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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Road construction and road maintenance machinery and
equipment -- Asphalt mixing plant
(English Translation)**

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1 Scope

This standard specifies the classification, technical requirements, test methods, inspection rules, marking, packaging, transportation, storage, quality assurance requirements and complete supply of road construction and maintenance machinery and equipment - Asphalt mixing plant (hereinafter referred to as asphalt mixing plant).

This standard applies to asphalt mixing plant.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard;

however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable.

For undated references, the latest edition of the referenced document applies.

GB 150 Steel pressure vessels

GB/T 1955 Construction winch

GB/T 3766 General rules for hydraulic system (GB/T 3766-2001, eqv ISO 4413.1998)

GB 5226.1 Safety of machinery - Electrical equipment of machines - Part 1.

General requirements (GB 5226.1-2002, IEC 60240-1.2000, IDT)

GB 7258 Safety specifications for power-driven vehicles operating on roads

GB/T 7920.11 Road construction and maintenance equipment - Asphalt mixing plants - Terminology and commercial specifications (GB/T 7920.11-

2006, ISO 15642.2003, IDT)

GB/T 7932 Pneumatic fluid power - General rules relating to systems (GB/T 7932-2003, ISO 4414.1998, IDT)

Fixed asphalt mixing plant

The asphalt mixing plant which uses fixed installation, all or part of which needs the support from transportation means during relocation.

3.2

Movable asphalt mixing plant

The asphalt mixing plant, all or most of which are equipped with walking devices, that use the traction mechanism as the main means of transport during relocation.

3.3

Standard operating mode

The condition of medium-grain ordinary asphalt mixture at which the ambient temperature is 20 °C, it is at the standard atmospheric pressure, the average moisture content of the cold aggregate is 5%, the diesel fuel is used, the hot aggregate temperature is 160 °C or the finished material temperature is

140 °C.

3.4

Fuel consumption rate

Under standard operating conditions, for every ton of finished material produced by continuous asphalt mixing plant or for every ton of hot aggregate produced by intermittent asphalt mixing plant, the amount of diesel fuel consumed by the drum burner.

Note: The calorific value of diesel is calculated at 46055 kJ/kg.

3.5

Static calibration measurement accuracy (abbreviated as static accuracy)

It is the calibration accuracy of the standard weight, expressed as a percentage, as the

relative error of the difference between the value of the standard weight and the indicated value to the agreed value of the standard weight.

3.6

Dynamic batching measurement accuracy (abbreviated as dynamic accuracy)

5.3.2 The weld shall be flat, well-proportioned, free from defects; meet the requirements of JB/T 5000.3.

5.3.3 The surface of the castings shall be clean, free of pores, looseness and other defects; meet the requirements of JB/T 5000.4 and JB/T 5000.6.

5.3.4 Piping and joints shall be clean and unobstructed, sealed reliably; meet the requirements of JB/T 5000.11.

5.3.5 The hydraulic system shall meet the requirements of GB/T 3766.

5.3.6 The quality of the paint film shall meet the requirements of JG/T 5011.12.

5.3.7 The equipment shall be easy to transport; the hoisting and transportation shall comply with the requirements of relevant standards.

5.4 Towing performance requirements of movable mixing plant

5.4.1

When each transport unit is towed by a wheeled tractor, the driving speed shall not be higher than 20 km/h. The components are connected reliably, without loosening, deformation or damage.

5.4.2

The size limits of each transport unit during towing are as follows. total height 4.5 m, total width 3 m, total length 20 m.

5.4.3

The minimum turning diameter is not more than 60 m; the minimum ground clearance is not less than 265 mm.

5.4.4

The axle load of the transport unit shall meet the requirements of relevant specifications and shall not deviate from the design value by $\pm 2.0\%$.

5.4.5

When driving at a speed of 20 km/h, the maximum braking distance shall meet the requirements of GB 7258.

5.5.1 Cold material supply system

5.5.1.1

The cold material supply system consists of cold material silos, feeders, aggregate belt conveyors, inclined belt conveyors.

5.5.1.2

The cold material silo's volume and material supply capacity shall meet the requirements of the maximum production capacity of the asphalt mixing plant; the material supply shall be stable and reliable.

5.5.1.3

The cold material silo adopts a multi-silo structure; its quantity shall meet the grading requirements of the mixture. The fine material silo shall be equipped with an arch breaking device.

5.5.2.8 There shall be no leakage of material at the material outlet and material inlet & outlet boxes.

5.5.3 Burner

5.5.3.1

The burner is composed of air supply system, fuel supply system, nozzle, proportional adjustment device, ignition and electrical control system.

5.5.3.2

The heating capacity shall meet the needs of the maximum production capacity of the mixing plant.

5.5.3.3

The ignition shall be rapid; the safety devices such as flame monitoring and flameout protection shall be installed, which is stable and reliable.

5.5.3.4

It shall be able to stably burn; the air-fuel ratio shall be easily adjusted.

5.5.3.5

The flame shape shall be well matched with the drum; the flame rigidity is good; no obvious deviation is allowed.

5.5.3.6

The high-temperature zone shall be made of heat-resistant steel plates; if refractory materials need to be installed, they shall be easily replaced.