International Standard

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Hollow taper interface with flange contact surface —

Part 5: Shanks of types AS, CS and ES

Interfaces à cône creux-face —

Partie 5: Queues de type AS, CS et ES

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Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Hollow taper shanks, types and dimensions ... **1**
4.1 General ... 1
4.2 Hollow taper shanks of type AS ... 2
4.2.1 General ... 2
4.2.2 Balancing measures at the HSK-AS taper shank flange ... 8
4.3 Hollow taper shank of type CS ... 23
4.3.1 General ... 23
4.3.2 Basic dimensions ... 23
4.4 Hollow taper shank of type ES ... 26
4.5 Dimensions ... 27

5 Balancing ... **32**
5.1 General ... 32
5.2 Fine balancing of HSK-AS and HSK-CS ... 32

6 Design ... **33**
6.1 HSK sizes and types ... 33
6.2 Medium-transfer unit ... 33
6.3 Clamping forces ... 33
6.4 Material and heat treatment ... 33

7 Designation ... **33**

Annex A (informative) **Clamping forces for shanks of types AS, CS and ES** ... **34**

Annex B (informative) **Hollow taper shanks of type CS with medium-transfer unit** ... **35**

Annex C (informative) **Balancing measures and tool handling equipment** ... **36**

Annex D (informative) **Overview of all different types of shanks** ... **37**

Bibliography ... **38**

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Foreword

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This document was prepared by Technical Committee ISO/TC 29, *Small tools,* Subcommittee SC 9*, Tools with defined cutting edges, holding tools, cutting items, adaptive items and interfaces*.

A list of all parts of the ISO 12164 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This corrected version of ISO 12164-5:2023 incorporates the following corrections:

— Figure 11 has been modified;

— Table 2 has been modified.

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Hollow taper interface with flange contact surface —

Part 5:
Shanks of types AS, CS and ES

1 Scope

This document specifies the dimensions of hollow taper shanks with flange contact surface (HSK). These shanks are the male part of the interface to the machine tools (e.g. milling/drilling and grinding machines).

This document specifies three types of shanks:

— types AS and ES have a peripherally grooved flanges for automatic tool change;

— type CS has a flange without peripheral groove and can only be changed manually.

HSK types AS and ES can also be changed manually via radial bore holes in the hollow shank taper.

This document provides information for dynamically balanced HSK-AS and HSK-CS shanks balancing according to ISO 16084.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Hollow taper shanks, types and dimensions

4.1 General

All dimensions of the different hollow taper shank sizes with flange contact surface (also called “HSK” or “HSK shank” in this document) are specified in Figure 1 for type AS, Figure 9 for type CS and Figure 10 for type ES.

Table 1 provides the parameters of all types and sizes. Details of the types CS and ES, not specified in Figures 9 and 10, shall be taken from Figure 1 and Table 1.

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