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

GB/T 16769-2008

Replacing GB/T 16769-1997

**Metal-cutting machine tools -- Measurement method of sound
pressure level
(English Translation)**

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Foreword

This standard replaces GB/T 16769-1997 "metal cutting machine noise level measurement method." this standard and GB/T 16769-1997 compared to the main changes are as follows.

--- Chapter 1, "Scope", delete the words "operating condition", adding "assessment principle" (1997 edition Chapter 1, Chapter 1 of this edition);

--- Chapter 2, "Normative references" to "normative references" (1997 edition, Chapter 2, Section 2 of this edition);

--- Chapter 3, "definition" to "Terms and Definitions." Increase the "noise source", "noise", "noise emission", "emission sound pressure", "launch SPL ", " working position, the operator position ", " operator ", " predetermined position "terms and definitions, the abolition of the term" sound pressure ", repair Changed "SPL", the definition of "background noise" (the 1997 version of Chapter 3, Section 3 of this edition);

--- Chapter 5 Cancellation 5.3, which is incorporated as Chapter 7, "7.1 Machine noise value," adds noise measurement results invalid Processing, the "Found" to "measured value" and added, "Note 1" and "Note 2." Table 1 heading "affected by background noise Correction value "to" fix "the machine noise measurements. Table 1 content has been amended and supplemented (1997 Edition Chapter 5, this Chapter 7 edition);

--- The Chapter 5 as "5.1 Basic Conditions", and make appropriate changes and additions (1997 Edition Chapter 5, the first edition Chapter 5);

--- Chapter 6 cancel the heading "operating conditions", 6.4 as 5.1.6, the remainder as "Noise Measure 5.2" and "5.3 workers for noise measurement ", and make appropriate changes and additions. 5.2.1 adds after" note "(1997 edition, Chapter 6, Excerpts Chapter 5);

--- Chapter 7 to Chapter 6, and rearrange. 7.2 and 7.3 as a combined "6.1.3 measurement point distance", the contents are Metal-cutting machine noise level measurements

1 Scope

This standard specifies the terms and definitions of metal-cutting machine noise level measurements, measuring instruments, measurement conditions, measurement methods, data at Management, data recording and evaluation principles.

This standard applies to metal cutting machine tools (hereinafter referred to as the machine) of the noise level (hereinafter referred to as noise) measurements.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 3785-1983 electric sound level meter, acoustic performance and test methods

3 Terms and Definitions

The following terms and definitions apply to this standard.

Active or passive acoustic emission objects.

Noise generated by the sound source. Sound waves emitted by the noise source in the medium of sound pressure changes generated by the sound pressure level to be measured.

Under specified operating and installation conditions, by a given sound source (test machine) emitted airborne sound.

Note: The noise emission values can be contained in the product label or product description. The basic noise emission working position itself close to the sound source sound power level and the sound source or other emission sound pressure levels specified location.

On a reflective surface (such as. the ground), in accordance with the provisions of installation and operating conditions sound pressure specified position near the sound source work.

It does not include background noise and reflections than testing allowed other reflecting surfaces of the reflecting surface, in units of Pa [ska] (Pa).

Formula (1). Using the time weighting and frequency weighting GB/T 3785 provisions were measured in decibels (dB). The reference sound pressure P_0 20μPa.

$LP = 10 \lg$

P20