



nixkoTOOLS

Drilling

CATALOGUE



DRILLING

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Carbide drills - NCD	.E66

DRILLING Grade table

A - TURNING	ISO 513	CARBIDE					
		PVD COATED			UNCOATED		
		DEX	DXP	DRS	DRS		
B - THREADING	P	P01					
		P10					
		P20	JP5630	JP5725			
		P30		JP5725	JP5530	JP8725	
		P40					
C - GROOVING	Steel						
	M	M01					
		M10					
		M20	JP5630		JP5530	JP9535	
		M30					
D - MILLING	Stainless steel						
		M40					
	K	K01					
	Cast iron		K10	JP7625	JP5725		
			K20		JP5725		
		K30			JP5530		
E - DRILLING	N	N01					
		N10					
		N20				JU6520	
		N30					
F - ACCESSORIES	S	S01					
		S10					
		S20			JP9535		
		S30					
G - SPARE PARTS	Heat resistance						

GRADE	SYSTEM	HARDNESS HV	COATING		APPLICATION	FEATURES
			TECHNOLOGY	COMPOSITION		
JP5725	DEX - DXP	1.840	PVD	AlTiN	P P15 P30	High performance grade for steel drilling with a perfect combination between toughness and wear resistance. A very good choice even for nodular cast iron machining.
					K K10 K30	
JP5630	DEX	1.700	PVD	TiSiN	P P30	First choice for stainless steel and free-cutting steels. Tough substrate and special coating with low friction coefficient specifically developed for sticky materials.
					M M30	
JP7625	DEX	1.840	PVD	TiAlCrN	K K10 K30	Very hard coating film specifically studied for abrasive materials machining. First choice for gray cast iron in combination with TE chamfered geometry.
JP5530	DRS	1.840	PVD	TiAlN	P P20 P40	Universal grade mainly for steel application but also available for ISO M and ISO K machining.
					M M25 M30	
					K K25 K30	
JP8725	DRS	1.840	PVD	AlCrN	P P15 P30	First choice for steel application. The new substrate contribute to a great performance increase compared to conventional product.
JP9535	DRS	1.640	PVD	TiAlN	M M20 M35	First choice for stainless steel machining under general cutting conditions. Also applicable on titanium thanks to a great stability at high temperature.
					S S15 S25	
JU6520	DRS	1.560	-	-	N N10 N30	Uncoated grade for non-ferrous materials. The micrograin substrate toughness allows the production of very sharp ground cutting edges.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

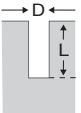







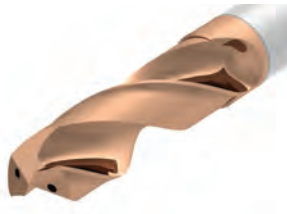














E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

	DRS		DRS PILOT		DEX	
	E6	E18	E24			
 DRS KAPR DEX DXP SIG° NCD SIG° SPOTdrill SIG°						
Tool diameter	Ø12.50 - Ø50.00		Ø18.00 - Ø30.00		Ø10.00 - Ø26.00	
L / D	2 - 3 - 4 - 5		6 - 9		3 - 5 (8 - 12 upon request)	
Coolant holes	✓		✓		✓	
Effective cutting edges	1		1		2	
Point angle	KAPR 85°		SIG pilot 118° - KAPR 87.5°		SIG 140°	
Workpiece material	P M K N		P M K N		P M K	
No. of corners	4		4		1	
No. of geometries	2		2 (periferic) - 1 (pilot)		4 (2 upon request)	
Special features	-		HSS center pilot		-	
Plain Surface	✓		✓		✓	
Slant Surface	✓		✗		✗	
Concave Surface	✓		✓		✓	
Convex Surface	✓		✓		✓	
Stacked Plates	✗		✗		✓	
Pipes	✓		✓		✓	
Half Hole	✓		✗		✗	
Hole Expansion	✓		✗		✗	
Precision	■ ■ □ □ □		■ ■ □ □ □		■ ■ ■ □ □	
Productivity	■ ■ ■ □ □		■ ■ ■ □ □		■ ■ ■ ■ ■	
Cost per hole	■ ■ □ □ □		■ ■ ■ □ □		■ ■ ■ ■ □	
Range	■ ■ ■ ■ □		■ ■ ■ □ □		■ ■ ■ ■ □	

      	DXP	NCD	SPOTDRILL
	□ E52	□ E66	□ E62
			 
Tool diameter	Ø30.00 - Ø60.00	Ø3.00 - Ø20.00	Ø14.00
L / D	3 - 6 - 8 - 10	3 - 5 (8 upon request)	-
Coolant holes	✓	both	✗
Effective cutting edge	2	2	2
Point angle	SIG pilot 140°	SIG 140°	SIG 90°
Workpiece material	P K	P M K S	P M K N
No. of corners	peripheral 2 / 3	1	4
No. of geometries	1	2	2
Special features	Chip split chipbreaker	-	-
Plain Surface 	✓	✓	Spotting 
Slant Surface 	✗	✗	
Concave Surface 	✓	✓	Engraving 
Convex Surface 	✓	✓	
Stacked Plates 	✓	✓	V-Grooving 
Pipes 	✓	✓	
Half Hole 	✗	✗	Chamfering 
Hole Expansion 	✗	✗	
Precision	■ ■ ■ □ □	■ ■ ■ ■ ■	
Productivity	■ ■ ■ ■ □	■ ■ ■ ■ □	
Cost per hole	■ ■ ■ ■ □	■ ■ ■ □ □	
Range	■ ■ ■ ■ ■	■ ■ ■ ■ □	

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

DRS DRILLS

High performance universal indexable drilling system with inserts

A - TURNING

B - THREADING

C - GROOVING

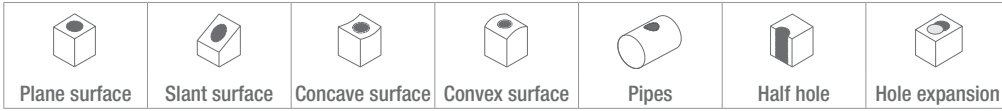
D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

APPLICATION



ISO APPLICATION FIELDS

P M K N

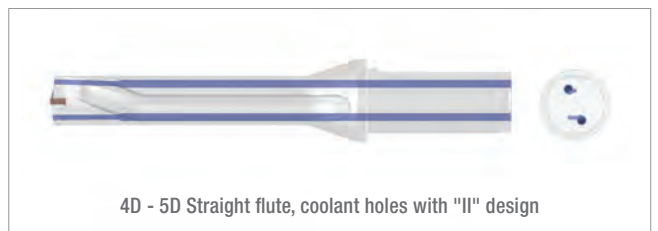
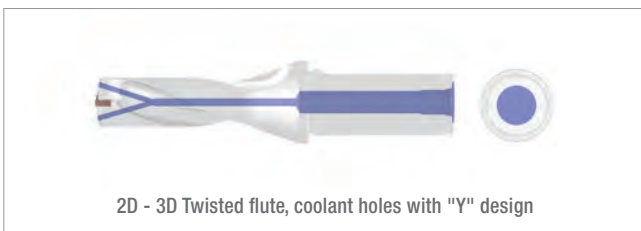
ADVANTAGES AND CHARACTERISTICS

- Highly universal drilling system suitable for diverse conditions
- Highly cost-efficient system
- Twisted flute style available in 2xD and 3xD, straight flute style in 4xD and 5xD to improve chip evacuation



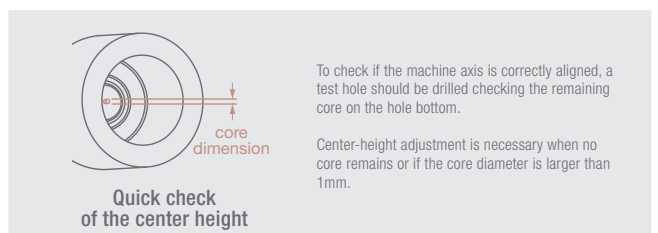
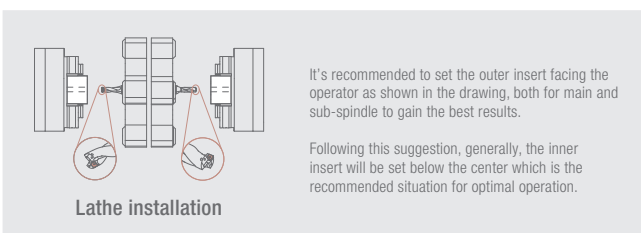
• Drilling bodies

- Weldon shank with internal coolant
- 2/ 3/ 4/ 5xD available from D13 to D50
- Special length and stepped body available upon request



• Inserts

- Available sizes 05/06/07/09/11/14
- Cemented carbide grades with PVD coatings or uncoated for N materials
- Geometries: GP, AL



<h1>2xD</h1>		
<h2>DRS drill</h2>		
<ul style="list-style-type: none"> • 2xD indexable drill body for SP inserts with helical flutes • All with coolant through • Please select insert size according to the drill diameter 		

Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX			MIID
NT-DRS-2D D12.50-S20-05	▽	12.5	20	94	44	26	0.4	0.5			SPoX05
NT-DRS-2D D13.00-S20-05	●	13	20	94	44	26	0.4	0.5			SPoX05
NT-DRS-2D D14.00-S20-05	●	14	20	96	46	28	0.4	0.5			SPoX05
NT-DRS-2D D15.00-S20-05	●	15	20	99	49	30	0.4	0.5			SPoX05
NT-DRS-2D D16.00-S25-06	●	16	25	108	52	32	0.5	0.5			SPoX06
NT-DRS-2D D17.00-S25-06	●	17	25	110	54	34	0.5	0.5			SPoX06
NT-DRS-2D D18.00-S25-06	●	18	25	113	57	36	0.5	0.5			SPoX06
NT-DRS-2D D19.00-S25-06	●	19	25	115	59	38	0.5	0.5			SPoX06
NT-DRS-2D D20.00-S25-06	●	20	25	119	63	40	0.5	0.5			SPoX06
NT-DRS-2D D21.00-S25-06	●	21	25	121	65	42	0.5	0.25			SPoX06
NT-DRS-2D D22.00-S25-07	●	22	25	123	67	44	0.5	0.5			SPoX07
NT-DRS-2D D23.00-S32-07	●	23	32	131	71	46	0.5	0.5			SPoX07
NT-DRS-2D D24.00-S32-07	●	24	32	134	74	48	0.5	0.5			SPoX07
NT-DRS-2D D25.00-S32-07	●	25	32	137	77	50	0.5	0.5			SPoX07
NT-DRS-2D D26.00-S32-07	●	26	32	139	79	52	0.6	0.25			SPoX07
NT-DRS-2D D27.00-S32-07	●	27	32	141	81	54	0.6	0.25			SPoX07
NT-DRS-2D D28.00-S32-09	●	28	32	144	84	56	0.8	0.5			SPoX09
NT-DRS-2D D29.00-S32-09	●	29	32	146	86	58	0.8	0.5			SPoX09
NT-DRS-2D D30.00-S32-09	●	30	32	151	91	60	0.8	0.5			SPoX09
NT-DRS-2D D31.00-S32-09	●	31	32	154	94	62	0.8	0.25			SPoX09
NT-DRS-2D D32.00-S32-09	●	32	32	156	96	64	0.8	0.25			SPoX09
NT-DRS-2D D33.00-S32-09	●	33	32	159	99	66	0.8	0.25			SPoX09
NT-DRS-2D D34.00-S40-11	●	34	40	171	101	68	0.9	0.5			SPoX11
NT-DRS-2D D35.00-S40-11	●	35	40	174	104	70	0.9	0.5			SPoX11
NT-DRS-2D D36.00-S40-11	●	36	40	177	107	72	0.9	0.5			SPoX11
NT-DRS-2D D37.00-S40-11	●	37	40	180	110	74	0.9	0.5			SPoX11
NT-DRS-2D D38.00-S40-11	●	38	40	183	113	76	0.9	0.5			SPoX11
NT-DRS-2D D39.00-S40-11	●	39	40	185	115	78	0.9	0.5			SPoX11
NT-DRS-2D D40.00-S40-11	●	40	40	188	118	80	0.9	0.25			SPoX11
NT-DRS-2D D41.00-S40-11	●	41	40	191	121	82	0.9	0.25			SPoX11
NT-DRS-2D D42.00-S40-14	●	42	40	193	123	84	1	0.5			SPoX14
NT-DRS-2D D43.00-S40-14	●	43	40	196	126	86	1	0.5			SPoX14
NT-DRS-2D D44.00-S40-14	●	44	40	198	128	88	1	0.5			SPoX14
NT-DRS-2D D45.00-S40-14	●	45	40	202	132	90	1	0.5			SPoX14
NT-DRS-2D D46.00-S40-14	●	46	40	205	135	92	1	0.5			SPoX14
NT-DRS-2D D47.00-S40-14	●	47	40	207	137	94	1	0.5			SPoX14
NT-DRS-2D D48.00-S40-14	●	48	40	210	140	96	1	0.25			SPoX14
NT-DRS-2D D49.00-S40-14	●	49	40	212	142	98	1	0.25			SPoX14
NT-DRS-2D D50.00-S40-14	●	50	40	215	145	100	1	0.25			SPoX14

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches	Spare parts	Insert screws	Flag wrenches
NT-DRS-2D D00.00-S00-05	NT-ST20043T06	NT-FTB06	NT-DRS-2D D00.00-S00-09	NT-ST35080T15	NT-FTB15
NT-DRS-2D D00.00-S00-06	NT-ST22055T06	NT-FTB06	NT-DRS-2D D00.00-S00-11	NT-ST40100T15	NT-FTB15
NT-DRS-2D D00.00-S00-07	NT-ST25065T07	NT-FTB07	NT-DRS-2D D00.00-S00-14	NT-ST50108T20	NT-FTB20

A - TURNING

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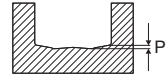
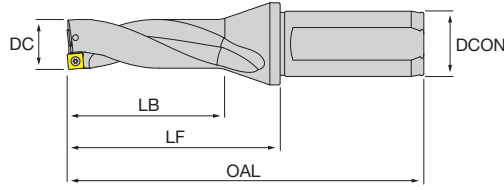
F - ACCESSORIES

G - SPARE PARTS

3xD

DRS drill

- 3xD indexable drill body for SP inserts with helical flutes
- All with coolant through
- Please select insert size according to the drill diameter



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES



G - SPARE PARTS

Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX		MIID
NT-DRS-3D D12.50-S20-05	●	12.5	20	107	57	39	0.4	0.5		SPoX05
NT-DRS-3D D13.00-S20-05	●	13	20	107	57	39	0.4	0.5		SPoX05
NT-DRS-3D D13.50-S20-05	●	13.5	20	110	60	42	0.4	0.5		SPoX05
NT-DRS-3D D14.00-S20-05	●	14	20	110	60	42	0.4	0.5		SPoX05
NT-DRS-3D D14.50-S20-05	●	14.5	20	114	64	45	0.4	0.5		SPoX05
NT-DRS-3D D15.00-S20-05	●	15	20	114	64	45	0.4	0.5		SPoX05
NT-DRS-3D D15.50-S25-06	●	15.5	25	124	68	48	0.5	0.5		SPoX06
NT-DRS-3D D16.00-S25-06	●	16	25	124	68	48	0.5	0.5		SPoX06
NT-DRS-3D D16.50-S25-06	●	16.5	25	127	71	51	0.5	0.5		SPoX06
NT-DRS-3D D17.00-S25-06	●	17	25	127	71	51	0.5	0.5		SPoX06
NT-DRS-3D D17.50-S25-06	●	17.5	25	131	75	54	0.5	0.5		SPoX06
NT-DRS-3D D18.00-S25-06	●	18	25	131	75	54	0.5	0.5		SPoX06
NT-DRS-3D D18.50-S25-06	●	18.5	25	134	78	57	0.5	0.5		SPoX06
NT-DRS-3D D19.00-S25-06	●	19	25	134	78	57	0.5	0.5		SPoX06
NT-DRS-3D D19.50-S25-06	●	19.5	25	139	83	60	0.5	0.5		SPoX06
NT-DRS-3D D20.00-S25-06	●	20	25	139	83	60	0.5	0.5		SPoX06
NT-DRS-3D D20.50-S25-06	●	20.5	25	142	86	63	0.5	0.25		SPoX06
NT-DRS-3D D21.00-S25-06	●	21	25	142	86	63	0.5	0.25		SPoX06
NT-DRS-3D D21.50-S25-06	●	21.5	25	145	89	66	0.5	0.25		SPoX06
NT-DRS-3D D22.00-S25-07	●	22	25	145	89	66	0.5	0.5		SPoX07
NT-DRS-3D D22.50-S32-07	●	22.5	32	154	94	69	0.5	0.5		SPoX07
NT-DRS-3D D23.00-S32-07	●	23	32	154	94	69	0.5	0.5		SPoX07
NT-DRS-3D D23.50-S32-07	●	23.5	32	158	98	72	0.5	0.5		SPoX07
NT-DRS-3D D24.00-S32-07	●	24	32	158	98	72	0.5	0.5		SPoX07
NT-DRS-3D D24.50-S32-07	●	24.5	32	162	102	75	0.5	0.5		SPoX07
NT-DRS-3D D25.00-S32-07	●	25	32	162	102	75	0.5	0.5		SPoX07
NT-DRS-3D D25.50-S32-07	●	25.5	32	165	105	78	0.6	0.5		SPoX07
NT-DRS-3D D26.00-S32-07	●	26	32	165	105	78	0.6	0.25		SPoX07
NT-DRS-3D D26.50-S32-07	●	26.5	32	168	108	81	0.6	0.25		SPoX07
NT-DRS-3D D27.00-S32-07	●	27	32	168	108	81	0.6	0.25		SPoX07
NT-DRS-3D D27.50-S32-07	●	27.5	32	172	112	84	0.6	0.25		SPoX07
NT-DRS-3D D28.00-S32-09	●	28	32	172	112	84	0.8	0.5		SPoX09
NT-DRS-3D D28.50-S32-09	●	28.5	32	175	115	87	0.8	0.5		SPoX09
NT-DRS-3D D29.00-S32-09	●	29	32	175	115	87	0.8	0.5		SPoX09
NT-DRS-3D D29.50-S32-09	●	29.5	32	181	121	90	0.8	0.5		SPoX09
NT-DRS-3D D30.00-S32-09	●	30	32	181	121	90	0.8	0.5		SPoX09
NT-DRS-3D D31.00-S32-09	●	31	32	185	125	93	0.8	0.25		SPoX09
NT-DRS-3D D32.00-S32-09	●	32	32	188	128	96	0.8	0.25		SPoX09
NT-DRS-3D D33.00-S32-09	●	33	32	192	132	99	0.8	0.25		SPoX09
NT-DRS-3D D34.00-S40-11	●	34	40	205	135	102	0.9	0.5		SPoX11
NT-DRS-3D D35.00-S40-11	●	35	40	209	139	105	0.9	0.5		SPoX11
NT-DRS-3D D36.00-S40-11	●	36	40	213	143	108	0.9	0.5		SPoX11
NT-DRS-3D D37.00-S40-11	●	37	40	217	147	111	0.9	0.5		SPoX11
NT-DRS-3D D38.00-S40-11	●	38	40	221	151	114	0.9	0.5		SPoX11
NT-DRS-3D D39.00-S40-11	●	39	40	224	154	117	0.9	0.25		SPoX11
NT-DRS-3D D40.00-S40-11	●	40	40	228	158	120	0.9	0.25		SPoX11
NT-DRS-3D D41.00-S40-11	●	41	40	232	162	123	0.9	0.5		SPoX11

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX			MIID
NT-DRS-3D D42.00-S40-14	●	42	40	235	165	126	1	0.5			SPoX14
NT-DRS-3D D43.00-S40-14	●	43	40	239	169	129	1	0.5			SPoX14
NT-DRS-3D D44.00-S40-14	●	44	40	242	172	132	1	0.5			SPoX14
NT-DRS-3D D45.00-S40-14	●	45	40	247	177	135	1	0.5			SPoX14
NT-DRS-3D D46.00-S40-14	●	46	40	251	181	138	1	0.5			SPoX14
NT-DRS-3D D47.00-S40-14	●	47	40	254	184	141	1	0.5			SPoX14
NT-DRS-3D D48.00-S40-14	●	48	40	258	188	144	1	0.25			SPoX14
NT-DRS-3D D49.00-S40-14	●	49	40	261	191	147	1	0.25			SPoX14
NT-DRS-3D D50.00-S40-14	●	50	40	265	195	150	1	0.25			SPoX14

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
		
NT-DRS-3D D _{00.00} -S ₀₀ -05	NT-ST20043T06	NT-FTB06
NT-DRS-3D D _{00.00} -S ₀₀ -06	NT-ST22055T06	NT-FTB06
NT-DRS-3D D _{00.00} -S ₀₀ -07	NT-ST25065T07	NT-FTB07
NT-DRS-3D D _{00.00} -S ₀₀ -09	NT-ST35080T15	NT-FTB15
NT-DRS-3D D _{00.00} -S ₀₀ -11	NT-ST40100T15	NT-FTB15
NT-DRS-3D D _{00.00} -S ₀₀ -14	NT-ST50108T20	NT-FTB20

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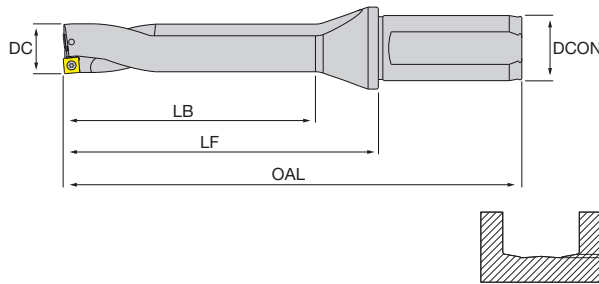
F - ACCESSORIES

G - SPARE PARTS

4xD

DRS drill

- 4xD indexable drill body for SP inserts with straight flutes
- All with coolant through
- Please select insert size according to the drill diameter





Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX		MIID
NT-DRS-4D D12.50-S20-05	●	12.5	20	120	70	52	0.4	0.5		SPoX05
NT-DRS-4D D13.00-S20-05	●	13	20	120	70	52	0.4	0.5		SPoX05
NT-DRS-4D D13.50-S20-05	●	13.5	20	124	74	56	0.4	0.5		SPoX05
NT-DRS-4D D14.00-S20-05	●	14	20	124	74	56	0.4	0.5		SPoX05
NT-DRS-4D D14.50-S20-05	●	14.5	20	129	79	60	0.4	0.5		SPoX05
NT-DRS-4D D15.00-S20-05	●	15	20	129	79	60	0.4	0.5		SPoX05
NT-DRS-4D D15.50-S25-06	●	15.5	25	140	84	64	0.5	0.5		SPoX06
NT-DRS-4D D16.00-S25-06	●	16	25	140	84	64	0.5	0.5		SPoX06
NT-DRS-4D D16.50-S25-06	●	16.5	25	144	88	68	0.5	0.5		SPoX06
NT-DRS-4D D17.00-S25-06	●	17	25	144	88	68	0.5	0.5		SPoX06
NT-DRS-4D D17.50-S25-06	●	17.5	25	149	93	72	0.5	0.5		SPoX06
NT-DRS-4D D18.00-S25-06	●	18	25	149	93	72	0.5	0.5		SPoX06
NT-DRS-4D D18.50-S25-06	●	18.5	25	153	97	76	0.5	0.5		SPoX06
NT-DRS-4D D19.00-S25-06	●	19	25	153	97	76	0.5	0.5		SPoX06
NT-DRS-4D D19.50-S25-06	●	19.5	25	159	103	80	0.5	0.5		SPoX06
NT-DRS-4D D20.00-S25-06	●	20	25	159	103	80	0.5	0.5		SPoX06
NT-DRS-4D D20.50-S25-06	●	20.5	25	163	107	84	0.5	0.25		SPoX06
NT-DRS-4D D21.00-S25-06	●	21	25	163	107	84	0.5	0.25		SPoX06
NT-DRS-4D D21.50-S25-06	●	21.5	25	167	111	88	0.5	0.25		SPoX06
NT-DRS-4D D22.00-S25-07	●	22	25	167	111	88	0.5	0.5		SPoX07
NT-DRS-4D D22.50-S32-07	●	22.5	32	177	117	92	0.5	0.5		SPoX07
NT-DRS-4D D23.00-S32-07	●	23	32	177	117	92	0.5	0.5		SPoX07
NT-DRS-4D D23.50-S32-07	●	23.5	32	182	122	96	0.5	0.5		SPoX07
NT-DRS-4D D24.00-S32-07	●	24	32	182	122	96	0.5	0.5		SPoX07
NT-DRS-4D D24.50-S32-07	●	24.5	32	187	127	100	0.5	0.5		SPoX07
NT-DRS-4D D25.00-S32-07	●	25	32	187	127	100	0.5	0.5		SPoX07
NT-DRS-4D D25.50-S32-07	●	25.5	32	191	131	104	0.6	0.5		SPoX07
NT-DRS-4D D26.00-S32-07	●	26	32	191	131	104	0.6	0.25		SPoX07
NT-DRS-4D D26.50-S32-07	●	26.5	32	195	135	108	0.6	0.25		SPoX07
NT-DRS-4D D27.00-S32-07	●	27	32	195	135	108	0.6	0.25		SPoX07
NT-DRS-4D D27.50-S32-07	●	27.5	32	200	140	112	0.6	0.25		SPoX07
NT-DRS-4D D28.00-S32-09	●	28	32	200	140	112	0.8	0.5		SPoX09
NT-DRS-4D D28.50-S32-09	●	28.5	32	204	144	116	0.8	0.5		SPoX09
NT-DRS-4D D29.00-S32-09	●	29	32	204	144	116	0.8	0.5		SPoX09
NT-DRS-4D D29.50-S32-09	●	29.5	32	211	151	120	0.8	0.5		SPoX09
NT-DRS-4D D30.00-S32-09	●	30	32	211	151	120	0.8	0.5		SPoX09
NT-DRS-4D D31.00-S32-09	●	31	32	216	156	124	0.8	0.25		SPoX09
NT-DRS-4D D32.00-S32-09	●	32	32	220	160	128	0.8	0.25		SPoX09
NT-DRS-4D D33.00-S32-09	●	33	32	225	165	132	0.8	0.25		SPoX09
NT-DRS-4D D34.00-S40-11	●	34	40	239	169	136	0.9	0.5		SPoX11
NT-DRS-4D D35.00-S40-11	●	35	40	244	174	140	0.9	0.5		SPoX11
NT-DRS-4D D36.00-S40-11	●	36	40	249	179	144	0.9	0.5		SPoX11
NT-DRS-4D D37.00-S40-11	●	37	40	254	184	148	0.9	0.5		SPoX11
NT-DRS-4D D38.00-S40-11	●	38	40	259	189	152	0.9	0.5		SPoX11
NT-DRS-4D D39.00-S40-11	●	39	40	263	193	156	0.9	0.25		SPoX11
NT-DRS-4D D40.00-S40-11	●	40	40	268	198	160	0.9	0.25		SPoX11
NT-DRS-4D D41.00-S40-11	▲	41	40	273	203	164	0.9	0.5		SPoX11

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX			MIID
NT-DRS-4D D42.00-S40-14	●	42	40	277	207	168	1	0.5			SPoX14
NT-DRS-4D D43.00-S40-14	●	43	40	282	212	172	1	0.5			SPoX14
NT-DRS-4D D44.00-S40-14	●	44	40	286	216	176	1	0.5			SPoX14
NT-DRS-4D D45.00-S40-14	●	45	40	292	222	180	1	0.5			SPoX14
NT-DRS-4D D46.00-S40-14	●	46	40	297	227	184	1	0.5			SPoX14
NT-DRS-4D D47.00-S40-14	●	47	40	301	231	188	1	0.5			SPoX14
NT-DRS-4D D48.00-S40-14	●	48	40	306	236	192	1	0.25			SPoX14
NT-DRS-4D D49.00-S40-14	▲	49	40	310	240	196	1	0.25			SPoX14
NT-DRS-4D D50.00-S40-14	●	50	40	315	245	200	1	0.25			SPoX14

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
		
NT-DRS-4D D _{00.00} -S ₀₀ -05	NT-ST20043T06	NT-FTB06
NT-DRS-4D D _{00.00} -S ₀₀ -06	NT-ST22055T06	NT-FTB06
NT-DRS-4D D _{00.00} -S ₀₀ -07	NT-ST25065T07	NT-FTB07
NT-DRS-4D D _{00.00} -S ₀₀ -09	NT-ST35080T15	NT-FTB15
NT-DRS-4D D _{00.00} -S ₀₀ -11	NT-ST40100T15	NT-FTB15
NT-DRS-4D D _{00.00} -S ₀₀ -14	NT-ST50108T20	NT-FTB20

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

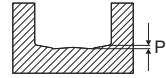
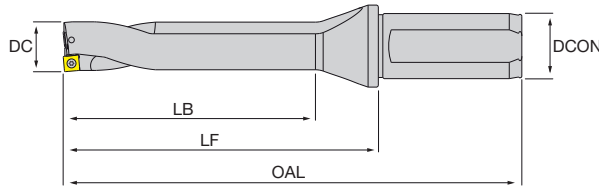
F - ACCESSORIES

G - SPARE PARTS

5xD

DRS drill

- 5xD indexable drill body for SP inserts with straight flutes
- All with coolant through
- Please select insert size according to the drill diameter



Designation	Stock	DC	DCON	OAL	LF	LB	PL	ADJLX			MIID
NT-DRS-5D D13.00-S20-05	●	13	20	133	83	65	0.4	0.5			SPoX05
NT-DRS-5D D14.00-S20-05	●	14	20	138	88	70	0.4	0.5			SPoX05
NT-DRS-5D D15.00-S20-05	●	15	20	144	94	75	0.4	0.5			SPoX05
NT-DRS-5D D16.00-S25-06	●	16	25	156	100	80	0.5	0.5			SPoX06
NT-DRS-5D D17.00-S25-06	●	17	25	161	105	85	0.5	0.5			SPoX06
NT-DRS-5D D18.00-S25-06	●	18	25	167	111	90	0.5	0.5			SPoX06
NT-DRS-5D D19.00-S25-06	●	19	25	172	116	95	0.5	0.5			SPoX06
NT-DRS-5D D20.00-S25-06	●	20	25	179	123	100	0.5	0.5			SPoX06
NT-DRS-5D D21.00-S25-06	●	21	25	184	128	105	0.5	0.25			SPoX06
NT-DRS-5D D22.00-S25-07	●	22	25	189	133	110	0.5	0.5			SPoX07
NT-DRS-5D D23.00-S32-07	●	23	32	200	140	115	0.5	0.5			SPoX07
NT-DRS-5D D24.00-S32-07	●	24	32	206	146	120	0.5	0.5			SPoX07
NT-DRS-5D D25.00-S32-07	●	25	32	212	152	125	0.5	0.5			SPoX07
NT-DRS-5D D26.00-S32-07	●	26	32	217	157	130	0.6	0.25			SPoX07
NT-DRS-5D D27.00-S32-07	●	27	32	222	162	135	0.6	0.25			SPoX07
NT-DRS-5D D28.00-S32-09	●	28	32	228	168	140	0.8	0.5			SPoX09
NT-DRS-5D D29.00-S32-09	●	29	32	233	173	145	0.8	0.5			SPoX09
NT-DRS-5D D30.00-S32-09	●	30	32	241	181	150	0.8	0.5			SPoX09
NT-DRS-5D D31.00-S32-09	●	31	32	247	187	155	0.8	0.25			SPoX09
NT-DRS-5D D32.00-S32-09	●	32	32	252	192	160	0.8	0.25			SPoX09
NT-DRS-5D D33.00-S32-09	●	33	32	258	198	165	0.8	0.25			SPoX09
NT-DRS-5D D34.00-S40-11	●	34	40	273	203	170	0.9	0.5			SPoX11
NT-DRS-5D D35.00-S40-11	●	35	40	279	209	175	0.9	0.5			SPoX11
NT-DRS-5D D36.00-S40-11	●	36	40	285	215	180	0.9	0.5			SPoX11
NT-DRS-5D D37.00-S40-11	●	37	40	291	221	185	0.9	0.5			SPoX11
NT-DRS-5D D38.00-S40-11	●	38	40	297	227	190	0.9	0.5			SPoX11
NT-DRS-5D D39.00-S40-11	●	39	40	302	232	195	0.9	0.5			SPoX11
NT-DRS-5D D40.00-S40-11	●	40	40	308	238	200	0.9	0.25			SPoX11
NT-DRS-5D D41.00-S40-11	●	41	40	314	244	205	0.9	0.25			SPoX11
NT-DRS-5D D42.00-S40-14	●	42	40	319	249	210	1	0.5			SPoX14
NT-DRS-5D D43.00-S40-14	●	43	40	325	255	215	1	0.5			SPoX14
NT-DRS-5D D44.00-S40-14	●	44	40	330	260	220	1	0.5			SPoX14
NT-DRS-5D D45.00-S40-14	●	45	40	337	267	225	1	0.5			SPoX14
NT-DRS-5D D46.00-S40-14	●	46	40	343	273	230	1	0.5			SPoX14
NT-DRS-5D D47.00-S40-14	●	47	40	348	278	235	1	0.5			SPoX14
NT-DRS-5D D48.00-S40-14	●	48	40	354	284	240	1	0.25			SPoX14
NT-DRS-5D D49.00-S40-14	●	49	40	359	289	245	1	0.25			SPoX14
NT-DRS-5D D50.00-S40-14	●	50	40	365	295	250	1	0.25			SPoX14

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches	Spare parts	Insert screws	Flag wrenches
NT-DRS-5D D _{00.00} -S ₀₀ -05	NT-ST20043T06	NT-FTB06	NT-DRS-5D D _{00.00} -S ₀₀ -09	NT-ST35080T15	NT-FTB15
NT-DRS-5D D _{00.00} -S ₀₀ -06	NT-ST22055T06	NT-FTB06	NT-DRS-5D D _{00.00} -S ₀₀ -11	NT-ST40100T15	NT-FTB15
NT-DRS-5D D _{00.00} -S ₀₀ -07	NT-ST25065T07	NT-FTB07	NT-DRS-5D D _{00.00} -S ₀₀ -14	NT-ST50108T20	NT-FTB20

<h1>SPoX</h1>	HF: Micrograin carbide PVD: Physical vapour deposition					HF PVD	HF PVD	HF PVD	HF PVD	HF				
	<h2>DRS drill</h2>					JP5530	JP8725	JP9535	JP9635	JU6520				
<ul style="list-style-type: none"> General purpose type or fine polished sharp geometries for aluminum or non-ferrous materials available Diverse PVD coated carbide grades available Inserts could also be mounted on DRS Pilot type and ChamferSquare milling bodies 	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: 1st choice)			
					P	120 240	120 240							
					M	40 100		80 160	80 160					
					K	120 180								
					N					240 400				
					S									
					H									

	Designation	RE	IC	S	D1	LE	Stock						
							●	○	▲	▽			
GENERAL	GP P M K												
		SPMX050204-GP	0.4	5	2.38	2.5	4.2	●	●	●			
		SPMX060204-GP	0.4	6	2.38	2.8	5.2	●	●	●			
		SPMX07T308-GP	0.8	7.94	3.97	2.8	6.34	●	●	●			
		SPMX090408-GP	0.8	9.8	4.3	4.2	8.2	●	●	▲	●		
		SPMX110408-GP	0.8	11.5	4.76	4.4	9.9	●	●	●			
		SPMX140512-GP	1.2	14.3	5.2	5.5	11.9	●	●	▲	●		
ALUMINIUM	AL N												
		SPGX050204-AL	0.4	5	2.38	2.5	4.2					●	
		SPGX060204-AL	0.4	6	2.38	2.8	5.2					●	
		SPGX07T308-AL	0.8	7.94	3.97	2.8	6.34					●	
		SPGX090408-AL	0.8	9.8	4.3	4.2	8.2					●	
		SPGX110408-AL	0.8	11.5	4.76	4.4	9.9					●	
		SPGX140512-AL	1.2	14.3	5.2	5.5	11.9					●	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	L/D	DC 12.50 ÷ 15.00			DC 15.50 ÷ 21.50			DC 22.00 ÷ 27.50		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	2xD - 3xD	0.05	0.07	0.09	0.05	0.08	0.11	0.05	0.09	0.13
				4xD	0.04	0.06	0.08	0.04	0.07	0.10	0.04	0.08	0.12
				5xD	0.04	0.05	0.06	0.04	0.06	0.08	0.04	0.07	0.10
B - THREADING	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	2xD - 3xD	0.07	0.10	0.13	0.07	0.11	0.15	0.09	0.13	0.17
				4xD	0.06	0.09	0.12	0.06	0.10	0.14	0.08	0.12	0.16
				5xD	0.06	0.08	0.10	0.06	0.09	0.12	0.08	0.11	0.14
C - GROOVING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	2xD - 3xD	0.07	0.09	0.11	0.07	0.10	0.13	0.09	0.12	0.15
				4xD	0.06	0.08	0.10	0.06	0.09	0.12	0.08	0.11	0.14
				5xD	0.06	0.07	0.08	0.06	0.08	0.10	0.08	0.10	0.12
D - MILLING	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	2xD - 3xD	0.06	0.09	0.12	0.06	0.10	0.14	0.06	0.11	0.16
				4xD	0.05	0.08	0.11	0.05	0.09	0.13	0.05	0.10	0.15
				5xD	0.05	0.06	0.07	0.05	0.08	0.11	0.05	0.09	0.13
E - DRILLING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	2xD - 3xD	0.05	0.08	0.11	0.05	0.09	0.13	0.05	0.10	0.15
				4xD	0.04	0.07	0.10	0.04	0.08	0.12	0.04	0.09	0.14
				5xD	0.04	0.06	0.08	0.04	0.07	0.10	0.04	0.08	0.12
F - ACCESSORIES	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	2xD - 3xD	0.06	0.08	0.10	0.06	0.09	0.12	0.06	0.10	0.14
				4xD	0.05	0.07	0.09	0.05	0.08	0.11	0.05	0.09	0.13
				5xD	0.05	0.06	0.07	0.05	0.06	0.07	0.05	0.08	0.11
G - SPARE PARTS	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		2xD - 3xD	0.05	0.07	0.09	0.05	0.08	0.11	0.05	0.09	0.13
				4xD	0.04	0.06	0.08	0.04	0.07	0.10	0.04	0.08	0.12
				5xD	0.04	0.05	0.06	0.04	0.06	0.08	0.04	0.07	0.10
H1	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	2xD - 3xD	0.07	0.10	0.13	0.09	0.13	0.17	0.11	0.15	0.19
				4xD	0.06	0.09	0.12	0.08	0.12	0.16	0.10	0.14	0.18
				5xD	0.06	0.08	0.10	0.08	0.11	0.14	0.10	0.13	0.16
H2	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	2xD - 3xD	0.07	0.09	0.11	0.08	0.12	0.16	0.09	0.14	0.19
				4xD	0.06	0.08	0.10	0.07	0.11	0.15	0.08	0.13	0.18
				5xD	0.06	0.07	0.08	0.07	0.10	0.13	0.08	0.12	0.16
H3	N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		2xD - 3xD	0.07	0.11	0.15	0.07	0.12	0.17	0.09	0.14	0.19
				4xD	0.06	0.10	0.14	0.06	0.11	0.16	0.08	0.13	0.18
				5xD	0.06	0.09	0.12	0.06	0.10	0.14	0.08	0.12	0.16
H4	N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AlSi12)		2xD - 3xD	0.07	0.10	0.13	0.07	0.11	0.15	0.09	0.13	0.17
				4xD	0.06	0.09	0.12	0.06	0.10	0.14	0.08	0.12	0.16
				5xD	0.06	0.08	0.10	0.06	0.09	0.12	0.08	0.11	0.14

Complete workpiece materials p. H1.

(fn: mm/rev)

DC 28.00 ÷ 33.00			DC 34.00 ÷ 41.00			DC 42.00 ÷ 50.00					
min	start	max	min	start	max	min	start	max			
0.06	0.10	0.14	0.07	0.11	0.15	0.07	0.12	0.17			
0.05	0.09	0.13	0.06	0.10	0.14	0.06	0.11	0.16			
0.05	0.08	0.11	0.06	0.09	0.12	0.06	0.10	0.14			
0.09	0.14	0.19	0.11	0.16	0.21	0.11	0.17	0.23			
0.08	0.13	0.18	0.10	0.15	0.20	0.10	0.16	0.22			
0.08	0.12	0.16	0.10	0.14	0.18	0.10	0.15	0.20			
0.09	0.13	0.17	0.09	0.14	0.19	0.11	0.16	0.21			
0.08	0.12	0.16	0.08	0.13	0.18	0.10	0.15	0.20			
0.08	0.11	0.14	0.08	0.12	0.16	0.10	0.14	0.18			
0.07	0.12	0.17	0.08	0.12	0.18	0.09	0.14	0.19			
0.06	0.11	0.16	0.07	0.11	0.17	0.08	0.13	0.18			
0.06	0.10	0.14	0.07	0.10	0.13	0.08	0.12	0.16			
0.06	0.11	0.16	0.07	0.12	0.17	0.09	0.13	0.17			
0.05	0.10	0.15	0.06	0.11	0.16	0.08	0.12	0.16			
0.05	0.09	0.13	0.06	0.10	0.14	0.08	0.11	0.14			
0.07	0.11	0.15	0.08	0.12	0.16	0.09	0.13	0.17			
0.06	0.10	0.14	0.07	0.11	0.15	0.08	0.12	0.16			
0.06	0.09	0.12	0.07	0.10	0.13	0.08	0.11	0.14			
0.06	0.10	0.14	0.07	0.11	0.15	0.09	0.12	0.15			
0.05	0.09	0.13	0.06	0.10	0.14	0.08	0.11	0.14			
0.05	0.08	0.11	0.06	0.09	0.12	0.08	0.10	0.12			
0.11	0.17	0.23	0.13	0.19	0.25	0.15	0.21	0.27			
0.10	0.16	0.22	0.12	0.18	0.24	0.14	0.20	0.26			
0.10	0.15	0.20	0.12	0.17	0.22	0.14	0.19	0.24			
0.11	0.16	0.21	0.13	0.17	0.21	0.15	0.19	0.23			
0.10	0.15	0.20	0.12	0.16	0.20	0.14	0.18	0.22			
0.10	0.14	0.18	0.12	0.15	0.18	0.14	0.17	0.20			
0.09	0.15	0.21	0.11	0.17	0.23	0.13	0.18	0.23			
0.08	0.14	0.20	0.10	0.16	0.22	0.12	0.17	0.22			
0.08	0.13	0.18	0.10	0.15	0.20	0.12	0.16	0.20			
0.09	0.14	0.19	0.11	0.16	0.21	0.13	0.17	0.21			
0.08	0.13	0.18	0.10	0.15	0.20	0.12	0.16	0.20			
0.08	0.12	0.16	0.10	0.14	0.18	0.12	0.15	0.18			

Complete workpiece materials p. H1.

(fn: mm/rev)

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

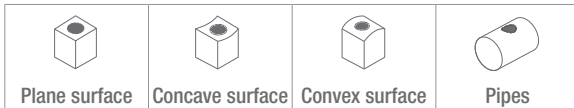
ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530			JP8725		
				min	start	max	min	start	max
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	2XD ÷ 5XD	120	180	240	120	180	240
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	2XD ÷ 5XD	100	150	200	100	150	200
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	2XD ÷ 5XD	80	120	160	80	120	160
ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530			JP9535		
				min	start	max	min	start	max
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	2XD ÷ 5XD	50	90	130	80	120	160
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	2XD ÷ 5XD	-	-	-	60	90	120
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	2XD ÷ 5XD	40	70	100	80	120	160
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		2XD ÷ 5XD	-	-	-	60	100	140
ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530					
				min	start	max			
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	2XD ÷ 5XD	120	150	180			
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	2XD ÷ 5XD	100	120	140			
ISO 513	MATERIAL	HARDNESS HB	L/D	JU6520					
				min	start	max			
N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		2XD ÷ 5XD	240	320	400			
N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AlSi12)		2XD ÷ 5XD	160	230	300			

Complete workpiece materials p. H1.

DRS PILOT

For extra deep holes - High performance indexable drilling system

APPLICATION



ISO APPLICATION FIELDS

P M K N

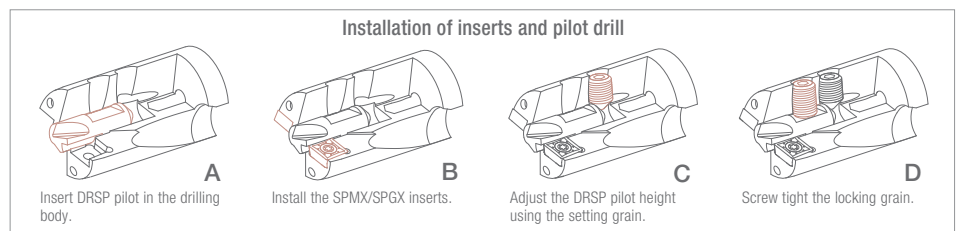
ADVANTAGES AND CHARACTERISTICS

- Highly universal drilling system suitable for diverse conditions
- Highly cost-efficient system for deep hole drilling
- The use of pilot provides better centering effect
- Straight flute design improves chip evacuation and strengthens the body



• Drilling bodies

- Weldon shank with internal coolant
- 6xD and 9xD available from D18 to D30
- Special length and stepped body available upon request



 For pilot adjustment see page E22.

• Inserts

- Available sizes 05/06/07
- Cemented carbide grades with PVD coatings or uncoated for N materials
- Geometries: GP, AL
- Pilot drill made of coated premium HSS



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

6xD

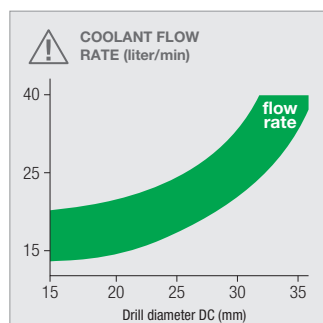
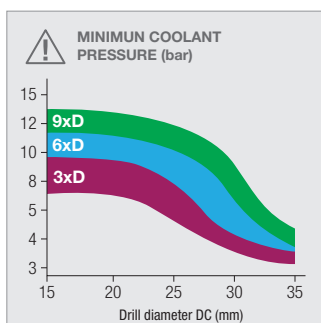
DRS pilot

- 6xD indexable drill body with pilot and seats for SP inserts with straight flutes
- All with coolant through
- Please select insert and pilot size according to the drill diameter

Designation	Stock	DC	DCON	OAL	LF	LB				PILOT	MIID
NT-DRS-6D D18.00-S25-05P6	●	18	25	191	135	112				DRSP06	SPoX05
NT-DRS-6D D19.00-S25-05P6	●	19	25	197	141	118				DRSP06	SPoX05
NT-DRS-6D D20.00-S25-06P6	●	20	25	203	147	124				DRSP06	SPoX06
NT-DRS-6D D21.00-S25-06P6	●	21	25	209	153	130				DRSP06	SPoX06
NT-DRS-6D D22.00-S25-06P6	●	22	25	215	159	136				DRSP06	SPoX06
NT-DRS-6D D23.00-S32-06P6	●	23	32	228	168	142				DRSP06	SPoX06
NT-DRS-6D D24.00-S32-06P6	●	24	32	234	174	148				DRSP06	SPoX06
NT-DRS-6D D25.00-S32-06P6	●	25	32	240	180	154				DRSP06	SPoX06
NT-DRS-6D D26.00-S32-07P8	●	26	32	246	186	160				DRSP08	SPoX07
NT-DRS-6D D27.00-S32-07P8	●	27	32	252	192	166				DRSP08	SPoX07
NT-DRS-6D D28.00-S32-07P8	●	28	32	258	198	172				DRSP08	SPoX07
NT-DRS-6D D29.00-S32-07P8	●	29	32	264	204	178				DRSP08	SPoX07
NT-DRS-6D D30.00-S32-07P8	●	30	32	270	210	184				DRSP08	SPoX07

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches	Locking grains	Setting grains	L wrench
NT-DRS-6D (DC 18÷19)	NT-ST20043T06	NT-FTB06	NT-ST042	NT-ST043	NT-WR025
NT-DRS-6D (DC 20÷22)	NT-ST22055T06	NT-FTB06	NT-ST042	NT-ST043	NT-WR025
NT-DRS-6D (DC 23÷25)	NT-ST22055T06	NT-FTB06	NT-ST044	NT-ST045	NT-WR025
NT-DRS-6D (DC 26÷30)	NT-ST25065T07	NT-FTB07	NT-ST046	NT-ST047	NT-WR030

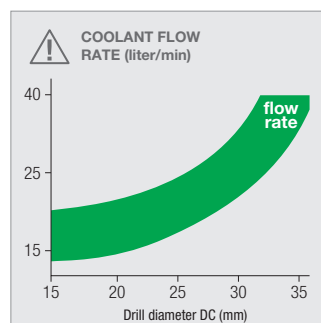
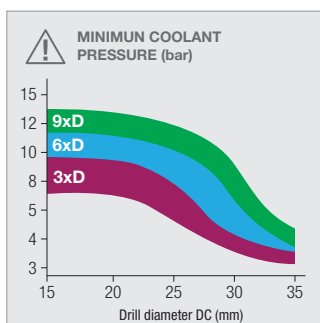


<h1>9xD</h1>		
<h2>DRS pilot</h2>		
<ul style="list-style-type: none"> • 9xD indexable drill body with pilot and seats for SP inserts with straight flutes • All with coolant through • Please select insert and pilot size according to the drill diameter 		

Designation	Stock	DC	DCON	OAL	LF	LB				PILOT	MIID
NT-DRS-9D D18.00-S25-05P6	●	18	25	245	189	166				DRSP06	SPoX05
NT-DRS-9D D19.00-S25-05P6	●	19	25	254	198	175				DRSP06	SPoX05
NT-DRS-9D D20.00-S25-06P6	●	20	25	263	207	184				DRSP06	SPoX06
NT-DRS-9D D21.00-S25-06P6	●	21	25	272	216	193				DRSP06	SPoX06
NT-DRS-9D D22.00-S25-06P6	●	22	25	281	225	202				DRSP06	SPoX06
NT-DRS-9D D23.00-S32-06P6	●	23	32	297	237	211				DRSP06	SPoX06
NT-DRS-9D D24.00-S32-06P6	●	24	32	306	246	220				DRSP06	SPoX06
NT-DRS-9D D25.00-S32-06P6	●	25	32	315	255	229				DRSP06	SPoX06
NT-DRS-9D D26.00-S32-07P8	●	26	32	324	264	238				DRSP08	SPoX07
NT-DRS-9D D27.00-S32-07P8	●	27	32	333	273	247				DRSP08	SPoX07
NT-DRS-9D D28.00-S32-07P8	●	28	32	342	282	256				DRSP08	SPoX07
NT-DRS-9D D29.00-S32-07P8	●	29	32	351	291	265				DRSP08	SPoX07
NT-DRS-9D D30.00-S32-07P8	●	30	32	360	300	274				DRSP08	SPoX07

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches	Locking grains	Setting grains	L wrench
NT-DRS-6D (DC 18÷19)	NT-ST20043T06	NT-FTB06	NT-ST042	NT-ST043	NT-WR025
NT-DRS-6D (DC 20÷22)	NT-ST22055T06	NT-FTB06	NT-ST042	NT-ST043	NT-WR025
NT-DRS-6D (DC 23÷25)	NT-ST22055T06	NT-FTB06	NT-ST044	NT-ST045	NT-WR025
NT-DRS-6D (DC 26÷30)	NT-ST25065T07	NT-FTB07	NT-ST046	NT-ST047	NT-WR030



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

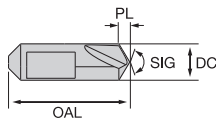

F - ACCESSORIES

G - SPARE PARTS

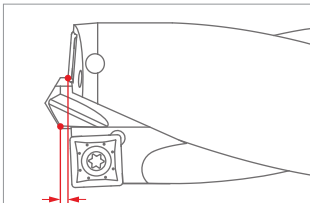
<h1>SPoX</h1>	HF: Micrograin carbide PVD: Physical vapour deposition				HF PVD	HF PVD	HF PVD	HF
	<h2>DRS pilot</h2>				JP5530	JP8725	JP9535	JU6520
<ul style="list-style-type: none"> General purpose type or fine polished sharp geometries for aluminum or non-ferrous materials available Diverse PVD coated carbide grades available Inserts could also be mounted on Chamfer-Square milling bodies 	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: 1st choice)			
		P		90 200	90 200			
		M		30 85		50 130		
		K		90 150				
		N					160 320	
		S						
		H						

	Designation	RE	IC	S	D1	LE	Stock			
							●	○	▲	▽
GENERAL 	GP P M K SPMX050204-GP	0.4	5	2.38	2.5	4.2	●	●	●	
	SPMX060204-GP	0.4	6	2.38	2.8	5.2	●	●	●	
	SPMX07T308-GP	0.8	7.94	3.97	2.8	6.34	●	●	●	
ALUMINIUM <p>periphery ground polished surface</p>	AL N SPGX050204-AL	0.4	5	2.38	2.5	4.2				●
	SPGX060204-AL	0.4	6	2.38	2.8	5.2				●
	SPGX07T308-AL	0.8	7.94	3.97	2.8	6.34				●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

<h1>Pilot</h1>		Hss: High speed steel PVD: Physical vapour deposition		Hss		
				PVD		
<h2>DRS pilot</h2>				HSS TIN		
<ul style="list-style-type: none"> TIN coated HSS pilot for DRS PILOT drills 1 Pilot is already pre-mounted on DRS Pilot drill body Universal use for PMKN materials Cannot be mounted on DEX Pilot 		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: 1st choice)				
		P	90 200			
		M	50 130			
		K	90 150			
		N	160 320			
		S				
	H					
Designation		DC	OAL	PL	SIG	Stock
GENERAL	GP P M K N					
						
	DRSP06-GP	6	20	1.5	118°	●
	DRSP08-GP	8	25	2.1	118°	●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



pilot height

MATERIAL	6xD	9xD
P M K	1.0 mm	1.4 mm
N	1.5 mm	1.7 mm

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530			JP8725		
					min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	6XD	100	150	200	100	150	200
				9XD	90	130	170	90	130	170
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	6XD	80	120	160	80	120	160
				9XD	70	105	140	70	105	140
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	6XD	65	95	125	65	95	125
				9XD	55	85	115	55	85	115
	ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530			JP9535		
	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	6XD	40	80	120	70	100	130
				9XD	30	60	90	50	80	110
C - GROOVING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	6XD	-	-	-	60	80	100
				9XD	-	-	-	50	70	90
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	6XD	35	60	85	70	100	130
				9XD	30	50	70	50	80	110
D - MILLING	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		6XD	-	-	-	60	90	120
				9XD	-	-	-	50	80	110
	ISO 513	MATERIAL	HARDNESS HB	L/D	JP5530					
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	6XD	110	130	150			
				9XD	90	110	130			
E - DRILLING	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	6XD	80	100	120			
				9XD	70	90	110			
	ISO 513	MATERIAL	HARDNESS HB	L/D	JU6520					
	N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		6XD	200	260	320			
				9XD	160	220	280			
F - ACCESSORIES	N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AlSi12)		6XD	120	180	240			
				9XD	100	150	200			

Complete workpiece materials p. H1.

G - SPARE PARTS

ISO 513	MATERIAL	HARDNESS HB	L/D	DC 18.00 ÷ 19.00			DC 20.00 ÷ 25.00			DC 26.00 ÷ 30.00		
				min	start	max	min	start	max	min	start	max
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	6XD	0.04	0.06	0.08	0.04	0.07	0.10	0.05	0.08	0.11
			9XD	0.04	0.05	0.06	0.04	0.06	0.08	0.05	0.07	0.09
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	6XD	0.06	0.09	0.12	0.08	0.11	0.14	0.08	0.12	0.16
			9XD	0.06	0.08	0.10	0.08	0.10	0.12	0.08	0.11	0.14
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	6XD	0.06	0.08	0.10	0.08	0.10	0.12	0.08	0.11	0.14
			9XD	0.06	0.07	0.08	0.08	0.09	0.10	0.08	0.10	0.12
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	6XD	0.05	0.08	0.11	0.05	0.09	0.13	0.06	0.10	0.14
			9XD	0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	6XD	0.04	0.07	0.10	0.04	0.08	0.12	0.05	0.09	0.13
			9XD	0.04	0.06	0.08	0.04	0.07	0.10	0.05	0.08	0.11
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	6XD	0.05	0.06	0.07	0.05	0.08	0.11	0.06	0.09	0.12
			9XD	0.04	0.05	0.06	0.05	0.07	0.09	0.06	0.08	0.10
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		6XD	0.04	0.06	0.08	0.04	0.07	0.10	0.05	0.08	0.11
			9XD	0.03	0.05	0.07	0.04	0.06	0.08	0.05	0.07	0.09
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	6XD	0.08	0.11	0.14	0.10	0.13	0.16	0.10	0.15	0.20
			9XD	0.08	0.10	0.12	0.10	0.12	0.14	0.10	0.14	0.18
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	6XD	0.07	0.10	0.13	0.08	0.12	0.16	0.10	0.14	0.18
			9XD	0.07	0.08	0.11	0.08	0.11	0.14	0.10	0.13	0.16
N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		6XD	0.06	0.10	0.14	0.08	0.12	0.16	0.08	0.13	0.18
			9XD	0.06	0.09	0.12	0.08	0.11	0.14	0.08	0.12	0.16
N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AISI12)		6XD	0.06	0.09	0.12	0.08	0.11	0.14	0.08	0.12	0.16
			9XD	0.06	0.08	0.10	0.08	0.10	0.12	0.08	0.11	0.14

Complete workpiece materials p. H1.

(fn: mm/rev)

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

DEX DRILLS

High productivity indexable drilling system with exchangeable heads

APPLICATION



ISO APPLICATION FIELDS

P M K

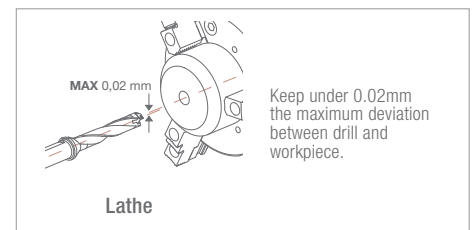
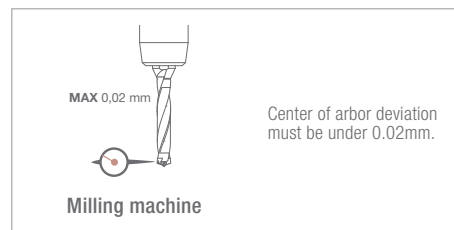
ADVANTAGES AND CHARACTERISTICS

- High reliable quick change indexable drilling system
- Solid drill head with 3D geometry, adapted for high feed rate and provides high efficiency in machining
- Attracting cost efficiency per hole, good replacement for regrind solid carbide drills



● Drilling bodies

- Weldon shank with internal coolant
- 3xD and 5xD available from D10 to D26
- Special length (1.5D, 8D and 12D) and stepped body available upon request

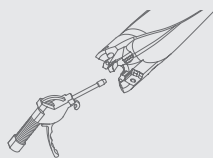


● Inserts

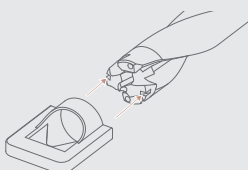
- Available D10-26, can make special diameters or stepped type
- Cemented carbide grades with PVD coatings
- Geometries: GP, SC, TE, FT (flat)



DRILLING HEADS INSTALLATION



Clean pocket with air blast.
Put insert into drill holder.



Set wrench into slots on insert flanks.
Slowly turn the wrench clockwise until stop.

3xD

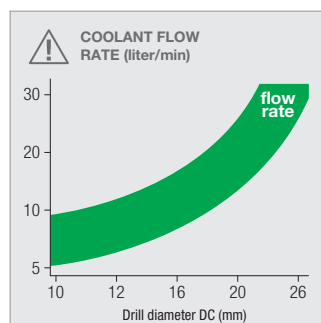
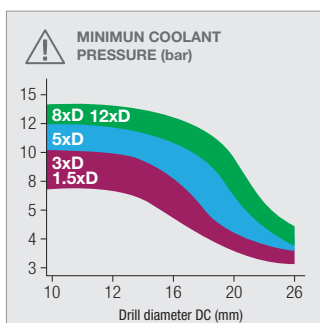
DEX drill

- 3xD indexable drill body for DEX drill head
- All with coolant through
- Different drill heads can fit into the same body, please check MIID column
- Special diameters or stepped type available upon requests

Designation	Stock	DC	DCON	OAL	LF	LB				MIID
NT-DEX-3D D10-S16F	●	10	16	95	47	38				DEX10 ^{oo}
NT-DEX-3D D11-S16F	●	11	16	98	50	39				DEX11 ^{oo}
NT-DEX-3D D12-S16F	●	12	16	104	56	44				DEX12 ^{oo}
NT-DEX-3D D13-S16F	●	13	16	108	60	47				DEX13 ^{oo}
NT-DEX-3D D14-S16F	●	14	16	112	64	50				DEX14 ^{oo}
NT-DEX-3D D15-S20F	●	15	20	118	68	53				DEX15 ^{oo}
NT-DEX-3D D16-S20F	●	16	20	122	72	56				DEX16 ^{oo}
NT-DEX-3D D17-S20F	●	17	20	126	76	59				DEX17 ^{oo}
NT-DEX-3D D18-S25F	●	18	25	136	80	62				DEX18 ^{oo}
NT-DEX-3D D19-S25F	●	19	25	140	84	65				DEX19 ^{oo}
NT-DEX-3D D20-S25F	●	20	25	144	88	68				DEX20 ^{oo}
NT-DEX-3D D21-S25F	●	21	25	152	96	75				DEX21 ^{oo}
NT-DEX-3D D22-S25F	●	22	25	157	101	81				DEX22 ^{oo}
NT-DEX-3D D23-S32F	●	23	32	165	105	82				DEX23 ^{oo}
NT-DEX-3D D24-S32F	●	24	32	170	110	86				DEX24 ^{oo}
NT-DEX-3D D25/26-S32F	●	25	32	175	115	89				DEX25/26 ^{oo}

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Head wrench
NT-DEX-3D (DC 10÷11)	NT-WR1011
NT-DEX-3D (DC 12÷17)	NT-WR1217
NT-DEX-3D (DC 18÷20)	NT-WR1820
NT-DEX-3D (DC 21÷25)	NT-WR2126



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

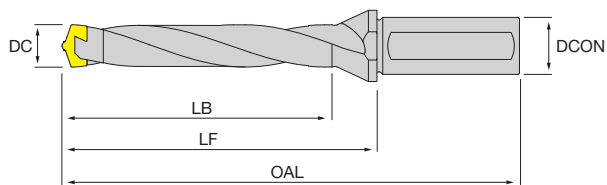
F - ACCESSORIES

G - SPARE PARTS

5xD

DEX drill

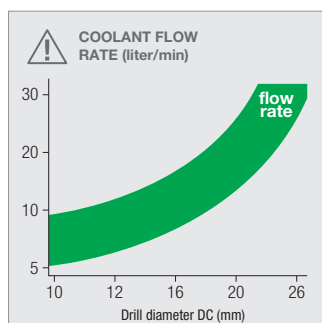
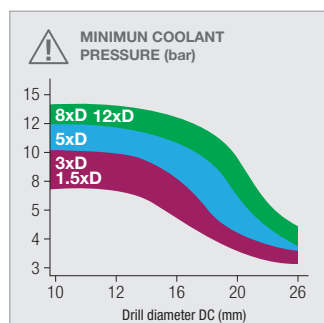
- 5xD indexable drill body for DEX drill head
- All with coolant through
- Different drill heads can fit into the same body, please check MIID column
- Special diameters or stepped type available upon requests

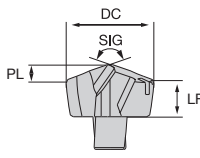




Designation	Stock	DC	DCON	OAL	LF	LB				MIID
NT-DEX-5D D10-S16F	●	10	16	116	68	59				DEX10 ^{oo}
NT-DEX-5D D11-S16F	●	11	16	121	73	62				DEX11 ^{oo}
NT-DEX-5D D12-S16F	●	12	16	130	82	70				DEX12 ^{oo}
NT-DEX-5D D13-S16F	●	13	16	136	88	75				DEX13 ^{oo}
NT-DEX-5D D14-S16F	●	14	16	142	94	80				DEX14 ^{oo}
NT-DEX-5D D15-S20F	●	15	20	150	100	85				DEX15 ^{oo}
NT-DEX-5D D16-S20F	●	16	20	156	106	90				DEX16 ^{oo}
NT-DEX-5D D17-S20F	●	17	20	162	112	95				DEX17 ^{oo}
NT-DEX-5D D18-S25F	●	18	25	174	118	100				DEX18 ^{oo}
NT-DEX-5D D19-S25F	●	19	25	180	124	105				DEX19 ^{oo}
NT-DEX-5D D20-S25F	●	20	25	186	130	110				DEX20 ^{oo}
NT-DEX-5D D21-S25F	●	21	25	194	138	117				DEX21 ^{oo}
NT-DEX-5D D22-S25F	●	22	25	201	145	125				DEX22 ^{oo}
NT-DEX-5D D23-S32F	●	23	32	211	151	128				DEX23 ^{oo}
NT-DEX-5D D24-S32F	●	24	32	218	158	134				DEX24 ^{oo}
NT-DEX-5D D25/26-S32F	●	25	32	225	165	139				DEX25/26 ^{oo}

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Head wrench
NT-DEX-5D (DC 10÷11)	NT-WR1011
NT-DEX-5D (DC 12÷17)	NT-WR1217
NT-DEX-5D (DC 18÷20)	NT-WR1820
NT-DEX-5D (DC 21÷25)	NT-WR2126



<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD		
	<h2>DEX drill</h2>		JP5625	JP5725		
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)				
		P	55 160	55 160		
		M				
		K	60 140	60 140		
		N				
		S				
H						

Designation		DC	DC toll.	SIG	PL	LF	Stock	
GENERAL 	GP 10∞ P K	DEX1000-GP	10	k6	140°	1.78	4.42	●
		DEX1010-GP	10.1	k6	140°	1.8	4.4	○
		DEX1020-GP	10.2	k6	140°	1.82	4.38	●
		DEX1030-GP	10.3	k6	140°	1.84	4.36	● ▲
		DEX1040-GP	10.4	k6	140°	1.86	4.34	● ▲
		DEX1050-GP	10.5	k6	140°	1.88	4.32	●
		DEX1060-GP	10.6	k6	140°	1.9	4.3	○
		DEX1070-GP	10.7	k6	140°	1.92	4.28	○
		DEX1080-GP	10.8	k6	140°	1.94	4.26	○
		DEX1090-GP	10.9	k6	140°	1.96	4.24	○
GENERAL 	GP 11∞ P K	DEX1100-GP	11	k6	140°	1.98	4.62	● ▲
		DEX1110-GP	11.1	k6	140°	2	4.6	○
		DEX1120-GP	11.2	k6	140°	2.02	4.58	○
		DEX1130-GP	11.3	k6	140°	2.04	4.56	● ▲
		DEX1140-GP	11.4	k6	140°	2.06	4.54	○
		DEX1150-GP	11.5	k6	140°	2.08	4.52	● ▲
		DEX1160-GP	11.6	k6	140°	2.1	4.5	○
		DEX1170-GP	11.7	k6	140°	2.12	4.48	○
		DEX1180-GP	11.8	k6	140°	2.14	4.46	○
		DEX1190-GP	11.9	k6	140°	2.16	4.44	○

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

GP - Chisel edge




Big size chisel allows high feedrate machining and best centering features.

GP - Outer corner



Small chamfer for very good edge protection in general machining.

GP - Gash geometry



Gashing design allows good chip evacuation and reduce thrust load.

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

A - TURNING

B - THREADING

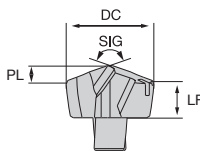
C - GROOVING



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<h1>Heads</h1> <h2>DEX drill</h2> <ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD	
	Stable machining, light cut ● 1 st choice ○ suitable General machining, medium cut ● 1 st choice ○ suitable Unstable machining, heavy cut ⚙ 1 st choice ⚙ suitable		JP5625 JP5725		
Dimensions 		ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)	
		P	55 160	55 160	
		M			
		K	60 140	60 140	
		N			
		S			
		H			

Designation		DC	DC toll.	SIG	PL	LF	Stock		
GENERAL	GP 12 ₀₀ P K 	DEX1200-GP	12	k6	140°	2.18	4.82	●	
		DEX1210-GP	12.1	k6	140°	2.2	4.8	●	▲
		DEX1220-GP	12.2	k6	140°	2.22	4.78	●	▲
		DEX1230-GP	12.3	k6	140°	2.24	4.76	●	▲
		DEX1240-GP	12.4	k6	140°	2.26	4.74	●	▲
		DEX1250-GP	12.5	k6	140°	2.27	4.73	●	▲
		DEX1260-GP	12.6	k6	140°	2.29	4.71		●
		DEX1270-GP	12.7	k6	140°	2.31	4.69	●	▲
		DEX1280-GP	12.8	k6	140°	2.33	4.67	●	▲
		DEX1290-GP	12.9	k6	140°	2.35	4.645	●	▲
GENERAL	GP 13 ₀₀ P K 	DEX1300-GP	13	k6	140°	2.37	5.23	●	
		DEX1310-GP	13.1	k6	140°	2.38	5.22	●	▲
		DEX1320-GP	13.2	k6	140°	2.4	5.2		●
		DEX1330-GP	13.3	k6	140°	2.42	5.18	●	▲
		DEX1340-GP	13.4	k6	140°	2.44	5.16	●	▲
		DEX1350-GP	13.5	k6	140°	2.46	5.14		●
		DEX1360-GP	13.6	k6	140°	2.47	5.13	●	▲
		DEX1370-GP	13.7	k6	140°	2.49	5.11		●
		DEX1380-GP	13.8	k6	140°	2.51	5.09		●
		DEX1390-GP	13.9	k6	140°	2.53	5.07	●	▲

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	<h2>DEX drill</h2>		JP5625	JP5725		
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	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: 1st choice)		
			P 55 160 55 160 M K 60 140 60 140 N S H			

Designation		DC	DC toll.	SIG	PL	LF	Stock		
GENERAL		GP 1400 P K	DEX1400-GP	14	k6	140°	2.55	5.55	●
		DEX1410-GP	14.1	k6	140°	2.57	5.53	●	
		DEX1420-GP	14.2	k6	140°	2.58	5.52	●	
		DEX1430-GP	14.3	k6	140°	2.6	5.5	● ▲	
		DEX1440-GP	14.4	k6	140°	2.62	5.48	●	
		DEX1450-GP	14.5	k6	140°	2.64	5.46	●	
		DEX1460-GP	14.6	k6	140°	2.66	5.44	●	
		DEX1470-GP	14.7	k6	140°	2.68	5.42	● ▲	
		DEX1480-GP	14.8	k6	140°	2.69	5.41	● ▲	
		DEX1490-GP	14.9	k6	140°	2.71	5.39	● ▲	
GENERAL		GP 1500 P K	DEX1500-GP	15	k6	140°	2.73	5.97	●
		DEX1505-GP	15.05	k6	140°			○	
		DEX1510-GP	15.1	k6	140°	2.75	5.95	●	
		DEX1520-GP	15.2	k6	140°	2.77	5.93	●	
		DEX1530-GP	15.3	k6	140°	2.78	5.92	●	
		DEX1540-GP	15.4	k6	140°	2.8	5.9	● ▲	
		DEX1550-GP	15.5	k6	140°	2.82	5.88	●	
		DEX1560-GP	15.6	k6	140°	2.84	5.86	●	
		DEX1570-GP	15.7	k6	140°	2.86	5.84	● ▲	
		DEX1580-GP	15.8	k6	140°	2.88	5.82	●	
DEX1590-GP	15.9	k6	140°	2.89	5.81	● ▲			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

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	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	Unstable machining, heavy cut	<input type="radio"/> 1 st choice <input checked="" type="radio"/> suitable	<input type="radio"/>	<input checked="" type="radio"/>	
	Dimensions		ISO		
		Vc(m/min) - suggested cutting speed range (bold: 1st choice)			
		P	55 160	55 160	
		M			
		K	60 140	60 140	
		N			
		S			

Designation		DC	DC toll.	SIG	PL	LF	Stock		
GENERAL		GP 16 [∞] P K	DEX1600-GP	16	k6	140°	2.91	5.89	●
		DEX1610-GP	16.1	k6	140°	2.93	5.87	●	
		DEX1620-GP	16.2	k6	140°	2.95	5.85	● ▲	
		DEX1630-GP	16.3	k6	140°	2.97	5.83	● ▲	
		DEX1640-GP	16.4	k6	140°	2.98	5.82	●	
		DEX1650-GP	16.5	k6	140°	3	5.8	●	
		DEX1660-GP	16.6	k6	140°	3.02	5.78	● ▲	
		DEX1670-GP	16.7	k6	140°	3.04	5.76	● ▲	
		DEX1680-GP	16.8	k6	140°	3.06	5.74	● ▲	
		DEX1690-GP	16.9	k6	140°	3.08	5.72	● ▲	
GENERAL		GP 17 [∞] P K	DEX1700-GP	17	k6	140°	3.09	6.81	●
		DEX1710-GP	17.1	k6	140°	3.11	6.79	●	
		DEX1720-GP	17.2	k6	140°	3.13	6.77	●	
		DEX1730-GP	17.3	k6	140°	3.15	6.77	● ▲	
		DEX1740-GP	17.4	k6	140°	3.17	6.75	● ▲	
		DEX1750-GP	17.5	k6	140°	3.18	6.72	●	
		DEX1760-GP	17.6	k6	140°	3.2	6.7	●	
		DEX1770-GP	17.7	k6	140°	3.22	6.68	● ▲	
		DEX1780-GP	17.8	k6	140°	3.24	6.66	●	
		DEX1790-GP	17.9	k6	140°	3.26	6.64	● ▲	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

GP - Chisel edge

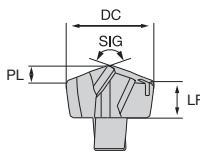
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	<h2>DEX drill</h2>		JP5625	JP5725	
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	Stable machining, light cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	
	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/>	
	Unstable machining, heavy cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/>	
	Dimensions		ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)
		P	55 160	55 160	
		M			
		K	60 140	60 140	
		N			
		S			
		H			

Designation		DC	DC toll.	SIG	PL	LF	Stock		
GENERAL 	GP 1800 P K	DEX1800-GP	18	k6	140°	3.28	7.22	<input checked="" type="radio"/>	
		DEX1810-GP	18.1	k6	140°	3.29	7.21	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1820-GP	18.2	k6	140°	3.31	7.19	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1830-GP	18.3	k6	140°	3.33	7.17	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1840-GP	18.4	k6	140°	3.35	7.15	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1850-GP	18.5	k6	140°	3.37	7.13	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1860-GP	18.6	k6	140°	3.38	7.12	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1870-GP	18.7	k6	140°	3.4	7.1	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1880-GP	18.8	k6	140°	3.42	7.08	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1890-GP	18.9	k6	140°	3.44	7.06	<input checked="" type="radio"/>	<input checked="" type="radio"/>
GENERAL 	GP 1900 P K	DEX1900-GP	19	k6	140°	3.46	7.54	<input checked="" type="radio"/>	
		DEX1910-GP	19.1	k6	140°	3.48	7.52	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1920-GP	19.2	k6	140°	3.49	7.51	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1930-GP	19.3	k6	140°	3.51	7.49	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1940-GP	19.4	k6	140°	3.53	7.47	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1950-GP	19.5	k6	140°	3.55	7.45	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1960-GP	19.6	k6	140°	3.57	7.43	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1970-GP	19.7	k6	140°	3.59	7.41	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1980-GP	19.8	k6	140°	3.6	7.4	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		DEX1990-GP	19.9	k6	140°	3.62	7.38	<input checked="" type="radio"/>	<input checked="" type="radio"/>

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

GP - Chisel edge




Big size chisel allows high feedrate machining and best centering features.

GP - Outer corner



Small chamfer for very good edge protection in general machining.

GP - Gash geometry



Gashing design allows good chip evacuation and reduce thrust load.

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

A - TURNING

B - THREADING

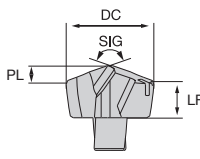
C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES


G - SPARE PARTS

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD	
	<h2>DEX drill</h2>		JP5625	JP5725	
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)			
		P	55 160	55 160	
		M			
		K	60 140	60 140	
		N			
		S			
	H				

Designation		DC	DC toll.	SIG	PL	LF	Stock	
GENERAL	GP 20₀₀ P K							
	DEX2000-GP	20	k6	140°	3.64	7.96	● ▲	
	DEX2010-GP	20.1	k6	140°	3.66	7.94	●	
	DEX2020-GP	20.2	k6	140°	3.68	7.92	● ▲	
	DEX2030-GP	20.3	k6	140°	3.69	7.91	● ▲	
	DEX2040-GP	20.4	k6	140°	3.71	7.89	● ▲	
	DEX2050-GP	20.5	k6	140°	3.73	7.87	●	
	DEX2060-GP	20.6	k6	140°	3.75	7.85	●	
	DEX2070-GP	20.7	k6	140°	3.77	7.83	● ▲	
	DEX2080-GP	20.8	k6	140°	3.79	7.81	● ▲	
DEX2090-GP	20.9	k6	140°	3.8	7.8	●		
GENERAL	GP 21₀₀ P K							
	DEX2100-GP	21	k6	140°	3.82	8.28	●	
	DEX2150-GP	21.5	k6	140°	3.91	8.19	●	
GENERAL	GP 22₀₀ P K							
	DEX2200-GP	22	k6	140°	4	8.7	●	
	DEX2250-GP	22.5	k6	140°	4.09	8.61	●	
GENERAL	GP 23₀₀ P K							
	DEX2300-GP	23	k6	140°	4.18	9.12	● ▲	
	DEX2350-GP	23.5	k6	140°	4.28	9.02	●	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

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Gashing design allows good chip evacuation and reduce thrust load.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD		
	<h2>DEX drill</h2>		JP5625	JP5725		
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	Stable machining, light cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input type="radio"/>	<input type="radio"/>		
	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
	Unstable machining, heavy cut	<input type="radio"/> 1 st choice <input type="radio"/> suitable	<input type="radio"/>	<input type="radio"/>		
	Dimensions	ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)		
		P	55 160	55 160		
	M					
	K	60 140	60 140			
	N					
	S					
	H					

Designation		DC	DC toll.	SIG	PL	LF	Stock		
GENERAL	GP 24_∞ P K 	DEX2400-GP	24	k6	140°	4.36	9.54	●	▲
		DEX2450-GP	24.5	k6	140°	4.46	9.44	●	
GENERAL	GP 25_∞ P K 	DEX2500-GP	25	k6	140°	4.55	9.95	●	
		DEX2550-GP	25.5	k6	140°	4.64	9.86	●	▲
		DEX2600-GP	26	k6	140°	4.73	9.86	●	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

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A - TURNING

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F - ACCESSORIES

G - SPARE PARTS

A - TURNING

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F - ACCESSORIES

G - SPARE PARTS

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD											
	<h2>DEX drill</h2>		JP5630											
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)											
			<table border="1"> <tr><td>P</td><td>55 160</td></tr> <tr><td>M</td><td>30 80</td></tr> <tr><td>K</td><td></td></tr> <tr><td>N</td><td></td></tr> <tr><td>S</td><td></td></tr> <tr><td>H</td><td></td></tr> </table>	P	55 160	M	30 80	K		N		S		H
P	55 160													
M	30 80													
K														
N														
S														
H														

Designation		DC	DC toll.	SIG	PL	LF	Stock	
LOW FORCE 	SC 10∞ P M	DEX1000-SC	10	k6	140°	1.78	4.42	●
		DEX1010-SC	10.1	k6	140°	1.8	4.4	○
		DEX1020-SC	10.2	k6	140°	1.82	4.38	●
		DEX1030-SC	10.3	k6	140°	1.84	4.36	●
		DEX1040-SC	10.4	k6	140°	1.86	4.34	●
		DEX1050-SC	10.5	k6	140°	1.88	4.32	●
		DEX1060-SC	10.6	k6	140°	1.9	4.3	○
		DEX1070-SC	10.7	k6	140°	1.92	4.28	○
		DEX1080-SC	10.8	k6	140°	1.94	4.26	○
		DEX1090-SC	10.9	k6	140°	1.96	4.24	○
LOW FORCE 	SC 11∞ P M	DEX1100-SC	11	k6	140°	1.98	4.62	●
		DEX1110-SC	11.1	k6	140°	2	4.6	○
		DEX1120-SC	11.2	k6	140°	2.02	4.58	○
		DEX1130-SC	11.3	k6	140°	2.04	4.56	●
		DEX1140-SC	11.4	k6	140°	2.06	4.54	○
		DEX1150-SC	11.5	k6	140°	2.08	4.52	●
		DEX1160-SC	11.6	k6	140°	2.1	4.5	○
		DEX1170-SC	11.7	k6	140°	2.12	4.48	○
		DEX1180-SC	11.8	k6	140°	2.14	4.46	○
		DEX1190-SC	11.9	k6	140°	2.16	4.44	○

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

SC - Chisel edge

Small size chisel allows perfect balancing between centering performance and torque level.

SC - Outer corner

Sharp edge for better cutting action and no burr formation on sticky materials.

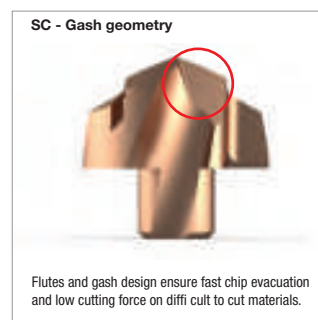
SC - Gash geometry

Flutes and gash design ensure fast chip evacuation and low cutting force on diffi cult to cut materials.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD
	<h2>DEX drill</h2>		JP5630
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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
		P	55 160
		M	30 80
		K	
		N	
		S	
		H	

Designation		DC	DC toll.	SIG	PL	LF	Stock		
LOW FORCE		SC 1200 P M	DEX1200-SC	12	k6	140°	2.18	4.82	●
		DEX1210-SC	12.1	k6	140°	2.2	4.8	●	
		DEX1220-SC	12.2	k6	140°	2.22	4.78	●	
		DEX1230-SC	12.3	k6	140°	2.24	4.76	●	
		DEX1240-SC	12.4	k6	140°	2.26	4.74	○	
		DEX1250-SC	12.5	k6	140°	2.27	4.73	●	
		DEX1260-SC	12.6	k6	140°	2.29	4.71	●	
		DEX1270-SC	12.7	k6	140°	2.31	4.69	○	
		DEX1280-SC	12.8	k6	140°	2.33	4.67	○	
		DEX1290-SC	12.9	k6	140°	2.35	4.645	○	
LOW FORCE		SC 1300 P M	DEX1300-SC	13	k6	140°	2.37	5.23	●
		DEX1310-SC	13.1	k6	140°	2.38	5.22	●	
		DEX1320-SC	13.2	k6	140°	2.4	5.2	○	
		DEX1330-SC	13.3	k6	140°	2.42	5.18	○	
		DEX1340-SC	13.4	k6	140°	2.44	5.16	○	
		DEX1350-SC	13.5	k6	140°	2.46	5.14	●	
		DEX1360-SC	13.6	k6	140°	2.47	5.13	○	
		DEX1370-SC	13.7	k6	140°	2.49	5.11	○	
		DEX1380-SC	13.8	k6	140°	2.51	5.09	○	
		DEX1390-SC	13.9	k6	140°	2.53	5.07	●	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



A - TURNING

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<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD												
	<h2>DEX drill</h2>	JP5630												
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)											
		<table border="1"> <tr><td>P</td><td>55 160</td></tr> <tr><td>M</td><td>30 80</td></tr> <tr><td>K</td><td></td></tr> <tr><td>N</td><td></td></tr> <tr><td>S</td><td></td></tr> <tr><td>H</td><td></td></tr> </table>	P	55 160	M	30 80	K		N		S		H	
P	55 160													
M	30 80													
K														
N														
S														
H														

Designation		DC	DC toll.	SIG	PL	LF	Stock	
LOW FORCE 	SC 1400 P M	DEX1400-SC	14	k6	140°	2.55	5.55	●
		DEX1410-SC	14.1	k6	140°	2.57	5.53	●
		DEX1420-SC	14.2	k6	140°	2.58	5.52	●
		DEX1430-SC	14.3	k6	140°	2.6	5.5	○
		DEX1440-SC	14.4	k6	140°	2.62	5.48	○
		DEX1450-SC	14.5	k6	140°	2.64	5.46	●
		DEX1460-SC	14.6	k6	140°	2.66	5.44	●
		DEX1470-SC	14.7	k6	140°	2.68	5.42	○
		DEX1480-SC	14.8	k6	140°	2.69	5.41	●
		DEX1490-SC	14.9	k6	140°	2.71	5.39	○
LOW FORCE 	SC 1500 P M	DEX1500-SC	15	k6	140°	2.73	5.97	●
		DEX1510-SC	15.1	k6	140°	2.75	5.95	●
		DEX1520-SC	15.2	k6	140°	2.77	5.93	●
		DEX1530-SC	15.3	k6	140°	2.78	5.92	●
		DEX1540-SC	15.4	k6	140°	2.8	5.9	○
		DEX1550-SC	15.5	k6	140°	2.82	5.88	●
		DEX1560-SC	15.6	k6	140°	2.84	5.86	○
		DEX1570-SC	15.7	k6	140°	2.86	5.84	○
		DEX1580-SC	15.8	k6	140°	2.88	5.82	○
		DEX1590-SC	15.9	k6	140°	2.89	5.81	○

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

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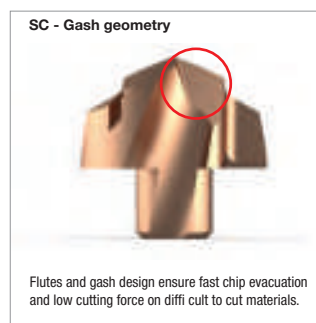
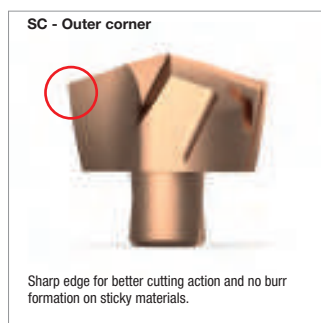
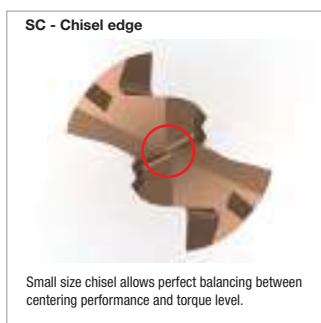
SC - Gash geometry

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<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD	
	DEX drill	JP5630	
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)
	P	55 160	
	M	30 80	
	K		
	N		
	S		
	H		

Designation		DC	DC toll.	SIG	PL	LF	Stock	
LOW FORCE		DEX1600-SC	16	k6	140°	2.91	5.89	●
		DEX1610-SC	16.1	k6	140°	2.93	5.87	○
		DEX1620-SC	16.2	k6	140°	2.95	5.85	●
		DEX1630-SC	16.3	k6	140°	2.97	5.83	●
		DEX1640-SC	16.4	k6	140°	2.98	5.82	○
		DEX1650-SC	16.5	k6	140°	3	5.8	●
		DEX1660-SC	16.6	k6	140°	3.02	5.78	●
		DEX1670-SC	16.7	k6	140°	3.04	5.76	○
		DEX1680-SC	16.8	k6	140°	3.06	5.74	○
		DEX1690-SC	16.9	k6	140°	3.08	5.72	○
LOW FORCE		DEX1700-SC	17	k6	140°	3.09	6.81	●
		DEX1710-SC	17.1	k6	140°	3.11	6.79	●
		DEX1720-SC	17.2	k6	140°	3.13	6.77	○
		DEX1730-SC	17.3	k6	140°	3.15	6.75	○
		DEX1740-SC	17.4	k6	140°	3.17	6.73	○
		DEX1750-SC	17.5	k6	140°	3.18	6.72	●
		DEX1760-SC	17.6	k6	140°	3.2	6.7	○
		DEX1770-SC	17.7	k6	140°	3.22	6.68	●
		DEX1780-SC	17.8	k6	140°	3.24	6.66	●
		DEX1790-SC	17.9	k6	140°	3.26	6.64	○

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



A - TURNING

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A - TURNING

B - THREADING

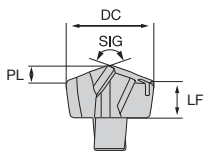
C - GROOVING



D - MILLING

E - DRILLING

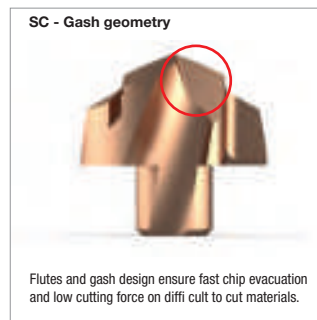
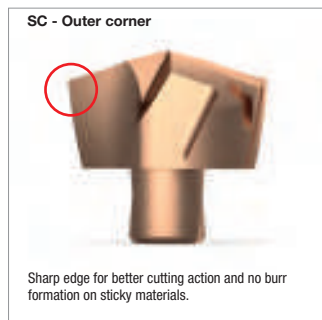
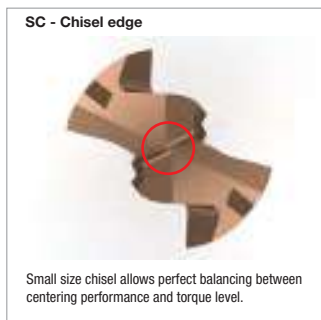
F - ACCESSORIES

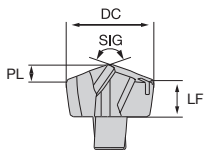
G - SPARE PARTS





<h1>Heads</h1> <h2>DEX drill</h2> <ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD	
	Stable machining, light cut ● 1 st choice ○ suitable General machining, medium cut ● 1 st choice ○ suitable ● Unstable machining, heavy cut ⚠ 1 st choice ⚠ suitable ⚠	JP5630	
Dimensions	ISO	Vc(m/min) - suggested cutting speed range (bold: 1 st choice)	
	P	55 160	
	M	30 80	
	K		
	N		
	S		
	H		

Designation		DC	DC toll.	SIG	PL	LF	Stock
LOW FORCE 	SC 1800 P M	18	k6	140°	3.28	7.22	●
	DEX1810-SC	18.1	k6	140°	3.29	7.21	●
	DEX1820-SC	18.2	k6	140°	3.31	7.19	○
	DEX1830-SC	18.3	k6	140°	3.33	7.17	●
	DEX1840-SC	18.4	k6	140°	3.35	7.15	○
	DEX1850-SC	18.5	k6	140°	3.37	7.13	●
	DEX1860-SC	18.6	k6	140°	3.38	7.12	○
	DEX1870-SC	18.7	k6	140°	3.4	7.1	○
	DEX1880-SC	18.8	k6	140°	3.42	7.08	○
	DEX1890-SC	18.9	k6	140°	3.44	7.06	○
LOW FORCE 	SC 1900 P M	19	k6	140°	3.46	7.54	●
	DEX1910-SC	19.1	k6	140°	3.48	7.52	○
	DEX1920-SC	19.2	k6	140°	3.49	7.51	●
	DEX1930-SC	19.3	k6	140°	3.51	7.49	●
	DEX1940-SC	19.4	k6	140°	3.53	7.47	○
	DEX1950-SC	19.5	k6	140°	3.55	7.45	●
	DEX1960-SC	19.6	k6	140°	3.57	7.43	○
	DEX1970-SC	19.7	k6	140°	3.59	7.41	●
	DEX1980-SC	19.8	k6	140°	3.6	7.4	○
	DEX1990-SC	19.9	k6	140°	3.62	7.38	●

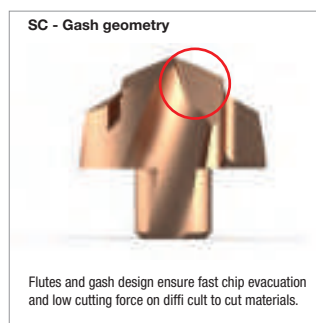
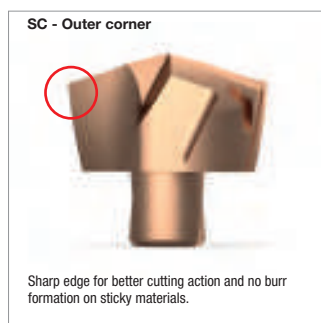
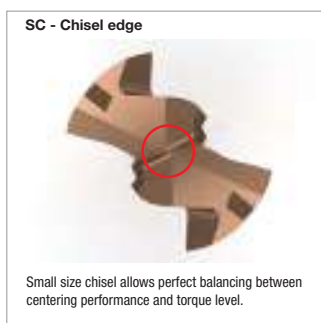
● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD
	<h2>DEX drill</h2>		JP5630
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)	
		P	55 160
		M	30 80
		K	
		N	
		S	
		H	

Designation		DC	DC toll.	SIG	PL	LF	Stock	
LOW FORCE 	SC 20 ₀₀ P M	DEX2000-SC	20	k6	140°	3.64	7.96	●
		DEX2010-SC	20.1	k6	140°	3.66	7.94	○
		DEX2020-SC	20.2	k6	140°	3.68	7.92	○
		DEX2030-SC	20.3	k6	140°	3.69	7.91	○
		DEX2040-SC	20.4	k6	140°	3.71	7.89	○
		DEX2050-SC	20.5	k6	140°	3.73	7.87	●
		DEX2060-SC	20.6	k6	140°	3.75	7.85	○
		DEX2070-SC	20.7	k6	140°	3.77	7.83	○
		DEX2080-SC	20.8	k6	140°	3.79	7.81	○
		DEX2090-SC	20.9	k6	140°	3.8	7.8	○
LOW FORCE 	SC 21 ₀₀ P M	DEX2100-SC	21	k6	140°	3.82	8.28	●
		DEX2150-SC	21.5	k6	140°	3.91	8.19	●
LOW FORCE 	SC 22 ₀₀ P M	DEX2200-SC	22	k6	140°	4	8.7	●
		DEX2230-SC	22.3	k6	140°			○
		DEX2250-SC	22.5	k6	140°	4.09	8.61	●
LOW FORCE 	SC 23 ₀₀ P M	DEX2300-SC	23	k6	140°	4.18	9.12	●
		DEX2350-SC	23.5	k6	140°	4.28	9.02	●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

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<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD
	<h2>DEX drill</h2>		JP5630
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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
		P	55 160
		M	30 80
		K	
		N	
		S	
		H	

Designation		DC	DC toll.	SIG	PL	LF	Stock
LOW FORCE 	SC 24 [∞] P M						
	DEX2400-SC	24	k6	140°	4.36	9.54	●
	DEX2450-SC	24.5	k6	140°	4.46	9.44	●
LOW FORCE 	SC 25 [∞] P M						
	DEX2500-SC	25	k6	140°	4.55	9.95	●
	DEX2550-SC	25.5	k6	140°	4.64	9.86	●
	DEX2600-SC	26	k6	140°	4.73	9.86	●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

SC - Chisel edge

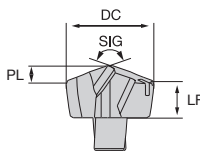
Small size chisel allows perfect balancing between centering performance and torque level.

SC - Outer corner

Sharp edge for better cutting action and no burr formation on sticky materials.

SC - Gash geometry


Flutes and gash design ensure fast chip evacuation and low cutting force on diffi cult to cut materials.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	
	<h2>DEX drill</h2>		JP7625	
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)	
		P M K 70 160 N S H		

Designation		DC	DC toll.	SIG	PL	LF	Stock
REINFORCED	TE 10[∞] K						
	DEX1000-TE	10	k6	140°	1.78	4.42	●
	DEX1020-TE	10.2	k6	140°	1.82	4.38	●
	DEX1030-TE	10.3	k6	140°	1.84	4.36	●
	DEX1050-TE	10.5	k6	140°	1.88	4.32	●
REINFORCED	TE 11[∞] K						
	DEX1100-TE	11	k6	140°	1.98	4.62	●
	DEX1150-TE	11.5	k6	140°	2.08	4.52	●
REINFORCED	TE 12[∞] K						
	DEX1200-TE	12	k6	140°	2.18	4.82	●
	DEX1250-TE	12.5	k6	140°	2.27	4.73	●
REINFORCED	TE 13[∞] K						
	DEX1300-TE	13	k6	140°	2.37	5.23	●
	DEX1350-TE	13.5	k6	140°	2.46	5.14	●
REINFORCED	TE 14[∞] K						
	DEX1400-TE	14	k6	140°	2.55	5.55	●
	DEX1450-TE	14.5	k6	140°	2.64	5.46	●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

TE - Chisel edge




Big size chisel allows high feedrate machining and best centering features.

TE - Outer corner



Big negative chamfer for higher performance on cast iron machining.

TE - Gash geometry



Gashing design allows good chip evacuation and reduce thrust load.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD
	<h2>DEX drill</h2>		JP7625
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)
		P M K 70 160 N S H	

Designation		DC	DC toll.	SIG	PL	LF	Stock
REINFORCED	TE 1500 K 	DEX1500-TE	15	k6	140°	2.73	5.97 ●
		DEX1550-TE	15.5	k6	140°	2.82	5.88 ●
		DEX1580-TE	15.8	k6	140°	2.88	5.82 ○
REINFORCED	TE 1600 K 	DEX1600-TE	16	k6	140°	2.91	5.89 ●
		DEX1650-TE	16.5	k6	140°	3	5.8 ●
REINFORCED	TE 1700 K 	DEX1700-TE	17	k6	140°	3.09	6.81 ●
		DEX1750-TE	17.5	k6	140°	3.18	6.72 ●
REINFORCED	TE 1800 K 	DEX1800-TE	18	k6	140°	3.28	7.22 ●
		DEX1850-TE	18.5	k6	140°	3.37	7.13 ●
REINFORCED	TE 1900 K 	DEX1900-TE	19	k6	140°	3.46	7.54 ●
		DEX1950-TE	19.5	k6	140°	3.55	7.45 ●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

TE - Chisel edge

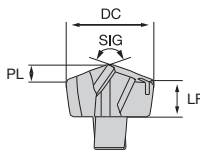
Big size chisel allows high feedrate machining and best centering features.






TE - Outer corner

Big negative chamfer for higher performance on cast iron machining.

TE - Gash geometry


Gashing design allows good chip evacuation and reduce thrust load.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	
	<h2>DEX drill</h2>		JP7625	
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)	
		P M K 70 160 N S H		

Designation		DC	DC toll.	SIG	PL	LF	Stock
REINFORCED	TE 20[∞] K 	DEX2000-TE	20	k6	140°	3.64 7.96	●
		DEX2050-TE	20.5	k6	140°	3.73 7.87	●
		DEX2070-TE	20.7	k6	140°	3.77 7.83	○
REINFORCED	TE 21[∞] K 	DEX2100-TE	21	k6	140°	3.82 8.28	●
		DEX2150-TE	21.5	k6	140°	3.91 8.19	●
REINFORCED	TE 22[∞] K 	DEX2200-TE	22	k6	140°	4 8.7	●
		DEX2250-TE	22.5	k6	140°	4.09 8.61	●
REINFORCED	TE 23[∞] K 	DEX2300-TE	23	k6	140°	4.18 9.12	●
		DEX2350-TE	23.5	k6	140°	4.28 9.02	●
REINFORCED	TE 24[∞] K 	DEX2400-TE	24	k6	140°	4.36 9.54	●
		DEX2450-TE	24.5	k6	140°	4.46 9.44	●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

TE - Chisel edge




Big size chisel allows high feedrate machining and best centering features.

TE - Outer corner



Big negative chamfer for higher performance on cast iron machining.

TE - Gash geometry



Gashing design allows good chip evacuation and reduce thrust load.

A - TURNING

B - THREADING

C - GROOVING

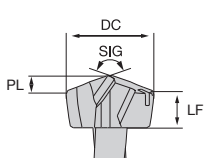

D - MILLING

E - DRILLING

F - ACCESSORIES


G - SPARE PARTS

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD						
	<h2>DEX drill</h2>		JP7625						
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	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: 1st choice)						
		P M K 70 160 N S H							
Designation		DC	DC toll.	SIG	PL	LF	Stock		
REINFORCED	TE 2500 K 	DEX2500-TE	25	k6	140°	4.55	9.95	●	
		DEX2550-TE	25.5	k6	140°	4.64	9.86	●	
		DEX2600-TE	26	k6	140°	4.73	9.86	●	


● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

TE - Chisel edge




Big size chisel allows high feedrate machining and best centering features.

TE - Outer corner

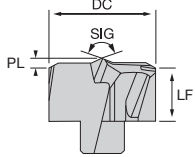







Big negative chamfer for higher performance on cast iron machining.

TE - Gash geometry



Gashing design allows good chip evacuation and reduce thrust load.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD		
	<h2>DEX drill</h2>		JP5625	JP5725		
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 	Stable machining, light cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input type="radio"/>	<input type="radio"/>		
	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
	Unstable machining, heavy cut	<input type="radio"/> 1 st choice <input type="radio"/> suitable				
	Dimensions	ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)		
		P	55 160	55 160		
	M					
	K	60 140	60 140			
	N					
	S					
	H					

Designation		DC	DC toll.	SIG	PL	LF	Stock	
FLAT TYPE	FT 10∞ P K 	DEX1000-FT	10	k6	140°	1.78	4.42	<input type="radio"/>
		DEX1050-FT	10.5	k6	140°	1.88	4.32	<input type="radio"/>
FLAT TYPE	FT 11∞ P K 	DEX1100-FT	11	k6	140°	1.98	4.62	<input type="radio"/>
		DEX1150-FT	11.5	k6	140°	2.08	4.52	<input type="radio"/>
FLAT TYPE	FT 12∞ P K 	DEX1200-FT	12	k6	140°	2.18	4.82	<input type="radio"/>
		DEX1250-FT	12.5	k6	140°	2.27	4.73	<input type="radio"/>
FLAT TYPE	FT 13∞ P K 	DEX1300-FT	13	k6	140°	2.37	5.23	<input type="radio"/>
		DEX1350-FT	13.5	k6	140°	2.46	5.14	<input checked="" type="radio"/> <input checked="" type="radio"/>
FLAT TYPE	FT 14∞ P K 	DEX1400-FT	14	k6	140°	2.55	5.55	<input type="radio"/>
		DEX1450-FT	14.5	k6	140°	2.64	5.46	<input type="radio"/>

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

 **CUTTING CONDITIONS**



Please reduce cutting speed and feed rate by 20% when using flat type drilling heads.

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

A - TURNING

B - THREADING

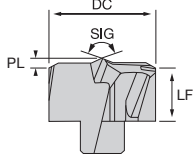
C - GROOVING






D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD		
	<h2>DEX drill</h2>		JP5625	JP5725		
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	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
	Unstable machining, heavy cut	<input type="radio"/> 1 st choice <input type="radio"/> suitable	<input type="radio"/>	<input type="radio"/>		
	Dimensions	ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)		
		P	55 160	55 160		
	M					
	K	60 140	60 140			
	N					
	S					
	H					

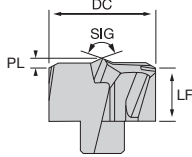
Designation		DC	DC toll.	SIG	PL	LF	Stock	
FLAT TYPE 	FT 1500 P K							
	DEX1500-FT	15	k6	140°	2.73	5.97		○
	DEX1550-FT	15.5	k6	140°	2.82	5.88		○
FLAT TYPE 	FT 1600 P K							
	DEX1600-FT	16	k6	140°	2.91	5.89		○
	DEX1650-FT	16.5	k6	140°	3	5.8		○
FLAT TYPE 	FT 1700 P K							
	DEX1700-FT	17	k6	140°	3.09	6.81		○
	DEX1750-FT	17.5	k6	140°	3.18	6.72		○
FLAT TYPE 	FT 1800 P K							
	DEX1800-FT	18	k6	140°	3.28	7.22	●	▲
	DEX1850-FT	18.5	k6	140°	3.37	7.13		○
FLAT TYPE 	FT 1900 P K							
	DEX1900-FT	19	k6	140°	3.46	7.54	●	▲
	DEX1950-FT	19.5	k6	140°	3.55	7.45		○






● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

 **CUTTING CONDITIONS**



Please reduce cutting speed and feed rate by 20% when using flat type drilling heads.

<h1>Heads</h1>	HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD		
	<h2>DEX drill</h2>		JP5625	JP5725		
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	General machining, medium cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
	Unstable machining, heavy cut	<input checked="" type="radio"/> 1 st choice <input type="radio"/> suitable	<input checked="" type="radio"/>	<input type="radio"/>		
	Dimensions	ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)		
		P	55 160	55 160		
	M					
	K	60 140	60 140			
	N					
	S					
	H					

Designation		DC	DC toll.	SIG	PL	LF	Stock	
FLAT TYPE 	FT 20 [∞] P K DEX2000-FT	20	k6	140°	3.64	7.96	●	▲
	DEX2050-FT	20.5	k6	140°	3.73	7.87		○
FLAT TYPE 	FT 21 [∞] P K DEX2100-FT	21	k6	140°	3.82	8.28	●	▲
	DEX2150-FT	21.5	k6	140°	3.91	8.19		○
FLAT TYPE 	FT 22 [∞] P K DEX2200-FT	22	k6	140°	4	8.7	●	▲
	DEX2250-FT	22.5	k6	140°	4.09	8.61		○
FLAT TYPE 	FT 23 [∞] P K DEX2300-FT	23	k6	140°	4.18	9.12	●	
	DEX2350-FT	23.5	k6	140°	4.28	9.02		○
FLAT TYPE 	FT 24 [∞] P K DEX2400-FT	24	k6	140°	4.36	9.54	●	▲
	DEX2450-FT	24.5	k6	140°	4.46	9.44		○

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

 **CUTTING CONDITIONS**



Please reduce cutting speed and feed rate by 20% when using flat type drilling heads.

A - TURNING

B - THREADING

C - GROOVING

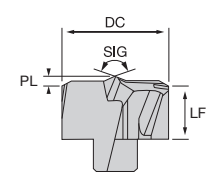
D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

<h1>Heads</h1>		HF: Micrograin carbide PVD: Physical vapour deposition		HF PVD	HF PVD			
<h2>DEX drill</h2>				JP5625	JP5725			
<ul style="list-style-type: none"> GP geometry is for general purpose use, SC geometry is more featured for stainless, and TE geometry is more featured for cast iron, FT is for making flat-bottom holes Can fit with 3xD or 5xD DEX drill bodies Diameters out of catalogue can be made upon request Step drill (step on the drill head or with chamfer insert on the drill body) or 1.5/ 8/ 12xD available upon requests 		Stable machining, light cut	● 1 st choice ○ suitable	<input type="radio"/>	<input type="radio"/>			
		General machining, medium cut	● 1 st choice ○ suitable	<input checked="" type="radio"/>	<input checked="" type="radio"/>			
		Unstable machining, heavy cut	⚡ 1 st choice ⚡ suitable					
		Dimensions 		ISO		Vc(m/min) - suggested cutting speed range (bold: 1st choice)		
		P	55 160	55 160				
		M						
		K	60 140	60 140				
		N						
		S						
		H						
Designation		DC	DC toll.	SIG	PL	LF	Stock	
FLAT TYPE	FT 2500 P K							
	DEX2500-FT	25	k6	140°	4.55	9.95	●	▲
	DEX2550-FT	25.5	k6	140°	4.64	9.86		○
	DEX2600-FT	26	k6	140°	4.73	9.86	●	▲

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

⚠ CUTTING CONDITIONS



Please reduce cutting speed and feed rate by 20% when using flat type drilling heads.

ISO 513	MATERIAL	HARDNESS HB	L/D	JP5630			JP5725			
				min	start	max	min	start	max	
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3xD - 5xD	80	120	160	80	120	160	
			8xD	65	100	135	65	100	135	
			12xD	55	85	115	55	85	115	
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3xD - 5xD	-	-	-	60	90	120	
			8xD	-	-	-	50	75	100	
			12xD	-	-	-	40	60	80	
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3xD - 5xD	-	-	-	40	60	80	
			8xD	-	-	-	35	50	65	
			12xD	-	-	-	30	40	50	
ISO 513	MATERIAL	HARDNESS HB	L/D	JP5630						
				min	start	max				
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	3xD - 5xD	60	80	100				
			8xD	50	65	80				
			12xD	40	55	70				
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	3xD - 5xD	30	40	50				
			8xD	25	35	45				
			12xD	25	30	35				
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	3xD - 5xD	40	60	80				
			8xD	35	50	65				
			12xD	30	40	50				
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		3xD - 5xD	30	50	70				
			8xD	25	40	55				
			12xD	20	35	50				
ISO 513	MATERIAL	HARDNESS HB	L/D	JP5725			JP7625			
				min	start	max	min	start	max	
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3xD - 5xD	80	110	140	100	130	160	
			8xD	70	90	110	80	100	120	
			12xD	60	80	100	70	90	110	
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3xD - 5xD	80	100	120	100	120	140	
			8xD	70	90	110	80	100	120	
			12xD	60	80	100	70	90	110	

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	L/D	DC 10.00 ÷ 10.99			DC 11.00 ÷ 11.99			DC 12.00 ÷ 12.99		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3xD - 5xD	0.10	0.16	0.22	0.10	0.17	0.24	0.12	0.19	0.26
				8xD	0.08	0.13	0.18	0.08	0.14	0.20	0.10	0.15	0.20
				12xD	-	-	-	-	0.13	0.18	-	-	-
B - THREADING	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3xD - 5xD	0.12	0.19	0.26	0.12	0.20	0.28	0.14	0.22	0.30
				8xD	0.10	0.15	0.20	0.10	0.16	0.22	0.11	0.17	0.23
				12xD	-	-	-	-	0.15	0.20	-	-	-
C - GROOVING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3xD - 5xD	0.12	0.18	0.24	0.12	0.19	0.26	0.14	0.21	0.28
				8xD	0.10	0.14	0.18	0.10	0.15	0.20	0.11	0.16	0.21
				12xD	-	-	-	-	0.14	0.18	-	-	-
D - MILLING	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	3xD - 5xD	0.11	0.15	0.19	0.11	0.16	0.21	0.13	0.18	0.23
				8xD	0.09	0.14	0.15	0.09	0.13	0.17	0.11	0.15	0.19
				12xD	-	-	-	-	0.12	0.15	-	-	-
E - DRILLING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	3xD - 5xD	0.09	0.14	0.19	0.09	0.15	0.21	0.11	0.16	0.21
				8xD	0.07	0.11	0.15	0.07	0.12	0.17	0.09	0.13	0.17
				12xD	-	-	-	-	0.11	0.14	-	-	-
F - ACCESSORIES	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	3xD - 5xD	0.10	0.14	0.18	0.10	0.15	0.20	0.12	0.16	0.20
				8xD	0.08	0.11	0.14	0.08	0.12	0.16	0.10	0.13	0.16
				12xD	-	-	-	-	0.11	0.14	-	-	-
G - SPARE PARTS	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		3xD - 5xD	0.10	0.13	0.16	0.10	0.14	0.18	0.12	0.15	0.18
				8xD	0.08	0.10	0.12	0.08	0.11	0.14	0.10	0.12	0.14
				12xD	-	-	-	-	0.10	0.12	-	-	-
H1	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3xD - 5xD	0.14	0.22	0.30	0.14	0.24	0.34	0.16	0.26	0.36
				8xD	0.11	0.18	0.25	0.11	0.19	0.27	0.12	0.20	0.28
				12xD	-	-	-	-	0.18	0.25	-	-	-
H2	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3xD - 5xD	0.12	0.18	0.24	0.12	0.20	0.28	0.13	0.21	0.29
				8xD	0.10	0.15	0.20	0.10	0.16	0.22	0.11	0.17	0.23
				12xD	-	-	-	-	0.14	0.20	-	-	-

Complete workpiece materials p. H1.

(fn: mm/rev)

DC 13.00 ÷ 13.99			DC 14.00 ÷ 14.99			DC 15.00 ÷ 16.99			DC 17.00 ÷ 19.99			DC 20.00 ÷ 22.99			DC 23.00 ÷ 26.00		
min	start	max	min	start	max	min	start	max	min	start	max	min	start	max	min	start	max
0.12	0.20	0.28	0.16	0.23	0.30	0.16	0.25	0.34	0.16	0.29	0.42	0.20	0.32	0.44	0.20	0.34	0.48
0.10	0.16	0.22	0.12	0.18	0.24	0.12	0.20	0.28	0.12	0.23	0.34	0.16	0.26	0.36	0.16	0.27	0.38
0.08	0.14	0.20	0.11	0.16	0.21	0.11	0.17	0.23	0.11	0.20	0.29	0.14	0.22	0.30	0.14	0.24	0.34
0.14	0.23	0.32	0.18	0.26	0.34	0.18	0.29	0.40	0.18	0.33	0.48	0.24	0.37	0.50	0.24	0.40	0.56
0.11	0.18	0.25	0.14	0.20	0.26	0.14	0.23	0.32	0.14	0.26	0.38	0.20	0.30	0.40	0.20	0.32	0.44
0.10	0.16	0.22	0.13	0.18	0.23	0.13	0.20	0.27	0.13	0.23	0.33	0.17	0.26	0.35	0.17	0.28	0.39
0.14	0.22	0.30	0.18	0.25	0.32	0.18	0.28	0.38	0.18	0.32	0.46	0.24	0.36	0.48	0.24	0.38	0.52
0.11	0.17	0.23	0.14	0.20	0.26	0.14	0.22	0.30	0.14	0.25	0.36	0.20	0.29	0.38	0.20	0.31	0.42
0.10	0.15	0.20	0.13	0.17	0.21	0.13	0.20	0.27	0.13	0.23	0.33	0.17	0.25	0.33	0.17	0.27	0.37
0.13	0.19	0.25	0.17	0.22	0.27	0.17	0.24	0.31	0.17	0.27	0.37	0.22	0.31	0.40	0.22	0.32	0.42
0.11	0.16	0.21	0.14	0.18	0.22	0.14	0.19	0.24	0.14	0.22	0.30	0.18	0.25	0.32	0.18	0.26	0.34
0.09	0.13	0.17	0.12	0.15	0.18	0.12	0.17	0.22	0.12	0.19	0.26	0.15	0.21	0.27	0.15	0.22	0.29
0.11	0.17	0.23	0.15	0.20	0.25	0.15	0.22	0.29	0.15	0.25	0.35	0.19	0.28	0.37	0.19	0.29	0.39
0.09	0.14	0.19	0.11	0.16	0.21	0.12	0.17	0.22	0.12	0.20	0.28	0.15	0.22	0.29	0.15	0.23	0.31
0.08	0.12	0.16	0.09	0.13	0.17	0.10	0.15	0.20	0.10	0.17	0.24	0.13	0.19	0.25	0.13	0.20	0.27
0.12	0.17	0.22	0.16	0.20	0.24	0.16	0.22	0.28	0.16	0.25	0.34	0.20	0.28	0.36	0.20	0.29	0.38
0.10	0.14	0.18	0.12	0.16	0.20	0.12	0.17	0.22	0.12	0.19	0.26	0.16	0.22	0.28	0.16	0.23	0.30
0.08	0.12	0.16	0.11	0.14	0.17	0.11	0.15	0.19	0.11	0.17	0.23	0.14	0.20	0.26	0.14	0.21	0.28
0.12	0.16	0.20	0.16	0.19	0.22	0.16	0.20	0.24	0.16	0.23	0.30	0.20	0.26	0.32	0.20	0.27	0.34
0.10	0.13	0.16	0.12	0.15	0.18	0.12	0.16	0.20	0.12	0.18	0.24	0.16	0.21	0.26	0.16	0.22	0.28
0.08	0.11	0.14	0.11	0.13	0.15	0.11	0.14	0.17	0.11	0.16	0.21	0.14	0.18	0.22	0.14	0.19	0.24
0.16	0.28	0.40	0.22	0.32	0.42	0.22	0.35	0.48	0.22	0.40	0.58	0.28	0.45	0.62	0.28	0.48	0.68
0.12	0.22	0.32	0.18	0.26	0.34	0.18	0.28	0.38	0.18	0.32	0.46	0.22	0.36	0.50	0.22	0.38	0.54
0.11	0.19	0.27	0.15	0.22	0.29	0.15	0.25	0.35	0.15	0.27	0.39	0.20	0.32	0.44	0.20	0.34	0.48
0.13	0.22	0.31	0.18	0.26	0.34	0.18	0.28	0.38	0.18	0.32	0.46	0.22	0.36	0.50	0.22	0.38	0.54
0.11	0.18	0.25	0.14	0.20	0.26	0.14	0.22	0.30	0.14	0.25	0.36	0.18	0.27	0.40	0.18	0.30	0.42
0.09	0.15	0.21	0.13	0.18	0.23	0.13	0.20	0.27	0.13	0.23	0.33	0.15	0.25	0.35	0.15	0.26	0.37

Complete workpiece materials p. H1.

(fn: mm/rev)

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

DXP

For extra deep holes - Indexable drilling system with exchangeable heads

APPLICATION

				
Plane surface	Concave surface	Convex surface	Stacked plates	Pipes

ISO APPLICATION FIELDS

P K

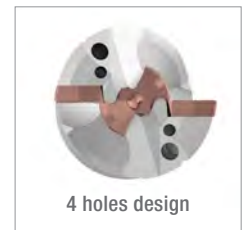
ADVANTAGES AND CHARACTERISTICS

- High performance deep hole modular drilling system
- Pilot enables better centering in deep hole drilling (available also in 3xD for who seeks better centering)
- Adapted for higher feed rate among indexable solutions



• Drilling bodies

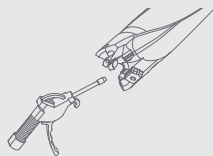
- Weldon shank with internal coolant
- 3/ 6/ 8/ 10xD available from D30 to D60
- Special length and stepped body available upon request



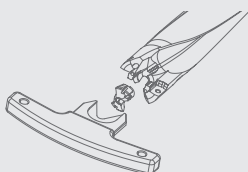
• Inserts

- Pilot head available from D15 to D28 with HC geometry for perfect self-centering and reduces drilling force.
- Peripheral insert featuring CS geometry (Chip Splitter) designed to efficiently break and eject chips

DRILLING HEADS INSTALLATION



Clean pocket with air blast.
Put insert into drill holder.



Set wrench into slots on insert flanks.
Slowly turn the wrench clockwise until stop.



3xD

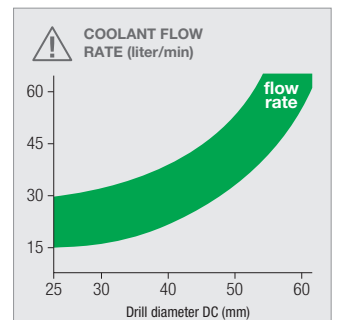
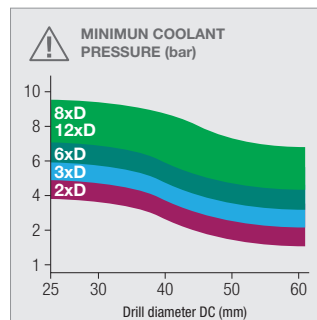
DXP drill

- 3xD pilot type drill body
- All with 4 coolant holes
- Please select inserts according to columns PILOT and MIID
- Peripheral inserts for D30 and D31 have a different shape compared to all the others

Designation	Stock	DC	DCON	OAL	LF	LB			PILOT	MIID
NT-DXP-03 D30-S32-P16E04	▲	30	32	185	125	99.9			DXP-P16	DXP-E04
NT-DXP-03 D31-S32-P17E04	▲	31	32	189	129	103.9			DXP-P17	DXP-E04
NT-DXP-03 D32-S32-P15E05	▲	32	32	194	134	105.7			DXP-P15	DXP-E05
NT-DXP-03 D33-S32-P16E05	▲	33	32	196	136	107.8			DXP-P16	DXP-E05
NT-DXP-03 D34-S32-P16E05	▲	34	32	199	139	110.8			DXP-P16	DXP-E05
NT-DXP-03 D35-S32-P18E05	▲	35	32	204	144	116.5			DXP-P18	DXP-E05
NT-DXP-03 D36-S32-P18E05	▲	36	32	206	146	118.5			DXP-P18	DXP-E05
NT-DXP-03 D37-S32-P16E06	▲	37	32	209	149	119.8			DXP-P16	DXP-E06
NT-DXP-03 D38-S32-P16E06	▲	38	32	214	154	122.8			DXP-P16	DXP-E06
NT-DXP-03 D39-S32-P18E06	▲	39	32	217	157	127.5			DXP-P18	DXP-E06
NT-DXP-03 D40-S32-P18E06	▲	40	32	234	164	131.5			DXP-P18	DXP-E06
NT-DXP-03 D41-S32-P19E06	▲	41	32	236	166	134			DXP-P19	DXP-E06
NT-DXP-03 D42-S50-P19E06	▲	42	50	240	170	137			DXP-P19	DXP-E06
NT-DXP-03 D43-S50-P16E08	▲	43	50	243	173	137.8			DXP-P16	DXP-E08
NT-DXP-03 D44-S50-P18E08	▲	44	50	246	176	142.5			DXP-P18	DXP-E08
NT-DXP-03 D45-S50-P18E08	▲	45	50	249	179	145.5			DXP-P18	DXP-E08
NT-DXP-03 D46-S50-P19E08	▲	46	50	252	182	149			DXP-P19	DXP-E08
NT-DXP-03 D47-S50-P20E08	▲	47	50	255	185	152.6			DXP-P20	DXP-E08
NT-DXP-03 D48-S50-P21E08	▲	48	50	259	189	156.1			DXP-P21	DXP-E08
NT-DXP-03 D49-S50-P22E08	▲	49	50	262	192	159.7			DXP-P22	DXP-E08
NT-DXP-03 D50-S50-P23E08	▲	50	50	265	195	163.3			DXP-P23	DXP-E08
NT-DXP-03 D51-S50-P24E08	▲	51	50	269	199	167.9			DXP-P24	DXP-E08
NT-DXP-03 D52-S50-P25E08	▲	52	50	280	210	170.5			DXP-P25	DXP-E08
NT-DXP-03 D53-S50-P26E08	▲	53	50	274	204	173.5			DXP-P26	DXP-E08
NT-DXP-03 D54-S50-P27E08	▲	54	50	278	208	178.5			DXP-P27	DXP-E08
NT-DXP-03 D55-S50-P28E08	▲	55	50	280	210	180.5			DXP-P28	DXP-E08
NT-DXP-03 D56-S50-P20E10	▲	56	50	283	213	179.6			DXP-P20	DXP-E10
NT-DXP-03 D57-S50-P21E10	▲	57	50	286	216	183.1			DXP-P21	DXP-E10
NT-DXP-03 D58-S50-P22E10	▲	58	50	289	219	186.7			DXP-P22	DXP-E10
NT-DXP-03 D59-S50-P23E10	▲	59	50	292	222	190.3			DXP-P23	DXP-E10
NT-DXP-03 D60-S50-P24E10	▲	60	50	295	225	193.9			DXP-P24	DXP-E10

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Head wrench	Insert screws	Flag wrenches
NT-DXP-03 (DC 30)	NT-WR1416	NT-ST25080T09	NT-FTB09
NT-DXP-03 (DC 31)	NT-WR1720	NT-ST25080T09	NT-FTB09
NT-DXP-03 (DC 32÷34)	NT-WR1416	NT-ST30080T10	NT-FTB10
NT-DXP-03 (DC 35÷36)	NT-WR1720	NT-ST30080T10	NT-FTB10
NT-DXP-03 (DC 37÷38)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-03 (DC 39÷42)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-03 (DC 43)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-03 (DC 44÷47)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-03 (DC 48÷55)	NT-WR2128	NT-ST40100T15	NT-FTB15
NT-DXP-03 (DC 56)	NT-WR1720	NT-ST50100T20	NT-FTB20
NT-DXP-03 (DC 57÷60)	NT-WR2128	NT-ST50100T20	NT-FTB20



A - TURNING

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D - MILLING

E - DRILLING

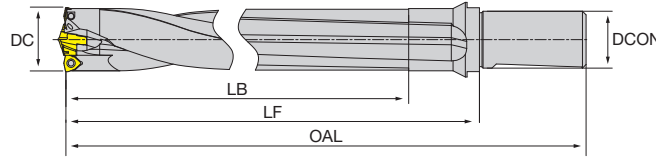
F - ACCESSORIES

G - SPARE PARTS

6xD

DXP drill

- 6xD pilot type drill body
- All with 4 coolant holes
- Please select inserts according to columns PILOT and MIID
- Peripheral inserts for D30 and D31 have a different shape compared to all the others



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

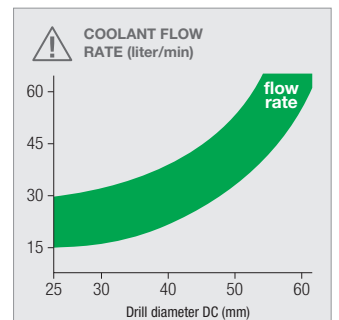
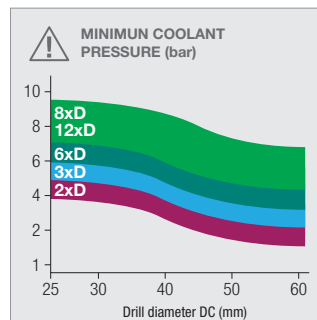
F - ACCESSORIES

G - SPARE PARTS

Designation	Stock	DC	DCON	OAL	LF	LB			PILOT	MIID
NT-DXP-06 D30-S32-P16E04	▲	30	32	275	215	189.9			DXP-P16	DXP-E04
NT-DXP-06 D31-S32-P17E04	▲	31	32	282	222	196.9			DXP-P17	DXP-E04
NT-DXP-06 D32-S32-P15E05	▲	32	32	289	229	200.7			DXP-P15	DXP-E05
NT-DXP-06 D33-S32-P16E05	▲	33	32	295	235	206.8			DXP-P16	DXP-E05
NT-DXP-06 D34-S32-P16E05	▲	34	32	301	241	212.8			DXP-P16	DXP-E05
NT-DXP-06 D35-S32-P18E05	▲	35	32	309	249	221.5			DXP-P18	DXP-E05
NT-DXP-06 D36-S32-P18E05	▲	36	32	314	254	226.5			DXP-P18	DXP-E05
NT-DXP-06 D37-S32-P16E06	▲	37	32	320	260	230.8			DXP-P16	DXP-E06
NT-DXP-06 D38-S32-P16E06	▲	38	32	328	268	236.8			DXP-P16	DXP-E06
NT-DXP-06 D39-S32-P18E06	▲	39	32	334	274	244.5			DXP-P18	DXP-E06
NT-DXP-06 D40-S32-P18E06	▲	40	32	353	283	250.5			DXP-P18	DXP-E06
NT-DXP-06 D41-S32-P19E06	▲	41	32	359	289	257			DXP-P19	DXP-E06
NT-DXP-06 D42-S50-P19E06	▲	42	50	366	296	263			DXP-P19	DXP-E06
NT-DXP-06 D43-S50-P16E08	▲	43	50	372	302	266.8			DXP-P16	DXP-E08
NT-DXP-06 D44-S50-P18E08	▲	44	50	378	308	274.5			DXP-P18	DXP-E08
NT-DXP-06 D45-S50-P18E08	▲	45	50	384	314	280.5			DXP-P18	DXP-E08
NT-DXP-06 D46-S50-P19E08	▲	46	50	390	320	287			DXP-P19	DXP-E08
NT-DXP-06 D47-S50-P20E08	▲	47	50	396	326	293.6			DXP-P20	DXP-E08
NT-DXP-06 D48-S50-P21E08	▲	48	50	403	333	300.1			DXP-P21	DXP-E08
NT-DXP-06 D49-S50-P22E08	▲	49	50	409	339	306.7			DXP-P22	DXP-E08
NT-DXP-06 D50-S50-P23E08	▲	50	50	415	345	313.3			DXP-P23	DXP-E08
NT-DXP-06 D51-S50-P24E08	▲	51	50	421	351	319.9			DXP-P24	DXP-E08
NT-DXP-06 D52-S50-P25E08	▲	52	50	427	357	326.5			DXP-P25	DXP-E08
NT-DXP-06 D53-S50-P26E08	▲	53	50	433	363	332.5			DXP-P26	DXP-E08
NT-DXP-06 D54-S50-P27E08	▲	54	50	440	370	340.5			DXP-P27	DXP-E08
NT-DXP-06 D55-S50-P28E08	▲	55	50	445	375	345.5			DXP-P28	DXP-E08
NT-DXP-06 D56-S50-P20E10	▲	56	50	451	381	347.6			DXP-P20	DXP-E10
NT-DXP-06 D57-S50-P21E10	▲	57	50	457	387	354.1			DXP-P21	DXP-E10
NT-DXP-06 D58-S50-P22E10	▲	58	50	463	393	360.7			DXP-P22	DXP-E10
NT-DXP-06 D59-S50-P23E10	▲	59	50	469	399	367.3			DXP-P23	DXP-E10
NT-DXP-06 D60-S50-P24E10	▲	60	50	475	405	373.9			DXP-P24	DXP-E10

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

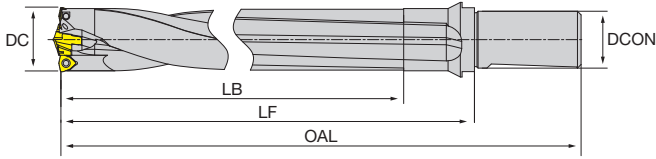
Spare parts	Head wrench	Insert screws	Flag wrenches
NT-DXP-06 (DC 30)	NT-WR1416	NT-ST25080T09	NT-FTB09
NT-DXP-06 (DC 31)	NT-WR1720	NT-ST25080T09	NT-FTB09
NT-DXP-06 (DC 32÷34)	NT-WR1416	NT-ST30080T10	NT-FTB10
NT-DXP-06 (DC 35÷36)	NT-WR1720	NT-ST30080T10	NT-FTB10
NT-DXP-06 (DC 37÷38)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-06 (DC 39÷42)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-06 (DC 43)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-06 (DC 44÷47)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-06 (DC 48÷55)	NT-WR2128	NT-ST40100T15	NT-FTB15
NT-DXP-06 (DC 56)	NT-WR1720	NT-ST50100T20	NT-FTB20
NT-DXP-06 (DC 57÷60)	NT-WR2128	NT-ST50100T20	NT-FTB20




8xD

DXP drill

- 8xD pilot type drill body
- All with 4 coolant holes
- Please select inserts according to columns PILOT and MIID
- Peripheral inserts for D30 and D31 have a different shape compared to all the others

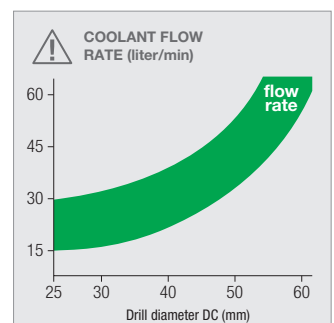
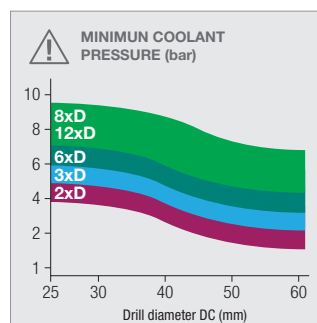




Designation	Stock	DC	DCON	OAL	LF	LB			PILOT	MIID
NT-DXP-08 D30-S32-P16E04	▲	30	32	335	275	249.9			DXP-P16	DXP-E04
NT-DXP-08 D31-S32-P17E04	▲	31	32	344	284	258.9			DXP-P17	DXP-E04
NT-DXP-08 D32-S32-P15E05	▲	32	32	353	293	264.7			DXP-P15	DXP-E05
NT-DXP-08 D33-S32-P16E05	▲	33	32	361	301	272.8			DXP-P16	DXP-E05
NT-DXP-08 D34-S32-P16E05	▲	34	32	369	309	280.8			DXP-P16	DXP-E05
NT-DXP-08 D35-S32-P18E05	▲	35	32	379	319	291.5			DXP-P18	DXP-E05
NT-DXP-08 D36-S32-P18E05	▲	36	32	386	326	298.5			DXP-P18	DXP-E05
NT-DXP-08 D37-S32-P16E06	▲	37	32	394	334	304.8			DXP-P16	DXP-E06
NT-DXP-08 D38-S32-P16E06	▲	38	32	404	344	312.8			DXP-P16	DXP-E06
NT-DXP-08 D39-S32-P18E06	▲	39	32	412	352	322.5			DXP-P18	DXP-E06
NT-DXP-08 D40-S32-P18E06	▲	40	32	433	363	330.5			DXP-P18	DXP-E06
NT-DXP-08 D41-S32-P19E06	▲	41	32	441	371	339			DXP-P19	DXP-E06
NT-DXP-08 D42-S50-P19E06	▲	42	50	450	380	347			DXP-P19	DXP-E06
NT-DXP-08 D43-S50-P16E08	▲	43	50	458	388	352.8			DXP-P16	DXP-E08
NT-DXP-08 D44-S50-P18E08	▲	44	50	466	396	362.5			DXP-P18	DXP-E08
NT-DXP-08 D45-S50-P18E08	▲	45	50	474	404	370.5			DXP-P18	DXP-E08
NT-DXP-08 D46-S50-P19E08	▲	46	50	482	412	379			DXP-P19	DXP-E08
NT-DXP-08 D47-S50-P20E08	▲	47	50	490	420	387.6			DXP-P20	DXP-E08
NT-DXP-08 D48-S50-P21E08	▲	48	50	499	429	396.1			DXP-P21	DXP-E08
NT-DXP-08 D49-S50-P22E08	▲	49	50	507	437	404.7			DXP-P22	DXP-E08
NT-DXP-08 D50-S50-P23E08	▲	50	50	515	445	413.3			DXP-P23	DXP-E08
NT-DXP-08 D51-S50-P24E08	▲	51	50	523	453	421.9			DXP-P24	DXP-E08
NT-DXP-08 D52-S50-P25E08	▲	52	50	531	461	430.5			DXP-P25	DXP-E08
NT-DXP-08 D53-S50-P26E08	▲	53	50	539	469	438.5			DXP-P26	DXP-E08
NT-DXP-08 D54-S50-P27E08	▲	54	50	548	478	448.5			DXP-P27	DXP-E08
NT-DXP-08 D55-S50-P28E08	▲	55	50	555	485	455.5			DXP-P28	DXP-E08
NT-DXP-08 D56-S50-P20E10	▲	56	50	563	493	459.6			DXP-P20	DXP-E10
NT-DXP-08 D57-S50-P21E10	▲	57	50	571	501	468.1			DXP-P21	DXP-E10
NT-DXP-08 D58-S50-P22E10	▲	58	50	579	509	476.7			DXP-P22	DXP-E10
NT-DXP-08 D59-S50-P23E10	▲	59	50	587	517	485.3			DXP-P23	DXP-E10
NT-DXP-08 D60-S50-P24E10	▲	60	50	595	525	493.9			DXP-P24	DXP-E10

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Head wrench	Insert screws	Flag wrenches
NT-DXP-08 (DC 30)	NT-WR1416	NT-ST25080T09	NT-FTB09
NT-DXP-08 (DC 31)	NT-WR1720	NT-ST25080T09	NT-FTB09
NT-DXP-08 (DC 32÷34)	NT-WR1416	NT-ST30080T10	NT-FTB10
NT-DXP-08 (DC 35÷36)	NT-WR1720	NT-ST30080T10	NT-FTB10
NT-DXP-08 (DC 37÷38)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-08 (DC 39÷42)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-08 (DC 43)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-08 (DC 44÷47)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-08 (DC 48÷55)	NT-WR2128	NT-ST40100T15	NT-FTB15
NT-DXP-08 (DC 56)	NT-WR1720	NT-ST50100T20	NT-FTB20
NT-DXP-08 (DC 57÷60)	NT-WR2128	NT-ST50100T20	NT-FTB20



A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

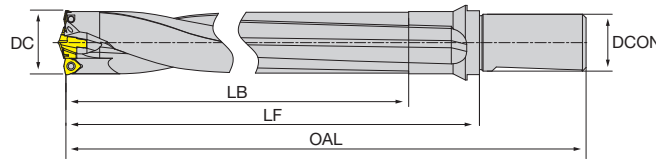
F - ACCESSORIES

G - SPARE PARTS

10xD

DXP drill

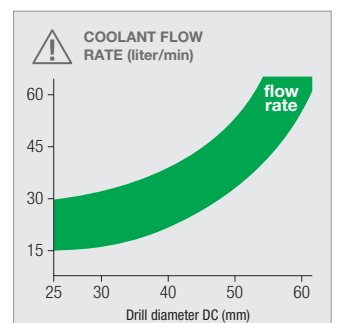
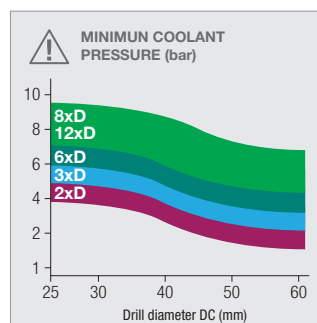
- 10xD pilot type drill body
- All with 4 coolant holes
- Please select inserts according to columns PILOT and MIID
- Peripheral inserts for D30 and D31 have a different shape compared to all the others



Designation	Stock	DC	DCON	OAL	LF	LB			PILOT	MIID
NT-DXP-10 D30-S32-P16E04	▲	30	32	395	335	319.9			DXP-P16	DXP-E04
NT-DXP-10 D31-S32-P17E04	▲	31	32	406	346	320.9			DXP-P17	DXP-E04
NT-DXP-10 D32-S32-P15E05	▲	32	32	417	357	328.7			DXP-P15	DXP-E05
NT-DXP-10 D33-S32-P16E05	▲	33	32	427	367	338.8			DXP-P16	DXP-E05
NT-DXP-10 D34-S32-P16E05	▲	34	32	437	377	328.8			DXP-P16	DXP-E05
NT-DXP-10 D35-S32-P18E05	▲	35	32	448	388	360.5			DXP-P18	DXP-E05
NT-DXP-10 D36-S32-P18E05	▲	36	32	458	398	370.5			DXP-P18	DXP-E05
NT-DXP-10 D37-S32-P16E06	▲	37	32	468	408	378.8			DXP-P16	DXP-E06
NT-DXP-10 D38-S32-P16E06	▲	38	32	480	420	388.8			DXP-P16	DXP-E06
NT-DXP-10 D39-S32-P18E06	▲	39	32	490	430	400.5			DXP-P18	DXP-E06
NT-DXP-10 D40-S32-P18E06	▲	40	32	513	443	410.5			DXP-P18	DXP-E06
NT-DXP-10 D41-S32-P19E06	▲	41	32	523	453	421			DXP-P19	DXP-E06
NT-DXP-10 D42-S50-P19E06	▲	42	50	534	464	431			DXP-P19	DXP-E06
NT-DXP-10 D43-S50-P16E08	▲	43	50	544	474	438.8			DXP-P16	DXP-E08
NT-DXP-10 D44-S50-P18E08	▲	44	50	554	484	450.5			DXP-P18	DXP-E08
NT-DXP-10 D45-S50-P18E08	▲	45	50	564	494	460.5			DXP-P18	DXP-E08
NT-DXP-10 D46-S50-P19E08	▲	46	50	574	504	471			DXP-P19	DXP-E08
NT-DXP-10 D47-S50-P20E08	▲	47	50	584	514	481.6			DXP-P20	DXP-E08
NT-DXP-10 D48-S50-P21E08	▲	48	50	595	525	492.1			DXP-P21	DXP-E08
NT-DXP-10 D49-S50-P22E08	▲	49	50	605	535	502.7			DXP-P22	DXP-E08
NT-DXP-10 D50-S50-P23E08	▲	50	50	615	545	513.3			DXP-P23	DXP-E08
NT-DXP-10 D51-S50-P24E08	▲	51	50	625	555	523.9			DXP-P24	DXP-E08
NT-DXP-10 D52-S50-P25E08	▲	52	50	635	565	534.5			DXP-P25	DXP-E08
NT-DXP-10 D53-S50-P26E08	▲	53	50	645	575	544.5			DXP-P26	DXP-E08
NT-DXP-10 D54-S50-P27E08	▲	54	50	656	586	556.5			DXP-P27	DXP-E08
NT-DXP-10 D55-S50-P28E08	▲	55	50	665	595	565.5			DXP-P28	DXP-E08
NT-DXP-10 D56-S50-P20E10	▲	56	50	675	605	571.6			DXP-P20	DXP-E10
NT-DXP-10 D57-S50-P21E10	▲	57	50	685	615	582.1			DXP-P21	DXP-E10
NT-DXP-10 D58-S50-P22E10	▲	58	50	695	625	592.7			DXP-P22	DXP-E10
NT-DXP-10 D59-S50-P23E10	▲	59	50	705	635	603.3			DXP-P23	DXP-E10
NT-DXP-10 D60-S50-P24E10	▲	60	50	715	645	613.9			DXP-P24	DXP-E10

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

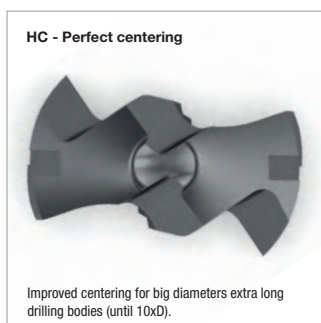
Spare parts	Head wrench	Insert screws	Flag wrenches
NT-DXP-10 (DC 30)	NT-WR1416	NT-ST25080T09	NT-FTB09
NT-DXP-10 (DC 31)	NT-WR1720	NT-ST25080T09	NT-FTB09
NT-DXP-10 (DC 32÷34)	NT-WR1416	NT-ST30080T10	NT-FTB10
NT-DXP-10 (DC 35÷36)	NT-WR1720	NT-ST30080T10	NT-FTB10
NT-DXP-10 (DC 37÷38)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-10 (DC 39÷42)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-10 (DC 43)	NT-WR1416	NT-ST40100T15	NT-FTB15
NT-DXP-10 (DC 44÷47)	NT-WR1720	NT-ST40100T15	NT-FTB15
NT-DXP-10 (DC 48÷55)	NT-WR2128	NT-ST40100T15	NT-FTB15
NT-DXP-10 (DC 56)	NT-WR1720	NT-ST50100T20	NT-FTB20
NT-DXP-10 (DC 57÷60)	NT-WR2128	NT-ST50100T20	NT-FTB20



<h1>Pilot</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD	
	<h2>DXP drill</h2>	JP5725	
<ul style="list-style-type: none"> • PVD coated carbide pilot HC (high concentration) pilot is for general purpose use • DXP pilot may look like a DEX drill head but they're not interchangeable • Step drills can be made upon request 	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: 1st choice)
	P	55 160	
	M		
	K	60 140	
	N		
	S		
	H		

GENERAL	HC P K		Designation						Stock	
			DC	DC toll.	SIG	PL	LF			
			DXP-P15-HC	15	k6	150°	3.05	5.65	▲	
			DXP-P16-HC	16	k6	150°	3.25	5.55	▲	
			DXP-P17-HC	17	k6	150°	3.35	6.55	▲	
			DXP-P18-HC	18	k6	150°	3.5	7	▲	
			DXP-P19-HC	19	k6	150°	3.83	7.17	▲	
			DXP-P20-HC	20	k6	150°	4.03	7.57	▲	
			DXP-P21-HC	21	k6	150°	4.23	7.87	▲	
			DXP-P22-HC	22	k6	150°	4.51	8.19	●	
			DXP-P23-HC	23	k6	150°	4.8	8.5	▲	
			DXP-P24-HC	24	k6	150°	4.9	9	▲	
			DXP-P25-HC	25	k6	150°	4.92	9.58	▲	
			DXP-P26-HC	26	k6	150°	5.16	9.34	▲	
			DXP-P27-HC	27	k6	150°	5.41	10.09	▲	
			DXP-P28-HC	28	k6	150°	5.62	9.88	▲	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

<h1>External</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD	
	<h2>DXP drill</h2>		JP5725
<ul style="list-style-type: none"> • New generation "Chip Splitter" • Specially waved edge splits the chips, improves heat dissipation, prolongs the tool life, improves hole quality • Peripheral inserts for DXP drill • Step drills can be made upon request 	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: 1st choice)
	P	55 160	
	M		
	K	60 140	
	N		
	S		
	H		

Designation		RE	IC	S	D1	LE	Stock
GENERAL chip splitter	CS P K DXP-E04-CS	0.4	7.26	3.79	2.85	10.76	▲
	CS P K DXP-E05-CS	0.8	8	3.75	3.4	5.29	▲
 chip splitter	DXP-E06-CS	0.8	10	3.75	4.4	6.62	▲
	DXP-E08-CS	0.8	12	4.75	4.4	7.94	●
	DXP-E10-CS	0.8	15	5.25	5.5	9.92	▲

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

CS - Chips formation

The short chips created by CS geometry can be easily ejected even on very deep holes.

ISO 513	MATERIAL	HARDNESS HB	L/D	JP5725				
				min	start	max		
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3xD - 6xD	80	120	160		
			8xD	65	100	135		
			10xD	55	85	115		
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3xD - 6xD	60	90	120		
			8xD	50	75	100		
			10xD	40	60	80		
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3xD - 6xD	40	60	80		
			8xD	35	50	65		
			10xD	30	40	50		
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3xD - 6xD	80	110	140		
			8xD	70	90	110		
			10xD	60	80	100		
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3xD - 6xD	80	100	120		
			8xD	70	90	110		
			10xD	60	80	100		

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

ISO 513	MATERIAL	HARDNESS HB	L/D	DC 30.00 ÷ 35.00			DC 36.00 ÷ 40.00			DC 41.00 ÷ 45.00		
				min	start	max	min	start	max	min	start	max
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3xD - 6xD	0.16	0.22	0.28	0.18	0.25	0.32	0.18	0.27	0.36
			8xD	0.12	0.17	0.22	0.14	0.20	0.26	0.14	0.21	0.28
			10xD	0.10	0.15	0.20	0.12	0.17	0.22	0.12	0.18	0.24
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3xD - 6xD	0.18	0.25	0.32	0.20	0.28	0.36	0.20	0.31	0.42
			8xD	0.14	0.20	0.26	0.16	0.22	0.28	0.16	0.25	0.34
			10xD	0.12	0.17	0.22	0.14	0.19	0.24	0.14	0.22	0.30
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3xD - 6xD	0.18	0.24	0.30	0.20	0.27	0.34	0.20	0.30	0.40
			8xD	0.14	0.19	0.24	0.16	0.21	0.26	0.16	0.24	0.32
			10xD	0.12	0.16	0.20	0.14	0.18	0.22	0.14	0.21	0.28
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3xD - 6xD	0.20	0.27	0.34	0.22	0.30	0.38	0.22	0.33	0.44
			8xD	0.16	0.21	0.26	0.18	0.24	0.30	0.18	0.27	0.36
			10xD	0.14	0.18	0.22	0.16	0.21	0.26	0.16	0.23	0.30
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3xD - 6xD	0.16	0.22	0.28	0.18	0.24	0.30	0.18	0.28	0.36
			8xD	0.12	0.17	0.22	0.14	0.19	0.24	0.14	0.21	0.28
			10xD	0.10	0.15	0.20	0.12	0.16	0.20	0.12	0.18	0.24

Complete workpiece materials p. H1.

(fn: mm/rev)

DC 46.00 ÷ 50.00			DC 51.00 ÷ 55.00			DC 56.00 ÷ 60.00					
min	start	max	min	start	max	min	start	max			
0.20	0.30	0.40	0.20	0.32	0.44	0.22	0.34	0.46			
0.16	0.24	0.32	0.16	0.26	0.36	0.18	0.27	0.36			
0.14	0.21	0.28	0.14	0.22	0.30	0.16	0.24	0.32			
0.22	0.29	0.46	0.22	0.36	0.50	0.24	0.38	0.52			
0.18	0.27	0.36	0.18	0.27	0.40	0.20	0.31	0.42			
0.16	0.24	0.32	0.16	0.26	0.36	0.16	0.26	0.36			
0.22	0.33	0.44	0.22	0.35	0.48	0.24	0.37	0.50			
0.18	0.27	0.36	0.18	0.28	0.38	0.20	0.30	0.40			
0.16	0.23	0.30	0.16	0.25	0.34	0.16	0.26	0.36			
0.24	0.36	0.48	0.24	0.38	0.52	0.26	0.40	0.54			
0.20	0.29	0.38	0.20	0.31	0.42	0.20	0.32	0.44			
0.16	0.25	0.34	0.16	0.26	0.36	0.18	0.28	0.38			
0.20	0.29	0.38	0.20	0.31	0.42	0.20	0.32	0.44			
0.16	0.23	0.30	0.16	0.25	0.34	0.16	0.26	0.36			
0.14	0.20	0.26	0.14	0.22	0.30	0.14	0.22	0.30			

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

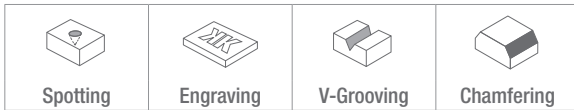
F - ACCESSORIES

G - SPARE PARTS

SPOT DRILL

High quality multipurpose system

APPLICATION



ISO APPLICATION FIELDS

P M K N

ADVANTAGES AND CHARACTERISTICS

- Highly universal system for chamfering, engraving, spot drilling or milling grooves
- Convenient to use with great flexibility
- Inserts available with different radii and for diverse workpiece materials



• Drilling bodies

- Cylindrical type and screw-in type
- Max. drilling dia. 14mm, min. drilling dia. 2.4mm
- Smart kit of 1 holder plus 4 inserts available
- Extension sleeves (steel/carbon 10xD)



• Inserts

- Available R03/08 for PMK, R04/08 for aluminium
- Cemented carbide grades with PVD coatings or uncoated for N materials
- Geometries: GP, AL



<h1>NT-SPOT</h1> <h2>SPOT drill</h2> <ul style="list-style-type: none"> Spot drill system with SPOT inserts External coolant Multifunctional system for maximum versatility Inserts cannot be mounted on DRS drills or ChamferSquare milling holders 	<p>Screw-in</p>	
	<p>Cylindrical</p>	

Designation	Stock	DC	DCX	CICT	DCON	LF	LU	CRKS		MIID
SCREW-IN										
NT-SPOT D14-M08-L052	●	15.4	14	1	8.5	35	-	M8		SPOT11
CYLINDRICAL										
NT-SPOT D14-S16-L100	●	15.4	14	1	16	100	30	-		SPOT11

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

Spare parts	Insert screws	Flag wrenches
NT-SPOT D14-○○○-L○○○	NT-ST35080T15	NT-FTB15

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

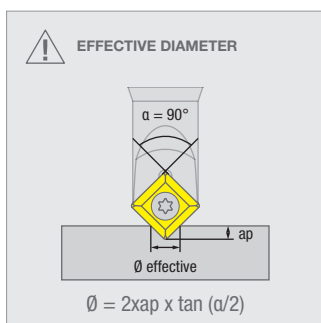
G - SPARE PARTS

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

<h1>SPOT11</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD	HF PVD	HF PVD	HF PVD	
<h2>SPOT drill</h2>		JP7525	JP8725	JP9535	JU6520	
<ul style="list-style-type: none"> • General purpose type or fine polished sharp geometries for aluminum or non-ferrous materials available • Diverse PVD coated or uncoated carbide grades available • Multiple radii available for each geometry • Inserts cannot be mounted on DRS drills or ChamferSquare milling holders 	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: 1st choice)				
	P	120 240				
	M		80 160			
	K	100 160				
	N			240 400		
	S					
	H					

Designation		RE	IC	S	D1	LE	Stock				
GENERAL	GP P M K										
		SPOT11 R03-GP	0.3	11	3.97	4.3	10.4	●	●	●	
		SPOT11 R08-GP	0.8	11	3.97	4.3	9.4	●	●	●	
ALUMINIUM	AL N										
		SPOT11 R04-AL	0.4	11	3.97	4.3	10.2				●
		SPOT11 R08-AL	0.8	11	3.97	4.3	9.4				●

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion



ISO 513	MATERIAL	HARDNESS HB	JP8725				
			min	start	max		
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	120	180	240		
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	100	150	200		
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	80	120	160		
ISO 513	MATERIAL	HARDNESS HB	JP9535				
			min	start	max		
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	80	120	160		
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	60	90	120		
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	80	120	160		
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		60	100	140		
ISO 513	MATERIAL	HARDNESS HB	JP7525				
			min	start	max		
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	100	130	160		
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	100	110	120		
ISO 513	MATERIAL	HARDNESS HB	JU6520				
			min	start	max		
N1	Aluminium alloys ≤ Si 12% (ex. 3.4365/AlZn5.5MgCu/ERGA)		240	320	400		
N2	Aluminium alloys Si > 12% (ex. 3.2382/G-AlSi12)		160	230	300		

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

NCD DRILLS

High performance solid carbide drill series

APPLICATION



ISO APPLICATION FIELDS

P M K S

ADVANTAGES AND CHARACTERISTICS

- Premium quality delivering top class performance
- Suitable for different types of holes and surfaces on diverse materials
- Twisted flute style with or without coolant available in 3xD and 5xD as standards, for other sizes and step drills we can provide as special
- Cutting parameters available on smart phone



• Range

- D3-20mm, 3xD and 5xD, with and without coolant
- Special length and step drill available upon request

• Geometries

- GP for general purpose, wide application range
- SC for reduced cutting force and smooth cutting



NCD3-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- **Without** coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

3xD

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3-GP 0300-062/020-S06	●	3	3	14	20	62	6	140°			
NCD3-GP 0310-062/020-S06	●	3.1	3	14	20	62	6	140°			
NCD3-GP 0320-062/020-S06	●	3.2	3	14	20	62	6	140°			
NCD3-GP 0330-062/020-S06	●	3.3	3	14	20	62	6	140°			
NCD3-GP 0340-062/020-S06	●	3.4	3	14	20	62	6	140°			
NCD3-GP 0350-062/020-S06	●	3.5	3	14	20	62	6	140°			
NCD3-GP 0360-062/020-S06	●	3.6	3	14	20	62	6	140°			
NCD3-GP 0370-062/020-S06	●	3.7	3	14	20	62	6	140°			
NCD3-GP 0380-066/024-S06	●	3.8	3	17	24	66	6	140°			
NCD3-GP 0390-066/024-S06	●	3.9	3	17	24	66	6	140°			
NCD3-GP 0400-066/024-S06	●	4	3	17	24	66	6	140°			
NCD3-GP 0410-066/024-S06	●	4.1	3	17	24	66	6	140°			
NCD3-GP 0420-066/024-S06	●	4.2	3	17	24	66	6	140°			
NCD3-GP 0430-066/024-S06	●	4.3	3	17	24	66	6	140°			
NCD3-GP 0440-066/024-S06	●	4.4	3	17	24	66	6	140°			
NCD3-GP 0450-066/024-S06	●	4.5	3	17	24	66	6	140°			
NCD3-GP 0460-066/024-S06	●	4.6	3	17	24	66	6	140°			
NCD3-GP 0470-066/024-S06	●	4.7	3	17	24	66	6	140°			
NCD3-GP 0480-066/028-S06	●	4.8	3	20	28	66	6	140°			
NCD3-GP 0490-066/028-S06	●	4.9	3	20	28	66	6	140°			
NCD3-GP 0500-066/028-S06	●	5	3	20	28	66	6	140°			
NCD3-GP 0510-066/028-S06	●	5.1	3	20	28	66	6	140°			
NCD3-GP 0520-066/028-S06	●	5.2	3	20	28	66	6	140°			
NCD3-GP 0530-066/028-S06	●	5.3	3	20	28	66	6	140°			
NCD3-GP 0540-066/028-S06	●	5.4	3	20	28	66	6	140°			
NCD3-GP 0550-066/028-S06	●	5.5	3	20	28	66	6	140°			
NCD3-GP 0560-066/028-S06	●	5.6	3	20	28	66	6	140°			
NCD3-GP 0570-066/028-S06	●	5.7	3	20	28	66	6	140°			
NCD3-GP 0580-066/028-S06	●	5.8	3	20	28	66	6	140°			
NCD3-GP 0590-066/028-S06	●	5.9	3	20	28	66	6	140°			
NCD3-GP 0600-066/028-S06	●	6	3	20	28	66	6	140°			
NCD3-GP 0610-079/034-S08	●	6.1	3	24	34	79	8	140°			
NCD3-GP 0620-079/034-S08	●	6.2	3	24	34	79	8	140°			
NCD3-GP 0630-079/034-S08	●	6.3	3	24	34	79	8	140°			
NCD3-GP 0640-079/034-S08	●	6.4	3	24	34	79	8	140°			
NCD3-GP 0650-079/034-S08	●	6.5	3	24	34	79	8	140°			
NCD3-GP 0660-079/034-S08	●	6.6	3	24	34	79	8	140°			
NCD3-GP 0670-079/034-S08	●	6.7	3	24	34	79	8	140°			
NCD3-GP 0680-079/034-S08	●	6.8	3	24	34	79	8	140°			
NCD3-GP 0690-079/034-S08	●	6.9	3	24	34	79	8	140°			
NCD3-GP 0700-079/034-S08	●	7	3	24	34	79	8	140°			
NCD3-GP 0710-079/041-S08	●	7.1	3	29	41	79	8	140°			
NCD3-GP 0720-079/041-S08	●	7.2	3	29	41	79	8	140°			
NCD3-GP 0730-079/041-S08	●	7.3	3	29	41	79	8	140°			
NCD3-GP 0740-079/041-S08	●	7.4	3	29	41	79	8	140°			
NCD3-GP 0750-079/041-S08	●	7.5	3	29	41	79	8	140°			
NCD3-GP 0760-079/041-S08	●	7.6	3	29	41	79	8	140°			
NCD3-GP 0770-079/041-S08	●	7.7	3	29	41	79	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD3-GP 0780-079/041-S08	●	7.8	3	29	41	79	8	140°				
NCD3-GP 0790-079/041-S08	●	7.9	3	29	41	79	8	140°				
NCD3-GP 0800-079/041-S08	●	8	3	29	41	79	8	140°				
NCD3-GP 0810-089/047-S10	●	8.1	3	35	47	89	10	140°				
NCD3-GP 0820-089/047-S10	●	8.2	3	35	47	89	10	140°				
NCD3-GP 0830-089/047-S10	●	8.3	3	35	47	89	10	140°				
NCD3-GP 0840-089/047-S10	●	8.4	3	35	47	89	10	140°				
NCD3-GP 0850-089/047-S10	●	8.5	3	35	47	89	10	140°				
NCD3-GP 0860-089/047-S10	●	8.6	3	35	47	89	10	140°				
NCD3-GP 0870-089/047-S10	●	8.7	3	35	47	89	10	140°				
NCD3-GP 0880-089/047-S10	●	8.8	3	35	47	89	10	140°				
NCD3-GP 0890-089/047-S10	●	8.9	3	35	47	89	10	140°				
NCD3-GP 0900-089/047-S10	●	9	3	35	47	89	10	140°				
NCD3-GP 0910-089/047-S10	●	9.1	3	35	47	89	10	140°				
NCD3-GP 0920-089/047-S10	●	9.2	3	35	47	89	10	140°				
NCD3-GP 0930-089/047-S10	●	9.3	3	35	47	89	10	140°				
NCD3-GP 0940-089/047-S10	●	9.4	3	35	47	89	10	140°				
NCD3-GP 0950-089/047-S10	●	9.5	3	35	47	89	10	140°				
NCD3-GP 0960-089/047-S10	●	9.6	3	35	47	89	10	140°				
NCD3-GP 0970-089/047-S10	●	9.7	3	35	47	89	10	140°				
NCD3-GP 0980-089/047-S10	●	9.8	3	35	47	89	10	140°				
NCD3-GP 0990-089/047-S10	●	9.9	3	35	47	89	10	140°				
NCD3-GP 1000-089/047-S10	●	10	3	35	47	89	10	140°				
NCD3-GP 1010-102/055-S12	●	10.1	3	40	55	102	12	140°				
NCD3-GP 1020-102/055-S12	●	10.2	3	40	55	102	12	140°				
NCD3-GP 1030-102/055-S12	●	10.3	3	40	55	102	12	140°				
NCD3-GP 1040-102/055-S12	●	10.4	3	40	55	102	12	140°				
NCD3-GP 1050-102/055-S12	●	10.5	3	40	55	102	12	140°				
NCD3-GP 1060-102/055-S12	●	10.6	3	40	55	102	12	140°				
NCD3-GP 1070-102/055-S12	●	10.7	3	40	55	102	12	140°				
NCD3-GP 1080-102/055-S12	●	10.8	3	40	55	102	12	140°				
NCD3-GP 1090-102/055-S12	●	10.9	3	40	55	102	12	140°				
NCD3-GP 1100-102/055-S12	●	11	3	40	55	102	12	140°				
NCD3-GP 1110-102/055-S12	●	11.1	3	40	55	102	12	140°				
NCD3-GP 1120-102/055-S12	●	11.2	3	40	55	102	12	140°				
NCD3-GP 1130-102/055-S12	●	11.3	3	40	55	102	12	140°				
NCD3-GP 1140-102/055-S12	●	11.4	3	40	55	102	12	140°				
NCD3-GP 1150-102/055-S12	●	11.5	3	40	55	102	12	140°				
NCD3-GP 1160-102/055-S12	●	11.6	3	40	55	102	12	140°				
NCD3-GP 1170-102/055-S12	●	11.7	3	40	55	102	12	140°				
NCD3-GP 1180-102/055-S12	●	11.8	3	40	55	102	12	140°				
NCD3-GP 1190-102/055-S12	●	11.9	3	40	55	102	12	140°				
NCD3-GP 1200-102/055-S12	●	12	3	40	55	102	12	140°				
NCD3-GP 1250-107/060-S14	●	12.5	3	43	60	107	14	140°				
NCD3-GP 1300-107/060-S14	●	13	3	43	60	107	14	140°				
NCD3-GP 1350-107/060-S14	●	13.5	3	43	60	107	14	140°				
NCD3-GP 1400-107/060-S14	●	14	3	43	60	107	14	140°				
NCD3-GP 1450-115/065-S16	●	14.5	3	45	65	115	16	140°				
NCD3-GP 1500-115/065-S16	●	15	3	49	65	115	16	140°				
NCD3-GP 1550-115/065-S16	●	15.5	3	49	65	115	16	140°				
NCD3-GP 1600-115/065-S16	●	16	3	49	65	115	16	140°				
NCD3-GP 1650-123/073-S18	●	16.5	3	52	73	123	18	140°				
NCD3-GP 1700-123/073-S18	●	17	3	52	73	123	18	140°				
NCD3-GP 1750-123/073-S18	●	17.5	3	52	73	123	18	140°				
NCD3-GP 1800-123/073-S18	●	18	3	52	73	123	18	140°				
NCD3-GP 1850-131/079-S20	●	18.5	3	55	79	131	20	140°				
NCD3-GP 1900-131/079-S20	●	19	3	55	79	131	20	140°				
NCD3-GP 1950-131/079-S20	●	19.5	3	55	79	131	20	140°				
NCD3-GP 2000-131/079-S20	●	20	3	55	79	131	20	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion
E68

NCD5-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- **Without** coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

5xD

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5-GP 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5-GP 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5-GP 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5-GP 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5-GP 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5-GP 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5-GP 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5-GP 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5-GP 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5-GP 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5-GP 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5-GP 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5-GP 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5-GP 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5-GP 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5-GP 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5-GP 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5-GP 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5-GP 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5-GP 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5-GP 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5-GP 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5-GP 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5-GP 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5-GP 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5-GP 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5-GP 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5-GP 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5-GP 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5-GP 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5-GP 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5-GP 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5-GP 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5-GP 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5-GP 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5-GP 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5-GP 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5-GP 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5-GP 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5-GP 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5-GP 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5-GP 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5-GP 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5-GP 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5-GP 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5-GP 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5-GP 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5-GP 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD5-GP 0780-091/053-S08	●	7.8	5	43	53	91	8	140°				
NCD5-GP 0790-091/053-S08	●	7.9	5	43	53	91	8	140°				
NCD5-GP 0800-091/053-S08	●	8	5	43	53	91	8	140°				
NCD5-GP 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°				
NCD5-GP 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°				
NCD5-GP 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°				
NCD5-GP 0840-103/061-S10	●	8.4	5	49	61	103	10	140°				
NCD5-GP 0850-103/061-S10	●	8.5	5	49	61	103	10	140°				
NCD5-GP 0860-103/061-S10	●	8.6	5	49	61	103	10	140°				
NCD5-GP 0870-103/061-S10	●	8.7	5	49	61	103	10	140°				
NCD5-GP 0880-103/061-S10	●	8.8	5	49	61	103	10	140°				
NCD5-GP 0890-103/061-S10	●	8.9	5	49	61	103	10	140°				
NCD5-GP 0900-103/061-S10	●	9	5	49	61	103	10	140°				
NCD5-GP 0910-103/061-S10	●	9.1	5	49	61	103	10	140°				
NCD5-GP 0920-103/061-S10	●	9.2	5	49	61	103	10	140°				
NCD5-GP 0930-103/061-S10	●	9.3	5	49	61	103	10	140°				
NCD5-GP 0940-103/061-S10	●	9.4	5	49	61	103	10	140°				
NCD5-GP 0950-103/061-S10	●	9.5	5	49	61	103	10	140°				
NCD5-GP 0960-103/061-S10	●	9.6	5	49	61	103	10	140°				
NCD5-GP 0970-103/061-S10	●	9.7	5	49	61	103	10	140°				
NCD5-GP 0980-103/061-S10	●	9.8	5	49	61	103	10	140°				
NCD5-GP 0990-103/061-S10	●	9.9	5	49	61	103	10	140°				
NCD5-GP 1000-103/061-S10	●	10	5	49	61	103	10	140°				
NCD5-GP 1010-118/071-S12	●	10.1	5	52	71	118	12	140°				
NCD5-GP 1020-118/071-S12	●	10.2	5	52	71	118	12	140°				
NCD5-GP 1030-118/071-S12	●	10.3	5	52	71	118	12	140°				
NCD5-GP 1040-118/071-S12	●	10.4	5	52	71	118	12	140°				
NCD5-GP 1050-118/071-S12	●	10.5	5	52	71	118	12	140°				
NCD5-GP 1060-118/071-S12	●	10.6	5	52	71	118	12	140°				
NCD5-GP 1070-118/071-S12	●	10.7	5	52	71	118	12	140°				
NCD5-GP 1080-118/071-S12	●	10.8	5	52	71	118	12	140°				
NCD5-GP 1090-118/071-S12	●	10.9	5	52	71	118	12	140°				
NCD5-GP 1100-118/071-S12	●	11	5	52	71	118	12	140°				
NCD5-GP 1110-118/071-S12	●	11.1	5	52	71	118	12	140°				
NCD5-GP 1120-118/071-S12	●	11.2	5	52	71	118	12	140°				
NCD5-GP 1130-118/071-S12	●	11.3	5	52	71	118	12	140°				
NCD5-GP 1140-118/071-S12	●	11.4	5	52	71	118	12	140°				
NCD5-GP 1150-118/071-S12	●	11.5	5	52	71	118	12	140°				
NCD5-GP 1160-118/071-S12	●	11.6	5	52	71	118	12	140°				
NCD5-GP 1170-118/071-S12	●	11.7	5	52	71	118	12	140°				
NCD5-GP 1180-118/071-S12	●	11.8	5	52	71	118	12	140°				
NCD5-GP 1190-118/071-S12	●	11.9	5	52	71	118	12	140°				
NCD5-GP 1200-118/071-S12	●	12	5	52	71	118	12	140°				
NCD5-GP 1250-124/077-S14	●	12.5	5	63	77	124	14	140°				
NCD5-GP 1300-124/077-S14	●	13	5	63	77	124	14	140°				
NCD5-GP 1350-124/077-S14	●	13.5	5	63	77	124	14	140°				
NCD5-GP 1400-124/077-S14	●	14	5	63	77	124	14	140°				
NCD5-GP 1450-133/083-S16	●	14.5	5	67	83	133	16	140°				
NCD5-GP 1500-133/083-S16	●	15	5	67	83	133	16	140°				
NCD5-GP 1550-133/083-S16	●	15.5	5	67	83	133	16	140°				
NCD5-GP 1600-133/083-S16	●	16	5	67	83	133	16	140°				
NCD5-GP 1650-143/093-S18	●	16.5	5	75	93	143	18	140°				
NCD5-GP 1700-143/093-S18	●	17	5	75	93	143	18	140°				
NCD5-GP 1750-143/093-S18	●	17.5	5	75	93	143	18	140°				
NCD5-GP 1800-143/093-S18	●	18	5	75	93	143	18	140°				
NCD5-GP 1850-153/101-S20	●	18.5	5	81	101	153	20	140°				
NCD5-GP 1900-153/101-S20	●	19	5	81	101	153	20	140°				
NCD5-GP 1950-153/101-S20	●	19.5	5	81	101	153	20	140°				
NCD5-GP 2000-153/101-S20	●	20	5	81	101	153	20	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD3H-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- With coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

3xD
▲ with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD3H-GP 0300-062/020-S06	●	3	3	14	20	62	6	140°				
NCD3H-GP 0310-062/020-S06	●	3.1	3	14	20	62	6	140°				
NCD3H-GP 0320-062/020-S06	●	3.2	3	14	20	62	6	140°				
NCD3H-GP 0330-062/020-S06	●	3.3	3	14	20	62	6	140°				
NCD3H-GP 0340-062/020-S06	●	3.4	3	14	20	62	6	140°				
NCD3H-GP 0350-062/020-S06	●	3.5	3	14	20	62	6	140°				
NCD3H-GP 0360-062/020-S06	●	3.6	3	14	20	62	6	140°				
NCD3H-GP 0370-062/020-S06	●	3.7	3	14	20	62	6	140°				
NCD3H-GP 0380-066/024-S06	●	3.8	3	17	24	66	6	140°				
NCD3H-GP 0390-066/024-S06	●	3.9	3	17	24	66	6	140°				
NCD3H-GP 0400-066/024-S06	●	4	3	17	24	66	6	140°				
NCD3H-GP 0410-066/024-S06	●	4.1	3	17	24	66	6	140°				
NCD3H-GP 0420-066/024-S06	●	4.2	3	17	24	66	6	140°				
NCD3H-GP 0430-066/024-S06	●	4.3	3	17	24	66	6	140°				
NCD3H-GP 0440-066/024-S06	●	4.4	3	17	24	66	6	140°				
NCD3H-GP 0450-066/024-S06	●	4.5	3	17	24	66	6	140°				
NCD3H-GP 0460-066/024-S06	●	4.6	3	17	24	66	6	140°				
NCD3H-GP 0470-066/024-S06	●	4.7	3	17	24	66	6	140°				
NCD3H-GP 0480-066/028-S06	●	4.8	3	20	28	66	6	140°				
NCD3H-GP 0490-066/028-S06	●	4.9	3	20	28	66	6	140°				
NCD3H-GP 0500-066/028-S06	●	5	3	20	28	66	6	140°				
NCD3H-GP 0510-066/028-S06	●	5.1	3	20	28	66	6	140°				
NCD3H-GP 0520-066/028-S06	●	5.2	3	20	28	66	6	140°				
NCD3H-GP 0530-066/028-S06	●	5.3	3	20	28	66	6	140°				
NCD3H-GP 0540-066/028-S06	●	5.4	3	20	28	66	6	140°				
NCD3H-GP 0550-066/028-S06	●	5.5	3	20	28	66	6	140°				
NCD3H-GP 0560-066/028-S06	●	5.6	3	20	28	66	6	140°				
NCD3H-GP 0570-066/028-S06	●	5.7	3	20	28	66	6	140°				
NCD3H-GP 0580-066/028-S06	●	5.8	3	20	28	66	6	140°				
NCD3H-GP 0590-066/028-S06	●	5.9	3	20	28	66	6	140°				
NCD3H-GP 0600-066/028-S06	●	6	3	20	28	66	6	140°				
NCD3H-GP 0610-079/034-S08	●	6.1	3	24	34	79	8	140°				
NCD3H-GP 0620-079/034-S08	●	6.2	3	24	34	79	8	140°				
NCD3H-GP 0630-079/034-S08	●	6.3	3	24	34	79	8	140°				
NCD3H-GP 0640-079/034-S08	●	6.4	3	24	34	79	8	140°				
NCD3H-GP 0650-079/034-S08	●	6.5	3	24	34	79	8	140°				
NCD3H-GP 0660-079/034-S08	●	6.6	3	24	34	79	8	140°				
NCD3H-GP 0670-079/034-S08	●	6.7	3	24	34	79	8	140°				
NCD3H-GP 0680-079/034-S08	●	6.8	3	24	34	79	8	140°				
NCD3H-GP 0690-079/034-S08	●	6.9	3	24	34	79	8	140°				
NCD3H-GP 0700-079/034-S08	●	7	3	24	34	79	8	140°				
NCD3H-GP 0710-079/041-S08	●	7.1	3	29	41	79	8	140°				
NCD3H-GP 0720-079/041-S08	●	7.2	3	29	41	79	8	140°				
NCD3H-GP 0730-079/041-S08	●	7.3	3	29	41	79	8	140°				
NCD3H-GP 0740-079/041-S08	●	7.4	3	29	41	79	8	140°				
NCD3H-GP 0750-079/041-S08	●	7.5	3	29	41	79	8	140°				
NCD3H-GP 0760-079/041-S08	●	7.6	3	29	41	79	8	140°				
NCD3H-GP 0770-079/041-S08	●	7.7	3	29	41	79	8	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

	Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
A - TURNING	NCD3H-GP 0780-079/041-S08	●	7.8	3	29	41	79	8	140°			
	NCD3H-GP 0790-079/041-S08	●	7.9	3	29	41	79	8	140°			
	NCD3H-GP 0800-079/041-S08	●	8	3	29	41	79	8	140°			
	NCD3H-GP 0810-089/047-S10	●	8.1	3	35	47	89	10	140°			
	NCD3H-GP 0820-089/047-S10	●	8.2	3	35	47	89	10	140°			
	NCD3H-GP 0830-089/047-S10	●	8.3	3	35	47	89	10	140°			
	NCD3H-GP 0840-089/047-S10	●	8.4	3	35	47	89	10	140°			
	NCD3H-GP 0850-089/047-S10	●	8.5	3	35	47	89	10	140°			
	NCD3H-GP 0860-089/047-S10	●	8.6	3	35	47	89	10	140°			
	NCD3H-GP 0870-089/047-S10	●	8.7	3	35	47	89	10	140°			
B - THREADING	NCD3H-GP 0880-089/047-S10	●	8.8	3	35	47	89	10	140°			
	NCD3H-GP 0890-089/047-S10	●	8.9	3	35	47	89	10	140°			
	NCD3H-GP 0900-089/047-S10	●	9	3	35	47	89	10	140°			
	NCD3H-GP 0910-089/047-S10	●	9.1	3	35	47	89	10	140°			
	NCD3H-GP 0920-089/047-S10	●	9.2	3	35	47	89	10	140°			
	NCD3H-GP 0930-089/047-S10	●	9.3	3	35	47	89	10	140°			
	NCD3H-GP 0940-089/047-S10	●	9.4	3	35	47	89	10	140°			
	NCD3H-GP 0950-089/047-S10	●	9.5	3	35	47	89	10	140°			
	NCD3H-GP 0960-089/047-S10	●	9.6	3	35	47	89	10	140°			
	NCD3H-GP 0970-089/047-S10	●	9.7	3	35	47	89	10	140°			
C - GROOVING	NCD3H-GP 0980-089/047-S10	●	9.8	3	35	47	89	10	140°			
	NCD3H-GP 0990-089/047-S10	●	9.9	3	35	47	89	10	140°			
	NCD3H-GP 1000-089/047-S10	●	10	3	35	47	89	10	140°			
	NCD3H-GP 1010-102/055-S12	●	10.1	3	40	55	102	12	140°			
	NCD3H-GP 1020-102/055-S12	●	10.2	3	40	55	102	12	140°			
	NCD3H-GP 1030-102/055-S12	●	10.3	3	40	55	102	12	140°			
	NCD3H-GP 1040-102/055-S12	●	10.4	3	40	55	102	12	140°			
	NCD3H-GP 1050-102/055-S12	●	10.5	3	40	55	102	12	140°			
	NCD3H-GP 1060-102/055-S12	●	10.6	3	40	55	102	12	140°			
	NCD3H-GP 1070-102/055-S12	●	10.7	3	40	55	102	12	140°			
D - MILLING	NCD3H-GP 1080-102/055-S12	●	10.8	3	40	55	102	12	140°			
	NCD3H-GP 1090-102/055-S12	●	10.9	3	40	55	102	12	140°			
	NCD3H-GP 1100-102/055-S12	●	11	3	40	55	102	12	140°			
	NCD3H-GP 1110-102/055-S12	●	11.1	3	40	55	102	12	140°			
	NCD3H-GP 1120-102/055-S12	●	11.2	3	40	55	102	12	140°			
	NCD3H-GP 1130-102/055-S12	●	11.3	3	40	55	102	12	140°			
	NCD3H-GP 1140-102/055-S12	●	11.4	3	40	55	102	12	140°			
	NCD3H-GP 1150-102/055-S12	●	11.5	3	40	55	102	12	140°			
	NCD3H-GP 1160-102/055-S12	●	11.6	3	40	55	102	12	140°			
	NCD3H-GP 1170-102/055-S12	●	11.7	3	40	55	102	12	140°			
E - DRILLING	NCD3H-GP 1180-102/055-S12	●	11.8	3	40	55	102	12	140°			
	NCD3H-GP 1190-102/055-S12	●	11.9	3	40	55	102	12	140°			
	NCD3H-GP 1200-102/055-S12	●	12	3	40	55	102	12	140°			
	NCD3H-GP 1250-107/060-S14	●	12.5	3	43	60	107	14	140°			
	NCD3H-GP 1300-107/060-S14	●	13	3	43	60	107	14	140°			
	NCD3H-GP 1350-107/060-S14	●	13.5	3	43	60	107	14	140°			
	NCD3H-GP 1400-107/060-S14	●	14	3	43	60	107	14	140°			
	NCD3H-GP 1450-115/065-S16	●	14.5	3	45	65	115	16	140°			
	NCD3H-GP 1500-115/065-S16	●	15	3	49	65	115	16	140°			
	NCD3H-GP 1550-115/065-S16	●	15.5	3	49	65	115	16	140°			
F - ACCESSORIES	NCD3H-GP 1600-115/065-S16	●	16	3	49	65	115	16	140°			
	NCD3H-GP 1650-123/073-S18	●	16.5	3	52	73	123	18	140°			
	NCD3H-GP 1700-123/073-S18	●	17	3	52	73	123	18	140°			
	NCD3H-GP 1750-123/073-S18	●	17.5	3	52	73	123	18	140°			
	NCD3H-GP 1800-123/073-S18	●	18	3	52	73	123	18	140°			
	NCD3H-GP 1850-131/079-S20	●	18.5	3	55	79	131	20	140°			
	NCD3H-GP 1900-131/079-S20	●	19	3	55	79	131	20	140°			
	NCD3H-GP 1950-131/079-S20	●	19.5	3	55	79	131	20	140°			
	NCD3H-GP 2000-131/079-S20	●	20	3	55	79	131	20	140°			
	G - SPARE PARTS											

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD5H-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- With coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

5xD
▲ with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-GP 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5H-GP 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5H-GP 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5H-GP 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5H-GP 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5H-GP 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5H-GP 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5H-GP 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5H-GP 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5H-GP 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5H-GP 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5H-GP 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5H-GP 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5H-GP 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5H-GP 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5H-GP 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5H-GP 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5H-GP 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5H-GP 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5H-GP 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5H-GP 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5H-GP 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5H-GP 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5H-GP 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5H-GP 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5H-GP 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5H-GP 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5H-GP 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5H-GP 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5H-GP 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5H-GP 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5H-GP 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5H-GP 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5H-GP 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5H-GP 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5H-GP 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5H-GP 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5H-GP 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5H-GP 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5H-GP 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5H-GP 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5H-GP 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5H-GP 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5H-GP 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5H-GP 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5H-GP 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5H-GP 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5H-GP 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD5H-GP 0780-091/053-S08	●	7.8	5	43	53	91	8	140°				
NCD5H-GP 0790-091/053-S08	●	7.9	5	43	53	91	8	140°				
NCD5H-GP 0800-091/053-S08	●	8	5	43	53	91	8	140°				
NCD5H-GP 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°				
NCD5H-GP 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°				
NCD5H-GP 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°				
NCD5H-GP 0840-103/061-S10	●	8.4	5	49	61	103	10	140°				
NCD5H-GP 0850-103/061-S10	●	8.5	5	49	61	103	10	140°				
NCD5H-GP 0860-103/061-S10	●	8.6	5	49	61	103	10	140°				
NCD5H-GP 0870-103/061-S10	●	8.7	5	49	61	103	10	140°				
NCD5H-GP 0880-103/061-S10	●	8.8	5	49	61	103	10	140°				
NCD5H-GP 0890-103/061-S10	●	8.9	5	49	61	103	10	140°				
NCD5H-GP 0900-103/061-S10	●	9	5	49	61	103	10	140°				
NCD5H-GP 0910-103/061-S10	●	9.1	5	49	61	103	10	140°				
NCD5H-GP 0920-103/061-S10	●	9.2	5	49	61	103	10	140°				
NCD5H-GP 0930-103/061-S10	●	9.3	5	49	61	103	10	140°				
NCD5H-GP 0940-103/061-S10	●	9.4	5	49	61	103	10	140°				
NCD5H-GP 0950-103/061-S10	●	9.5	5	49	61	103	10	140°				
NCD5H-GP 0960-103/061-S10	●	9.6	5	49	61	103	10	140°				
NCD5H-GP 0970-103/061-S10	●	9.7	5	49	61	103	10	140°				
NCD5H-GP 0980-103/061-S10	●	9.8	5	49	61	103	10	140°				
NCD5H-GP 0990-103/061-S10	●	9.9	5	49	61	103	10	140°				
NCD5H-GP 1000-103/061-S10	●	10	5	49	61	103	10	140°				
NCD5H-GP 1010-118/071-S12	●	10.1	5	52	71	118	12	140°				
NCD5H-GP 1020-118/071-S12	●	10.2	5	52	71	118	12	140°				
NCD5H-GP 1030-118/071-S12	●	10.3	5	52	71	118	12	140°				
NCD5H-GP 1040-118/071-S12	●	10.4	5	52	71	118	12	140°				
NCD5H-GP 1050-118/071-S12	●	10.5	5	52	71	118	12	140°				
NCD5H-GP 1060-118/071-S12	●	10.6	5	52	71	118	12	140°				
NCD5H-GP 1070-118/071-S12	●	10.7	5	52	71	118	12	140°				
NCD5H-GP 1080-118/071-S12	●	10.8	5	52	71	118	12	140°				
NCD5H-GP 1090-118/071-S12	●	10.9	5	52	71	118	12	140°				
NCD5H-GP 1100-118/071-S12	●	11	5	52	71	118	12	140°				
NCD5H-GP 1110-118/071-S12	●	11.1	5	52	71	118	12	140°				
NCD5H-GP 1120-118/071-S12	●	11.2	5	52	71	118	12	140°				
NCD5H-GP 1130-118/071-S12	●	11.3	5	52	71	118	12	140°				
NCD5H-GP 1140-118/071-S12	●	11.4	5	52	71	118	12	140°				
NCD5H-GP 1150-118/071-S12	●	11.5	5	52	71	118	12	140°				
NCD5H-GP 1160-118/071-S12	●	11.6	5	52	71	118	12	140°				
NCD5H-GP 1170-118/071-S12	●	11.7	5	52	71	118	12	140°				
NCD5H-GP 1180-118/071-S12	●	11.8	5	52	71	118	12	140°				
NCD5H-GP 1190-118/071-S12	●	11.9	5	52	71	118	12	140°				
NCD5H-GP 1200-118/071-S12	●	12	5	52	71	118	12	140°				
NCD5H-GP 1250-124/077-S14	●	12.5	5	63	77	124	14	140°				
NCD5H-GP 1300-124/077-S14	●	13	5	63	77	124	14	140°				
NCD5H-GP 1350-124/077-S14	●	13.5	5	63	77	124	14	140°				
NCD5H-GP 1400-124/077-S14	●	14	5	63	77	124	14	140°				
NCD5H-GP 1450-133/083-S16	●	14.5	5	67	83	133	16	140°				
NCD5H-GP 1500-133/083-S16	●	15	5	67	83	133	16	140°				
NCD5H-GP 1550-133/083-S16	●	15.5	5	67	83	133	16	140°				
NCD5H-GP 1600-133/083-S16	●	16	5	67	83	133	16	140°				
NCD5H-GP 1650-143/093-S18	●	16.5	5	75	93	143	18	140°				
NCD5H-GP 1700-143/093-S18	●	17	5	75	93	143	18	140°				
NCD5H-GP 1750-143/093-S18	●	17.5	5	75	93	143	18	140°				
NCD5H-GP 1800-143/093-S18	●	18	5	75	93	143	18	140°				
NCD5H-GP 1850-153/101-S20	●	18.5	5	81	101	153	20	140°				
NCD5H-GP 1900-153/101-S20	●	19	5	81	101	153	20	140°				
NCD5H-GP 1950-153/101-S20	●	19.5	5	81	101	153	20	140°				
NCD5H-GP 2000-153/101-S20	●	20	5	81	101	153	20	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion
E74

NCD3H-SC

NCD

- First choice for stainless steel and sticky free-cutting steels
- With coolant holes
- Self centering geometry for accurate holes
- AlCrN based multilayer coating with very low friction coefficient to reduce built up edge

3xD
▲ with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3H-SC 0300-062/020-S06	●	3	3	14	20	62	6	140°			
NCD3H-SC 0310-062/020-S06	●	3.1	3	14	20	62	6	140°			
NCD3H-SC 0320-062/020-S06	●	3.2	3	14	20	62	6	140°			
NCD3H-SC 0330-062/020-S06	●	3.3	3	14	20	62	6	140°			
NCD3H-SC 0340-062/020-S06	●	3.4	3	14	20	62	6	140°			
NCD3H-SC 0350-062/020-S06	●	3.5	3	14	20	62	6	140°			
NCD3H-SC 0360-062/020-S06	●	3.6	3	14	20	62	6	140°			
NCD3H-SC 0370-062/020-S06	●	3.7	3	14	20	62	6	140°			
NCD3H-SC 0380-066/024-S06	●	3.8	3	17	24	66	6	140°			
NCD3H-SC 0390-066/024-S06	●	3.9	3	17	24	66	6	140°			
NCD3H-SC 0400-066/024-S06	●	4	3	17	24	66	6	140°			
NCD3H-SC 0410-066/024-S06	●	4.1	3	17	24	66	6	140°			
NCD3H-SC 0420-066/024-S06	●	4.2	3	17	24	66	6	140°			
NCD3H-SC 0430-066/024-S06	●	4.3	3	17	24	66	6	140°			
NCD3H-SC 0440-066/024-S06	●	4.4	3	17	24	66	6	140°			
NCD3H-SC 0450-066/024-S06	●	4.5	3	17	24	66	6	140°			
NCD3H-SC 0460-066/024-S06	●	4.6	3	17	24	66	6	140°			
NCD3H-SC 0470-066/024-S06	●	4.7	3	17	24	66	6	140°			
NCD3H-SC 0480-066/028-S06	●	4.8	3	20	28	66	6	140°			
NCD3H-SC 0490-066/028-S06	●	4.9	3	20	28	66	6	140°			
NCD3H-SC 0500-066/028-S06	●	5	3	20	28	66	6	140°			
NCD3H-SC 0510-066/028-S06	●	5.1	3	20	28	66	6	140°			
NCD3H-SC 0520-066/028-S06	●	5.2	3	20	28	66	6	140°			
NCD3H-SC 0530-066/028-S06	●	5.3	3	20	28	66	6	140°			
NCD3H-SC 0540-066/028-S06	●	5.4	3	20	28	66	6	140°			
NCD3H-SC 0550-066/028-S06	●	5.5	3	20	28	66	6	140°			
NCD3H-SC 0560-066/028-S06	●	5.6	3	20	28	66	6	140°			
NCD3H-SC 0570-066/028-S06	●	5.7	3	20	28	66	6	140°			
NCD3H-SC 0580-066/028-S06	●	5.8	3	20	28	66	6	140°			
NCD3H-SC 0590-066/028-S06	●	5.9	3	20	28	66	6	140°			
NCD3H-SC 0600-066/028-S06	●	6	3	20	28	66	6	140°			
NCD3H-SC 0610-079/034-S08	●	6.1	3	24	34	79	8	140°			
NCD3H-SC 0620-079/034-S08	●	6.2	3	24	34	79	8	140°			
NCD3H-SC 0630-079/034-S08	●	6.3	3	24	34	79	8	140°			
NCD3H-SC 0640-079/034-S08	●	6.4	3	24	34	79	8	140°			
NCD3H-SC 0650-079/034-S08	●	6.5	3	24	34	79	8	140°			
NCD3H-SC 0660-079/034-S08	●	6.6	3	24	34	79	8	140°			
NCD3H-SC 0670-079/034-S08	●	6.7	3	24	34	79	8	140°			
NCD3H-SC 0680-079/034-S08	●	6.8	3	24	34	79	8	140°			
NCD3H-SC 0690-079/034-S08	●	6.9	3	24	34	79	8	140°			
NCD3H-SC 0700-079/034-S08	●	7	3	24	34	79	8	140°			
NCD3H-SC 0710-079/041-S08	●	7.1	3	29	41	79	8	140°			
NCD3H-SC 0720-079/041-S08	●	7.2	3	29	41	79	8	140°			
NCD3H-SC 0730-079/041-S08	●	7.3	3	29	41	79	8	140°			
NCD3H-SC 0740-079/041-S08	●	7.4	3	29	41	79	8	140°			
NCD3H-SC 0750-079/041-S08	●	7.5	3	29	41	79	8	140°			
NCD3H-SC 0760-079/041-S08	●	7.6	3	29	41	79	8	140°			
NCD3H-SC 0770-079/041-S08	●	7.7	3	29	41	79	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
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A - TURNING
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Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD3H-SC 0780-079/041-S08	●	7.8	3	29	41	79	8	140°				
NCD3H-SC 0790-079/041-S08	●	7.9	3	29	41	79	8	140°				
NCD3H-SC 0800-079/041-S08	●	8	3	29	41	79	8	140°				
NCD3H-SC 0810-089/047-S10	●	8.1	3	35	47	89	10	140°				
NCD3H-SC 0820-089/047-S10	●	8.2	3	35	47	89	10	140°				
NCD3H-SC 0830-089/047-S10	●	8.3	3	35	47	89	10	140°				
NCD3H-SC 0840-089/047-S10	●	8.4	3	35	47	89	10	140°				
NCD3H-SC 0850-089/047-S10	●	8.5	3	35	47	89	10	140°				
NCD3H-SC 0860-089/047-S10	●	8.6	3	35	47	89	10	140°				
NCD3H-SC 0870-089/047-S10	●	8.7	3	35	47	89	10	140°				
NCD3H-SC 0880-089/047-S10	●	8.8	3	35	47	89	10	140°				
NCD3H-SC 0890-089/047-S10	●	8.9	3	35	47	89	10	140°				
NCD3H-SC 0900-089/047-S10	●	9	3	35	47	89	10	140°				
NCD3H-SC 0910-089/047-S10	●	9.1	3	35	47	89	10	140°				
NCD3H-SC 0920-089/047-S10	●	9.2	3	35	47	89	10	140°				
NCD3H-SC 0930-089/047-S10	●	9.3	3	35	47	89	10	140°				
NCD3H-SC 0940-089/047-S10	●	9.4	3	35	47	89	10	140°				
NCD3H-SC 0950-089/047-S10	●	9.5	3	35	47	89	10	140°				
NCD3H-SC 0960-089/047-S10	●	9.6	3	35	47	89	10	140°				
NCD3H-SC 0970-089/047-S10	●	9.7	3	35	47	89	10	140°				
NCD3H-SC 0980-089/047-S10	●	9.8	3	35	47	89	10	140°				
NCD3H-SC 0990-089/047-S10	●	9.9	3	35	47	89	10	140°				
NCD3H-SC 1000-089/047-S10	●	10	3	35	47	89	10	140°				
NCD3H-SC 1010-102/055-S12	●	10.1	3	40	55	102	12	140°				
NCD3H-SC 1020-102/055-S12	●	10.2	3	40	55	102	12	140°				
NCD3H-SC 1030-102/055-S12	●	10.3	3	40	55	102	12	140°				
NCD3H-SC 1040-102/055-S12	●	10.4	3	40	55	102	12	140°				
NCD3H-SC 1050-102/055-S12	●	10.5	3	40	55	102	12	140°				
NCD3H-SC 1060-102/055-S12	●	10.6	3	40	55	102	12	140°				
NCD3H-SC 1070-102/055-S12	●	10.7	3	40	55	102	12	140°				
NCD3H-SC 1080-102/055-S12	●	10.8	3	40	55	102	12	140°				
NCD3H-SC 1090-102/055-S12	●	10.9	3	40	55	102	12	140°				
NCD3H-SC 1100-102/055-S12	●	11	3	40	55	102	12	140°				
NCD3H-SC 1110-102/055-S12	●	11.1	3	40	55	102	12	140°				
NCD3H-SC 1120-102/055-S12	●	11.2	3	40	55	102	12	140°				
NCD3H-SC 1130-102/055-S12	●	11.3	3	40	55	102	12	140°				
NCD3H-SC 1140-102/055-S12	●	11.4	3	40	55	102	12	140°				
NCD3H-SC 1150-102/055-S12	●	11.5	3	40	55	102	12	140°				
NCD3H-SC 1160-102/055-S12	●	11.6	3	40	55	102	12	140°				
NCD3H-SC 1170-102/055-S12	●	11.7	3	40	55	102	12	140°				
NCD3H-SC 1180-102/055-S12	●	11.8	3	40	55	102	12	140°				
NCD3H-SC 1190-102/055-S12	●	11.9	3	40	55	102	12	140°				
NCD3H-SC 1200-102/055-S12	●	12	3	40	55	102	12	140°				
NCD3H-SC 1250-107/060-S14	●	12.5	3	43	60	107	14	140°				
NCD3H-SC 1300-107/060-S14	●	13	3	43	60	107	14	140°				
NCD3H-SC 1350-107/060-S14	●	13.5	3	43	60	107	14	140°				
NCD3H-SC 1400-107/060-S14	●	14	3	43	60	107	14	140°				
NCD3H-SC 1450-115/065-S16	●	14.5	3	45	65	115	16	140°				
NCD3H-SC 1500-115/065-S16	●	15	3	49	65	115	16	140°				
NCD3H-SC 1550-115/065-S16	●	15.5	3	49	65	115	16	140°				
NCD3H-SC 1600-115/065-S16	●	16	3	49	65	115	16	140°				
NCD3H-SC 1650-123/073-S18	●	16.5	3	52	73	123	18	140°				
NCD3H-SC 1700-123/073-S18	●	17	3	52	73	123	18	140°				
NCD3H-SC 1750-123/073-S18	●	17.5	3	52	73	123	18	140°				
NCD3H-SC 1800-123/073-S18	●	18	3	52	73	123	18	140°				
NCD3H-SC 1850-131/079-S20	●	18.5	3	55	79	131	20	140°				
NCD3H-SC 1900-131/079-S20	●	19	3	55	79	131	20	140°				
NCD3H-SC 1950-131/079-S20	●	19.5	3	55	79	131	20	140°				
NCD3H-SC 2000-131/079-S20	●	20	3	55	79	131	20	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD5H-SC

NCD

- First choice for stainless steel and sticky free-cutting steels
- With coolant holes
- Self centering geometry for accurate holes
- AlCrN based multilayer coating with very low friction coefficient to reduce built up edge

5xD
▲ with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-SC 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5H-SC 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5H-SC 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5H-SC 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5H-SC 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5H-SC 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5H-SC 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5H-SC 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5H-SC 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5H-SC 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5H-SC 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5H-SC 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5H-SC 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5H-SC 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5H-SC 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5H-SC 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5H-SC 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5H-SC 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5H-SC 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5H-SC 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5H-SC 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5H-SC 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5H-SC 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5H-SC 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5H-SC 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5H-SC 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5H-SC 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5H-SC 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5H-SC 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5H-SC 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5H-SC 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5H-SC 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5H-SC 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5H-SC 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5H-SC 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5H-SC 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5H-SC 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5H-SC 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5H-SC 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5H-SC 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5H-SC 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5H-SC 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5H-SC 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5H-SC 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5H-SC 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5H-SC 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5H-SC 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5H-SC 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG				
NCD5H-SC 0780-091/053-S08	●	7.8	5	43	53	91	8	140°				
NCD5H-SC 0790-091/053-S08	●	7.9	5	43	53	91	8	140°				
NCD5H-SC 0800-091/053-S08	●	8	5	43	53	91	8	140°				
NCD5H-SC 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°				
NCD5H-SC 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°				
NCD5H-SC 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°				
NCD5H-SC 0840-103/061-S10	●	8.4	5	49	61	103	10	140°				
NCD5H-SC 0850-103/061-S10	●	8.5	5	49	61	103	10	140°				
NCD5H-SC 0860-103/061-S10	●	8.6	5	49	61	103	10	140°				
NCD5H-SC 0870-103/061-S10	●	8.7	5	49	61	103	10	140°				
NCD5H-SC 0880-103/061-S10	●	8.8	5	49	61	103	10	140°				
NCD5H-SC 0890-103/061-S10	●	8.9	5	49	61	103	10	140°				
NCD5H-SC 0900-103/061-S10	●	9	5	49	61	103	10	140°				
NCD5H-SC 0910-103/061-S10	●	9.1	5	49	61	103	10	140°				
NCD5H-SC 0920-103/061-S10	●	9.2	5	49	61	103	10	140°				
NCD5H-SC 0930-103/061-S10	●	9.3	5	49	61	103	10	140°				
NCD5H-SC 0940-103/061-S10	●	9.4	5	49	61	103	10	140°				
NCD5H-SC 0950-103/061-S10	●	9.5	5	49	61	103	10	140°				
NCD5H-SC 0960-103/061-S10	●	9.6	5	49	61	103	10	140°				
NCD5H-SC 0970-103/061-S10	●	9.7	5	49	61	103	10	140°				
NCD5H-SC 0980-103/061-S10	●	9.8	5	49	61	103	10	140°				
NCD5H-SC 0990-103/061-S10	●	9.9	5	49	61	103	10	140°				
NCD5H-SC 1000-103/061-S10	●	10	5	49	61	103	10	140°				
NCD5H-SC 1010-118/071-S12	●	10.1	5	52	71	118	12	140°				
NCD5H-SC 1020-118/071-S12	●	10.2	5	52	71	118	12	140°				
NCD5H-SC 1030-118/071-S12	●	10.3	5	52	71	118	12	140°				
NCD5H-SC 1040-118/071-S12	●	10.4	5	52	71	118	12	140°				
NCD5H-SC 1050-118/071-S12	●	10.5	5	52	71	118	12	140°				
NCD5H-SC 1060-118/071-S12	●	10.6	5	52	71	118	12	140°				
NCD5H-SC 1070-118/071-S12	●	10.7	5	52	71	118	12	140°				
NCD5H-SC 1080-118/071-S12	●	10.8	5	52	71	118	12	140°				
NCD5H-SC 1090-118/071-S12	●	10.9	5	52	71	118	12	140°				
NCD5H-SC 1100-118/071-S12	●	11	5	52	71	118	12	140°				
NCD5H-SC 1110-118/071-S12	●	11.1	5	52	71	118	12	140°				
NCD5H-SC 1120-118/071-S12	●	11.2	5	52	71	118	12	140°				
NCD5H-SC 1130-118/071-S12	●	11.3	5	52	71	118	12	140°				
NCD5H-SC 1140-118/071-S12	●	11.4	5	52	71	118	12	140°				
NCD5H-SC 1150-118/071-S12	●	11.5	5	52	71	118	12	140°				
NCD5H-SC 1160-118/071-S12	●	11.6	5	52	71	118	12	140°				
NCD5H-SC 1170-118/071-S12	●	11.7	5	52	71	118	12	140°				
NCD5H-SC 1180-118/071-S12	●	11.8	5	52	71	118	12	140°				
NCD5H-SC 1190-118/071-S12	●	11.9	5	52	71	118	12	140°				
NCD5H-SC 1200-118/071-S12	●	12	5	52	71	118	12	140°				
NCD5H-SC 1250-124/077-S14	●	12.5	5	63	77	124	14	140°				
NCD5H-SC 1300-124/077-S14	●	13	5	63	77	124	14	140°				
NCD5H-SC 1350-124/077-S14	●	13.5	5	63	77	124	14	140°				
NCD5H-SC 1400-124/077-S14	●	14	5	63	77	124	14	140°				
NCD5H-SC 1450-133/083-S16	●	14.5	5	67	83	133	16	140°				
NCD5H-SC 1500-133/083-S16	●	15	5	67	83	133	16	140°				
NCD5H-SC 1550-133/083-S16	●	15.5	5	67	83	133	16	140°				
NCD5H-SC 1600-133/083-S16	●	16	5	67	83	133	16	140°				
NCD5H-SC 1650-143/093-S18	●	16.5	5	75	93	143	18	140°				
NCD5H-SC 1700-143/093-S18	●	17	5	75	93	143	18	140°				
NCD5H-SC 1750-143/093-S18	●	17.5	5	75	93	143	18	140°				
NCD5H-SC 1800-143/093-S18	●	18	5	75	93	143	18	140°				
NCD5H-SC 1850-153/101-S20	●	18.5	5	81	101	153	20	140°				
NCD5H-SC 1900-153/101-S20	●	19	5	81	101	153	20	140°				
NCD5H-SC 1950-153/101-S20	●	19.5	5	81	101	153	20	140°				
NCD5H-SC 2000-153/101-S20	●	20	5	81	101	153	20	140°				

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

ISO 513	MATERIAL	HARDNESS HB	L/D	NCD GP			NCD H GP			NCD H SC		
				min	start	max	min	start	max	min	start	max
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3XD ÷ 5XD	80	100	120	100	130	160	100	130	160
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3XD ÷ 5XD	60	80	100	80	110	140	80	110	140
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3XD ÷ 5XD	40	60	80	60	90	120	-	-	-
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	3XD ÷ 5XD	-	-	-	-	-	-	50	60	70
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	3XD ÷ 5XD	-	-	-	-	-	-	20	25	30
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	3XD ÷ 5XD	-	-	-	-	-	-	40	60	80
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		3XD ÷ 5XD	-	-	-	-	-	-	20	30	40
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3XD ÷ 5XD	80	90	100	100	120	140	-	-	-
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3XD ÷ 5XD	40	60	80	60	90	120	-	-	-
S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		3XD ÷ 5XD	-	-	-	-	-	-	30	40	50
S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		3XD ÷ 5XD	-	-	-	-	-	-	40	50	60

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	TYPE	DC 3.00 ÷ 3.99			DC 4.00 ÷ 4.99			DC 5.00 ÷ 5.99		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	NCD GP	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
				NCD H GP	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
				NCD H SC	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	NCD GP	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16
				NCD H GP	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17
				NCD H SC	0.09	0.11	0.13	0.10	0.12	0.14	0.11	0.13	0.15
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	NCD GP	0.08	0.10	0.12	0.09	0.11	0.13	0.10	0.12	0.14
				NCD H GP	0.08	0.10	0.13	0.09	0.12	0.14	0.10	0.13	0.15
				NCD H SC	-	-	-	-	-	-	-	-	-
	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.05	0.08	0.11	0.06	0.09	0.12	0.07	0.10	0.13
C - GROOVING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	NCD GP	-	-	-	-	-	-	-		
				NCD H GP	-	-	-	-	-	-	-		
				NCD H SC	0.06	0.07	0.08	0.05	0.07	0.09	0.06	0.08	0.10
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	NCD GP	-	-	-	-	-	-	-		
				NCD H GP	-	-	-	-	-	-	-		
				NCD H SC	0.02	0.05	0.08	0.03	0.06	0.09	0.06	0.08	0.10
D - MILLING	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		NCD GP	-	-	-	-	-	-	-		
				NCD H GP	-	-	-	-	-	-	-		
				NCD H SC	0.02	0.04	0.06	0.03	0.05	0.07	0.04	0.06	0.08
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	NCD GP	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
				NCD H GP	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
				NCD H SC	-	-	-	-	-	-	-	-	
E - DRILLING	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	NCD GP	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18
				NCD H GP	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
				NCD H SC	-	-	-	-	-	-	-		
	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		NCD GP	-	-	-	-	-	-	-		
				NCD H GP	-	-	-	-	-	-	-		
				NCD H SC	0.01	0.02	0.04	0.01	0.03	0.05	0.02	0.04	0.06
F - ACCESSORIES	S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		NCD GP	-	-	-	-	-	-	-		
				NCD H GP	-	-	-	-	-	-	-		
				NCD H SC	0.01	0.03	0.05	0.02	0.04	0.06	0.03	0.05	0.07

Complete workpiece materials p. H1.

(fn: mm/rev)

F - ACCESSORIES

G - SPARE PARTS

DC 6.00 ÷ 6.99			DC 7.00 ÷ 7.99			DC 8.00 ÷ 8.99			DC 9.00 ÷ 9.99			DC 10.00 ÷ 10.99			DC 11.00 ÷ 11.99		
min	start	max	min	start	max	min	start	max	min	start	max	min	start	max	min	start	max
0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27
0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25
0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.06	0.09	0.12	0.07	0.10	0.13	0.08	0.11	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.12	0.15	0.18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	0.09	0.11	0.07	0.10	0.13	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13	0.10	0.12	0.14	0.11	0.13	0.15
0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	0.05	0.07	0.04	0.06	0.08	0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	0.06	0.08	0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13	0.10	0.12	0.14

Complete workpiece materials p. H1.

(fn: mm/rev)

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	TYPE	DC 12.00 ÷ 12.99			DC 13.00 ÷ 13.99			DC 14.00 ÷ 14.99		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	NCD GP	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
				NCD H GP	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
				NCD H SC	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	NCD GP	0.19	0.21	0.22	0.20	0.22	0.24	0.21	0.23	0.25
				NCD H GP	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
				NCD H SC	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	NCD GP	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
				NCD H GP	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
				NCD H SC	-	-	-	-	-	-	-	-	-
C - GROOVING	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.13	0.16	0.19	0.16	0.18	0.20	0.17	0.19	0.21
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
D - MILLING	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	NCD GP	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31
				NCD H GP	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33
				NCD H SC	-	-	-	-	-	-	-	-	-
E - DRILLING	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	NCD GP	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27
				NCD H GP	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
				NCD H SC	-	-	-	-	-	-	-	-	-
	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16
F - ACCESSORIES	S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17

Complete workpiece materials p. H1.

(fn: mm/rev)

F - ACCESSORIES

G - SPARE PARTS

DC 15.00 ÷ 15.99			DC 16.00 ÷ 16.99			DC 17.00 ÷ 17.99			DC 18.00 ÷ 18.99			DC 19.00 ÷ 19.99			DC 20.00 ÷ 20.99		
min	start	max	min	start	max	min	start	max	min	start	max	min	start	max	min	start	max
0.26	0.28	0.30	0.29	0.29	0.31	0.28	0.30	0.32	0.29	0.31	0.33	0.30	0.32	0.34	0.31	0.33	0.35
0.27	0.29	0.32	0.30	0.30	0.33	0.29	0.32	0.34	0.30	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37
0.25	0.27	0.29	0.30	0.30	0.30	0.26	0.29	0.32	0.27	0.30	0.33	0.30	0.32	0.34	0.31	0.33	0.35
0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31
0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33
0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	0.20	0.23	0.18	0.21	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.22	0.25	0.28	0.24	0.26	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
0.28	0.30	0.32	0.29	0.31	0.33	0.30	0.32	0.34	0.31	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37
0.29	0.32	0.34	0.30	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37	0.34	0.36	0.38	0.35	0.37	0.39
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31	0.28	0.30	0.32	0.29	0.31	0.33
0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33	0.29	0.32	0.34	0.30	0.33	0.35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23

Complete workpiece materials p. H1.

(fn: mm/rev)

A - TURNING

B - THREADING

C - GROOVING

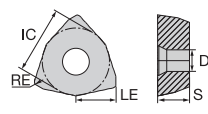
D - MILLING


E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

<h1>WCMX</h1>	HF: Micrograin carbide PVD: Physical vapour deposition	HF PVD													
<h2>ISO</h2>		JP5530													
<ul style="list-style-type: none"> ISO drilling inserts with geometry for general purposes PVD coated carbide grade for universal use Inserts could be mounted on ISO drill bodies with seats of the same IC circle 	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)												
		<table style="width: 100%; border-collapse: collapse;"> <tr><td style="background-color: #e6f2ff; text-align: center;">P</td><td style="text-align: center;">120 240</td></tr> <tr><td style="background-color: #fff9c4; text-align: center;">M</td><td style="text-align: center;">40 100</td></tr> <tr><td style="background-color: #ffe0b2; text-align: center;">K</td><td style="text-align: center;">120 180</td></tr> <tr><td style="background-color: #c8e6c9; text-align: center;">N</td><td></td></tr> <tr><td style="background-color: #d7ccc8; text-align: center;">S</td><td></td></tr> <tr><td style="background-color: #e0e0e0; text-align: center;">H</td><td></td></tr> </table>	P	120 240	M	40 100	K	120 180	N		S		H		
P	120 240														
M	40 100														
K	120 180														
N															
S															
H															

	Designation	RE	IC	S	D1	LE		Stock	
GENERAL		WCMX030208-GP	0.8	5.56	2.38	2.8	-	●	
		WCMX040208-GP	0.8	6.35	2.38	2.9	-	●	
		WCMX050308-GP	0.8	7.94	3.18	3.4	-	●	
		WCMX06T308-GP	0.8	9.52	3.97	3.8	-	●	
		WCMX080412-GP	1.2	12.7	4.76	4.4	-	●	

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

THIEME

#ZERSPANNUNG PUR



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