



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

GB/T 24183-2021

Metallic materials - Sheet and strip - Earing test

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FOREWORD

This document was drafted in accordance with the rules given in GB/T 1.1-2020, "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

This document replaces GB/T 24183-2009 "Metallic materials - Earing test". Compared with GB/T 24183-2009, except for structural adjustment and editorial changes, the main technical changes are as follows:

- Change the description of db; add the symbols and meanings of N ear peaks and N ear valleys (see Chapter 3; Chapter 3 of version 2009);
- Change the requirements in the note of 5.3 to be part of the content of 6.3 of the main text (see 6.3; note of 5.3 of version 2009);
- Change the requirements in the note of 5.4 to be part of the content of 6.4 of the main text (see 6.4; note of 5.4 of version 2009);
- Clarify that the working surface hardness requirements of die, blankholder and punch refer to Vickers hardness (see 6.5);
- Add rounding requirements for ear height expressed as a percentage (see 9.4).

This document is equivalent to ISO 11531:2015 "Metallic materials - Sheet and strip - Earing test".

Two chapters - "Normative references" and "Terms and definitions" - are added to this document.

The following minimal editorial changes are made to this document:

- Add the index number of "test piece" in Figure 2;
- Add a "Note" to 8.3, supplementing that engine oil can be selected as the lubricant.

1 Scope

This document specifies a method for determining the ear height of metal sheet and strip after deep drawing.

This document applies to metal sheet and strip of nominal thickness of 0.1 mm ~ 3 mm.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

There are no terms and definitions that need to be defined in this document.

4 Symbols and their meanings

The meanings of the symbols used in the earing test are given in Table 1, and illustrated in Figures 1 and 2.

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