STANDARD **255**

Second edition
1990-11-01

Belt drives — Pulleys for V-belts (system based on datum width) — Geometrical inspection of grooves

Transmissions par courroies — Poulies à gorges pour courroies trapézoïdales (système basé sur la largeur de référence) — Contrôle géométrique des gorges

Reference number
ISO 255:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 255 was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*.

This second edition cancels and replaces the first edition (ISO 255:1981), of which it constitutes a technical revision.

Annex A forms an integral part of this International Standard. Annex B is for information only.

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Introduction

In drives using V-belts, the dimensions of the pulley grooves can be defined either on the basis of the datum width or on the basis of the effective width. As a result, two systems for definition and description of the dimensions of pulleys and belts have been developed. The two systems are independent of each other.

For the geometrical inspection of grooves defined on the basis of the datum width, necessary tests to ensure by mechanical means the conformity of a grooved pulley with standard specifications were specified, but modern quick or serial checking procedures for grooved pulley production control were not.

Belt drives — Pulleys for V-belts (system based on datum width) — Geometrical inspection of grooves

1 Scope

This International Standard specifies the methods of checking the regularity of the grooves and pulleys for V-belts specified in the system based on datum width. The grooved pulleys may be designed for use with classical or narrow V-belts.

Inspection parameters and tolerances of grooved pulleys are specified in appropriate International Standards.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4183:1989, *Belt drives — Classical and narrow V-belts — Grooved pulleys (system based on datum width).*

3 Principle

Complete inspection of a grooved pulley carried out in four successive checking operations, in the following order:

— inspection of groove profile (see clause 4);

— inspection of groove spacing (see clause 5);

— inspection of datum diameter (see clause 6);

— inspection of run-out (see clause 7).

4 Groove profile

4.1 Specification

The groove profile shall be specified in the corresponding International Standard by the dimensions shown in figure 1 and given in table 1.

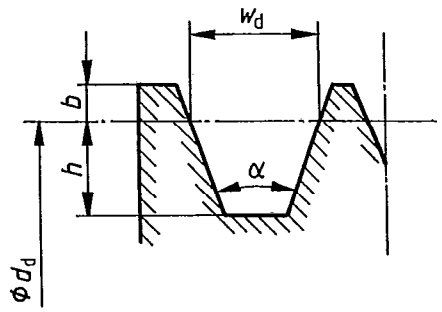

Figure 1 — Groove profile

Table 1 — Groove profile specification

Dimension	Symbol	Tolerance
Datum width	w_d	A specified value not subject to tolerance
Groove angle	α	$\pm \Delta\alpha$
Groove height above datum width	b	Minimum value
Groove depth below datum width	h	Minimum value