## INTERNATIONAL STANDARD

ISO 5610-4

First edition 2010-08-01

## Tool holders with rectangular shank for indexable inserts —

Part 4: **Style D** 

Porte-plaquette à queue rectangulaire pour plaquettes amovibles —

iTeh STPartie 1 Forme D PREVIEW (standards.iteh.ai)

ISO 5610-4:2010 https://standards.iteh.ai/catalog/standards/sist/33210a13-4d97-4eac-9fe8c6ffic65539f0/iso-5610-4-2010



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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 5610-4 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 5610-4, together with ISO 5610-1, ISO 5610-2, ISO 5610-3, ISO 5610-5, 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/33210a13-4d97-4eac-9fe8-

- 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 4: Style D

### 1 Scope

This part of ISO 5610 specifies tool holders with rectangular shank, style D, i.e. with straight shank and cutting edge angle  $\kappa_r = 45^{\circ}$  for side cutting.

These tool holders are primarily intended for indexable inserts made of hardmetal or other cutting materials intended to be mounted by clamping and 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.

### iTeh STANDARD PREVIEW

### 2 Normative references (standards.iteh.ai)

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. Por undated references, the latest edition of the referenced document (including any amendments) applies: tandards/sist/33210a13-4d97-4eac-9fe8-c6ffc65539f0/iso-5610-4-2010

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.

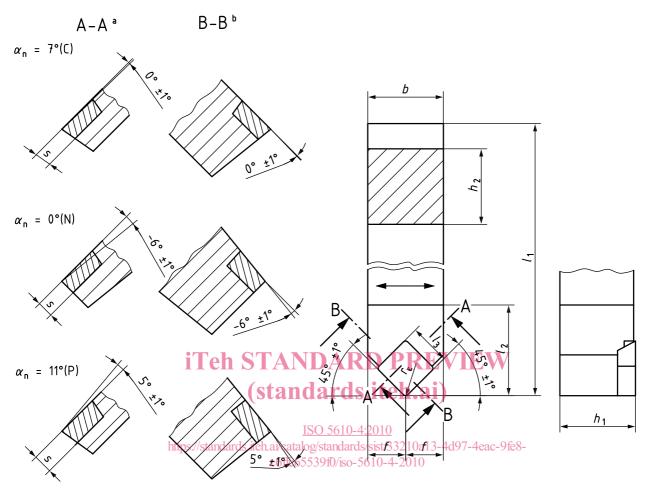
For determination of dimensions  $h_1$ , f and  $l_1$ , see ISO 5610-1.

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.

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



a Inclination angle  $\lambda_n$ .

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

b Rake angle  $\gamma_n$ .

Table 1

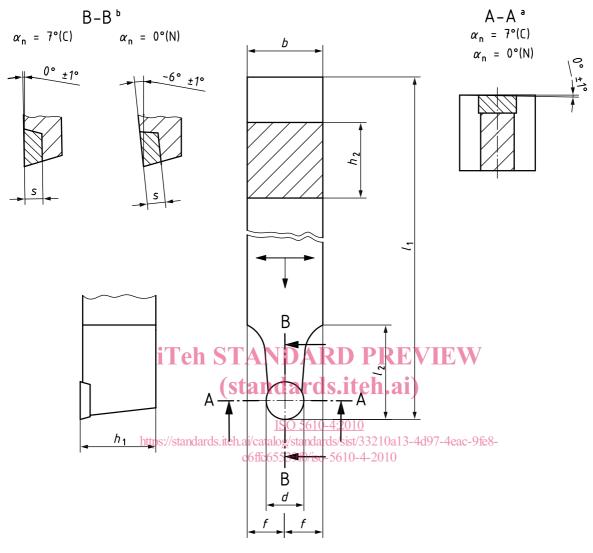
Dimensions in millimetres

Symbol <sup>a</sup>	$h_1$	b	$l_3$	f	$h_2$	$l_1^a$	$l_2$	$_{S}$ b				
	js13	h13		±0,25	h13	k16	max.					
SSDCN 1212 — 09								3,97				
PSDNN 1212 — 09	12	12	9,52	6	12	_	32	3,18				
CSDPN 1212 — 09								0,10				
SSDCN 1616 — 09								3,97				
PSDNN 1616 — 09	16	16	9,52	8	16	_	32	3,18				
CSDPN 1616 — 09								0,10				
SSDCN 2020 — 12								4,76				
PSDNN 2020 — 12	20	20	12,7	10	20	_	36	1,70				
CSDPN 2020 — 12								3,18				
CSDNN 2525 — 12								7,94				
SSDCN 2525 — 12	25	25	12,7	12,5	25	_	36	4,76				
PSDNN 2525 — 12		25	12,7	12,0	25			4,70				
CSDPN 2525 — 12								3,18				
CSDNN 3225 — 12	iTeh S	STAN	DARI	) PRE	VIEW	7		7,94				
SSDCN 3225 — 12	32	(stand	lar <del>g</del> s.i	tebsai	32	_	36	4,76				
PSDNN 3225 — 12	] 32	(523110	10012,4001	10012,3001	32	_	30	4,70				
CSDPN 3225 — 12		<u>I</u>	SO 5610-4:20					3,18				
SSDCN 3232 — 19 htt	ps://standards	iteh.ai/catalo. c6ffc65	9		-4d97-4eac-9	9fe8-		6,35				
PSDNN 3232 — 19	32	32	19,05	16	32	_	45	0,00				
CSDPN 3232 — 19								4,76				

<sup>&</sup>lt;sup>a</sup> For the selection of length,  $l_1$ , the en-dash can be replaced by the dimensions of ISO 5610-1:2010, Table 2. For the letter symbols identifying the tool length, see ISO 5608:1995, Table 6.

b Insert thickness without shim, if any.

### 3.3 Tool holder style D for round indexable insert shape R



a Inclination angle  $\lambda_n$ .

Figure 2 — Tool holder style D for round indexable insert — R

b Rake angle  $\gamma_n$ .

Table 2

Dimensions in millimetres

			T	1		Diffictions	in millimetres
Symbol <sup>a</sup>	h <sub>1</sub> js13	<i>b</i> h13	d	<i>f</i> ± 0,25	h <sub>2</sub> h13	l <sub>1</sub> a k16	<i>s</i> b
SRDCN 0808 — 06							
PRDCN 0808 — 06	8	8	6	4	8		2,38
SRDCN 1010 — 06							
PRDCN 1010 — 06	1	10	6	- 5	10	_	2,38
SRDCN 1010 — 08	10						
PRDCN 1010 — 08	1		8				3,18
SRDCN 1212 — 06							
PRDCN 1212 — 06	1		6				2,38
SRDCN 1212 — 08	12	12		6	12	_	
PRDCN 1212 — 08	1		8				3,18
SRDCN 1616 — 06							
PRDCN 1616 — 06	1	16	6				2,38
SRDCN 1616 — 08	1						
PRDCN 1616 — 08	16		8	8	16	_	3,18
SRDCN 1616 — 10	1						
PRDCN 1616 — 10	-		10				3,97
SRDCN 2020 — 06							
PRDCN 2020 — 06	-		6	REVIE 10 1.ai)	20 20		2,38
SRDCN 2020 — 08 •	- ~-		D =				
PRDCN 2020 — 08	Teh S7	CANDA	RB P				3,18
SRDCN 2020 — 10	20	tandar					
PRDCN 2020 — 10	<del> </del> (S		asıtten				3,97
SRDCN 2020 — 12	1						
PRDCN 2020 — 12	1		510-4: <b>22</b> 10				4,76
SRDCN 2525 — 06 littps	//standards.itel		dards/sist/332		eac-9fe8-		
PRDCN 2525 — 06	1	c6ffc65539f0.	iso-56 <b>6</b> 0-4-20	12,5	25		2,38
SRDCN 2525 — 08	1		-				
PRDCN 2525 — 08	1		8				3,18
CRDNN 2525 — 09	1		9,52				4,76
SRDCN 2525 — 10	1		·				,
PRDCN 2525 — 10	25		10				3,97
SRDCN 2525 — 12	1		45				4 = 4
PRDCN 2525 — 12	1		12				4,76
CRDNN 2525 — 12	1		12,7				7,94
SRDCN 2525 — 16	1						
PRDCN 2525 — 16	1		16				6,35
SRDCN 3225 — 12			40				4.70
	-1		12				4,76
PRDCN 3225 — 12				1	20	†	
PRDCN 3225 — 12 CRDNN 3225 — 12	-	05	12,7	40.5	00		7 0 1
	32	25	12,7 15,88	12,5	32	_	7,94
CRDNN 3225 — 12	32	25	15,88	12,5	32	_	·
CRDNN 3225 — 12 CRDNN 3225 — 15	32	25		12,5	32	_	7,94 6,35
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16	32	25	15,88	12,5	32	_	·
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16	32	25 32	15,88 16 19,05	12,5	32	_	6,35 7,94
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19			15,88 16				6,35
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19 SRDCN 3232 — 20			15,88 16 19,05 20			_	6,35 7,94
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19 SRDCN 3232 — 20 PRDCN 3232 — 20			15,88 16 19,05			_	6,35 7,94
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19 SRDCN 3232 — 20 PRDCN 3232 — 20 SRDCN 4040 — 25	32	32	15,88 16 19,05 20	16	32		6,35 7,94 6,35
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19 SRDCN 3232 — 20 PRDCN 3232 — 20 SRDCN 4040 — 25 PRDCN 4040 — 25 CRDNN 4040 — 25	32	32	15,88 16 19,05 20 25	16	32		6,35 7,94 6,35
CRDNN 3225 — 12 CRDNN 3225 — 15 SRDCN 3225 — 16 PRDCN 3225 — 16 CRDNN 3232 — 19 SRDCN 3232 — 20 PRDCN 3232 — 20 SRDCN 4040 — 25 PRDCN 4040 — 25 CRDNN 4040 — 25	32	32	15,88 16 19,05 20 25	16	32		6,35 7,94 6,35