

**Geometrical Product Specifications
(GPS) - Geometric features - Part 2:
Definitions of extracted axis of a
cylinder and a cone; Extracted median
surface; Extracted local size and
diameter**

Geometrical Product Specifications (GPS) -
Geometric features - Part 2: Definitions of extracted
axis of a cylinder and a cone; Extracted median
surface; Extracted local size and diameter

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 14660-2:2000 sisaldab Euroopa standardi EN ISO 14660-2:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.03.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 14660-2:2000 consists of the English text of the European standard EN ISO 14660-2:1999.</p> <p>This document is endorsed on 17.03.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This part of ISO 14660 defines a number of extracted features of workpieces.</p>	<p>Scope: This part of ISO 14660 defines a number of extracted features of workpieces.</p>
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ICS 17.040.10

Võtmesõnad: definitions, geometric characteristics, geometrical product specifications, workpieces

ICS 01.040.17; 17.040.10

English version

Geometrical product specifications (GPS) – Geometrical features

Part 2: Extracted median line of a cylinder and a cone, extracted median surface, local size of an extracted feature
(ISO 14660-2 : 1999)

Spécification géométrique des produits (GPS) – Éléments géométriques – Partie 2: Ligne médiane extraite d'un cylindre et d'un cône, surface médiane extraite, taille locale d'un élément extrait
(ISO 14660-2 : 1999)

Geometrische Produktspezifikation (GPS) – Geometrieelemente – Teil 2: Erfasste mittlere Linie eines Zylinders und eines Kegels, erfasste mittlere Fläche, örtliches Maß eines erfassten Geometrieelementes
(ISO 14660-2 : 1999)

This European Standard was approved by CEN on 1999-08-20.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 14660-2 : 1999 Geometrical product specifications (GPS) – Geometrical features – Part 2: Extracted median line of a cylinder and a cone, extracted median surface, local size of an extracted feature,

which was prepared by ISO/TC 213 'Dimensional and geometrical product specifications and verification' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 290 'Dimensional and geometrical product specifications and verification', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by April 2000 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 14660-2 : 1999 was approved by CEN as a European Standard without any modification.

Introduction

This part of ISO 14660 is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). It influences chain link 3 of the Size, Form of line — Derived feature, Form of surface — Derived feature, Orientation — Derived feature and Location — Derived feature chains of standards in the general GPS matrix.

For more detailed information on the relation of this part of ISO 14660 to other standards and the GPS matrix model, see annex A.

Geometrical features exist in three “worlds”:

- the world of specification, where several representations of the future workpiece are imagined by the designer;
- the world of the workpiece, the physical world;
- the world of inspection, where a representation of a given workpiece is used through sampling of the workpiece by measuring instruments

It is important to understand the relationship between these three worlds. ISO 14660 defines standardized terminology for geometrical features in each world as well as standardized terminology for the relationship and communication between each world.

This part of ISO 14660 is part 2 of a series of standards under preparation dealing with geometrical feature definitions.

Extracted features are not geometrical perfect and need further detailed definitions compared to the corresponding nominal features to be unambiguously defined and correctly understood.

It is the intention that the same detailed definition of an extracted feature is valid in all chains of standards where the feature or characteristic is used. Therefore the definitions given in this part of ISO 14660 are in force wherever they apply in the general GPS matrix.

For the purposes of this part of ISO 14660, the following line types have been used in the illustrations:

Feature type	Line type
<ul style="list-style-type: none">• extracted surface• extracted line (integral features)	wide dotted line
<ul style="list-style-type: none">• extracted median surface• extracted median line (derived features)	narrow dotted line
<ul style="list-style-type: none">• associated plane of a extracted (integral) surface• associated line in a extracted (integral) surface	wide dashed dotted line
<ul style="list-style-type: none">• associated median plane, associated axis (derived features)	narrow dashed dotted line
<ul style="list-style-type: none">• real surface (outline)	continuous wide line
<ul style="list-style-type: none">• nominal features (technical drawings in illustrations)	in accordance with ISO 128-24

1 Scope

This part of ISO 14660 defines a number of extracted features of workpieces. It specifies conditions for default definitions, i.e. when no other definitions are specified on the drawing by an extended feature indication. This part of ISO 14660 does not give further definitions, for the extracted feature in question, which would require extended drawing indications.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 14660. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 14660 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 14660-1:1999, *Geometrical product specifications (GPS) — Geometrical features — Part 1: General terms and definitions*.

3 Terms and definitions

For the purposes of this part of ISO 14660, the terms and definitions given in ISO 14660-1 and the following apply.

3.1

default definition (of an extracted feature)

detailed supplementary definition, selected by convention, of the extracted feature concerned, which is applicable only by using the basic ISO tolerance indication on the drawing or in other technical documents

NOTE 1 The basic ISO tolerance indications are those given in, for example, ISO 286-1, ISO 1101 and ISO 1302.

NOTE 2 The default definition (of an extracted feature) can be changed to a special definition by adding an extension to the basic ISO tolerance indication. Such extensions are under development.