# INTERNATIONAL STANDARD

First edition 2010-08-01

# Tool holders with rectangular shank for indexable inserts —

Part 5: Style F

Porte-plaquette à queue rectangulaire pour plaquettes amovibles —

# iTeh STradie 55 preview (standards.iteh.ai)

ISO 5610-5:2010 https://standards.iteh.ai/catalog/standards/sist/edeff0c3-6ba6-4468-8a9cc469e9f5f429/iso-5610-5-2010



Reference number ISO 5610-5:2010(E)

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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 5610-5 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with cutting edges made of hard cutting materials*.

This first edition of ISO 5610-5, together with ISO 5610-1, ISO 5610-2, ISO 5610-3, ISO 5610-4, ISO 5610-6, ISO 5610-7, ISO 5610-8, ISO 5610-9, ISO 5610-10, ISO 5610-11, ISO 5610-12, ISO 5610-13, ISO 5610-14 and ISO 5610-15, cancels and replaces ISO 5610:1998.

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

https://standards.iteh.ai/catalog/standards/sist/edeff0c3-6ba6-4468-8a9c-

- 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 5: Style F

#### 1 Scope

This part of ISO 5610 specifies tool holders with rectangular shank, style F, i.e. with straight shank and cutting edge angle  $\kappa_r = 90^\circ$  for side cutting.

These tool holders are primarily intended for indexable inserts made of hardmetal 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 5610-1:2010, Table A.1.

## 2 Normative references STANDARD PREVIEW

The following referenced documents are indispensable for the application 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 <u>5610-5:2010</u>

https://standards.iteh.ai/catalog/standards/sist/edeff0c3-6ba6-4468-8a9c-

ISO 5608:1995, Turning and copying tool holders and cartridges for indexable inserts - Designation

ISO 5610-1:2010, Tool holders with rectangular shank for indexable inserts — Part 1: General survey, correlation and determination of dimensions

#### 3 Dimensions

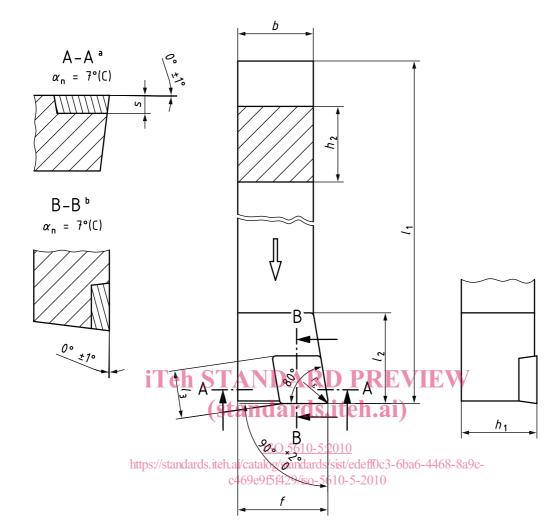
#### 3.1 General

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

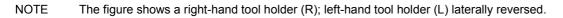
For determination of dimensions  $h_1$ , f and  $l_1$ , see ISO 5610-1.

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 F for rhombic indexable insert shape C



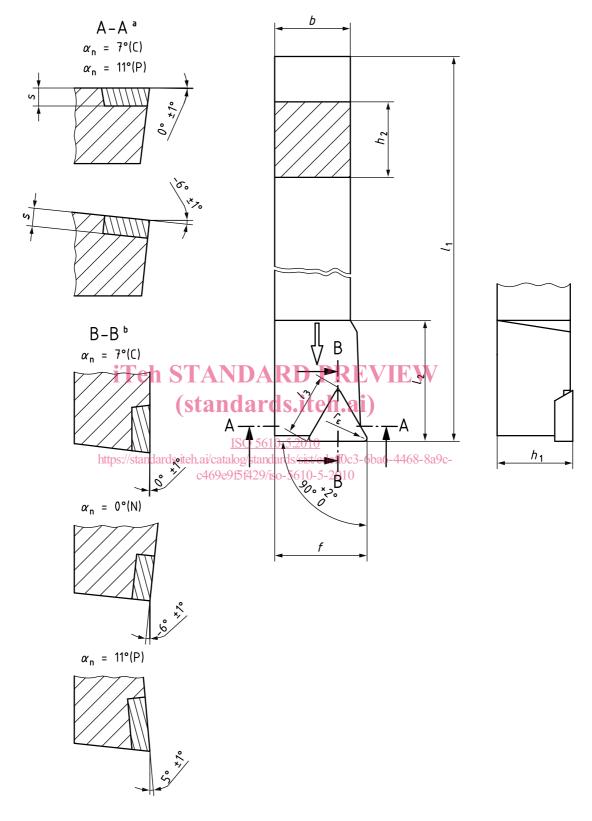
- <sup>a</sup> Inclination angle  $\lambda_n$ .
- <sup>b</sup> Rake angle  $\gamma_{\rm h}$ .

#### Figure 1 — Tool holder style F for rhombic indexable insert — C

_						D	imensions ir	n millimetres
Symbol <sup>a</sup>	h <sub>1</sub>	b	l <sub>3</sub>	f	h <sub>2</sub>	l <sub>1</sub> a	l <sub>2</sub>	s <sup>b</sup>
	js13	h13	*	+0,5 0	h13	k16	max.	
SCFCR 0808 — 06	8	8	6,4	10	8	_	12	2,38
SCFCL 0808 — 06								
SCFCR 1010 — 06	10	10	6,4	12	10	_	12	2,38
SCFCL 1010 — 06								2,50
<ul> <li><sup>a</sup> For the selection of length, l<sub>1</sub>, the en-dash may be replaced by the dimensions of ISO 5610-1:2010, Table 2. For letter symbols identifying the tool length, see ISO 5608:1995, Table 6.</li> <li><sup>b</sup> Insert thickness without shim, if any.</li> </ul>								

#### Table 1

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### 3.3 Tool holder style F for triangular indexable insert shape T



<sup>a</sup> Inclination angle  $\lambda_n$ .

<sup>b</sup> Rake angle  $\gamma_n$ .

#### Figure 2 — Tool holder style F for triangular indexable insert — T

Table 2

Dimensions in millimetres

Symbol <sup>a</sup>	h <sub>1</sub>	b	l <sub>3</sub>	f	$h_2$	l1 <sup>a</sup>	$l_2$	s <sup>b</sup>
	js13	h13	~	+0,5 0	h13	k16	max.	
STFCR 1212 — 11		12	11	16	12	_	25	0.00
STFCL 1212 — 11	12							2,38
PTFNR 1212 — 11								
PTFNL 1212 — 11								3,18
CTFPR 1212 — 11								5,10
CTFPL 1212 — 11								
STFCR 1616 — 11		16	11	20	16	_	25	2,38
STFCL 1616 — 11								2,00
PTFNR 1616 — 11	16							
PTFNL 1616 — 11								3,18
CTFPR 1616 — 11								0,10
CTFPL 1616 — 11								
STFCR 1616 — 16	<b>:</b> 1	Cob S7				<b>IEW</b> - 5-4468-8a9c	32	3,97
STFCL 1616 — 16								- , -
PTFNR 1616 — 16	16	16 (S	tanda	rds.ite 5610-5:2010 andards/sist/e 19/iso-5610-5	deff0c3-6ba6			4,76
PTFNL 1616 — 16	-	(standards.ite)						, -
CTFPR 1616 — 16	https:/		h.ai/catalog/st					3,18
CTFPL 1616 — 16								,
STFCR 2020 — 16		20	16,5	25	20	_	32	3,97
STFCL 2020 — 16	20							
PTFNR 2020 — 16								4,76
PTFNL 2020 — 16								
CTFPR 2020 — 16								3,18
CTFPL 2020 — 16								
STFCR 2525 — 16		25	16,5	32	25	_	32	3,97
STFCL 2525 — 16								
PTFNR 2525 — 16	25							4,76
PTFNL 2525 — 16								
CTFPR 2525 — 16								3,18
CTFPL 2525 — 16								
STFCR 2525 — 22	- 25	25	22	32	25	_	36	
STFCL 2525 — 22 PTFNR 2525 — 22								
PTFNL 2525 — 22 PTFNL 2525 — 22								4,76
CTFPR 2525 — 22								
CTFPL 2525 — 22								

Table 2 (continued)

Dimensions in millimetres

1								
Symbol <sup>a</sup>	$h_1$	b	$l_3$	f	h2	l <sub>1</sub> a	$l_2$	s <sup>b</sup>
- <b>,</b>	js13	h13	*	+0,5 0	h13	k16	max.	
STFCR 3225 — 16								2.07
STFCL 3225 — 16								3,97
PTFNR 3225 — 16	32	25	16,5	32	32	_	32	4,76
PTFNL 3225 — 16								4,70
CTFPR 3225 — 16								2 1 9
CTFPL 3225 — 16								3,18
STFCR 3225 — 22		25	22	32	32	_	36	
STFCL 3225 — 22								4,76
PTFNR 3225 — 22	20							
PTFNL 3225 — 22	32							
CTFPR 3225 — 22								
CTFPL 3225 — 22								
STFCR 3232 — 22	iTeh S	STAN	DARI	) PRE	VIEW	7		
STFCL 3232 — 22								
PTFNR 3232 — 22	20	(stand	lards.	iteh.ai	32		36	4.76
PTFNL 3232 — 22	32	02		10	52	_	30	4,76
CTFPR 3232 — 22	ns•//standards	ls.iteh.ai/catalo	<u>\$0 5610-5:2</u> g/standards/s 5f429/iso-56	ist/edeff0c3-0	5ba6-4468-8	a9c-		
CTFPL 3232 — 22	psi/standard							
STFCR 4040 — 22	40	40	22	50			36	4,76
STFCL 4040 — 22								
PTFNR 4040 — 22					40			
PTFNL 4040 — 22					40			
CTFPR 4040 — 22								
CTFPL 4040 — 22								
PTFNR 4040 — 27	40	40	27,5	50	40	_	40	6,35
PTFNL 4040 — 27								
<sup>a</sup> See Table 1.								
<sup>b</sup> See Table 1.								