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

GB/T 27698.7-2011

**Test method for the performance of heat exchangers and heat
exchange element -- Part 7: Measurement of noise from
air-cooled heat exchangers**

热交换器及传热元件性能测试方法 第7部分：空冷器噪声测定

(English Translation)

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Foreword

GB/T 27698 "heat exchangers and heat transfer device performance test methods" is divided into eight sections.

- Part 1. General requirements;
- Part 2. shell and tube heat exchanger;
- Part 3. plate heat exchanger;
- Part 4. spiral plate heat exchanger;
- Part 5. shell and tube heat exchanger heat transfer tubes;
- Part 6. Used for air cooling fin tube;
- Part 7. Air Cooler noise measurement;
- Part 8. Calibration of industrial heat exchangers.

This section GB/T 27698 Part 7.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This part of the National boiler pressure vessel Standardization Technical Committee (SAC/TC262) and focal points.

This section is responsible for drafting units. High-tech Gansu Lanke Petrochemical Equipment Co., Ltd. (Lanzhou Petroleum Machinery Research Institute).

It participated in the drafting of this section. Country refining oil drilling equipment for Quality Supervision and Inspection Center, industrial machinery energy-saving projects Heat Transfer Technology Center, China Petrochemical Engineering Construction Corporation.

1.1 Subject Matter

This section GB/T 27698 specifies the A sound level measuring method octave sound pressure level and sound power level of air cooler noise.

1.2 Scope

1.2.1

This section applies to horizontal tubes induced draft air cooled heat exchangers, forced-air cooler. Slant, wet, wet and dry, and other joint formula Noise measurement method type air cooler may refer to this part. This section does not apply to individual components that generate noise (such as impellers, transmission unit Set and motors, etc.).

1.2.2

This type of assay section shall consist of two types.

- a) Factory test. the factory before the product is delivered with a single span noise measurement;
- b) field test. the noise on the field means a unit of measurement.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 3241 octave and fractional octave filters GB/T 3785 sound level meter electric, acoustic performance and test methods Performance and calibration of GB/T 4129 Acoustics Determination of sound power levels for standard sound source requirements JJG176 acoustic calibrator verification procedures JJG188 sound level meter verification procedures NB/T 47007 (JB/T 4758) air-cooled heat exchangers

3 Terms and Definitions

The following terms and definitions apply to this section.

Cross-bay

One or more of a bundle with one or more than one fan, assembled from a skeleton and other appurtenances empty Cooler.

Unit unit

A cross or air cooler across simultaneously.

Blower Air Cooler induced-draughtexchanger Bundle placed fan suction side of the air cooler.