

INTERNATIONAL
STANDARD

ISO
2538

Second edition
1998-09-15

**Geometrical Product Specifications
(GPS) — Series of angles and slopes on
prisms**

*Spécification géométrique des produits (GPS) — Séries d'angles et
d'inclinaisons de prismes*



Reference number
ISO 2538:1998(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 2538 was prepared by the Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

This second edition cancels and replaces the first edition (ISO 2538:1974), of which the tables have been corrected and updated, but not technically modified.

Annexes A and B of this International Standard are for information only.

© ISO 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

Printed in Switzerland

Introduction

This International Standard is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). It influences chain links 1 and 2 of the chain of standards on angle.

For more detailed information of the relation of this International Standard to other standards and the GPS matrix model, see annex A.

This document is a preview generated by EVS

This document is a preview generated by EVS

Geometrical Product Specifications (GPS) — Series of angles and slopes on prisms

1 Scope

This International Standard specifies two series of prism angles from 120° to 0° 30' and a series of prism slopes from 1:10 to 1:500, for general mechanical engineering purposes.

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1

prism

part of a piece which is limited by two intersecting planes

See figure 1.

NOTE — Both planes are termed "prism planes". When these are intended for fits, they are termed "mating planes for the prism".

2.2

multiple prism

part of a piece which is limited by several pairs of intersecting planes

See figure 2.

NOTES

- 1 A double prism is limited by two pairs of intersecting planes.
- 2 When the intersection of each pair of planes is a point, the multiple prism is a pyramid (see figure 3).

2.3

wedge

prism with a small angle

2.4

slide prism

vee-block

dovetail

typical prism with a large angle

NOTE — These special prisms are used, for example, as a slideway on machine tools (see figures 4 and 5).