

GROOVING SYSTEM

Multifunctional solution for grooving, turning and profiling



Internal holders, now available!

NDB GROOVING	HC: coated carbide HF: micrograin carbide CVD: chemical vapour deposition PVD: physical vapour deposition				HC	HC	HF	HF																														
					CVD	CVD	PVD	-	JC7010	JC6025	JP5125	JU6015																										
· 2 cutting edges · Rectangular shape with elastic clamping · Stable double-rail clamping system · 3D chipbreaker for optimized chip control · GT/GA: Straight cutting edge for multifunctional grooving · RT/RA: Full radius for copying operations · CW tolerance GT/RT: ±0.05 · CW tolerance GA/RA: ±0.025	Stable machining, light cut	● 1 st choice	○ suitable	●	●	○	●																															
	General machining, medium cut	● 1 st choice	○ suitable	●	●	●	●																															
	Unstable machining, heavy cut	● 1 st choice	○ suitable	⊕	⊕	⊕	⊕																															
	Dimensions	ISO			Vc(m/min) - suggested cutting speed range (bold: 1 st choice)																																	
		P	140	80																																		
	M	300	180																																			
	K	180	60																																			
	N	380	140																																			
	S		50																																			
	H		120																																			
			300																																			
			1000																																			
			20																																			
			40																																			

Designation		CW	RE	INSL	S	Stock																																		
CARBIDE GT grooving and turning general purpose	NDBD20R02M-GT	2.0	0.2	16	3.5	●	●	●	●																															
	NDBD30R04M-GT	3.0	0.4	21	4.8	●	●	●	●																															
	NDBD40R04M-GT	4.0	0.4	21	4.8	●	●	●	●																															
	NDBD50R04M-GT	5.0	0.4	26	5.8	●	●	●	●																															
	NDBD60R08M-GT	6.0	0.8	26	5.8	●	●	●	●																															
	NDBD80R08M-GT	8.0	0.8	31	6.5	●	●	●	●																															
	GA grooving and turning polished surface for aluminium	NDBD20R02G-GA	2.0	0.2	16	3.5					●																													
NDBD30R04G-GA		3.0	0.4	21	4.8						●																													
NDBD40R04G-GA		4.0	0.4	21	4.8							●																												
RT profiling general purpose	NDBD20R10M-RT	2.0	1.0	16	3.5					●																														
	NDBD30R15M-RT	3.0	1.5	21	4.8						●																													
	NDBD40R20M-RT	4.0	2.0	21	4.8	●				●																														
	NDBD50R25M-RT	5.0	2.5	26	5.8	●				●																														
	NDBD60R30M-RT	6.0	3.0	26	5.8	●				●																														
	NDBD80R40M-RT	8.0	4.0	31	6.5						●																													
RA profiling polished surface for aluminium	NDBD20R10G-RA	2.0	1.0	16	3.5						●																													
	NDBD30R15G-RA	3.0	1.5	21	4.8							●																												
	NDBD40R20G-RA	4.0	2.0	21	4.8								●																											

● stock standard

GT - GROOVING

NDBD20	f _n	0.05	0.07	0.09
NDBD30	f _n	0.07	0.10	0.13
NDBD40	f _n	0.09	0.12	0.15
NDBD50	f _n	0.11	0.15	0.19
NDBD60	f _n	0.13	0.19	0.25
NDBD80	f _n	0.18	0.26	0.34

GT - TURNING

NDBD20	a _p	0.30	0.90	1.50	f _n	0.10	0.12	0.14
NDBD30	a _p	0.40	1.20	2.00	f _n	0.16	0.18	0.20
NDBD40	a _p	0.50	1.50	2.50	f _n	0.18	0.21	0.24
NDBD50	a _p	0.50	1.80	3.10	f _n	0.20	0.25	0.30
NDBD60	a _p	1.00	2.20	3.40	f _n	0.24	0.33	0.42
NDBD80	a _p	1.00	2.80	4.60	f _n	0.32	0.44	0.56

RT - COPYING

NDBD20	a _p	0.10	0.50	0.90	f _n	0.12	0.15	0.18
NDBD30	a _p	0.10	0.75	1.50	f _n	0.18	0.23	0.28
NDBD40	a _p	0.10	1.00	1.90	f _n	0.20	0.27	0.34
NDBD50	a _p	0.10	1.25	2.40	f _n	0.22	0.33	0.42
NDBD60	a _p	0.10	1.50	2.90	f _n	0.24	0.37	0.50
NDBD80	a _p	0.10	2.00	3.90	f _n	0.32	0.49	0.66

GA - GROOVING

NDBD20	f _n	0.06	0.08	0.10
NDBD30	f _n	0.08	0.12	0.16
NDBD40	f _n	0.10	0.15	0.20

GA - TURNING

NDBD20	a _p	0.20	0.80	1.40	f _n	0.12	0.16	0.20
NDBD30	a _p	0.20	1.00	1.80	f _n	0.14	0.20	0.26
NDBD40	a _p	0.40	1.40	2.40	f _n	0.16	0.23	0.30

RA - COPYING

NDBD20	a _p	0.10	0.50	0.90	f _n	0.10	0.16	0.22
NDBD30	a _p	0.10	0.75	1.50	f _n	0.16	0.24	0.32
NDBD40	a _p	0.10	1.00	1.90	f _n	0.18	0.28	0.38

a_p: depth of cut (mm)
f_n: feed rate (mm/rev)

NDB E

P	M	K	N	S	H
H	H	H	H		

- Tool holders for grooving and cut-off
- Radial reinforced shape available
- Multiple overhang available for each size
- Rigid and reliable monobloc type

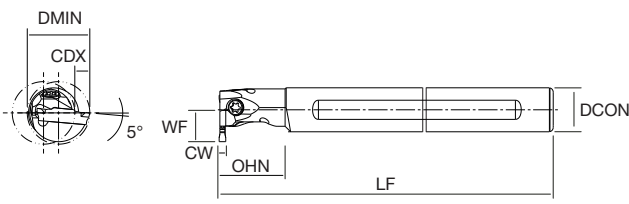

RR - RADIAL REINFORCED SHAPE right-hand shown

ST - STANDARD SHAPE right-hand shown

Designation		Stock		CW	CDX	H	HF	B	LF	LH	HBL	HBH	WF
		R	L										
RR	NDB E/r1212-2-CDX14	●	●	2	14	12	12	12	120	25	24	2	12.2
	NDB E/r1616-2-CDX14	●	●	2	14	16	16	16	120	25	24	2	16.2
	NDB E/r1616-3-CDX20	●	●	3	20	16	16	16	120	31	30	2	16.3
ST	NDB E/r2020-2-CDX14	●	●	2	14	20	20	20	125	38			21.0
	NDB E/r1616-3-CDX10	●	●	3	10	16	16	16	120	35			16.2
	NDB E/r2020-3-CDX10	●	●	3	10	20	20	20	125	38			21.0
	NDB E/r2020-3-CDX20	●	●	3	20	20	20	20	125	40			21.0
	NDB E/r2525-3-CDX10	●	●	3	10	25	25	25	150	40			26.0
	NDB E/r2525-3-CDX20	●	●	3	20	25	25	25	150	45			26.0
	NDB E/r2020-4-CDX10	●	●	4	10	20	20	20	125	35			21.0
	NDB E/r2020-4-CDX25	●	●	4	25	20	20	20	125	50			21.0
	NDB E/r2525-4-CDX10	●	●	4	10	25	25	25	150	40			26.0
	NDB E/r2525-4-CDX25	●	●	4	25	25	25	25	150	50			26.0
	NDB E/r2525-5-CDX10	●	●	5	10	25	25	25	150	40			26.0
	NDB E/r2525-5-CDX25	●	●	5	25	25	25	25	150	50			26.0
	NDB E/r2525-6-CDX15	●	●	6	15	25	25	25	150	45			26.0
	NDB E/r2525-6-CDX30	●	●	6	30	25	25	25	150	56			26.0
	NDB E/r2525-8-CDX15	●	●	8	15	25	25	25	150	43			26.5
NDB E/r2525-8-CDX30	●	●	8	30	25	25	25	150	55			27.0	

Spare Parts	SCREW	WRENCH	SCREW	WRENCH

RR	NDB E/r1212	NT-ST076	NT-FT15		
	NDB E/r1616	NT-ST077	NT-FT15		
ST	NDB E/r1616			NT-SC001	NT-WR040
	NDB E/r2020			NT-SC001	NT-WR040
	NDB E/r2525			NT-SC002	NT-WR040

<h2 style="margin: 0;">NDB I</h2> <table border="1" style="width: 100%; text-align: center; font-weight: bold; margin: 5px 0;"> <tr> <td style="background-color: #0070C0; color: white;">P</td> <td style="background-color: #FFD700; color: black;">M</td> <td style="background-color: #DC143C; color: white;">K</td> <td style="background-color: #008000; color: white;">N</td> <td style="background-color: #800000; color: white;">S</td> <td style="background-color: #000000; color: white;">H</td> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td></td> <td></td> </tr> </table> <ul style="list-style-type: none"> · Tool holder for internal grooving and copying · Multiple overhang available for each size · Vortex technology for a perfect chip ejection · Internal coolant 	P	M	K	N	S	H	H	H	H	H				 <p style="text-align: right; margin-top: 5px;">right-hand shown</p>
P	M	K	N	S	H									
H	H	H	H											

	Designation	Stock		CW	CDX	DMIN	DCON	LF	WF	OHN	WT	MIID
		R	L									
INTERNAL	NDB I/1620V-2-CDX04	●	●	2	4	20	16	150	11.5	25	0.25	NDBD20
	NDB I/2025V-2-CDX06	●	●	2	6	25	20	180	14.5	30	0.40	NDBD20
	NDB I/2025V-3-CDX06	●	●	3	6	25	20	180	14.5	30	0.40	NDBD30
	NDB I/2532V-3-CDX08	●	●	3	8	32	25	200	19.0	40	0.70	NDBD30
	NDB I/3240V-3-CDX10	●	●	3	10	40	32	220	23.5	50	1.30	NDBD30
	NDB I/2532V-4-CDX08	●	●	4	8	32	25	200	19.0	40	0.70	NDBD40
	NDB I/3240V-4-CDX10	●	●	4	10	40	32	220	23.5	50	1.30	NDBD40

Spare Parts	SCREW 	WRENCH 
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RR	NDB I/1620	NT-ST050	NT-TX15
	NDB I/1600	NT-ST051	NT-TX20



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