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**Blanks for superabrasive cutting-off  
wheels —**

Part 1:

**Manually guided cutting-off in building  
and civil engineering**

*Âmes pour meules de tronçonnage superabrasives —*

*Partie 1: Tronçonnage guidé à la main dans le bâtiment et le génie civil*



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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 6105-1 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This first edition of ISO 6105-1, together with ISO 6105-2, cancels and replaces ISO 6105:1988, the contents of which have been technically revised.

ISO 6105 consists of the following parts, under the general title *Blanks for superabrasive cutting-off wheels*:

- *Part 1: Manually guided cutting-off in building and civil engineering*
- *Part 2: Hand-held cutting-off in building and civil engineering*



# Blanks for superabrasive cutting-off wheels —

## Part 1: Manually guided cutting-off in building and civil engineering

### 1 Scope

This part of ISO 6105 specifies dimensions for blanks to be used for superabrasive cutting-off wheels on stationary or mobile cutting-off machines that are designed for application in building and civil engineering (cutting of asphalt, concrete, natural or artificial stone).

### 2 Dimensions

The dimensions of blanks with 40 mm lands and narrow slots (type A), blanks with 40 mm lands and wide slots (type B), blanks with 50 mm lands and narrow slots (type C), blanks with 50 mm lands and wide slots (type D) and blanks with 20 mm lands and narrow slots (type E), used for superabrasive cutting-off wheels, are shown in Figures 1 and 2 and are given in Tables 1 to 5 respectively.

Details which are not specified shall be chosen according to need.

### 3 Designation

**EXAMPLE** A blank for superabrasive cutting-off wheels of Type A with  $D_1 = 540$  mm,  $E = 2,8$  mm and  $H = 50$  mm is designated as follows:

**Blank ISO 6105-1 A 540 × 2,8 × 50**

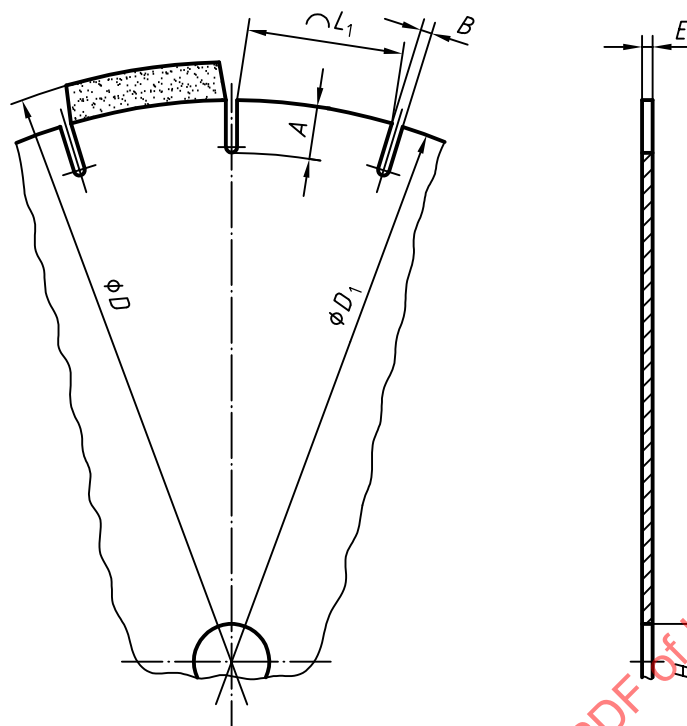


Figure 1



Figure 2

NOTE Alternatively, a key hole slot may be used. A different slot shape is permitted.

Table 1 — Type A, blank with 40 mm lands, narrow slots

Dimensions in millimetres

$D$	$D_1$		$E$ $+0,1$ $0$	$A$ $\pm 1,0$	$H$ H7	$B^a$ $\pm 0,5$	Number of lands $Z$	$L_1$ nom.
250	240	$\pm 0,3$	1,6	14	25,4/30/60	3	17	41,4
300	290		1,6/1,8/2,2		25,4/30/35/60		21	40,4
350	340		2,2/2,5		25,4/35/50/60		25	39,7
400	390		2,2/2,5		25,4/30/35/60		28	40,8
450	440	$\pm 0,5$	2,5/2,8/3,5	14	25,4/35/50/60	3	32	40,2
500	490		2,5/2,8		25,4/35/50/60		36	39,8
550	540		2,8		25,4/35/50/60		38	41,6
600	590		2,8/3,5		25,4/35/50/60		42	41,1
625	615	$\pm 0,7$	3,0/3,5/5,0	14	25,4/35/50/60	3	42	43,0
650	640		3,0/3,5/5,0		25,4/35/50/60		46	40,7
700	690		3,0/3,5/5,0		25,4/35/50/60		50	40,4
725	715		3,0/3,5/5,0		25,4/35/50/60		50	41,9
750	740		3,0/3,5/5,0		25,4/35/50/60		54	40,0
800	790		3,0/3,5/5,0		25,4/35/50/60		57	40,5
850	840		3,0/3,5/5,0		25,4/35/50/60		61	40,3
900	884		3,0/3,5/5,0		25,4/35/50/60		60	40,3
1 000	984	$\pm 0,7$	3,5/5,0	18	25,4/35/50/60	6	66	40,8
1 100	1 084		3,5/5,0		25,4/35/50/60		74	40,0
1 200	1 184	$\pm 1,0$	3,5/5,0	18	25,4/35/50/60	6	80	40,5

<sup>a</sup> For blanks with key hole slots at the rear, the hole diameter is 6 mm for a 3 mm slot.

Table 2 — Type B, blank with 40 mm lands, wide slots

Dimensions in millimetres

$D$	$D_1$		$E$ $+0,1$ $0$	$A$ $\pm 1,0$	$H$ H7	$B$ $\pm 0,5$	Number of lands $Z$	$L_1$ nom.
250	240	$\pm 0,3$	1,6	14	25,4/30/60	10	15	40,3
300	290		1,6/1,8/2,2		25,4/30/35/60		18	40,6
350	340		2,2/2,5		25,4/35/50/60		21	40,9
400	390		2,2/2,5		25,4/30/35/60		24	41,0
450	440	$\pm 0,5$	2,5/2,8/3,5	14	25,4/35/50/60	12	26	41,2
500	490		2,5/2,8		25,4/35/50/60		30	39,3
550	540		2,8		25,4/35/50/60		32	41,0
600	590		2,8/3,5		25,4/35/50/60		36	39,5
625	615	$\pm 0,7$	3,0/3,5/5,0	14	25,4/35/50/60	12	36	41,7
650	640		3,0/3,5/5,0		25,4/35/50/60		38	40,9
700	690		3,0/3,5/5,0		25,4/35/50/60		40	42,2
725	715		3,0/3,5/5,0		25,4/35/50/60		40	44,2
750	740		3,0/3,5/5,0		25,4/35/50/60		44	40,8
800	790		3,0/3,5/5,0		25,4/35/50/60		46	41,9
850	840		3,0/3,5/5,0		25,4/35/50/60		50	40,8
900	884		3,0/3,5/5,0		25,4/35/50/60	12	52	41,4
1 000	984	$\pm 0,7$	3,5/5,0	18	25,4/35/50/60		58	41,3
1 100	1 084		3,5/5,0		25,4/35/50/60		65	40,4
1 200	1 184	$\pm 1,0$	3,5/5,0	18	25,4/35/50/60	18	64	40,1
1 300	1 282		3,5		25,4/35/50/60		69	40,4
1 400	1 382		3,5		25,4/35/50/60		74	40,7
1 500	1 482		3,5		25,4/35/50/60		80	40,2
1 600	1 582		3,5		25,4/35/50/60	24	76	41,4
1 800	1 782		3,5		25,4/35/50/60		86	41,1
2 000	1 982		3,5		25,4/35/50/60		96	40,9



Table 3 — Type C, blank with 50 mm lands, narrow slots

Dimensions in millimetres

$D$	$D_1$		$E$ $+0,1$ $0$	$A$ $\pm 1,0$	$H$ H7	$B^a$ $\pm 0,5$	Number of lands $Z$	$L_1$ nom.
250	240	$\pm 0,3$	1,6	14	25,4/30/60	3	14	50,9
300	290		1,6/1,8/2,2		25,4/30/35/60		17	50,6
350	340		2,2/2,5		25,4/35/50/60		20	50,4
400	390		2,2/2,5		25,4/30/35/60		23	50,3
450	440	$\pm 0,5$	2,5/2,8/3,5	14	25,4/35/50/60	3	26	50,2
500	490		2,5/2,8		25,4/35/50/60		29	50,0
550	540		2,8		25,4/35/50/60		32	50,0
600	590		2,8/3,5		25,4/35/50/60		35	50,0
625	615	$\pm 0,7$	3,0/3,5/5,0	14	25,4/35/50/60	3	35	52,2
650	640		3,0/3,5/5,0		25,4/35/50/60		36	52,9
700	690		3,0/3,5/5,0		25,4/35/50/60		40	51,2
725	715		3,0/3,5/5,0		25,4/35/50/60		40	53,2
750	740		3,0/3,5/5,0		25,4/35/50/60		44	49,8
800	790		3,0/3,5/5,0		25,4/35/50/60		47	49,8
850	840		3,0/3,5/5,0		25,4/35/50/60		49	50,9
900	884		3,0/3,5/5,0		25,4/35/50/60		52	50,4
1 000	984	$\pm 1,0$	3,5/5,0	14	25,4/35/50/60	6	54	51,3
1 100	1 084		3,5/5,0		25,4/35/50/60		60	50,8
1 200	1 184		3,5/5,0		25,4/35/50/60		64	52,1
1 300	1 282		3,5		25,4/35/50/60		70	51,5
1 400	1 382		3,5		25,4/35/50/60		76	51,1
1 500	1 482		3,5		25,4/35/50/60		82	50,8
1 600	1 582		3,5		25,4/35/50/60		86	51,8

<sup>a</sup> For blanks with key hole slots at the rear, the hole diameter is 6 mm for a 3 mm slot.