

DRSSYSTEM

Broad range of drilling solutions

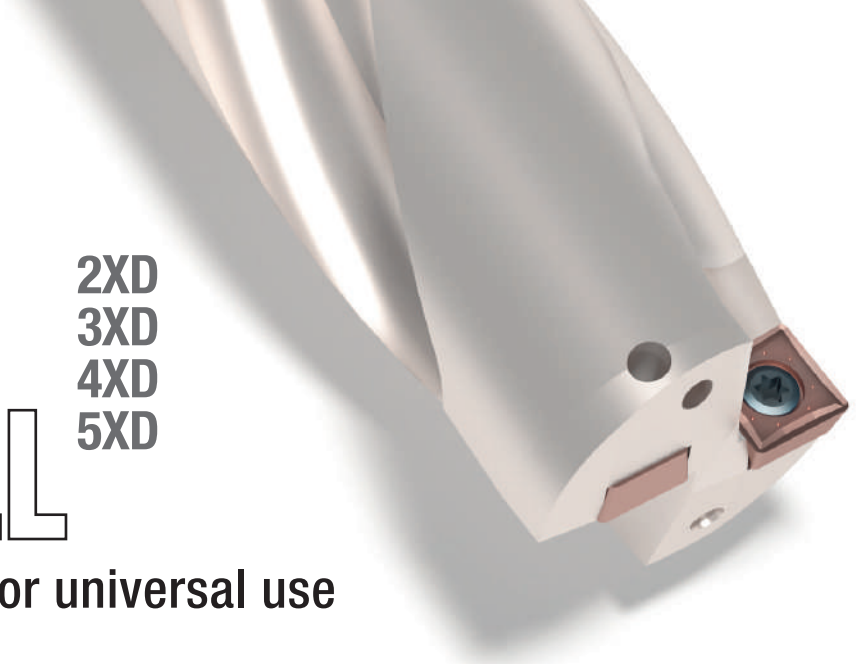
2XD - 3XD
4XD - 5XD
6XD - 9XD

nikkoTOOLS

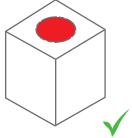
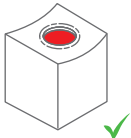
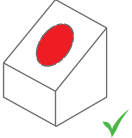
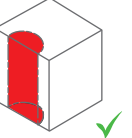
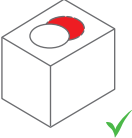
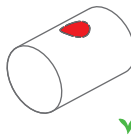
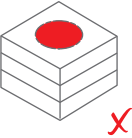
DRSDRILL

2XD
3XD
4XD
5XD

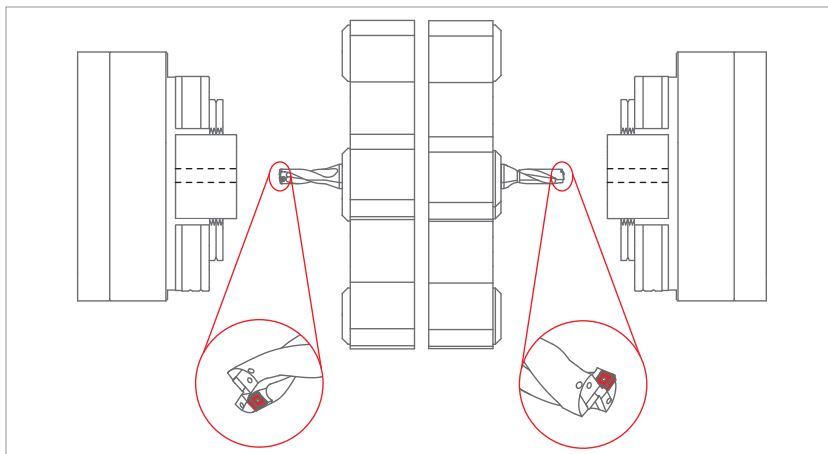
High performance drills for universal use



1. Where is DRSdrill applicable?

PLAIN SURFACE	CONCAVE SURFACE	SLANT SURFACE	HALF HOLE	HOLE EXPANSION	PIPES	STACKED PLATES
						

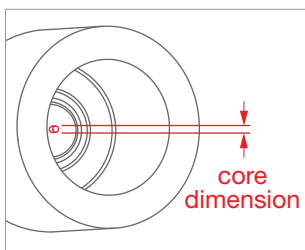
2. Lathe installation



It's recommended to set the outer insert facing the operator as shown in the drawing, both for main and sub-spindle to gain the best results.

Following this suggestion, generally, the inner insert will be set below the center which is the recommended situation for optimal operation.

3. Quick check of the center height



To check if the machine axis is correctly aligned, a test hole should be drilled checking the remaining core on the hole bottom.

Center-height adjustment is necessary when no core remains or if the core diameter is larger than 1mm.

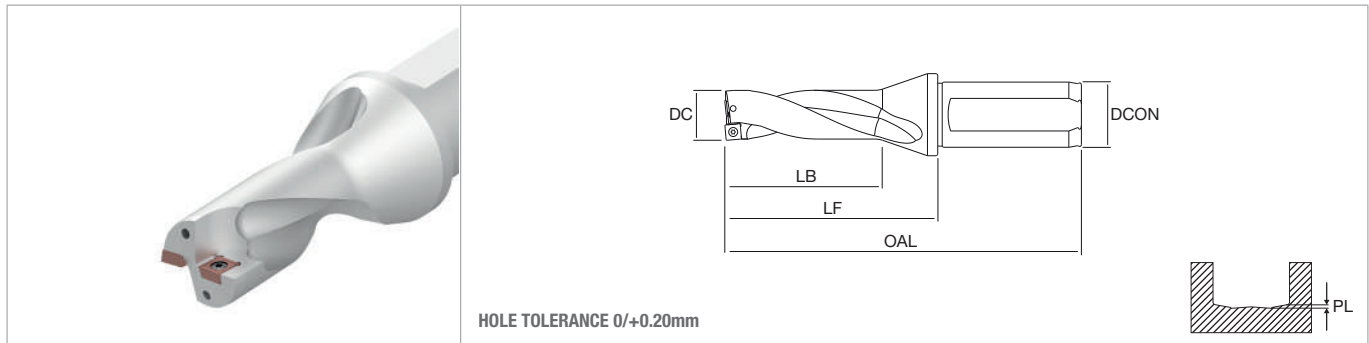
SP \square X	DRS 4 edges drilling inserts					ISO513	HC-PVD		HW											
	Size	IC	S	D1	RE		JP5625	JP5530	JP9635	JUG520										
	05	5.00	2.38	2.50	0.40	P	80 300	80 300												
	06	6.00	2.38	2.80	0.40	M			50 220											
	07	7.94	3.97	2.80	0.80	K	120 250	120 250												
	09	9.80	4.30	4.10	0.80	N			200 400											
	11	11.50	4.76	4.40	0.80	S														
	14	14.30	5.20	5.50	1.20	H														
GRADE APPLICATION AREA	Stable machining				+															
main application	General machining				-															
applicable	Unstable machining				+															

GENERAL	GP P M K S	SPMX	IC	S	D1	RE	f _n	v _c														
<p>polished surface</p>		050204-GP	5.00	2.38	2.50	0.40	2xD	f _n ▶ 0.04	0.08	0.12												
							3xD	f _n ▶ 0.04	0.07	0.10												
							4xD	f _n ▶ 0.04	0.06	0.08	●	●	●									
							5xD	f _n ▶ 0.04	0.05	0.06												
		060204-GP	6.00	2.38	2.80	0.40	0.80	0.80	2xD	f _n ▶ 0.06	0.10	0.14										
									3xD	f _n ▶ 0.06	0.09	0.12	●	●	●							
									4xD	f _n ▶ 0.05	0.07	0.10										
									5xD	f _n ▶ 0.04	0.06	0.08										
		077308-GP	7.94	3.97	2.80	0.80	0.80	0.80	2xD	f _n ▶ 0.06	0.11	0.16										
									3xD	f _n ▶ 0.06	0.10	0.14	●	●	●							
									4xD	f _n ▶ 0.06	0.09	0.12										
									5xD	f _n ▶ 0.05	0.07	0.09										
		090408-GP	9.80	4.30	4.10	0.80	0.80	0.80	2xD	f _n ▶ 0.08	0.14	0.20										
									3xD	f _n ▶ 0.08	0.13	0.18	●	●	●							
									4xD	f _n ▶ 0.06	0.11	0.16										
									5xD	f _n ▶ 0.06	0.09	0.12										
		110408-GP	11.50	4.76	4.40	0.80	0.80	0.80	2xD	f _n ▶ 0.08	0.15	0.22										
									3xD	f _n ▶ 0.08	0.14	0.20	●	●	●							
									4xD	f _n ▶ 0.07	0.12	0.18										
									5xD	f _n ▶ 0.06	0.12	0.16										
		140512-GP	14.30	5.20	5.50	1.20	0.80	0.80	2xD	f _n ▶ 0.10	0.17	0.24										
									3xD	f _n ▶ 0.10	0.16	0.22	●	●	●							
									4xD	f _n ▶ 0.08	0.14	0.20										
									5xD	f _n ▶ 0.07	0.12	0.18										
<p>polished surface</p>		050204-AL	5.00	2.38	2.50	0.40	0.80	2xD	f _n ▶ 0.06	0.09	0.12											
								3xD	f _n ▶ 0.06	0.09	0.12											
								4xD	f _n ▶ 0.04	0.07	0.10											
								5xD	f _n ▶ 0.04	0.06	0.08											
		060204-AL	6.00	2.38	2.80	0.40	0.80	0.80	2xD	f _n ▶ 0.08	0.12	0.16										
									3xD	f _n ▶ 0.08	0.12	0.16										
									4xD	f _n ▶ 0.06	0.09	0.12										
									5xD	f _n ▶ 0.06	0.08	0.10										
		077308-AL	7.94	3.97	2.80	0.80	0.80	0.80	2xD	f _n ▶ 0.10	0.14	0.18										
									3xD	f _n ▶ 0.10	0.14	0.18										
									4xD	f _n ▶ 0.08	0.11	0.14										
									5xD	f _n ▶ 0.08	0.10	0.12										
		090408-AL	9.80	4.30	4.10	0.80	0.80	0.80	2xD	f _n ▶ 0.10	0.15	0.20										
									3xD	f _n ▶ 0.10	0.15	0.20										
									4xD	f _n ▶ 0.09	0.12	0.15										
									5xD	f _n ▶ 0.09	0.11	0.13										
		110408-AL	11.50	4.76	4.40	0.80	0.80	0.80	2xD	f _n ▶ 0.11	0.16	0.21										
									3xD	f _n ▶ 0.11	0.16	0.21										
									4xD	f _n ▶ 0.10	0.14	0.18										
									5xD	f _n ▶ 0.10	0.13	0.16										
		140512-AL	14.30	5.20	5.50	1.20	0.80	0.80	2xD	f _n ▶ 0.12	0.17	0.22										
									3xD	f _n ▶ 0.12	0.17	0.22										
									4xD	f _n ▶ 0.10	0.15	0.20										
									5xD	f _n ▶ 0.10	0.14	0.18										

● stock standard

MATERIALS

P	M	K	▶ p. 14-15
N	S	H	



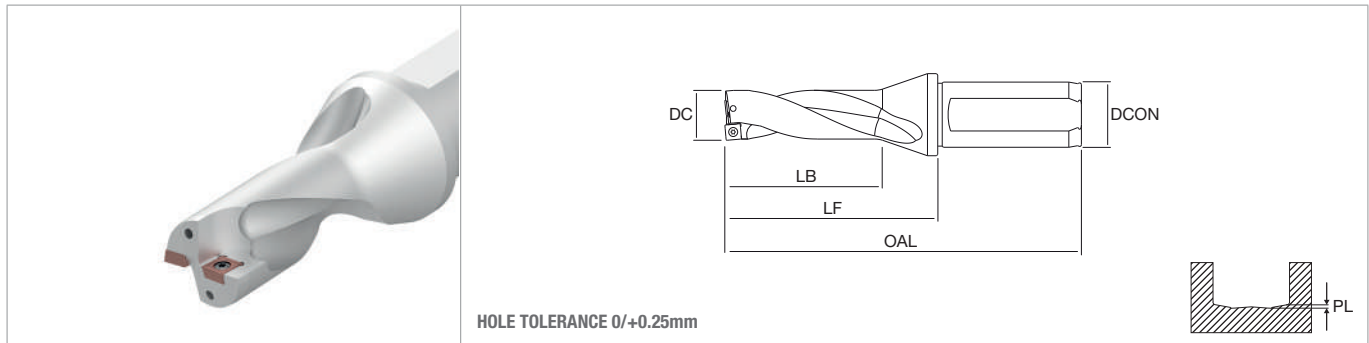
DRS 2XD			DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
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05	NT-DRS-2D	D13.00-S20-05	●	13	20	94	44	26	0.50	0.40	SPMX05 SPGX05
		D14.00-S20-05	●	14	20	96	46	28	0.50	0.40	
		D15.00-S20-05	●	15	20	99	49	30	0.50	0.40	
06	NT-DRS-2D	D16.00-S25-06	●	16	25	108	52	32	0.50	0.50	SPMX06 SPGX06
		D17.00-S25-06	●	17	25	110	54	34	0.50	0.50	
		D18.00-S25-06	●	18	25	113	57	36	0.50	0.50	
		D19.00-S25-06	●	19	25	115	59	38	0.50	0.50	
		D20.00-S25-06	●	20	25	119	63	40	0.50	0.50	
		D21.00-S25-06	●	21	25	121	65	42	0.25	0.50	
07	NT-DRS-2D	D22.00-S25-07	●	22	25	123	67	44	0.50	0.50	SPMX07 SPGX07
		D23.00-S32-07	●	23	32	131	71	46	0.50	0.50	
		D24.00-S32-07	●	24	32	134	74	48	0.50	0.50	
		D25.00-S32-07	●	25	32	137	77	50	0.50	0.50	
		D26.00-S32-07	●	26	32	139	79	52	0.25	0.60	
		D27.00-S32-07	●	27	32	141	81	54	0.25	0.60	
09	NT-DRS-2D	D28.00-S32-09	●	28	32	144	84	56	0.50	0.80	SPMX09 SPGX09
		D29.00-S32-09	●	29	32	146	86	58	0.50	0.80	
		D30.00-S32-09	●	30	32	151	91	60	0.50	0.80	
		D31.00-S32-09	●	31	32	154	94	62	0.25	0.80	
		D32.00-S32-09	●	32	32	156	96	64	0.25	0.80	
		D33.00-S32-09	●	33	32	159	99	66	0.25	0.80	
11	NT-DRS-2D	D34.00-S40-11	●	34	40	171	101	68	0.50	0.90	SPMX11 SPGX11
		D35.00-S40-11	●	35	40	174	104	70	0.50	0.90	
		D36.00-S40-11	●	36	40	177	107	72	0.50	0.90	
		D37.00-S40-11	●	37	40	180	110	74	0.50	0.90	
		D38.00-S40-11	●	38	40	183	113	76	0.50	0.90	
		D39.00-S40-11	●	39	40	185	115	78	0.50	0.90	
		D40.00-S40-11	●	40	40	188	118	80	0.25	0.90	
		D41.00-S40-11	●	41	40	191	121	82	0.25	0.90	
14	NT-DRS-2D	D42.00-S40-14	●	42	40	193	123	84	0.50	1.00	SPMX14 SPGX14
		D43.00-S40-14	●	43	40	196	126	86	0.50	1.00	
		D44.00-S40-14	●	44	40	198	128	88	0.50	1.00	
		D45.00-S40-14	●	45	40	202	132	90	0.50	1.00	
		D46.00-S40-14	●	46	40	205	135	92	0.50	1.00	
		D47.00-S40-14	●	47	40	207	137	94	0.50	1.00	
		D48.00-S40-14	●	48	40	210	140	96	0.25	1.00	
		D49.00-S40-14	●	49	40	212	142	98	0.25	1.00	
		D50.00-S40-14	●	50	40	215	145	100	0.25	1.00	

● stock standard

Spare Parts	INSERT SCREW	INSERT WRENCH

NT-DRS-2D D _{00.00} -S ₀₀ -05	NT-ST059	NT-FTB06
NT-DRS-2D D _{00.00} -S ₀₀ -06	NT-ST061	NT-FTB06
NT-DRS-2D D _{00.00} -S ₀₀ -07	NT-ST062	NT-FTB07
NT-DRS-2D D _{00.00} -S ₀₀ -09	NT-ST063	NT-FTB15
NT-DRS-2D D _{00.00} -S ₀₀ -11	NT-ST064	NT-FTB15
NT-DRS-2D D _{00.00} -S ₀₀ -14	NT-ST066	NT-FTB20




DRS 3XD		DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
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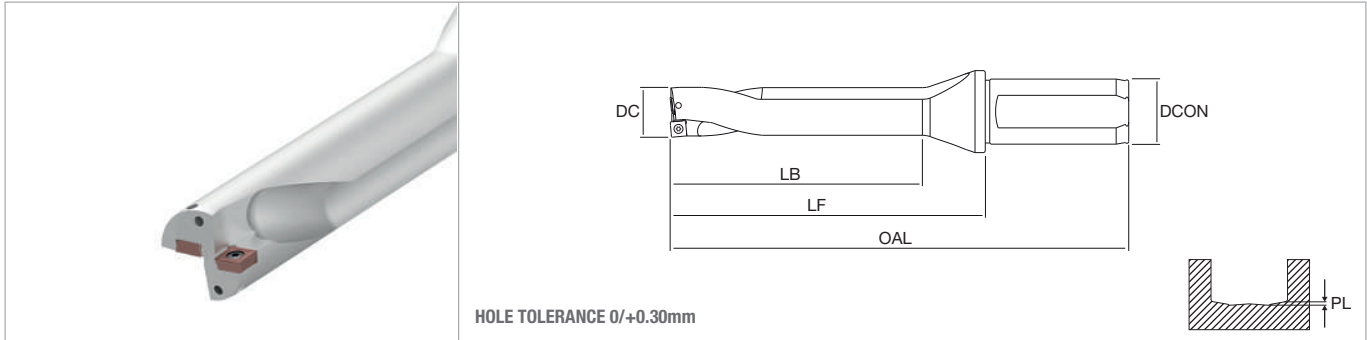
05	NT-DRS-3D	D12.50-S20-05	●	12.5	20	107	57	39	0.50	0.40	SPMX05 SPGX05
		D13.00-S20-05	●	13	20	107	57	39	0.50	0.40	
		D13.50-S20-05	●	13.5	20	110	60	42	0.50	0.40	
		D14.00-S20-05	●	14	20	110	60	42	0.50	0.40	
		D14.50-S20-05	●	14.5	20	114	64	45	0.50	0.40	
		D15.00-S20-05	●	15	20	114	64	45	0.50	0.40	
06	NT-DRS-3D	D15.50-S25-06	●	15.5	25	124	68	48	0.50	0.50	SPMX06 SPGX06
		D16.00-S25-06	●	16	25	124	68	48	0.50	0.50	
		D16.50-S25-06	●	16.5	25	127	71	51	0.50	0.50	
		D17.00-S25-06	●	17	25	127	71	51	0.50	0.50	
		D17.50-S25-06	●	17.5	25	131	75	54	0.50	0.50	
		D18.00-S25-06	●	18	25	131	75	54	0.50	0.50	
		D18.50-S25-06	●	18.5	25	134	78	57	0.50	0.50	
		D19.00-S25-06	●	19	25	134	78	57	0.50	0.50	
		D19.50-S25-06	●	19.5	25	139	83	60	0.50	0.50	
		D20.00-S25-06	●	20	25	139	83	60	0.50	0.50	
		D20.50-S25-06	●	20.5	25	142	86	63	0.25	0.50	
		D21.00-S25-06	●	21	25	142	86	63	0.25	0.50	
		D21.50-S25-06	●	21.5	25	145	89	66	0.25	0.50	
		07	NT-DRS-3D	D22.00-S25-07	●	22	25	145	89	66	
D22.50-S32-07	●			22.5	32	154	94	69	0.50	0.50	
D23.00-S32-07	●			23	32	154	94	69	0.50	0.50	
D23.50-S32-07	●			23.5	32	158	98	72	0.50	0.50	
D24.00-S32-07	●			24	32	158	98	72	0.50	0.50	
D24.50-S32-07	●			24.5	32	162	102	75	0.50	0.50	
D25.00-S32-07	●			25	32	162	102	75	0.50	0.50	
D25.50-S32-07	●			25.5	32	165	105	78	0.50	0.60	
D26.00-S32-07	●			26	32	165	105	78	0.25	0.60	
D26.50-S32-07	●			26.5	32	168	108	81	0.25	0.60	
D27.00-S32-07	●			27	32	168	108	81	0.25	0.60	
D27.50-S32-07	●			27.5	32	172	112	84	0.25	0.60	
09	NT-DRS-3D	D28.00-S32-09	●	28	32	172	112	84	0.50	0.80	SPMX09 SPGX09
		D28.50-S32-09	●	28.5	32	175	115	87	0.50	0.80	
		D29.00-S32-09	●	29	32	175	115	87	0.50	0.80	
		D29.50-S32-09	●	29.5	32	181	121	90	0.50	0.80	
		D30.00-S32-09	●	30	32	181	121	90	0.50	0.80	
		D31.00-S32-09	●	31	32	185	125	93	0.25	0.80	
		D32.00-S32-09	●	32	32	188	128	96	0.25	0.80	
		D33.00-S32-09	●	33	32	192	132	99	0.25	0.80	

● stock standard

DRS 3XD				DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
11	NT-DRS-3D	D34.00-S40-11	●	34	40	205	135	102	0.50	0.90	SPMX11 SPGX11
		D35.00-S40-11	●	35	40	209	139	105	0.50	0.90	
		D36.00-S40-11	●	36	40	213	143	108	0.50	0.90	
		D37.00-S40-11	●	37	40	217	147	111	0.50	0.90	
		D38.00-S40-11	●	38	40	221	151	114	0.50	0.90	
		D39.00-S40-11	●	39	40	224	154	117	0.50	0.90	
		D40.00-S40-11	●	40	40	228	158	120	0.25	0.90	
		D41.00-S40-11	●	41	40	232	162	123	0.25	0.90	
14	NT-DRS-3D	D42.00-S40-14	●	42	40	235	165	126	0.50	1.00	SPMX14 SPGX14
		D43.00-S40-14	●	43	40	239	169	129	0.50	1.00	
		D44.00-S40-14	●	44	40	242	172	132	0.50	1.00	
		D45.00-S40-14	●	45	40	247	177	135	0.50	1.00	
		D46.00-S40-14	●	46	40	251	181	138	0.50	1.00	
		D47.00-S40-14	●	47	40	254	184	141	0.50	1.00	
		D48.00-S40-14	●	48	40	258	188	144	0.25	1.00	
		D49.00-S40-14	●	49	40	261	191	147	0.25	1.00	
		D50.00-S40-14	●	50	40	265	195	150	0.25	1.00	

● stock standard

Spare Parts	INSERT SCREW	INSERT WRENCH
		
NT-DRS-3D D00.00-S00-05	NT-ST059	NT-FTB06
NT-DRS-3D D00.00-S00-06	NT-ST061	NT-FTB06
NT-DRS-3D D00.00-S00-07	NT-ST062	NT-FTB07
NT-DRS-3D D00.00-S00-09	NT-ST063	NT-FTB15
NT-DRS-3D D00.00-S00-11	NT-ST064	NT-FTB15
NT-DRS-3D D00.00-S00-14	NT-ST066	NT-FTB20




DRS 4XD		DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
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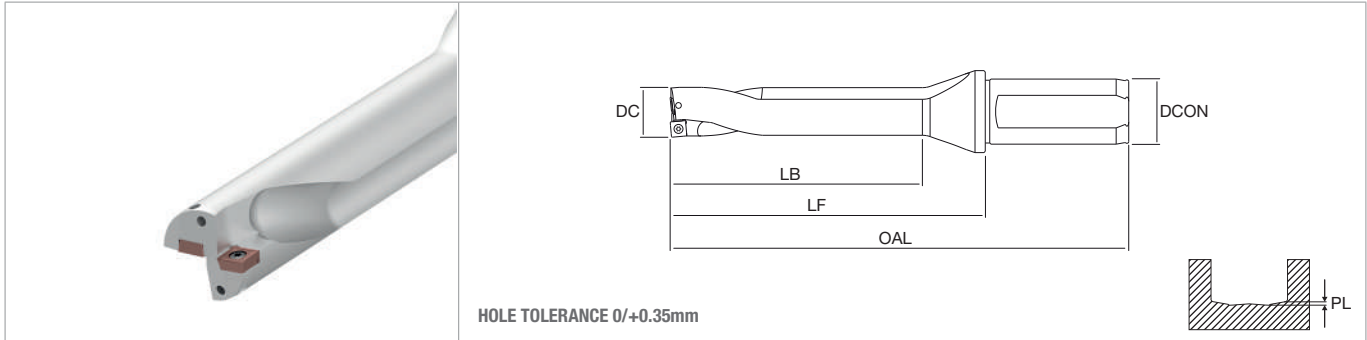
05	NT-DRS-4D	D12.50-S20-05	●	12.5	20	120	70	52	0.50	0.40	SPMX05 SPGX05
		D13.00-S20-05	●	13	20	120	70	52	0.50	0.40	
		D13.50-S20-05	●	13.5	20	124	74	56	0.50	0.40	
		D14.00-S20-05	●	14	20	124	74	56	0.50	0.40	
		D14.50-S20-05	●	14.5	20	129	79	60	0.50	0.40	
		D15.00-S20-05	●	15	20	129	79	60	0.50	0.40	
06	NT-DRS-4D	D15.50-S25-06	●	15.5	25	140	84	64	0.50	0.50	SPMX06 SPGX06
		D16.00-S25-06	●	16	25	140	84	64	0.50	0.50	
		D16.50-S25-06	●	16.5	25	144	88	68	0.50	0.50	
		D17.00-S25-06	●	17	25	144	88	68	0.50	0.50	
		D17.50-S25-06	●	17.5	25	149	93	72	0.50	0.50	
		D18.00-S25-06	●	18	25	149	93	72	0.50	0.50	
		D18.50-S25-06	●	18.5	25	153	97	76	0.50	0.50	
		D19.00-S25-06	●	19	25	153	97	76	0.50	0.50	
		D19.50-S25-06	●	19.5	25	159	103	80	0.50	0.50	
		D20.00-S25-06	●	20	25	159	103	80	0.50	0.50	
		D20.50-S25-06	●	20.5	25	163	107	84	0.25	0.50	
		D21.00-S25-06	●	21	25	163	107	84	0.25	0.50	
		D21.50-S25-06	●	21.5	25	167	111	88	0.25	0.50	
		07	NT-DRS-4D	D22.00-S25-07	●	22	25	167	111	88	
D22.50-S32-07	●			22.5	32	177	117	92	0.50	0.50	
D23.00-S32-07	●			23	32	177	117	92	0.50	0.50	
D23.50-S32-07	●			23.5	32	182	122	96	0.50	0.50	
D24.00-S32-07	●			24	32	182	122	96	0.50	0.50	
D24.50-S32-07	●			24.5	32	187	127	100	0.50	0.50	
D25.00-S32-07	●			25	32	187	127	100	0.50	0.50	
D25.50-S32-07	●			25.5	32	191	131	104	0.50	0.60	
D26.00-S32-07	●			26	32	191	131	104	0.25	0.60	
D26.50-S32-07	●			26.5	32	195	135	108	0.25	0.60	
D27.00-S32-07	●			27	32	195	135	108	0.25	0.60	
D27.50-S32-07	●			27.5	32	200	140	112	0.25	0.60	
09	NT-DRS-4D	D28.00-S32-09	●	28	32	200	140	112	0.50	0.80	SPMX09 SPGX09
		D28.50-S32-09	●	28.5	32	204	144	116	0.50	0.80	
		D29.00-S32-09	●	29	32	204	144	116	0.50	0.80	
		D29.50-S32-09	●	29.5	32	211	151	120	0.50	0.80	
		D30.00-S32-09	●	30	32	211	151	120	0.50	0.80	
		D31.00-S32-09	●	31	32	216	156	124	0.25	0.80	
		D32.00-S32-09	●	32	32	220	160	128	0.25	0.80	
		D33.00-S32-09	●	33	32	225	165	132	0.25	0.80	

● stock standard

DRS 4XD				DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
11	NT-DRS-4D	D34.00-S40-11	●	34	40	239	169	136	0.50	0.90	SPMX11 SPGX11
		D35.00-S40-11	●	35	40	244	174	140	0.50	0.90	
		D36.00-S40-11	●	36	40	249	179	144	0.50	0.90	
		D37.00-S40-11	●	37	40	254	184	148	0.50	0.90	
		D38.00-S40-11	●	38	40	259	189	152	0.50	0.90	
		D39.00-S40-11	●	39	40	263	193	156	0.50	0.90	
		D40.00-S40-11	●	40	40	268	198	160	0.25	0.90	
		D41.00-S40-11	●	41	40	273	203	164	0.25	0.90	
14	NT-DRS-4D	D42.00-S40-14	●	42	40	277	207	168	0.50	1.00	SPMX14 SPGX14
		D43.00-S40-14	●	43	40	282	212	172	0.50	1.00	
		D44.00-S40-14	●	44	40	286	216	176	0.50	1.00	
		D45.00-S40-14	●	45	40	292	222	180	0.50	1.00	
		D46.00-S40-14	●	46	40	297	227	184	0.50	1.00	
		D47.00-S40-14	●	47	40	301	231	188	0.50	1.00	
		D48.00-S40-14	●	48	40	306	236	192	0.25	1.00	
		D49.00-S40-14	●	49	40	310	240	196	0.25	1.00	
		D50.00-S40-14	●	50	40	315	245	200	0.25	1.00	

● stock standard

Spare Parts	INSERT SCREW	INSERT WRENCH
		
NT-DRS-4D D□□□□-S□□-05	NT-ST059	NT-FTB06
NT-DRS-4D D□□□□-S□□-06	NT-ST061	NT-FTB06
NT-DRS-4D D□□□□-S□□-07	NT-ST062	NT-FTB07
NT-DRS-4D D□□□□-S□□-09	NT-ST063	NT-FTB15
NT-DRS-4D D□□□□-S□□-11	NT-ST064	NT-FTB15
NT-DRS-4D D□□□□-S□□-14	NT-ST066	NT-FTB20



DRS 5XD			DC	DCON	OAL	LF	LB	ADJLX max. radial offset	PL hole bottom shape	MIID
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05	NT-DRS-5D	D13.00-S20-05	●	13	20	133	83	65	0.50	0.40	SPMX05 SPGX05
		D14.00-S20-05	●	14	20	138	88	70	0.50	0.40	
		D15.00-S20-05	●	15	20	144	94	75	0.50	0.40	
06	NT-DRS-5D	D16.00-S25-06	●	16	25	156	100	80	0.50	0.50	SPMX06 SPGX06
		D17.00-S25-06	●	17	25	161	105	85	0.50	0.50	
		D18.00-S25-06	●	18	25	167	111	90	0.50	0.50	
		D19.00-S25-06	●	19	25	172	116	95	0.50	0.50	
		D20.00-S25-06	●	20	25	179	123	100	0.50	0.50	
		D21.00-S25-06	●	21	25	184	128	105	0.25	0.50	
07	NT-DRS-5D	D22.00-S25-07	●	22	25	189	133	110	0.50	0.50	SPMX07 SPGX07
		D23.00-S32-07	●	23	32	200	140	115	0.50	0.50	
		D24.00-S32-07	●	24	32	206	146	120	0.50	0.50	
		D25.00-S32-07	●	25	32	212	152	125	0.50	0.50	
		D26.00-S32-07	●	26	32	217	157	130	0.25	0.60	
		D27.00-S32-07	●	27	32	222	162	135	0.25	0.60	
09	NT-DRS-5D	D28.00-S32-09	●	28	32	228	168	140	0.50	0.80	SPMX09 SPGX09
		D29.00-S32-09	●	29	32	233	173	145	0.50	0.80	
		D30.00-S32-09	●	30	32	241	181	150	0.50	0.80	
		D31.00-S32-09	●	31	32	247	187	155	0.25	0.80	
		D32.00-S32-09	●	32	32	252	192	160	0.25	0.80	
		D33.00-S32-09	●	33	32	258	198	165	0.25	0.80	
11	NT-DRS-5D	D34.00-S40-11	●	34	40	273	203	170	0.50	0.90	SPMX11 SPGX11
		D35.00-S40-11	●	35	40	279	209	175	0.50	0.90	
		D36.00-S40-11	●	36	40	285	215	180	0.50	0.90	
		D37.00-S40-11	●	37	40	291	221	185	0.50	0.90	
		D38.00-S40-11	●	38	40	297	227	190	0.50	0.90	
		D39.00-S40-11	●	39	40	302	232	195	0.50	0.90	
		D40.00-S40-11	●	40	40	308	238	200	0.25	0.90	
14	NT-DRS-5D	D41.00-S40-11	●	41	40	314	244	205	0.25	0.90	SPMX14 SPGX14
		D42.00-S40-14	●	42	40	319	249	210	0.50	1.00	
		D43.00-S40-14	●	43	40	325	255	215	0.50	1.00	
		D44.00-S40-14	●	44	40	330	260	220	0.50	1.00	
		D45.00-S40-14	●	45	40	337	267	225	0.50	1.00	
		D46.00-S40-14	●	46	40	343	273	230	0.50	1.00	
		D47.00-S40-14	●	47	40	348	278	235	0.50	1.00	
		D48.00-S40-14	●	48	40	354	284	240	0.25	1.00	
		D49.00-S40-14	●	49	40	359	289	245	0.25	1.00	
		D50.00-S40-14	●	50	40	365	295	250	0.25	1.00	

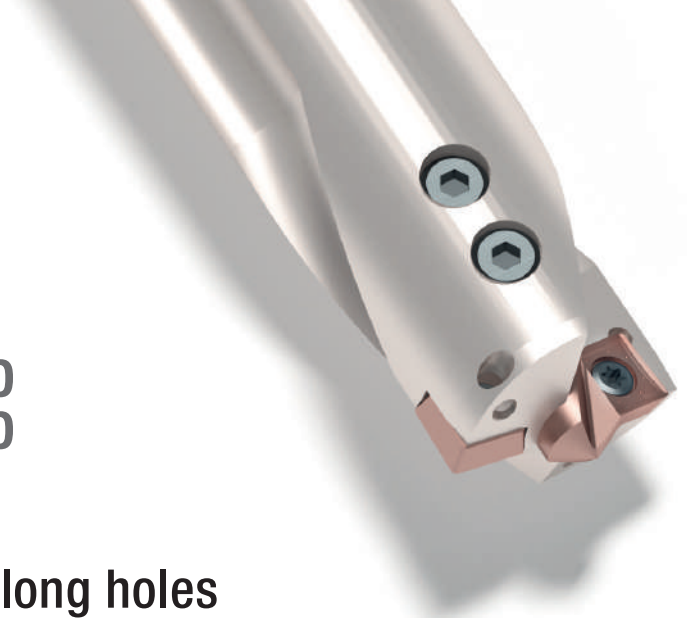
● stock standard

Spare Parts	INSERT SCREW	INSERT WRENCH

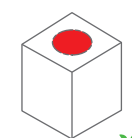
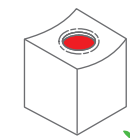
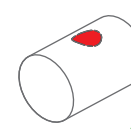
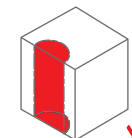
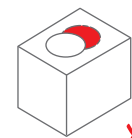
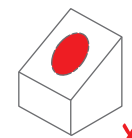
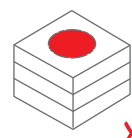
NT-DRS-5D D00.00-S00-05	NT-ST059	NT-FTB06
NT-DRS-5D D00.00-S00-06	NT-ST061	NT-FTB06
NT-DRS-5D D00.00-S00-07	NT-ST062	NT-FTB07
NT-DRS-5D D00.00-S00-09	NT-ST063	NT-FTB15
NT-DRS-5D D00.00-S00-11	NT-ST064	NT-FTB15
NT-DRS-5D D00.00-S00-14	NT-ST066	NT-FTB20

DRSPILOT^{6XD}_{9XD}

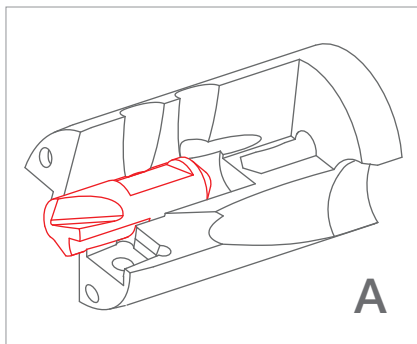
Perfect centering even on extra long holes



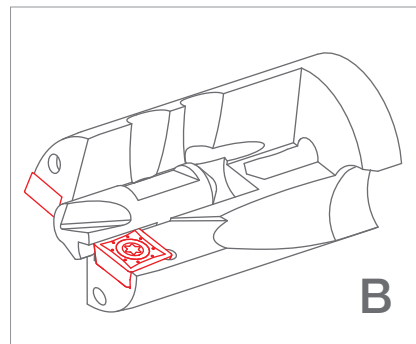
1. Where is DRSpilot applicable?

PLAIN SURFACE	CONCAVE SURFACE	PIPES	HALF HOLE	HOLE EXPANSION	SLANT SURFACE	STACKED PLATES
						

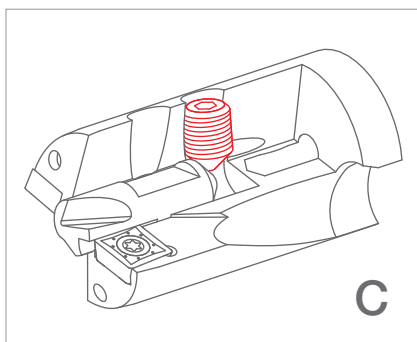
2. Installation of inserts and pilot drill



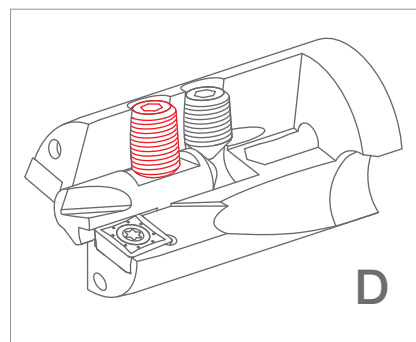
A Insert DRSP pilot in the drilling body.



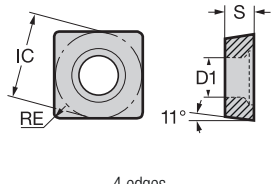

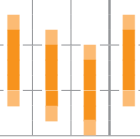
B Install the SPMX/SPGX inserts.

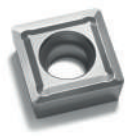



C Adjust the DRSP pilot height using the setting grain as shown in the drawing, following the table at pag. 11.

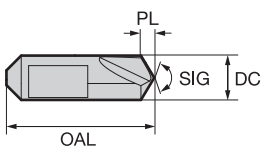



D Screw tight the locking grain.

SP-X		DRS PILOT 4 edges drilling inserts				ISO513	HC-PVD		HW													
		 <p>4 edges</p>	Size	IC	S		D1	RE		JP5625	JP5530	JP9635	JU6520									
05	5.00		2.38	2.50	0.40	P	60 220	60 220														
06	6.00		2.38	2.80	0.40	M			40 160													
07	7.94		3.97	2.80	0.80	K	100 190	100 190														
					N			150 300														
					S																	
					H																	
GRADE APPLICATION AREA		Stable machining				<table border="1"> <tr><td>+</td></tr> <tr><td>-</td></tr> <tr><td>+</td></tr> </table>	+	-	+													
+																						
-																						
+																						
main application		General machining																				
applicable		Unstable machining																				

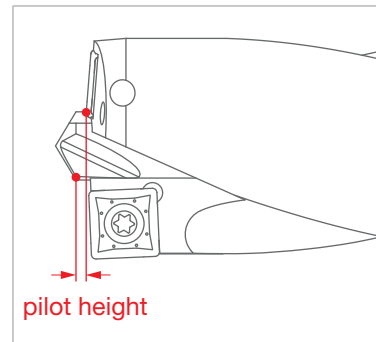
	GP	P M K		SPMX	050204-GP	6xD	f_n	0.08	0.10	0.12	●	●	●											
						9xD	f_n	0.06	0.08	0.10														
GENERAL				SPMX	060204-GP	6xD	f_n	0.08	0.10	0.12	●	●	●											
						9xD	f_n	0.06	0.08	0.10														
						6xD	f_n	0.09	0.11	0.13														
				SPMX	07T308-GP	9xD	f_n	0.07	0.09	0.11	●	●	●											
ALUMINIUM	AL N			SPGX	050204-AL	6xD	f_n	0.05	0.07	0.09				●										
						9xD	f_n	0.04	0.06	0.08														
						6xD	f_n	0.05	0.07	0.09				●										
						9xD	f_n	0.04	0.06	0.08														
				SPGX	07T308-AL	6xD	f_n	0.06	0.08	0.10				●										
						9xD	f_n	0.05	0.07	0.09														

● stock standard

DRSP		DRS PILOT interchangeable centering drill				
		Size	DC	OAL	PL	SIG
	06	6	20	1.5	118°	
	08	8	25	2.1	118°	
GENERAL		DRSP 06-GP HSS TIN				●
		DRSP 08-GP HSS TIN				●

● stock standard

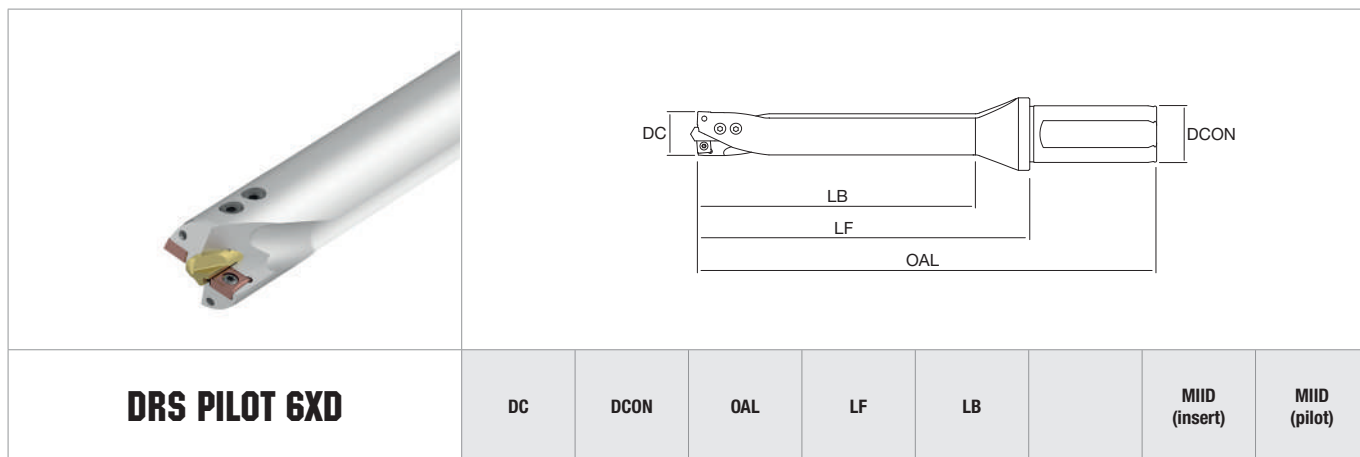
HEIGHT ADJUSTEMENT



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

MATERIALS

P	M	K	▶ p. 14-15
N	S	H	



DRS PILOT 6XD		DC	DCON	OAL	LF	LB		MID (insert)	MID (pilot)	
05	NT-DRS-6D	D18.00-S25-05P6	●	18	25	191	135	112	SPMX05 SPGX05	DRSP06
		D19.00-S25-05P6	●	19	25	197	141	118		
06	NT-DRS-6D	D20.00-S25-06P6	●	20	25	203	147	124	SPMX06 SPGX06	DRSP06
		D21.00-S25-06P6	●	21	25	209	153	130		
		D22.00-S25-06P6	●	22	25	215	159	136		
		D23.00-S32-06P6	●	23	32	228	168	142		
		D24.00-S32-06P6	●	24	32	234	174	148		
	D25.00-S32-06P6	●	25	32	240	180	154			
07	NT-DRS-6D	D26.00-S32-07P8	●	26	32	246	186	160	SPMX07 SPGX07	DRSP08
		D27.00-S32-07P8	●	27	32	252	192	166		
		D28.00-S32-07P8	●	28	32	258	198	172		
		D29.00-S32-07P8	●	29	32	264	204	178		
		D30.00-S32-07P8	●	30	32	270	210	184		

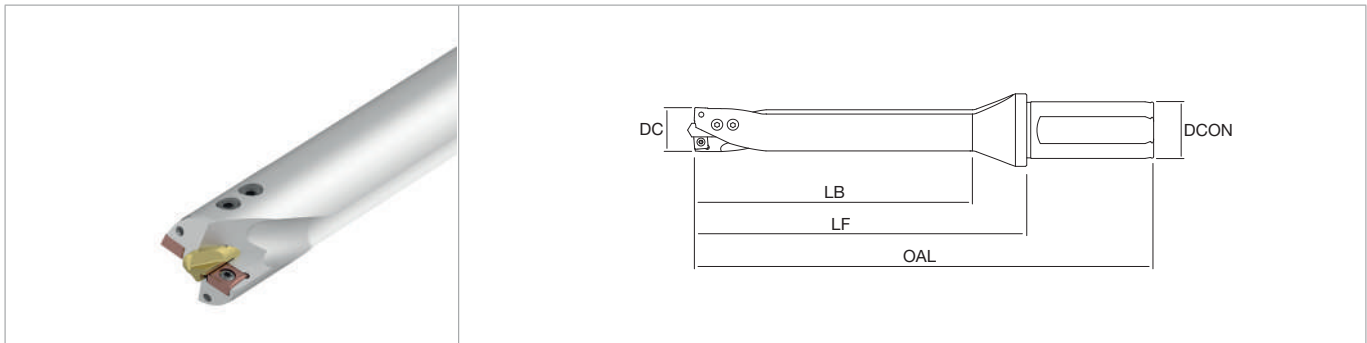
● stock standard



NT-DRS-6D D□□□-S□□-05P6	NT-ST059	NT-FTB06
NT-DRS-6D D□□□-S□□-06P6	NT-ST061	NT-FTB06
NT-DRS-6D D□□□-S□□-07P8	NT-ST062	NT-FTB07



DC 18÷22	NT-ST042	NT-ST043	NT-WR025
DC 23÷25	NT-ST044	NT-ST045	
DC 26÷30	NT-ST046	NT-ST047	NT-WR030



DRS PILOT 9XD			DC	DCON	OAL	LF	LB		MID (insert)	MID (pilot)
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05	NT-DRS-9D	D18.00-S25-05P6	●	18	25	245	189	166	SPMX05 SPGX05	DRSP06
		D19.00-S25-05P6	●	19	25	254	198	175		
06	NT-DRS-9D	D20.00-S25-06P6	●	20	25	263	207	184	SPMX06 SPGX06	DRSP06
		D21.00-S25-06P6	●	21	25	272	216	193		
		D22.00-S25-06P6	●	22	25	281	225	202		
		D23.00-S32-06P6	●	23	32	297	237	211		
		D24.00-S32-06P6	●	24	32	306	246	220		
		D25.00-S32-06P6	●	25	32	315	255	229		
07	NT-DRS-9D	D26.00-S32-07P8	●	26	32	324	264	238	SPMX07 SPGX07	DRSP08
		D27.00-S32-07P8	●	27	32	333	273	247		
		D28.00-S32-07P8	●	28	32	342	282	256		
		D29.00-S32-07P8	●	29	32	351	291	265		
		D30.00-S32-07P8	●	30	32	360	300	274		

● stock standard

Spare Parts	INSERT SCREW	INSERT WRENCH
		

NT-DRS-9D D□□□-S□□-05P6	NT-ST059	NT-FTB06
NT-DRS-9D D□□□-S□□-06P6	NT-ST061	NT-FTB06
NT-DRS-9D D□□□-S□□-07P8	NT-ST062	NT-FTB07

Spare Parts	LOCKING GRAIN	SETTING GRAIN	GRAIN WRENCH
			

DC 18÷22	NT-ST042	NT-ST043	NT-WR025
DC 23÷25	NT-ST044	NT-ST045	
DC 26÷30	NT-ST046	NT-ST047	NT-WR030

CUTTING SPEED [m/min]

	MATERIALS	HARDNESS/Rm	W.-Nr	DIN	AISI-ASTM	TRADE MARK
P1	Free cutting steel and structural steel	< 500 N/mm ²	1.0715	9 SMn 28	1213	AVP
			1.0765	36 SMnPb 14	A29	PR80
P2	Carbon steel and low alloy steel	500-700 N/mm ²	1.7147	20 MnCr 5	5120	-
			1.0511	C 40	1040	-
P3	Medium alloy steel and heat treated steel	600-800 N/mm ²	1.1201	42 CrMo 4	4142, 4140	-
			1.6511	36 CrNiMo 4	9840	-
P4	High alloy steel	800-1000 N/mm ²	1.1663	C 125 W	W1	-
			1.3505	100 Cr 6	52100	-
P5	Tool steel	900-1200 N/mm ²	1.2080	X 210 Cr 12	D3	K100
			1.2379	X 155 CrVMo 12 1	-	K110
M1	Ferritic stainless steel	400-700 N/mm ²	1.4016	X 6 Cr 17	430	-
			1.4104	X 12 CrMoS 17	430 F	-
M2	Austenitic stainless steel (good machinability)	500-750 N/mm ²	1.4305	X 10 CrNiS 18 9	303	-
			1.4301	X 6 CrNi 18 10	304, 304 H	-
M3	Austenitic stainless steel (medium machinability)	550-850 N/mm ²	1.4401	X 5 CrNiMo 17 12 2	316	-
			1.4462	X 2 CrNiMoN 22 5	F 51-329 A	DUPLEX
M4	Martensitic stainless steel	650-950 N/mm ²	1.4021	X 20 Cr 13	420	-
			1.4410	X 2 CrNiMoN 25 7 4	F 53-329 S1	SUPER DUPLEX
M5	PH stainless steel	800-1250 N/mm ²	1.4540	X 4 CrNiCuNb 16 4	XM-12	15-5-PH
			1.4542	X 5 CrNiNb 16 4	631	17-4-PH
K1	Grey cast iron	150-250 HB	0.6020	GG-20	A48 30 B	-
			0.6025	GG-25	A48 35 B	-
K2	Nodular cast iron	150-350 HB	0.7050	GGG-50	A536 80-55-6	-
			0.7070	GGG-70	A536 100-70-03	-
N1	Aluminium alloys ≤ 12% Si		3.3547	AlMg4.5Mn	5083	Peraluman 440
			3.2315	AlMgSi 1	6082	Anticorodal 100
N2	Aluminium alloys > 12% Si		3.2582	GD-AISi12	A413.0	
				G-AISi6Cu4	319	
N3	Copper		2.0940-01	CuAl10Fe	CA952	
			2.1176	CuPb10Sn	CA937	
N4	Bronze and brass		2.0401	Cu Zn39Pb3		OT58 AMPCO 18

DRSDRILL

DRSPILOT

JP5625	JP5530	JP9635	JU6520	JP5625	JP5530	JP9635	JU6520	MATERIALS	HARDNESS/Rm	
180÷300	180÷300			130÷220	130÷220			Free cutting steel and structural steel	< 500 N/mm ²	P1
140÷240	140÷240			100÷180	100÷180			Carbon steel and low alloy steel	500-700 N/mm ²	P2
100÷220	100÷220			80÷170	80÷170			Medium alloy steel and heat treated steel	600-800 N/mm ²	P3
100÷180	100÷180			80÷140	80÷140			High alloy steel	800-1000 N/mm ²	P4
80÷150	80÷150			60÷120	60÷120			Tool steel	900-1200 N/mm ²	P5
		120÷220				90÷160		Ferritic stainless steel	400-700 N/mm ²	M1
		80÷180				60÷130		Austenitic stainless steel (good machinability)	500-750 N/mm ²	M2
		60÷150				50÷110		Austenitic stainless steel (medium machinability)	550-850 N/mm ²	M3
		60÷150				50÷110		Martensitic stainless steel	650-950 N/mm ²	M4
		50÷120				40÷100		PH stainless steel	800-1250 N/mm ²	M5
180÷250	180÷250			130÷190	130÷190			Grey cast iron	150-250 HB	K1
120÷180	120÷180			100÷140	100÷140			Nodular cast iron	150-350 HB	K2
			250÷400				200÷300	Aluminium alloys ≤ 12% Si		N1
			150÷300				120÷240	Aluminium alloys > 12% Si		N2
			200÷300				150÷240	Copper		N3
			200÷300				150÷240	Bronze and brass		N4

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