International Standard



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEX DY HAPODHAR OPPAHUSALUR TO CTAHDAPTUSALUNGORGANISATION INTERNATIONALE DE NORMALISATION

# Acceptance conditions of mechanical dividing heads for machine tools — Testing of accuracy

Conditions de réception des appareils diviseurs, à commande mécanique, pour machines-outils — Contrôle de la précision

## Second edition – 1986-10-01 iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 5734:1986</u> https://standards.iteh.ai/catalog/standards/sist/1c0cb789-8452-4c88-a7d2ec6576e7be38/iso-5734-1986

Descriptors : machine tools, dividing apparatus, tests, testing conditions, dimensional measurements, accuracy.

## Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting, TANDARD PREVIEW

International Standard ISO 5734 was prepared by Technical Committee ISO/TC 39, Machine tools.

This second edition cancels and replaces the first edition (15075734-1978), the geometrical tests G4, G5 and G6 of which have been rechnically revised sist/1c0cb789-8452-4c88-a7d2-ec6576e7be38/iso-5734-1986

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# Acceptance conditions of mechanical dividing heads for machine tools — Testing of accuracy

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### 1 Scope and field of application

This International Standard specifies, with reference to ards/s ISO 230/1, geometrical tests on general purpose and normal, accuracy mechanical dividing heads for use or: machine tools, and the corresponding permissible deviations that apply.

It deals only with the verification of the accuracy of the device. It does not apply to the running of the device, which should generally be checked before the accuracy is tested.

#### 2 Reference

ISO 230/1, Acceptance code for machine tools — Part 1: Geometric accuracy of machines operating under no-load or finishing conditions.

### 3 Preliminary remarks

**3.1** In this International Standard, dimensions and deviations are expressed in millimetres and in inches.

ISO 5734:19 made to ISO 230/1, especially for the description of measuring icet to ards/simethods and the recommended accuracy of testing equipment. hormal tools, **3.3** The sequence in which the geometrical tests are given is related to the sub-assemblies of the device, and this in no way defined the sub-assemblies of the device, and this in no way

related to the sub-assemblies of the device, and this in no way defines the practical order of testing. In order to make the mounting of instruments or gauging easier, tests may be applied in any order.

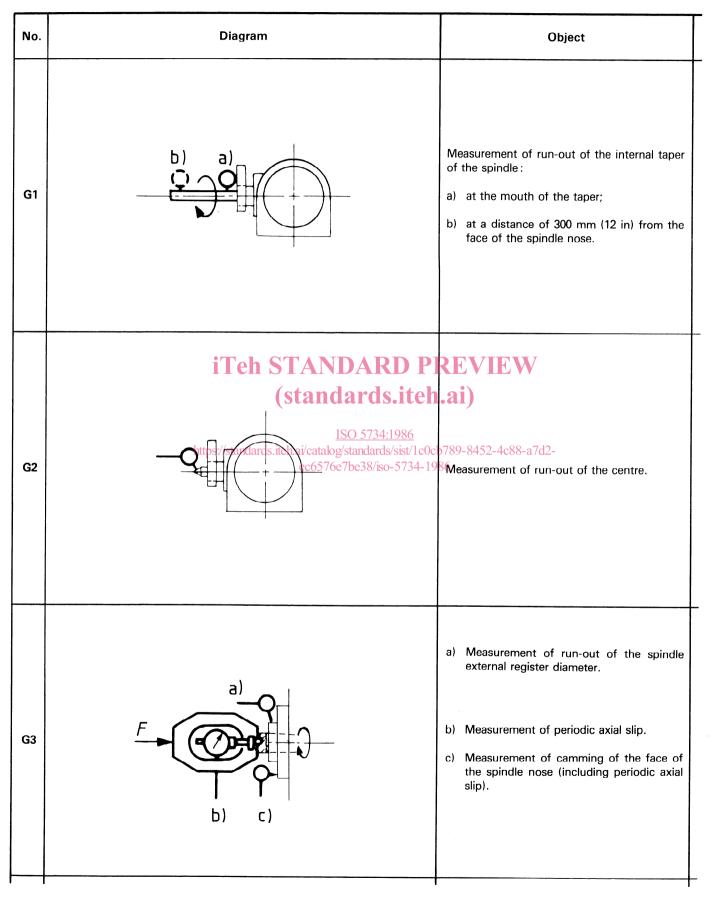
3.2 To apply this International Standard, reference should be

**3.4** When inspecting a device, it is not always necessary to carry out all the tests given in this International Standard. It is up to the user to choose, in agreement with the manufacturer, those relating to the properties which are of interest to him, but these tests are to be clearly stated when ordering a device.

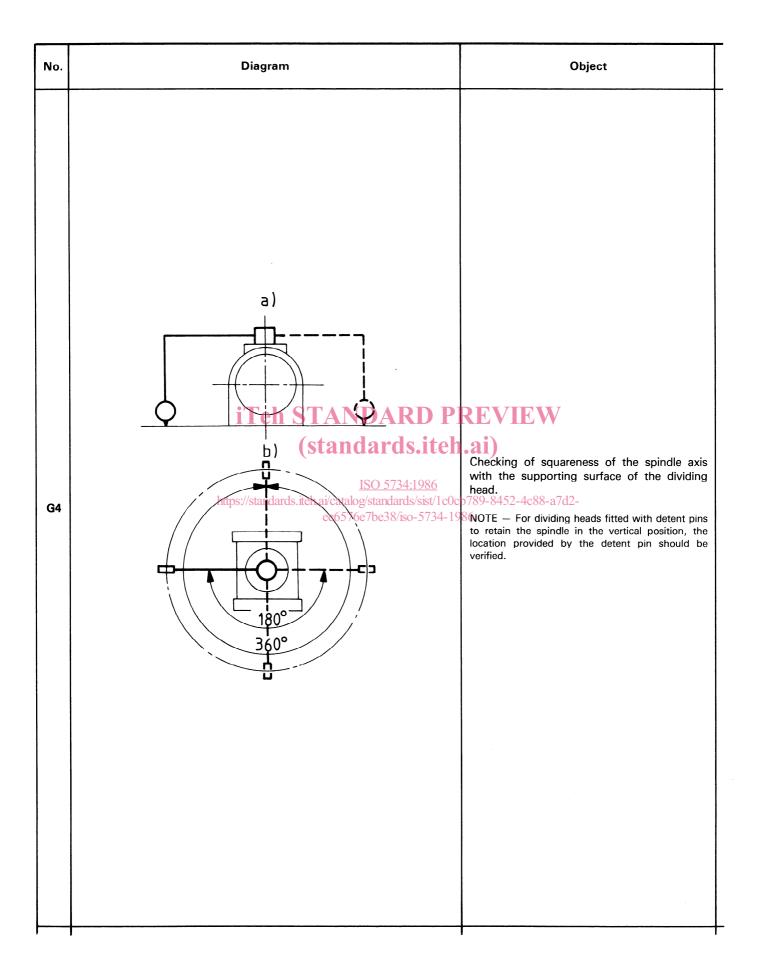
**3.5** When establishing the tolerance for a measuring range different from that given in this International Standard (see 2.311 in ISO 230/1), it should be taken into consideration that the minimum tolerance value is 0,01 mm (0.000 4 in).

**3.6** For reasons of simplicity the diagrams in this International Standard illustrate only one type of machine.

## 4 Acceptance conditions and permissible deviations



Permissible deviation				Measuring	Observations and references
	mm		in	instruments	to the ISO 230/1 acceptance code
a) b)	0,01 0,02	a) b)	0.000 4 0.000 8	Dial gauge and test mandrel	Sub-clause 5.612.3
	0,01		(standar ISO 5 s.itelo::::::::::::::::::::::::::::::::::::	<b>RD PREV</b> <b>ds.iteh.ai)</b> 734: 986 lards (sipi/ar:Gab789-845) 8/iso-5734-1986	2-4c88-a7d2- Sub-clause 5.612.2
a)	0,01	a)	0.000 4		<ul> <li>a) Sub-clause 5.612.2</li> <li>For a tapered spindle nose, the dial gaug shall be set perpendicular to the generatri of the taper.</li> </ul>
ь)	0,01	b)	0.000 4	Dial gauge	b) and c) Sub-clauses 5.62, 5.621.2, 5.622.1, 5.622.2 and 5.632
с)	0,02	c)	0.000 8		For the position of the dial gauge, se figures 59 to 64 and 67, sub-clauses 5.62 and 5.632. The value of force $F$ to be applied whe carrying out checks b) and c) shall b specified by the manufacturer.



	Permissible	e deviation	Measuring	Observations and references
	mm	in	instruments	to the ISO 230/1 acceptance code
	i	Teh STANDAR (standards (standards ISO 5734: /standards.iteh.ai/catalog/standards 0.000:87/32&7be38/iso	<b>D PREV</b> <b>.iteh.ai</b> ) <u>986</u> (sist/1c0cb789-8452	Sub-clause 5.512.1 Nount dial gauge on spindle. Set dividing head with spindle vertical by use of detent pin. Where there is no detent pin, set the dial gauge as shown in a) so that the dial gauge reads zero when swung
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