# INTERNATIONAL STANDARD

ISO 5610-11

Second edition 2014-09-01

## Tool holders with rectangular shank for indexable inserts —

Part 11: **Style R** 

Porte-plaquette à queue rectangulaire pour plaquettes amovibles —

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### **Foreword**

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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).

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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 5610-11:2014

This second edition cancels and replaces the first/edition/(ISO 5610 11:2010); of which it constitutes a minor revision.

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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 11: **Style R**

### 1 Scope

This part of ISO 5610 specifies tool holders with rectangular shank, style R, i.e. with offset shank and cutting edge angle  $\kappa_r$  = 75° 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

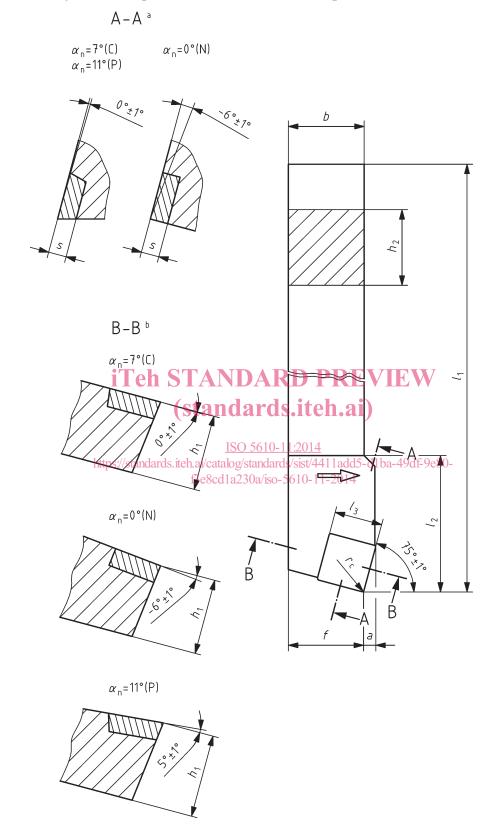
It is not necessary for tool holders to comply with the pictorial representation; only the dimensions given shall be observed.

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.

## 3.2 Tool holder style R for square indexable insert shape S



#### Key

- a Inclination angle,  $\lambda_s$ .
- b Rake angle,  $\gamma_0$ .

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

Figure 1 — Tool holder style R for square indexable insert — S

Table 1

Dimensions in millimetres

	1		1	1	1	ı		·	
Symbola	h <sub>1</sub> js13	b h13	<i>l</i> <sub>3</sub> ≈	а	f +0,5 0	h <sub>2</sub> h13	l <sub>1</sub> a k16	l <sub>2</sub> max.	<i>S</i> b
SSRCR 1212 — 09									2.07
SSRCL 1212 — 09									3,97
PSRNR 1212 — 09	12	12	0.50	2.2	10	10		22	
PSRNL 1212 — 09	12	12	9,52	2,2	13	12	_	32	2.10
CSRPR 1212 — 09									3,18
CSRPL 1212 — 09									
SSRCR 1616 — 12	16	16	12,7	3,1	17	16	_	36	
SSRCL 1616 — 12									476
PSRNR 1616 — 12									4,76
PSRNL 1616 — 12									
SSRCR 2020 — 12	eh S7	CANT	ARI	PR	EVIE	W			
SSRCL 2020 — 12						* * *			4,76
PSRNR 2020 — 12	20	tanda 20	ards.: 12,7	1 <b>tem.</b> 2 3,1	11) 22	20		36	4,70
PSRNL 2020 — 12			5610-11:2	· '	22	20	_	30	
CSRPR 2020 — 120s://sta	andards.iteh				15-d1ba-49	df-9e80-			3,18
CSRPL 2020 — 12		13e8cd1a2	30a/iso-561	0-11-2014	4				3,10
SSRCR 2525 — 12									
SSRCL 2525 — 12									4,76
PSRNR 2525 — 12	25	25	12,7	3,9	27	25		36	4,70
PSRNL 2525 — 12		23	12,7	3,9	27	23	_	30	
CSRPR 2525 — 12									3,18
CSRPL 2525 — 12									3,10
SSRCR 2525 — 15									5,56
SSRCL 2525 — 15	25	25	15,88	4,6	27	25		40	3,30
PSRNR 2525 — 15	23	23	15,00	1,0	27	25		10	6,35
PSRNL 2525 — 15									0,33
SSRCR 3225 — 12									
SSRCL 3225 — 12									4,76
PSRNR 3225 — 12	32	25	12,7	3,9	27	32	_	36	7,70
PSRNL 3225 — 12	] 32	23	12,/	3,7		32		30	
CSRPR 3225 — 12									3,18
CSRPL 3225 — 12									3,10

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.