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Electric earth-moving machinery - Methods of noise test

电动土方机械 噪声测试方法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Standardization of Earthmoving Machinery (SAC/TC334).

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Test method for noise from electric earth-moving machinery

1 Scope

This document describes the method for measuring the external emitted noise and the driver position noise of electrically powered earth-moving machinery.

This document applies to the determination of noise levels of pure electric earthmoving machinery and hybrid earthmoving machinery as defined in GB/T 44254, fuel cell earthmoving machinery. The measurement of noise of earth-moving machinery and externally powered earth-moving machinery shall be carried out for reference.

2 Normative references

GB/T 3767-2016

GB/T 3785.1-2023

GB/T 15173-2010

GB/T 25614-2010

GB/T 25615-2010

GB/T 44254

3 Terms and Definitions

The terms and definitions defined in GB/T 25614-2010, GB/T 25615-2010 and GB/T 44254 apply to this document.

4.1 Acoustic measurement instruments

4.1.1 The integrating sound level meter or other equivalent measurement system used for measurement shall preferably be a Class 1 sound level meter that meets the requirements of GB/T 3785.1-2023. Level meter.

4.1.2 Before and after measurement, the entire measurement system should be calibrated using a Class 1 accuracy sound calibrator that complies with GB/T 15173-2010. calibration.

4.2 Speed measuring instrument

The measurement accuracy of the speed measuring instrument should not be less than $\pm 2\%$.

4.3 Meteorological parameter measuring instruments

The measurement accuracy of meteorological parameter measuring instruments should meet the following requirements.

- Thermometer. $\pm 1^{\circ}\text{C}$;
- Anemometer. $\pm 1\text{m/s}$.