INTERNATIONAL STANDARD

ISO 5610-14

Second edition 2014-09-01

Tool holders with rectangular shank for indexable inserts —

Part 14: **Style H**

Porte-plaquette à queue rectangulaire pour plaquettes amovibles —

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with defined cutting edges, cutting items*.

ISO 5610-14:2014

This second edition cancels and replaces the first edition (ISO $5610-14\cdot2010$); of which it constitutes a minor revision. 7ba704120b60/iso-5610-14-2014

ISO 5610 consists of the following parts, under the general title *Tool holders with rectangular shank for indexable inserts*:

- Part 1: General survey, correlation and determination of dimensions
- Part 2: Style A
- Part 3: Style B
- Part 4: Style D
- Part 5: Style F
- Part 6: Style G
- Part 7: Style J
- Part 8: Style K
- Part 9: Style L
- Part 10: Style N
- Part 11: Style R
- Part 12: Style S
- Part 13: Style T

- Part 14: Style H
- Part 15: Style V

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Tool holders with rectangular shank for indexable inserts —

Part 14: **Style H**

1 Scope

This part of ISO 5610 specifies tool holders with rectangular shank, style H, i.e. with offset shank and cutting edge angle $\kappa_r = 107,5^{\circ}$ for side cutting.

These tool holders are primarily intended for indexable inserts made of hard metal or other cutting materials to be mounted by clamping and to be used for turning operations.

NOTE The symbols for the dimensions shown in the tables of this part of ISO 5610 and the corresponding preferred symbols of properties defined in ISO/TS 13399-2 and ISO/TS 13399-3 are given in ISO 5610-1:2014, Table A.1.

2 Normative references TANDARD PREVIEW

The following documents, in whole or in part are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5608:2012, Turning and copying tool holders and cartridges for indexable inserts — Designation

ISO 5610-1:2014, Tool holders with rectangular shank for indexable inserts — Part 1: General survey, correlation and determination of dimensions

3 Dimensions

3.1 General

It is not necessary for tool holders to comply with the pictorial representation; only the dimensions given shall be observed.

For determination of dimensions h_1 , f, and l_1 , see ISO 5610-1.

For explanation of the designation code for tool holders, see ISO 5608.

NOTE The values of rake angles and inclination angles shown in the figures are recommended values; they can vary according to the application.

A - A a $\alpha_{\rm N} = 0^{\circ}(N)$ $\alpha_{n}=7^{\circ}(C)$ _7°±1° 0°±1° В-В в $\alpha_{n} = 7^{\circ}(C)$ https://standards.iteh.ai/catalog/stand $\alpha_n = 0^{\circ}(N)$ 704120b60/isc

3.2 Tool holder style H for rhombic indexable insert shape D

Key

- a Inclination angle, λ_s .
- b Rake angle, γ_0 .

NOTE This figure shows a right-hand tool holder (R); left-hand tool holder (L) laterally reversed.

Figure 1 — Tool holder style H for rhombic indexable insert — D

Table 1Dimensions in millimetres

| Symbola | h ₁ js13 | <i>b</i> h13 | l ₃ ≈ | f +0,5 0 | h ₂ | l ₁ a k16 | l ₂ max. | Sp |
|--|---------------------|-----------------|------------------|------------------|----------------|-------------------------|------------------------|------|
| SDHCR 1010 — 07 SDHCL 1010 — 07 | 10 | 10 | 7,75 | 12 | 10 | _ | 25 | 2,38 |
| SDHCR 1212 — 07 SDHCL 1212 — 07 | 12 | 12 | 7,75 | 16 | 12 | _ | 32 | 2,38 |
| SDHCR 1616 — 11 SDHCL 1616 — 11 | 16 | 16 | 11,6 | 20 | 16 | _ | 32 | 3,97 |
| SDHCR 2020 — 11 SDHCL 2020 — 11 | 20 | 20 | 11,6 | - 25 | 20 | _ | 40 | 3,97 |
| PDHNR 2020 — 15 PDHNL 2020 — 15 | | | 15,5 | | | | | 6,35 |
| CDHNR 2525 — 15 | | | | | | | | 7,94 |
| CDHNL 2525 — 15 SDHCR 2525 — 15 | 25 | 25 | 15,5 | -32 | 25 | , — | 40 | 4,76 |
| SDHCL 2525 — 15 PDHNR 2525 — 15 | | | |) PKE iteh.ai | VÆW | / | | 6,35 |
| PDHNL 2525 — 15 CDHNR 3225 — 15 | | IS | O 5610-14:2 | 014 | | | | 7,94 |
| CDHNL 3225 — 15 th SDHCR 3225 — 15 | | 7ba70412 | 0b60/iso-56 | 10-14-2014 | | 3ce- | 4.0 | |
| SDHCL 3225 — 15 PDHNR 3225 — 15 | 32 | 25 | 15,5 | 32 | 32 | _ | 40 | 4,76 |
| PDHNL 3225 — 15 | - | | | | | | | 6,35 |

For the selection of length l_1 , the dash can be replaced by the dimensions of ISO 5610-1:2014, Table 2. For letter symbols identifying the tool length, see ISO 5608:2012, Table 6.

b Insert thickness without shim, if applicable.