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

GB/T 11356.2-2023

Replacing GB/T 11356.2-1997

**Belt drives - Geometrical inspection of grooves for classical
and narrow V-Pulleys - Part 2: System based on effective width
(English Translation)**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document is Part 2 of GB/T 11356: GB/T 11356 has published the following parts:

---Belt drive V pulley (standard width system) groove inspection (GB/T 11356.1);

--- Belt drive ordinary and narrow V pulley groove inspection Part 2: Effective width system (GB/T 11356.2):

This document replaces GB/T 11356.2-1997 "Belt drive pulleys for ordinary and narrow V-belt drives (effective width system) Groove inspection "Experience", compared with GB/T 11356.2-1997, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) Changed the effective width, groove angle, groove depth, maximum increment of groove top, and maximum depth of groove top arc symbols (see Figure 1 and Table 1,:1997 version)

Figure 1 and Table 1);

b) Changed the limit gauge width and angle symbols (see Figures 2 and 7, Figures 2 and 7 of the:1997 edition);

c) The limit gauge has been changed to mark the requirements for the minimum end alphamin and the maximum end alphamax (see 5.2:1, 3:2:1 of the:1997 edition);

d) Added dimensional requirements for wheel groove section inspection limit gauges for non-united V-belts (see 5.2:2, 3:2:2 of the:1997 edition);

e) Added dimensional requirements for wheel groove section inspection limit gauges for

combined V-belts (see 5.2:3, 3:2:3 of the:1997 edition);

f) The symbol of the correction item has been changed (see Figure 13, Figure 13 of the:1997 version);

g) Changed the schematic diagram of circular runout inspection (see Figure 14, Figure 14 of the:1997 edition);

h) Increased end face circular runout (see Figure 14, Figure 14 of the:1997 edition);

i) Additional tests added (see Chapter 9):

This document is modified to adopt ISO 9980:2012 "Belt Drive V Pulley (Effective Width System) Groove Inspection":

This document adds two chapters: "Normative Reference Documents" and "Terms and Definitions":

Compared with ISO 9980:2012, this document has made the following structural adjustments:

---Changed the arrangement of the diagrams (see Chapter 5):

The technical differences between this document and ISO 9980:2012 and their reasons are as follows:

--- Added normative references to GB/T 6931.1 and GB/T 6931.2 (see Chapter 3) to increase operability and facilitate the use of this document application;

--- Added normative references to GB/T 10413 (see 5.1, 6:1:1, 7:1:1, 7:1:2, Chapter 8) to increase operability and facilitate Application of this document;

---Added the requirement that the limit gauge mark the minimum end alphamin and the maximum end alphamax (see 5.2:1) to increase operability and facilitate this article Application of software;

---Added the dimensional requirements for the wheel groove section inspection limit gauge for non-united V-belts and the wheel groove section inspection limit gauge for united V-belts: requirements (see 5.2:2, 5:2:3) to increase operability and facilitate the application of this document;

---Added Formula 1 (see 6.2) to increase operability and facilitate the application of this document;

---The symbol for measuring ball or measuring rod diameter has been changed (see 6.2, Chapter 7) to coordinate with existing national standards;

---Deleted the reference B in circular runout inspection (see Chapter 6 of ISO 9980:2012) to increase operability and facilitate the preparation of this document application;

---Added end face circular runout inspection (see Chapter 8) to more standardize product quality;

---Added other inspection methods (see Chapter 9) to guide specific applications:

The following editorial changes have been made to this document:

---Added Appendix A (informative) "Special limit gauge inspection of effective width, groove depth and groove spacing of wheel groove section for non-united V-belts":

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

Introduction

V-belt transmission is one of the important transmission methods in belt transmission: Ordinary and narrow V-belt transmission are the most basic forms of V-belt transmission: Ordinary and narrow V-belt transmission can be divided into two series: standard width system and effective width system: It is widely used in machine tools, mining machinery, petroleum machinery, coal mining machinery, woodworking machinery, etc:

Industrial machinery, garden machinery, agricultural machinery and other fields: As early as 1989, my country issued GB 11356-1989 "General and narrow V-belt transmission "Pulley Groove Inspection" was revised in:1997 and was revised into two parts of the standard based on the procurement standards---GB/T 11356.1-1997 "Belt Transmission Pulleys for ordinary and narrow V-belt drives (standard width system) Groove inspection" and GB/T 11356.2-1997 "Belt drives for ordinary and narrow V-belts" Belt drive pulley (effective width system) groove inspection", in:2008 completed GB/T 11356.1-2008 "Belt drive V pulley (base width) System) Groove Inspection" revision work:

GB/T 11356 is designed to guide the groove shape inspection of ordinary and narrow V-pulleys, and detect their consistency with the standard pulley groove shape through mechanical methods:

properties, but no rapid or continuous inspection methods for controlling the geometries of pulley products are specified: GB/T 11356 is intended to consist of two parts:

---Part 1: Base width system: The purpose is to establish groove inspection specifications applicable to standard width V-pulleys:

---Part 2: Effective width system: The purpose is to establish groove inspection specifications suitable for effective width V-pulleys:

Belt drive ordinary and narrow V pulley groove inspection Part 2: Effective width system

1 Scope

This document specifies the routine inspection method for the groove shape of V-pulleys with narrow effective width:

This document is applicable to the inspection of basic dimensional parameters of narrow V-belt pulleys (effective width system): The corresponding V-belts can be single or combined belts:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 6931.1 Belt drive terminology Part 1: Basic terminology GB/T 6931.2 Belt drive terminology Part 2: V-belt and poly-V belt drive (GB/T 6931.2-2020, ISO 1081:2013,MOD)

GB/T 10413 Narrow V-belt pulley (effective width system) (GB/T 10413-2002, ISO 5290:2001, MOD)

3 Terms and definitions

The terms and definitions defined in GB/T 6931.1 and GB/T 6931.2 apply to this document:

4 Basic procedures

The inspection of pulleys should be carried out according to the following four continuous inspection procedures:

- a) Groove cross-section inspection;
- b) Groove spacing inspection;
- c) Effective diameter inspection;
- d) Circular runout inspection:

5 Groove cross-section inspection

5.1

Groove cross-section dimensions the groove cross-section size should comply with the regulations of GB/T 10413: The actual outer diameter of the pulley should not be greater