ASPHALT MIXING PLANT

European Technology at Asian Price
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 150,000m² 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.
SERVICES ORIENTED

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
Hangzhou Bay Bridge – a highway bridge of 36km long

The Hangzhou Bay Bridge is at present among the ten longest ocean-crossing bridges in the world connecting the municipalities of Jiaxing and Ningbo in Zhejiang, China with a design life of 100 years. 034000 asphalt plant was used in the bridge surface construction, produced a total of 500,000t of mixture in 2007. The bridge was opened to public on 1 May, 2008.
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.

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.

TECHNICAL FEATURES 1/2
Design with 3D software

International Quality of Recognition
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.
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.

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.

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.
**HMA RECYCLING**

**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.

1. **1 up to 15% RAP added**
   - FEEDING TO
   - MIXER

2. **2 up to 20% RAP added**
   - FEEDING TO
   - HOT ELEVATOR

**DG1500 RAP Direct Feeding**

**DG3000 RAP to Hot Elevator**
3  up to 35% RAP added
   FEEDING TO  
   ➔ RECYCLING RING

4  up to 50% RAP added
   FEEDING TO  
   ➔ RAP DRYER DRUM

Recycling Ring
DG4000 Double Drum
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.

2. The latest field bus product has distributed field bus control. With unified 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.

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.

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.

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.

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.
ONSITE SETUP

DGM SERIES [Mobile]

DGC SERIES [Container]
# Technical Data

![The Brand New ECO Series](image)

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