (optional) and modular assembly with no cement foundation required shortens the erection time, occupying less area and enabling a more convenient dismantle and transfer.





## INDEPENDENT INTELLECTUAL PROPERTY DGLEAP AUTOMATIC CONTROL SYSTEM

The *DGLeap* automatic control systems are self–researched and self–designed. Industrial control computers with high performance and large capacity are the main component and can be updated easily. These computers are configured with the best PLCs in the world with 2 configuration options: centralized control and bus–distribution control. Thus, *D&G Machinery*'s system can meet the requirements of various asphalt mixing plants and production management. And each configuration option includes fully computerized automatic controls, with touch–screen control (semi–automatic) and manual control. There are 3 ways of operation in order to ensure system reliability and production continuity.



#### **TECHNICALFEATURES 2/2**

#### 3 POINT ELECTRIC WEIGHING SYSTEM

The system consists of an aggregate weighing hopper, a filler weighing hopper and a bitumen weighing hopper. Each hopper weighs and is controlled independently. All three hoppers utilize **3-point load cells**. The system can also be equipped with feeding and metering devices for various additive materials.





### ADVANCED WEIGHT MONITORING SYSTEM OF

AGGREGATE, FILLER AND BITUMEN

The aggregate weighing hopper is controlled by a double–stroke cylinder, and provides the function of an advanced, fully computerized and automatic falling impact compensation. The filler weighing hopper is controlled by a frequency metering screw while the bitumen weighing hopper is controlled by dynamic calculation and is able to achieve the secondary measurement. Asphalt mixing plants of **D&G Machinery** are installed with a weighing and metering control system which is very precise and with a high weighing accuracy, enabling strict compliance with the required bitumen–to–aggregate ratio.







#### **INTEGRATED DESIGN**

#### OF THE DUST COLLECTION SYSTEM, EQUIPPED WITH A LARGE CLOSED-LOOP

TEMPERATURE CONTROL SYSTEM AND MONITORING SYSTEM

The D&G Machinery asphalt mixing plant boasts high quality and long service life attributed to two grades of dust collection and closed-loop temperature control systems and an automatic monitoring system. The performance of dust collection of the entire plant can meet the most stringent environmental requirements in the world today.





#### OUTSTANDING PRODUCT

PERFORMANCE

The large capacity hot mixture storage bin ensures continuity of production. Double oil tanks and the optional burner are suitable for various fuels (such as diesel oil, heavy oil and natural gas). D&G Machinery optimizes the structure design, the best project solution and high cost-performance ratio so as to meet customer's requirements. A large number of export projects result in more advanced design ideas. The factory is equipped with advanced machines, ensuring steel structures comply with international standards.

#### GLOBAL **PROCUREMENT** AND COOPERATION

As an industry leader, D&G Machinery only uses the products and resistant materials of prestigious international brands so as to manufacture the most universal, stable and durable products which have low energy consumption. a low failure rate and a high level of cost-effectiveness.













Sensing tomorrow™















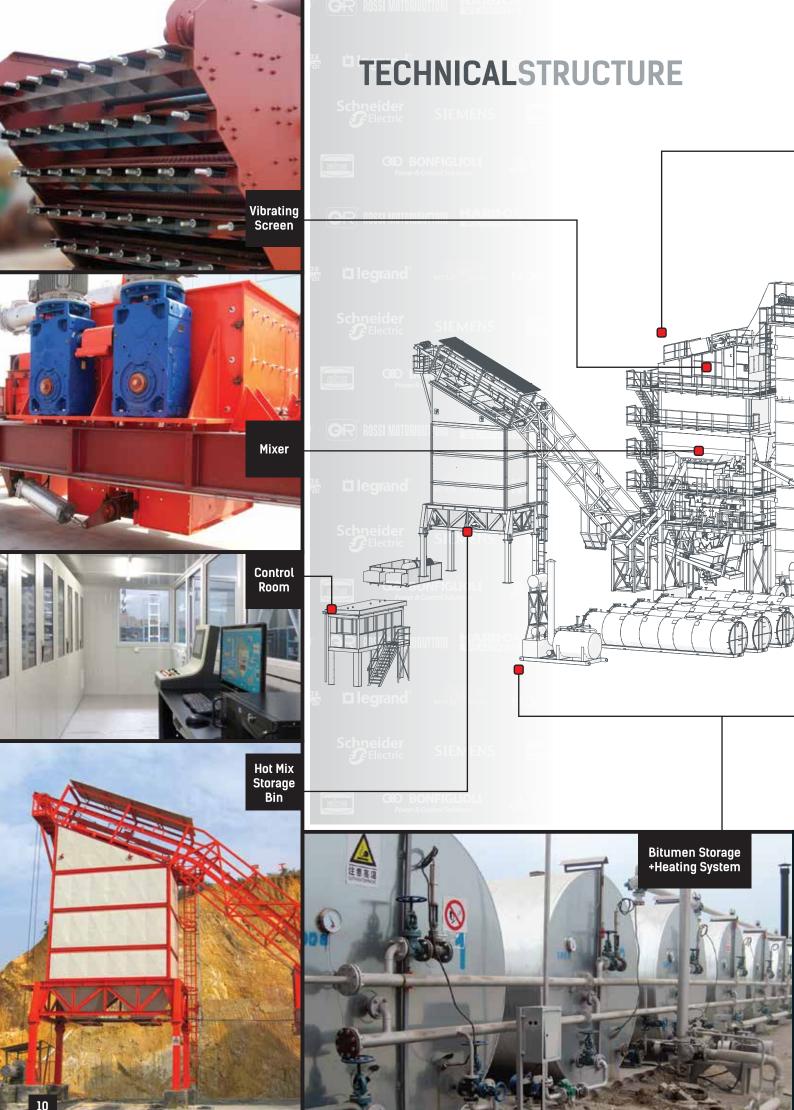


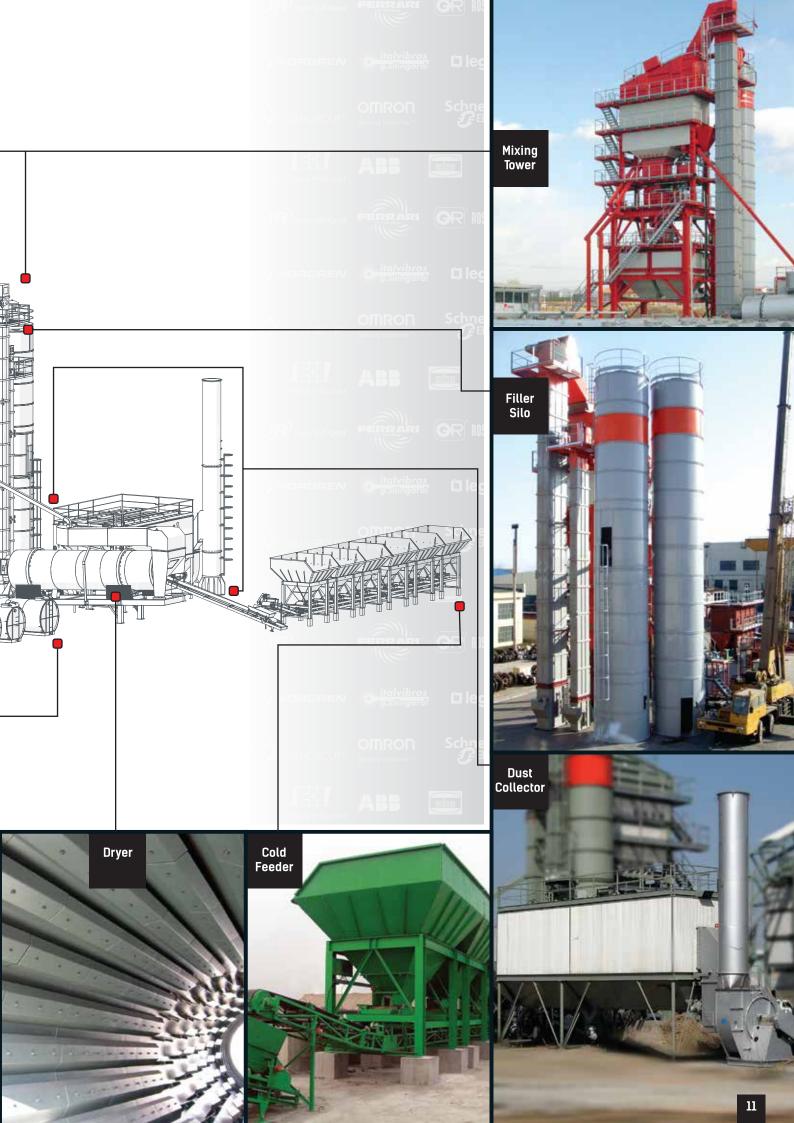










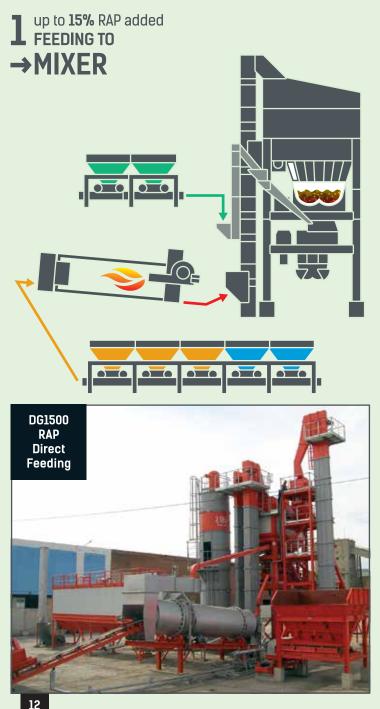


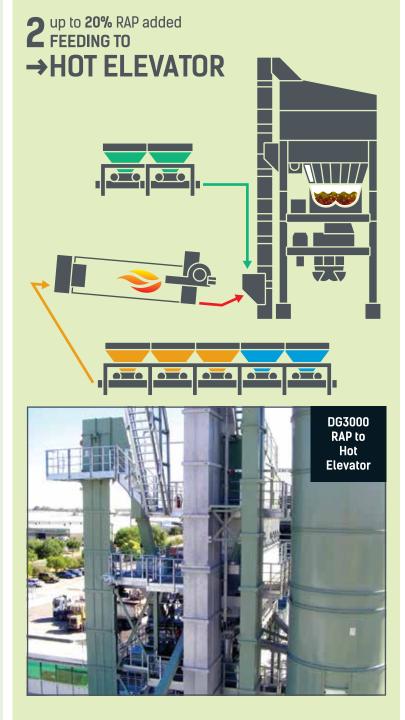
### **HMARECYCLING**

**D&G Machinery** is the first manufacturer in China to develop asphalt recycling plant and export the products to advanced countries such as Australia and Singapore. It has full range of 10-50% of RAP and various types of eco-friendly asphalt recycling plant with high-end configurations. The product designs adopt the international standard and are in line with the specific requirements of working conditions in users' countries.

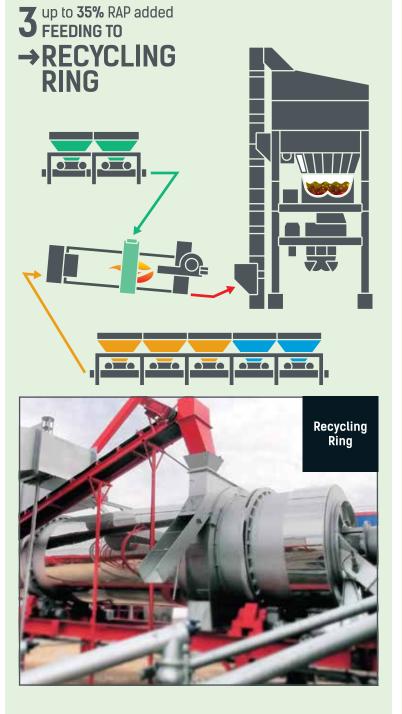
**D&G Machinery** provides customers with full support in terms of equipment and construction application in order to offer customers with comprehensive solution to the project, as well as to provide equipment modification service upon their request. D&G Machinery offers the foam bitumen generator, double drum recycling and recycling ring recycling solutions to customers. Its double drum recycling plants have already been exported to Russia and its recycling ring recycling plants are being used in India.

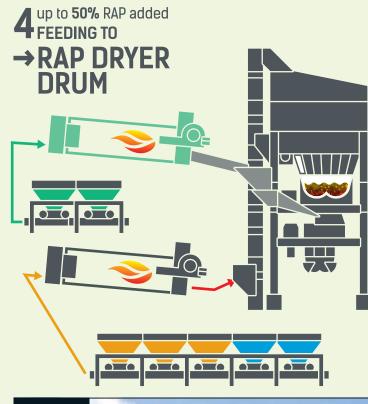
NOTE: All recycling solutions are subject to the working condition and the mix design requirement.













## **DGLeap 2.0**CONTROLSYSTEM

- 1. With latest generation of PROFIBUS field bus technology, a bolder reformation has been achieved on the convention control closets. The favorable integration of switch apparatus and automation equipment simplifies the whole control circuit connectivity with a brand-new technology. It builds up a more concise and stable control system, which is a great innovation in the field of switch and automation equipment.
- **4.** *DGLeap2.0* is a real production management centre. It integrates metering control of 6 categories of aggregates, 3 kinds of fillers, 2 kinds of bitumen, and 1 additive. It can also control the input quantities on 8 cold feeders. The precision on metering exceeds the national industrial standard.
- **5.** The control panel is designed to make the conventional industrial operation easier. The control panel consists of 27"LCD monitor computer and Siemens touch–screen system. This dual controlling system is to make the system more reliable. It remains the conventional button–pressing operation mode while applying abundant latest technology to make the system fast at speed and elegance in appearance.
- 2. The latest field bus product has distributed field bus control. With unitized control functioning, a true modular design is applied on the equipment. The structure of the convention central control system is divided into 8 independent controlling units. These controlling units are spread out to designated spots in the plant structure. Regional wiring for each unit is completed in the factory. The application of distributed field bus control system simplifies wiring operation at site and avoids large quantity of power and communication cables during the plant installation. It reduces installation workload dramatically and meets the requirement for plant fast installing and shifting.
- **6.** Large capacity database can store all types of data and recipes; the data can be transmitted to other computers using hard disk, USB or Diskette. The data can also be converted to Excel format.
- 7. A variety of production processes, maintenance and alert messages are presented accurately and in detail. The control system is easy to learn and operate. The newly added speaker device allows instant yet precise dispatch job control on site.

- **3.** The latest high-quality weighing control terminal is applied on the weighing system. It is equipped with an abundant and high-speed data collecting and transmitting interface with a strong anti-interference feature. It comes with Chinese/English language ready for overseas markets.
- 8. D&G Machinery has developed a remote servicing facility, which provides a safe and reliable wireless remote monitoring and maintaining solution. The remote monitoring system transmits data through a 3G wireless network. Through **D&G Machinery** remote monitoring platform, customers can easily observe a real time status of the plant, download all the production data and even monitor job site with camera surveillance from any remote places. Furthermore, **D&G Machinery** can diagnose and analyze the problem or potential error remotely in order to provide preventative servicing to minimize the downtime and maximize the customer's benefits.













**DGLeap2.0** has added extra function on continuously measuring and monitoring on the power consumption of the entire plant. It can also provide all the electrical parameters meanwhile.











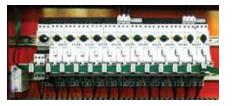






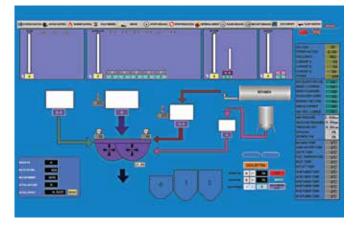




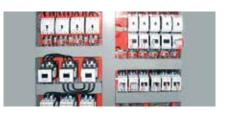






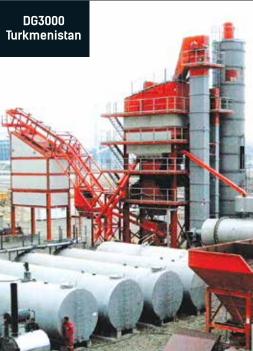






## **DGSERIES**











## **DGSERIES**













# DGMSERIES [Mobile] DGCSERIES [Container]







## **RECYCLING**SERIES







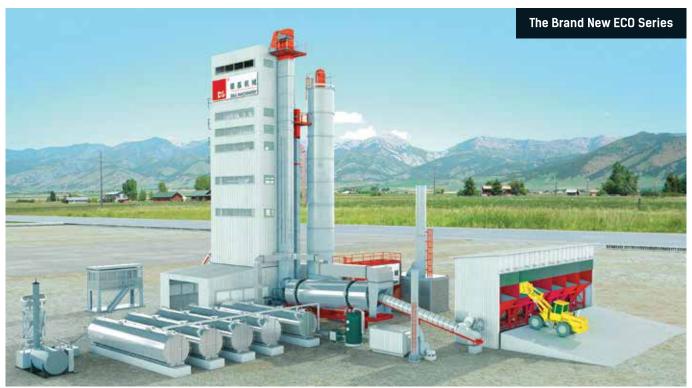




## **ADD-ONFEATURES**



## **TECHNICALDATA**



MODEL		DG1300	DG1500	DG2000	DG2500	DG3000	DG4000	DG5000
Rated Production Capacity		123 t/h	140 t/h	180 t/h	200 th	240 t/h	320 t/h	400 t/h
Cold Feeder Bin	Number × Volume	4 × 10 m³	5 × 10 m³	5 × 10 m³	5 × 10 m³	5 × 18 m³	6 × 18 m³	6 × 18 m³
Dryer Drum	Diameter Ø	ø 1.9 m	ø 1.9 m	ø 2.2 m	ø 2.2 m	ø 2.5 m	ø 2.8 m	ø 3.0 m
	Length	8.5 m	8.5 m	9 m	9 m	9 m	12 m	12 m
	Fuel Type	Diesel / Heavy Oil / Nature Gas / LPG / Coal						
	Drying Capacity							
	- Moisture Content 3%	170 t/h	170 t/h	220 t/h	220 t/h	300 t/h	390 t/h	450 t/h
	- Moisture Content 5%	120 t/h	120 t/h	180 t/h	180 t/h	240 t/h	320 t/h	400 t/h
Bag House	Dust Filtering Method	(1st Stage) Pre-separator + (2nd Stage) Bag Filtering House						
Main Tower	Screening	4	5	5	5	5/6	6	6
	Screening Area	10.1 m²	24.2 m²	24.2 m²	28.1 m²	38.4 m²	58.7 m²	69 m²
	Hot Bin Quantity	4+1	5+1	5+1	5+1	5+1 / 6+1	5+1	6+1
	Hot Bin Overall Volume	21 m³	21 m³	21 m³	40 m³	45 m³	75 m³	80 m³
	Aggregates Weighing	1300 kg	1500 kg	2000 kg	2500 kg	3000 kg	4200 kg	5500 kg
	Filler Weighing	130 kg	150 kg	200 kg	300 kg	400 kg	500 kg	800 kg
	Bitumen Weighing	130 kg	150 kg	200 kg	300 kg	400 kg	500 kg	500 kg
	Mixing Power	2 × 18.5 kW	2 × 30 kW	2 × 37 kW	2 × 45 kW	2 × 45 kW	2 × 55 kW	2 × 75 kW
	Mixing Capacity	1300 kg	2000 kg	2000 kg	3000 kg	3300 kg	4200 kg	5500 kg
	Filler Scaling & Feeding	Vari-Frequency Screw, Compelled and Well-Distributed Feeding Design.						
	Bitumen Scaling & Feeding	Dynamic 2-Stage Measurement, High Pressure Uniformly Spray.						
	Mixing	2 Horizontal Mixing Shafts, Dual-Motor Driven with Synchronous Reducer.						
Control System		DGLeap Control System 2.0     PLC Touch Screen HMI     Air-Conditioned Control Cabin      Large Screen Industrial Computer     Laser Printer						
Environment Index		• Dust Density ≤ 20 mg/Nm³ • Ringelmann Blackness Class 1 • Noise in Control Cabin ≤ 70dB						

<sup>\*</sup> The above specifications are for reference only. D&G Machinery reserves the right to make changes in engineering, design and improvement at any time without prior notice or obligation.

# **D&G MACHINERY**



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