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

GB/T 17249.2-2025

Replacing GB/T 17249.2-2005

**Acoustics - Recommended practice for the design of low-noise
workplaces containing machinery - Part 2: Noise control
measures**

声学 有机器的低噪声工作场所设计推荐方法 第2部分：噪声控制措施
(English Translation)

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Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and Definitions
4 Noise Control Technology Overview
5 Sound source noise control
6 Noise Control in the Transmission Path
7 Noise control at work location
8 Verification Method
9 New Technologies
Appendix A (Informative) Adjustment and Replacement of Machine Parts
Appendix B (Informative) Noise Source Layout
Appendix C (Informative) Noise Enclosure
Appendix D (Informative) Muffler
Appendix E (Informative) Indoor Sound Barriers
Appendix F (Informative) Room Sound Absorption Treatment
Appendix G (Informative) Structure-borne Noise Isolation
Appendix H (Informative) Airborne Noise Isolation
Appendix I (Informative) Noise Control at Workplace
Appendix J (Informative) New Technology Examples
Reference

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.

This document is Part 2 of GB/T 17249. GB/T 17249 has been published in the following parts.

--- Recommended approach for the design of low-noise workplaces for acoustic machinery
Part 1: Noise control strategies;

--- Recommended design of low-noise workplaces for acoustic machinery Part 2: Noise control measures;

--- Acoustics. Guide for design of low noise workplaces. Part 3: Sound propagation and noise prediction in workplaces.

This document replaces GB/T 17249.2-2005 "Guidelines for the design of acoustically low-noise workplaces Part 2: Noise control measures".

Compared with GB/T 17249.2-2005, this document has only editorial changes.

This document is equivalent to ISO 11690-2:2020 "Recommended methods for design of low-noise workplaces for acoustic machinery - Part 2: Noise Noise Control Measures.

The following minimal editorial changes were made to this document.

--- Deleted the reference to the obsolete ISO 10053 in the informative Appendix E.

Introduction

Several national standards specify methods for measuring and/or evaluating noise. GB/T 17249 Low-noise workplaces for acoustic machinery the ultimate goal of the Design Recommendations is to reduce noise.

This document provides some noise control measures. However, to be fully effective, it is important to select the most appropriate noise control measure for a particular situation.

Giving is important.

When non-acoustic engineers participate in noise control practice, they need to have a basic understanding of noise emission and propagation characteristics and understand Understand the basic principles of noise control.

To assist in the development of noise control in the workplace, it is essential that the information contained in these recommended practices is disseminated through national standards.

In order to reduce the noise hazards in the workplace, the state has formulated relevant laws and regulations. Generally, such laws and regulations require the adoption of noise control measures to achieve to the lowest reasonable level of noise emission, noise exposure and noise exposure, taking into account.

--- Known available measures;

---The latest level of progress in noise control technology;

--- Processing of noise sources;

---Proper planning, procurement and installation of machinery and equipment.

GB/T 17249 "Recommended methods for design of low-noise workplaces for acoustic machinery" is intended to consist of three parts.

--- Part 1: Noise control strategies. The purpose is to give the basic concepts and basic strategies of noise control;

--- Part 2: Noise control measures. The purpose is to provide basic technical measures for noise control and their evaluation and verification methods;

--- Part 3: Sound propagation and noise prediction in the workplace. The purpose is to give the sound propagation in the workplace and the sound pressure level in the workplace and prediction methods for noise exposure.

This document, together with the other two parts, outlines the procedures to be considered when dealing with noise control in workplaces, workrooms and open air environments.

These recommendations provide a relatively simple approach to all parties involved in workplace noise control and the design of low-noise workplaces.

The basic information necessary to facilitate the understanding of the required noise control requirements is provided.

The purpose of the GB/T 17249 series is to bridge the gap between existing noise control literature and the implementation of noise control measures.

The series is suitable for all workplaces, its main functions are.

--- Provide simple and concise information on some aspects of noise control in the workplace;

--- Serves as a guide to help understand the requirements in standards, directives, textbooks, manuals, reports and other professional and technical documents;

--- Provide assistance in decision making when evaluating the various available measures.

GB/T 17249 series is for factory personnel, health and safety officers, engineers, managers, planning and procurement department staff, architects and engineers.

However, the above parties need to pay attention to complying with the GB/T 17249 series recommendations and not all that is necessary to create a safe workplace.

The impact of noise on health, well-being and human activities is multifaceted. The GB/T 17249 series provides noise control strategies and Guidance on measures to reduce the impact of noise on people in the workplace. The assessment of the impact of noise on people is dealt with in other documents.

Low-noise workplace design with acoustic machinery Recommended practices Part 2:
Noise control measures

1 Scope

This document covers various technical aspects of workplace noise control, including different technical measures, acoustic evaluation quantities, noise reduction quantities and its verification method.

This document deals with audible sounds only.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 17249.1-2025 Recommended methods for designing low-noise workplaces for acoustic machines Part 1: Noise control strategies (ISO 11690-1:2020, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 17249.1-2025 apply to this document.

The terminology databases used for standardization maintained by ISO and IEC are located at.

4 Overview of Noise Control Technology

Noise reduction measures can be taken at the sound source (sound emission), between the sound source and the receiver (transmission path), and at the work location (receiver).

(See Figure 1).

Figure 1 Basic principles of noise control

When reducing noise emissions from machine operation, installation methods and production processes, all possible noise reduction measures should be considered (see Chapter 5 and GB/T 17249.1-2025). To determine whether noise emissions have been reduced to the lowest practicable level, it is necessary to the noise emission value of the machine equipment is given by its noise emission indication value (see GB/T 17249.1-2025