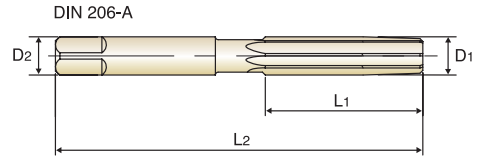


HSS, HAND REAMERS - STRAIGHT FLUTES

- 🇩🇪 **HSS, HANDREIBAHLEN - GERADEGENUTET**
- 🇫🇷 **ALÉSOIRS HSS À MAIN - HÉLICE À GAUCHE**
- 🇮🇹 **ALESATORI A MANO IN HSS - ELICA SINISTRA**

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter ≙ Nominal Reamer Diameter
- ▶ Straight Flutes / Right Hand Cut
- ▶ Chamfer Angle- tapered
- ▶ Type of center - Up to Ø3.75 : external centers
- Over Ø3.75 : internal centers

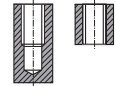
- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Schaft-Ø = Nomineller Reibahlen-Ø
- ▶ Geradegenutet / Rechtsschneidend
- ▶ Anschnittwinkel - Konisch
- ▶ Zentrierungsart - bis Ø3,75 mm : Zentrierungszapfen
- über Ø3,75 mm : Zentrierung



D1=D2

HSS **DIN 206** **H7**

Hole type



Unit : mm

EDP No.	Reamer Diameter		Flute Length		Overall Length	No. of Flute
	D		L1	L2		
K114300200	2.0		25		50	4
K114300220	2.2		27		54	4
K114300250	2.5		29		58	4
K114300280	2.8		31		62	4
K114300300	3.0		31		62	6
K114300320	3.2		33		66	6
K114300350	3.5		35		71	6
K114300400	4.0		38		76	6
K114300450	4.5		41		81	6
K114300500	5.0		44		87	6
K114300550	5.5		47		93	6
K114300600	6.0		47		93	6
K114300700	7.0		54		107	6
K114300800	8.0		58		115	6
K114300900	9.0		62		124	6
K114301000	10.0		66		133	6
K114301100	11.0		71		142	6
K114301200	12.0		76		152	6
K114301300	13.0		76		152	6
K114301400	14.0		81		163	8
K114301500	15.0		81		163	8
K114301600	16.0		87		175	8
K114301700	17.0		87		175	8
K114301800	18.0		93		188	8
K114301900	19.0		93		188	8
K114302000	20.0		100		201	8
K114302200	22.0		107		215	8
K114302400	24.0		115		231	8

▶NEXT PAGE

◎ : Excellent ○ : Good

ISO	P										M				K					
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel	Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○				○														

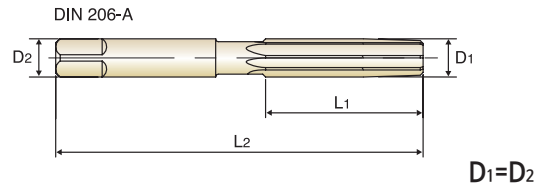
ISO	N										S						H				
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys			Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○		○	○	○													

HSS, HAND REAMERS - STRAIGHT FLUTES

- HSS, HANDREIBAHLEN - GERADEGENUTET
- ALÉSOIRS HSS À MAIN - ENTRÉE DROITE
- ALESATORI A MANO IN HSS - ELICA DRITTA

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter ≅ Nominal Reamer Diameter
- ▶ Straight Flutes / Right Hand Cut
- ▶ Chamfer Angle- tapered
- ▶ Type of center - Up to Ø3.75 : external centers
- Over Ø3.75 : internal centers

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Schaft-Ø = Nomineller Reibahlen-Ø
- ▶ Geradegenutet / Rechtsschneidend
- ▶ Anschnittwinkel - Konisch
- ▶ Zentrierungsart - bis Ø3,75 mm : Zentrierungszapfen
- über Ø3,75 mm : Zentrierung



HSS **DIN 206** **H7**



Unit : mm

EDP No.	Reamer Diameter		Flute Length		Overall Length		No. of Flute
	D		L1		L2		
K114302500	25.0		115		231		8
K114302600	26.0		115		231		8
K114302700	27.0		124		247		10
K114302800	28.0		124		247		10
K114302900	29.0		124		247		10
K114303000	30.0		124		247		10
K114303100	31.0		133		265		10
K114303200	32.0		133		265		10
K114303300	33.0		133		265		10
K114303400	34.0		142		284		10
K114303500	35.0		142		284		10
K114303600	36.0		142		284		10
K114303700	37.0		142		284		10
K114303800	38.0		152		305		10
K114303810	38.1		152		305		10
K114303900	39.0		152		305		10
K114304000	40.0		152		305		10
K114304100	41.0		152		305		12
K114304200	42.0		152		305		12
K114304300	43.0		163		326		12
K114304400	44.0		163		326		12
K114304500	45.0		163		326		12
K114304600	46.0		163		326		12
K114304700	47.0		163		326		12
K114304800	48.0		174		347		12
K114304900	49.0		174		347		12
K114305200	52.0		174		347		12
K114306000	60.0		184		367		12

◎ : Excellent ○ : Good

ISO	P										M				K							
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommended	○	○				○																

ISO	N										S							H			
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○		○	○	○													

SELECTION GUIDE

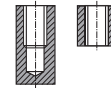


SERIES

K4101

K4111

HOLETYPE



FLUTETYPE

Straight

LH Spiral

SIZE MIN

D2.0

D2.0

SIZE MAX

D20.0

D20.0

PAGE

406

407

SURFACE TREATMENT

Bright

CARBIDE, HSS & HSS-E REAMERS

Carbide NC Machine Reamers
HSS Hand Reamers
HSS-E Chucking Reamers



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.427

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc	K4101	K4111
P	1	Non-alloy steel	About 0.15% C Annealed	125		◎	◎
	2		About 0.45% C Annealed	190	13	◎	◎
	3		About 0.45% C Quenched & Tempered	250	25	◎	◎
	4		About 0.75% C Annealed	270	28	○	○
	5		About 0.75% C Quenched & Tempered	300	32	○	○
	6	Low alloy steel	Annealed	180	10	◎	◎
	7		Quenched & Tempered	275	29	◎	◎
	8		Quenched & Tempered	300	32	○	○
	9		Quenched & Tempered	350	38		
	10		High alloyed steel, and tool steel	Annealed	200	15	○
	11	Quenched & Tempered		325	35		
M	12	Stainless steel	Ferritic / Martensitic Annealed	200	15	○	○
	13		Martensitic Quenched & Tempered	240	23	○	○
	14		Austenitic	180	10	○	○
K	15	Grey cast iron	Pearlitic / ferritic	180	10	◎	◎
	16		Pearlitic (Martensitic)	260	26	○	○
	17	Nodular cast iron	Ferritic	160	3	◎	◎
	18		Pearlitic	250	25	○	○
	19		Ferritic	130		◎	◎
20	Malleable cast iron	Pearlitic	230	21	○	○	
N	21	Aluminum-wrought alloy	Not Curable	60		○	○
	22		Curable Hardened	100		○	○
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75		○	○
	24		≤ 12% Si, Curable Hardened	90		○	○
	25		> 12% Si, Not Curable	130			
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%	110		○	○
	27		CuZn, CuSnZn (Brass)	90		○	○
	28		CuSn, lead-free copper and electrolytic copper	100		○	○
	29		Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic Rubber, Wood, etc.			
30							
S	31	Heat Resistant Super Alloys	Fe Based Annealed	200	15		
	32		Cured	280	30		
	33		Annealed	250	25		
	34		Ni or Co Based Cured	350	38		
	35		Cast	320	34		
36	Titanium Alloys	Pure Titanium	400 Rm				
37		Alpha + Beta Alloys Hardened	1050 Rm				
H	38	Hardened steel	Hardened	550	55		
	39		Hardened	630	60		
	40	Chilled Cast Iron	Cast	400	42		
	41	Hardened Cast Iron	Hardened	550	55		

K1143	K1153	K2101	K2111	K2121	K2102	K2112	K21B1
Straight	LH Spiral	Straight	LH Spiral	LH Spiral (Quick Spiral)	Straight	LH Spiral	LH Spiral
D2.0	D2.0	D2.0	D2.0	D4.0	D10.0	D10.0	D2.0
D60.0	D60.0	D20.0	D20.0	D20.0	D50.0	D50.0	D20.0
408	410	412	414	416	417	419	421

Bright



<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
								5
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6 P
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7
								8
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9
								10
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13 M
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17 K
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24
								25 N
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28
								29
								30
								31
								32
								33
								34 S
								35
								36
								37
								38
								39 H
								40
								41