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

GB/T 25697-2013

Replacing GB/T 25697-2010

**Road construction and maintenance machinery and equipment
- Asphalt pavement hot in-place recycling remixers**

道路施工与养护机械设备 沥青路面就地热再生复拌机

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 25697-2010 "Road construction and maintenance machinery and equipment Asphalt Pavement thermal regeneration reclaimer." versus GB/T 25697-2010 compared to the main changes are as follows:

--- Modify the "Terms and Definitions" Central "comprehensive" and a "fractional step method" Hot Recycling Asphalt Pavement reclaimer term as "compound" and "Step by Step" Hot Recycling Asphalt Pavement re-mixing machine, adding a definition of "Asphalt Pavement thermal regeneration unit complex mix" of repair Changed the "technical capability" is defined as part of the "parts" and (see 3.1,3.2,3.3);

--- Modified "category and parameters" in the way of job classification by type and main

parameters required (see Chapter 4);

--- Modify the "technical requirements" on the job performance of recycled asphalt mix requirements [see 5.2.10f)];

--- Modify the "technical requirements" on "mixing system" and "safety, environmental protection requirements" of the technical requirements (see 5.4.10,5.5.7);

--- Remove the "technical requirements" of "bitumen solution spray system," adds "regenerated catalyst spray system" and "bitumen spray system." (See 5.4.7,5.4.8);

--- Increased "technical requirements" in part "performance requirements" content (see 5.2.13 ~ 5.2.16,5.5.9);

--- Delete the words "test" in the tire ground pressure, diesel, heating means embedded thermocouples and other requirements and test methods;

--- Modify the "Test Method" in the "Test Site Requirements" [see 6.1.3d), 6.1.6]; "Heating fuel consumption test" "measurement" add new asphalt transportation system capacity

--- modified "test methods" in "for scarifying Industry productivity test "" stirring productivity test "" stir test "" paving performance test "Test Method (See 6.11.1.2,6.11.4,6.11.5.1,6.11.6.1,6.11.6.2,6.11.7);

--- "Test Method" in the "regeneration agent tank insulation system performance testing" with "renewable agent tank heating and insulation performance testing," adds "Regeneration sprayed amount and accuracy test" (see 6.11.2.1,6.11.2.2);

--- Increasing the "asphalt spray system performance testing" "scarifying shaft speed," "Shaft speed" and "steering mechanism operating force and stroke measuring" Test methods (see 6.11.3,6.11.5.2,6.11.6.3,6.12);

--- Added "Test Method" in the "step by step on asphalt pavement in situ thermal regeneration reclaimer, not paving performance test requirements." Within JB/T 10094 industrial boilers General technical requirements JG/T 5035 construction machinery and equipment contaminated with solid oil cleanliness classification JG/T 5050 Construction machinery and equipment reliability assessment General JG/T 5089 oil in automatic particle counting method of solid particulate contaminants Liquid such methods JG/T 5090 is extracted from the operating state of the hydraulic system piping JTGE20-2011 Highway Engineering asphalt and asphalt testing procedures JTGF40-2004 asphalt pavement construction specifications

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Machine

3.1.1 Asphalt Pavement thermal regeneration reclaimer

asphalt pavement hot-in-place recycling mixer Having a heating, scarifying, mixing, add asphalt recycled materials, adding asphalt, paving and other functions of the asphalt pavement maintenance equipment, said Function which can be combined on a single machine, or by a combination of these different functions into a mechanical unit.

3.1.2 Bituminous Pavement thermal regeneration reclaimer

combined asphalt pavement hot-in-place recycling mixer A computer with heating, scarifying, mixing, adding asphalt recycling solution, adding new asphalt, paving and other functions of the reclaimer.

3.1.3 Step asphalt pavement in situ thermal regeneration reclaimer

sub-step asphalt pavement hot-in-place recycling mixer Heating, scarifying, mixing, adding asphalt recycling solution, adding a new asphalt function, according to a combination of process requirements in different machinery Reclaimer unit formation.

3.1.4 Asphalt Pavement situ thermal regeneration unit complex mix

asphalt pavement hot-in-place recycling mixer unit Or by the combined fractional Asphalt Pavement Hot Recycling asphalt reclaimer and heating machines, pavers, rollers and other equipment combination To complete asphalt pavement in situ thermal regeneration complete unit construction.

3.2 Parts

3.2.1 Add new asphalt system new asphalt mixture added system General mechanism for adding new devices and asphalt mixture.

3.2.2 Pavement heating system heating system Of the road surface and bodies collectively means of heating.

3.2.3 Scarifying means scarifying unit The heated and softened road scarifying loose material into the apparatus.

3.2.4 Sprayed asphalt recycling apparatus asphalt liquids spraying unit The regeneration agent emulsified asphalt or bitumen solution is sprayed into the device a predetermined desired position of the construction.

3.3 Technical Performance

3.3.1 Working width working width Reclaimer regeneration pavement width.

3.3.2 Scarifying depth scarifying depth Reclaimer on the road scarifying depth.

3.3.3 Stirring capacity mixing capacity In unit time through the mixing system can achieve a uniform mixture state maximum quality.

3.3.4 Working speed workspeed Regeneration reclaimer walking speed during the construction.

3.3.5 Traveling speed travelspeed Reclaimer walking speed during the transition.

3.3.6 Heating Fuel theoretical consumption heatingfuelconsumptioninspecified At ambient temperature $25\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$, wind speed is less than 3 m/s working environment to the maximum working width of asphalt concrete pavement condition Surface (medium-grained asphalt) heating operation, the surface temperature does not exceed $180\text{ }^{\circ}\text{C}$, 40 mm thick surface layer temperature of not less than $70\text{ }^{\circ}\text{C}$, heating In unit time per unit area of \u200bthe heating fuel consumption amount (volume or mass) systems.

3.3.7 Theoretical productivity theorecticalproductivity At ambient temperature $25\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$, wind speed is less than 3 m/s working environment, reclaimer to regenerate width 4 m , depth 40 mm regeneration Under normal operating state of the asphalt concrete pavement (medium-grained asphalt) thermal recycling construction, the road to complete the regeneration unit time Surface area.

3.3.8 Quality of work operatingmass Reclaimer machine quality in working condition, and that the host device and the accessory device and the work specified by the manufacturer with, including a drive Drive member (75 kg), the fuel tank filled with oil, liquid system liquid is injected into the quality requirements specified by the manufacturer when.

3.3.9 The quality of transport shippingmass Reclaimer meet the railways, highways and other transportation requirements with the state or quality. That host, fuel tank fill 10% of the volume of fuel, Other liquid is injected into the liquid system requirements specified by the manufacturer, not including the driver, according to the manufacturer's specifications or may not include work wear Mass calculated position, attachment, cab, awning, ROPS, FOPS, wheels and the ballast and the like.

4 Types and main parameters

4.1 It can be divided into the following types.

--- By mode of operation is divided into. - combined; - Step by Step; - other ways.

--- Press heating is divided into. - hot air circulation; - infrared type; - infrared and hot air, and by the formula; - microwave type; - other ways.

--- Divided by way of walking. - self-propelled; - trailer; - other ways.

4.2 Main parameters Main parameters reclaimer is working width in millimeters (mm).

5.1 Basic requirements

5.1.1 welded structure shall comply with the technical requirements of JB/T 5943's.