

10632 Core drill with Morse taper shank

DIN 343
Z3
N
120°
HSS
≤ 900 N/mm²

Design

- Strongly rounded rear
- Surface treatment for reduced build-up of material deposits and improved chip removal

Advantage:

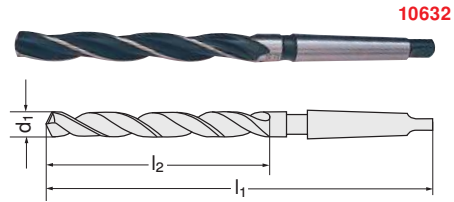
For drilling non-round holes, misaligned holes can be compensated.

Quality

HSS ground for normally machinable materials up to 900 N/mm².

Note:

The drilling diameter should be at least 3/4 of the spiral countersink Ø.



d ₁ h8	l ₂	l ₁	MT	HSS	...
mm	mm	mm		10632	
7.80	75	156	1		101
8.00	75	156	1		102
8.80	81	162	1		103
9.80	87	168	1		104
10.00	87	168	1		105
10.75	94	175	1		106
11.75	101	182	1		107
12.00	101	182	1		108
12.75	101	182	1		109

d ₁ h8	l ₂	l ₁	MT	HSS	...
mm	mm	mm		10632	
13.75	108	189	1		110
14.00	108	189	1		111
14.75	114	212	2		112
15.00	114	212	2		113
15.75	120	218	2		114
16.00	120	218	2		115
16.75	125	223	2		116
17.00	125	223	2		117
17.75	130	228	2		118

d ₁ h8	l ₂	l ₁	MT	HSS	...
mm	mm	mm		10632	
18.00	130	228	2		119
18.70	135	233	2		120
19.70	140	238	2		121
20.00	140	238	2		122
20.70	145	243	2		123
21.70	150	248	2		124
22.00	150	248	2		125
25.00	160	281	3		127
30.00	175	296	3		129

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
25-40	10-30	10-30	26-30	25-28	20-25	15-20	10-15	5-10	-	-	-	-	4-10	3-6	-	10-18	-

10640 - 10649 Multiplex HPC

HARTNER



Design

- Long service life due to wear-resistant indexable inserts
- Optimised chip removal
- Highly accurate and stable plate seat
- Perfect lubrication
- Large selection of indexable inserts

Advantage:

- Drilling tool also suitable for stack drilling

Scope of delivery:

Indexable insert holder incl. clamping screw.

Note:

For drilling depths from 5xD we recommend centring or making a pilot hole.
 When drilling without centring - reduce feed by approx. 50%.
 In the case of through-bores, the feed is to be reduced in the event of breakthrough.



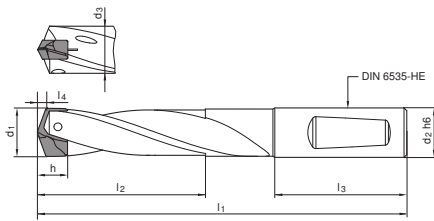
High precision, stable plate seat and stable holder + optimised chip removal and perfect cooling = long service life

Continued



Continued

Multiplex HPC holder 1.5xD



10640

For drilling range Ø d ₁ mm	Carrier size	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ (h6) mm	d ₃ mm	1.5xD	
							10640	...
11.00–11.49	110	19.30	84	45	12	10.70		100
11.50–11.99	115	20.10	85	45	12	11.20		101
12.00–12.49	120	21.0	87	45	12	11.70		102
12.50–12.99	125	21.90	89	45	14	12.20		103
13.00–13.49	130	22.60	90	45	14	12.70		104
13.50–13.99	135	23.60	92	45	14	13.20		105
14.00–14.49	140	24.50	93	45	14	13.70		106
14.50–14.99	145	25.30	98	48	16	14.20		107
15.00–15.49	150	26.10	100	48	16	14.70		108
15.50–15.99	155	27.0	101	48	16	15.20		109
16.00–16.49	160	27.80	102	48	16	15.70		110
16.50–16.99	165	28.70	105	48	18	16.20		111
17.00–17.49	170	29.60	106	48	18	16.70		112
17.50–17.99	175	30.40	107	48	18	17.20		113
18.00–18.49	180	31.20	108	48	18	17.70		114
18.50–18.99	185	32.10	113	50	20	18.20		115
19.00–19.49	190	32.90	114	50	20	18.70		116
19.50–19.99	195	33.70	116	50	20	19.20		117
20.00–20.49	200	34.60	117	50	20	19.70		118
20.50–20.99	205	35.50	128	56	25	20.20		119
21.00–21.49	210	36.40	129	56	25	20.70		120
21.50–21.99	215	37.20	130	56	25	21.20		121
22.00–22.49	220	38.00	131	56	25	21.70		122
22.50–22.99	225	38.90	134	56	25	22.20		123
23.00–23.49	230	39.80	135	56	25	22.70		124
23.50–23.99	235	40.60	137	56	25	23.20		125
24.00–24.49	240	41.50	138	56	25	23.70		126
24.50–24.99	245	42.30	140	56	25	24.20		127
25.00–25.49	250	43.20	142	56	25	24.70		128
25.50–25.99	255	44.00	148	60	32	25.20		129
26.00–26.49	260	44.30	151	60	32	25.70		130
26.50–26.99	265	45.10	153	60	32	26.20		131
27.00–27.49	270	46.00	155	60	32	26.70		132
27.50–27.99	275	46.80	156	60	32	27.20		133
28.00–28.49	280	47.70	157	60	32	27.70		134
28.50–28.99	285	48.50	159	60	32	28.20		135
29.00–29.49	290	49.40	161	60	32	28.70		136
29.50–29.99	295	50.20	162	60	32	29.20		137
30.00–30.49	300	50.90	164	60	32	29.70		138
30.50–30.99	305	51.70	166	60	32	30.20		139
31.00–31.49	310	52.60	167	60	32	30.70		140
31.50–31.99	315	53.40	168	60	32	31.20		141
32.00–32.99	320	55.10	172	60	32	31.70		142
33.00–33.99	330	56.80	175	60	32	32.70		143
34.00–34.99	340	58.50	178	60	32	33.70		144
35.00–35.99	350	60.20	181	60	32	34.70		145
36.00–36.99	360	61.80	184	60	32	35.70		146
37.00–37.99	370	63.50	188	60	32	36.70		147
38.00–38.99	380	65.20	191	60	32	37.70		148
39.00–40.00	390	66.90	194	60	32	38.70		149

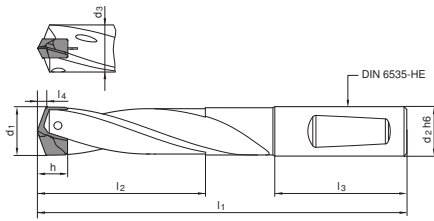
Continued





Continued

Multiplex HPC holder 3xD



10641



3xD

For drilling range Ø d ₁ mm	Carrier size	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ (h6) mm	d ₃ mm	10641	...
11.00–11.49	110	36.60	101	45	12	10.70		100
11.50–11.99	115	38.10	103	45	12	11.20		101
12.00–12.49	120	39.70	106	45	12	11.70		102
12.50–12.99	125	41.30	108	45	14	12.20		103
13.00–13.49	130	42.90	110	45	14	12.70		104
13.50–13.99	135	44.60	113	45	14	13.20		105
14.00–14.49	140	46.20	115	45	14	13.70		106
14.50–14.99	145	47.80	120	48	16	14.20		107
15.00–15.49	150	49.30	123	48	16	14.70		108
15.50–15.99	155	50.90	125	48	16	15.20		109
16.00–16.49	160	52.90	127	48	16	15.70		110
16.50–16.99	165	54.10	130	48	18	16.20		111
17.00–17.49	170	55.80	132	48	18	16.70		112
17.50–17.99	175	57.40	134	48	18	17.20		113
18.00–18.49	180	58.90	137	48	18	17.70		114
18.50–18.99	185	60.50	141	50	20	18.20		115
19.00–19.49	190	62.10	143	50	20	18.70		116
19.50–19.99	195	63.70	146	50	20	19.20		117
20.00–20.49	200	65.30	148	50	20	19.70		118
20.50–20.99	205	67.00	159	56	25	20.20		119
21.00–21.49	210	68.60	161	56	25	20.70		120
21.50–21.99	215	70.10	163	56	25	21.20		121
22.00–22.49	220	71.70	165	56	25	21.70		122
22.50–22.99	225	73.30	168	56	25	22.20		123
23.00–23.49	230	74.90	170	56	25	22.70		124
23.50–23.99	235	76.50	173	56	25	23.20		125
24.00–24.49	240	78.10	175	56	25	23.70		126
24.50–24.99	245	79.70	177	56	25	24.20		127
25.00–25.49	250	81.30	180	56	25	24.70		128
25.50–25.99	255	82.90	187	60	32	25.20		129
26.00–26.49	260	84.00	191	60	32	25.70		130
26.50–26.99	265	86.10	193	60	32	26.20		131
27.00–27.49	270	87.20	196	60	32	26.70		132
27.50–27.99	275	88.90	198	60	32	27.20		133
28.00–28.49	280	90.50	200	60	32	27.70		134
28.50–28.99	285	92.50	202	60	32	28.20		135
29.00–29.49	290	94.60	205	60	32	28.70		136
29.50–29.99	295	95.10	207	60	32	29.20		137
30.00–30.49	300	96.70	210	60	32	29.70		138
30.50–30.99	305	98.30	212	60	32	30.20		139
31.00–31.49	310	99.80	214	60	32	30.70		140
31.50–31.99	315	101.40	216	60	32	31.20		141
32.00–32.99	320	104.60	221	60	32	31.70		142
33.00–33.99	330	107.80	226	60	32	32.70		143
34.00–34.99	340	111.00	230	60	32	33.70		144
35.00–35.99	350	114.20	235	60	32	34.70		145
36.00–36.99	360	117.30	240	60	32	35.70		146
37.00–37.99	370	120.50	245	60	32	36.70		147
38.00–38.99	380	123.70	249	60	32	37.70		148
39.00–40.00	390	126.90	254	60	32	38.70		149

Continued

Multiplex holder

10640 - 10649

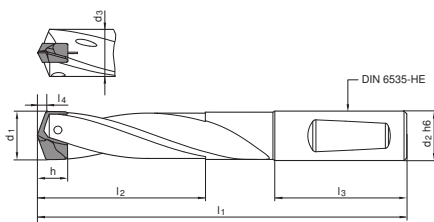
Multiplex HPC



5xD

Continued

Multiplex HPC holder 5xD



10642



5xD

For drilling range Ø d ₁ mm	Carrier size	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ (h6) mm	d ₃ mm	10642	...
11.00-11.49	110	59.60	124	45	12	10.70		100
11.50-11.99	115	62.10	127	45	12	11.20		101
12.00-12.49	120	64.70	131	45	12	11.70		102
12.50-12.99	125	67.30	134	45	14	12.20		103
13.00-13.49	130	69.90	137	45	14	12.70		104
13.50-13.99	135	72.60	141	45	14	13.20		105
14.00-14.49	140	75.20	144	45	14	13.70		106
14.50-14.99	145	77.80	150	48	16	14.20		107
15.00-15.49	150	80.30	154	48	16	14.70		108
15.50-15.99	155	82.90	157	48	16	15.20		109
16.00-16.49	160	85.90	160	48	16	15.70		110
16.50-16.99	165	88.10	164	48	18	16.20		111
17.00-17.49	170	90.80	167	48	18	16.70		112
17.50-17.99	175	93.40	170	48	18	17.20		113
18.00-18.49	180	95.90	174	48	18	17.70		114
18.50-18.99	185	98.50	179	50	20	18.20		115
19.00-19.49	190	101.10	182	50	20	18.70		116
19.50-19.99	195	103.70	186	50	20	19.20		117
20.00-20.49	200	106.30	189	50	20	19.70		118
20.50-20.99	205	109.00	201	56	25	20.20		119
21.00-21.49	210	111.60	204	56	25	20.70		120
21.50-21.99	215	114.10	207	56	25	21.20		121
22.00-22.49	220	116.70	210	56	25	21.70		122
22.50-22.99	225	119.30	214	56	25	22.20		123
23.00-23.49	230	121.90	217	56	25	22.70		124
23.50-23.99	235	124.50	221	56	25	23.20		125
24.00-24.49	240	127.10	224	56	25	23.70		126
24.50-24.99	245	129.70	227	56	25	24.20		127
25.00-25.49	250	132.30	231	56	25	24.70		128
25.50-25.99	255	134.90	239	60	32	25.20		129
26.00-26.49	260	137.00	244	60	32	25.70		130
26.50-26.99	265	140.00	247	60	32	26.20		131
27.00-27.49	270	142.20	251	60	32	26.70		132
27.50-27.99	275	144.80	254	60	32	27.20		133
28.00-28.49	280	147.40	257	60	32	27.70		134
28.50-28.99	285	150.40	260	60	32	28.20		135
29.00-29.49	290	153.50	264	60	32	28.70		136
29.50-29.99	295	155.10	267	60	32	29.20		137
30.00-30.49	300	157.60	271	60	32	29.70		138
30.50-30.99	305	160.20	274	60	32	30.20		139
31.00-31.49	310	162.80	277	60	32	30.70		140
31.50-31.99	315	165.40	280	60	32	31.20		141
32.00-32.99	320	170.60	287	60	32	31.70		142
33.00-33.99	330	175.80	294	60	32	32.70		143
34.00-34.99	340	181.00	300	60	32	33.70		144
35.00-35.99	350	186.20	307	60	32	34.70		145
36.00-36.99	360	191.30	314	60	32	35.70		146
37.00-37.99	370	196.50	321	60	32	36.70		147
38.00-38.99	380	201.70	327	60	32	37.70		148
39.00-40.00	390	206.90	334	60	32	38.70		149

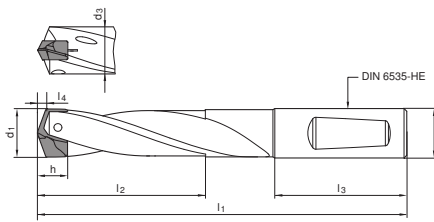
Continued





Continued

Multiplex HPC holder 7xD



10643



7xD

For drilling range Ø d ₁ mm	Carrier size	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ (h6) mm	d ₃ mm	7xD	
							10643	...
11.00–11.49	110	82.60	147	45	12	10.70		100
11.50–11.99	115	86.10	151	45	12	11.20		101
12.00–12.49	120	89.70	156	45	12	11.70		102
12.50–12.99	125	93.30	160	45	14	12.20		103
13.00–13.49	130	96.90	164	45	14	12.70		104
13.50–13.99	135	100.60	169	45	14	13.20		105
14.00–14.49	140	104.20	173	45	14	13.70		106
14.50–14.99	145	107.80	180	48	16	14.20		107
15.00–15.49	150	111.30	185	48	16	14.70		108
15.50–15.99	155	114.90	189	48	16	15.20		109
16.00–16.49	160	118.90	193	48	16	15.70		110
16.50–16.99	165	122.10	198	48	18	16.20		111
17.00–17.49	170	125.80	202	48	18	16.70		112
17.50–17.99	175	129.40	206	48	18	17.20		113
18.00–18.49	180	132.90	211	48	18	17.70		114
18.50–18.99	185	136.50	217	50	20	18.20		115
19.00–19.49	190	140.10	221	50	20	18.70		116
19.50–19.99	195	143.70	226	50	20	19.20		117
20.00–20.49	200	147.30	230	50	20	19.70		118
20.50–20.99	205	151.60	243	56	25	20.20		119
21.00–21.49	210	154.60	247	56	25	20.70		120
21.50–21.99	215	158.10	251	56	25	21.20		121
22.00–22.49	220	161.70	225	56	25	21.70		122
22.50–22.99	225	165.30	260	56	25	22.20		123
23.00–23.49	230	168.90	264	56	25	22.70		124
23.50–23.99	235	172.50	269	56	25	23.20		125
24.00–24.49	240	176.10	273	56	25	23.70		126
24.50–24.99	245	179.70	277	56	25	24.20		127
25.00–25.49	250	183.30	282	56	25	24.70		128
25.50–25.99	255	186.90	291	60	32	25.20		129
26.00–26.49	260	190.00	297	60	32	25.70		130
26.50–26.99	265	194.00	301	60	32	26.20		131
27.00–27.49	270	197.20	306	60	32	26.70		132
27.50–27.99	275	200.80	310	60	32	27.20		133
28.00–28.49	280	204.40	314	60	32	27.70		134
28.50–28.99	285	208.40	318	60	32	28.20		135
29.00–29.49	290	212.50	323	60	32	28.70		136
29.50–29.99	295	215.10	327	60	32	29.20		137
30.00–30.49	300	218.60	332	60	32	29.70		138
30.50–30.99	305	222.20	336	60	32	30.20		139
31.00–31.49	310	225.80	340	60	32	30.70		140
31.50–31.99	315	229.40	344	60	32	31.20		141

Continued

Multiplex holder

10640 - 10649

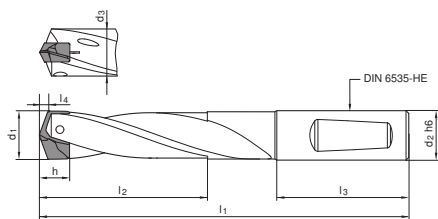
Multiplex HPC



10xD

Continued

Multiplex HPC holder 10xD




10644 100-141



For drilling range Ø d ₁ mm	Carrier size	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ (h6) mm	d ₃ mm	10xD	
							10644	...
11.00-11.49	110	117.10	182	45	12	10.70		100
11.50-11.99	115	122.10	187	45	12	11.20		101
12.00-12.49	120	127.20	194	45	12	11.70		102
12.50-12.99	125	132.30	199	45	14	12.20		103
13.00-13.49	130	137.50	205	45	14	12.70		104
13.50-13.99	135	142.50	211	45	14	13.20		105
14.00-14.49	140	147.70	217	45	14	13.70		106
14.50-14.99	145	152.80	225	48	16	14.20		107
15.00-15.49	150	157.80	232	48	16	14.70		108
15.50-15.99	155	162.90	237	48	16	15.20		109
16.00-16.49	160	168.00	243	48	16	15.70		110
16.50-16.99	165	173.10	249	48	18	16.20		111
17.00-17.49	170	178.30	255	48	18	16.70		112
17.50-17.99	175	183.50	260	48	18	17.20		113
18.00-18.49	180	188.40	267	48	18	17.70		114
18.50-18.99	185	193.50	274	50	20	18.20		115
19.00-19.49	190	198.70	280	50	20	18.70		116
19.50-19.99	195	203.70	286	50	20	19.20		117
20.00-20.49	200	208.90	292	50	20	19.70		118
20.50-20.99	205	214.00	306	56	25	20.20		119
21.00-21.49	210	219.10	312	56	25	20.70		120
21.50-21.99	215	224.20	317	56	25	21.20		121
22.00-22.49	220	229.30	323	56	25	21.70		122
22.50-22.99	225	234.40	329	56	25	22.20		123
23.00-23.49	230	239.50	335	56	25	22.70		124
23.50-23.99	235	244.60	341	56	25	23.20		125
24.00-24.49	240	249.70	347	56	25	23.70		126
24.50-24.99	245	254.80	352	56	25	24.20		127
25.00-25.49	250	259.90	359	56	25	24.70		128
25.50-25.99	255	265.00	369	60	32	25.20		129
26.00-26.49	260	270.00	377	60	32	25.70		130
26.50-26.99	265	275.00	382	60	32	26.20		131
27.00-27.49	270	280.00	388	60	32	26.70		132
27.50-27.99	275	285.20	394	60	32	27.20		133
28.00-28.49	280	290.30	400	60	32	27.70		134
28.50-28.99	285	295.40	405	60	32	28.20		135
29.00-29.49	290	300.50	412	60	32	28.70		136
29.50-29.99	295	305.60	418	60	32	29.20		137
30.00-30.49	300	310.60	424	60	32	29.70		138
30.50-30.99	305	315.70	429	60	32	30.20		139
31.00-31.49	310	320.80	435	60	32	30.70		140
31.50-31.99	315	325.90	441	60	32	31.20		141

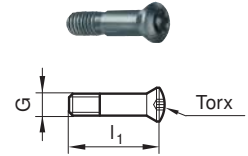
Continued



Continued 

Clamping screws

10644 200-213



For carrier size	G	l ₁ mm	TORX® size	10644	...
110/115	M 2.2	9.50	T 7	200	
120/125	M 2.2	10.50	T 7	201	
130/135	M 2.5	11.40	T 8	202	
140/145	M 3.0	12.10	T 9	203	
150/155	M 3.0	13.10	T 9	204	
160-175	M 3.5	14.25	T 10	205	
180-195	M 4.0	16.00	T 15	206	

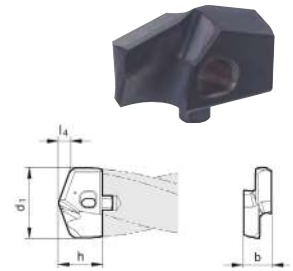
For carrier size	G	l ₁ mm	TORX® size	10644	...
200-215	M 4.5	18.00	T 15	207	
220-235	M 5.0	19.75	T 20	208	
240-255	M 5.0	21.75	T 20	209	
260-295	M 5.0	23.40	T 20	210	
300-315	M 6.0	27.00	T 25	211	
320-350	M 6.0	28.50	T 25	212	
360-390	M 6.0	32.50	T 25	213	

Multiplex HPC pilot plates

10645

Scope of delivery:

- Includes 1 clamping screw



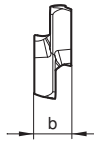
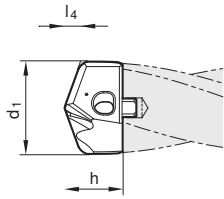
Carrier size	Solid carbide/AlTiN					10645	...
	d ₁ m7 mm	l ₄ mm	b mm	h mm			
110	11.00	1.80	4.50	7.20	100		
110	11.20	1.80	4.50	7.20	101		
110	11.50	1.90	4.50	7.20	102		
110	11.80	1.90	4.50	7.20	103		
120	12.00	1.90	5.00	7.40	104		
120	12.20	2.00	5.00	7.40	105		
120	12.50	2.00	5.00	7.40	106		
130	13.00	2.10	5.50	8.20	107		
130	13.50	2.20	5.50	8.20	108		
130	13.80	2.20	5.50	8.20	109		
140	14.00	2.30	6.00	9.40	110		
140	14.50	2.30	6.00	9.40	111		
140	14.80	2.40	6.00	9.40	112		
150	15.00	2.40	6.00	9.40	113		
150	15.50	2.50	6.00	9.40	114		
150	15.80	2.50	6.00	9.40	115		
160	16.00	2.60	7.00	10.60	116		
160	16.50	2.70	7.00	10.60	117		
170	17.00	2.70	7.00	10.60	118		
170	17.50	2.80	7.00	10.60	119		
180	18.00	2.90	8.00	12.10	120		
180	18.50	3.00	8.00	12.10	121		
190	19.00	3.00	8.00	12.10	122		
190	19.60	3.10	8.00	12.10	123		
200	20.00	3.20	9.00	13.30	124		

Carrier size	Solid carbide/AlTiN					10645	...
	d ₁ m7 mm	l ₄ mm	b mm	h mm			
200	20.50	3.30	9.00	13.30	125		
210	21.00	3.40	9.00	13.30	126		
210	21.50	3.40	9.00	13.30	127		
220	22.00	3.50	10.00	14.80	128		
220	22.50	3.60	10.00	14.80	129		
230	23.00	3.70	10.00	14.80	130		
230	23.50	3.80	10.00	14.80	131		
240	24.00	3.80	11.00	15.30	132		
240	24.50	3.90	11.00	15.30	133		
250	25.00	4.00	11.00	15.30	134		
260	26.00	4.10	12.00	19.40	135		
270	27.00	4.30	12.00	19.40	136		
280	28.00	4.40	13.00	20.10	137		
290	29.00	4.60	13.00	20.10	138		
300	30.00	4.70	14.00	21.70	139		
310	31.00	4.90	14.00	21.70	140		
320	32.00	5.00	15.00	22.40	141		
330	33.00	5.20	15.00	22.40	142		
340	34.00	5.40	15.00	22.40	143		
350	35.00	5.50	15.00	22.40	144		
360	36.00	5.70	16.00	23.20	145		
370	37.00	5.80	16.00	23.20	146		
380	38.00	6.00	16.00	23.20	147		
390	39.00	6.20	16.00	23.20	148		
390	40.00	6.20	16.00	23.20	149		

Continued 

Continued 

Multiplex HPC indexable inserts



Scope of delivery:
- Includes 1 clamping screw



Use

Carrier size

Carrier size	d ₁ m7 mm	l ₄ mm	b mm	h mm	Solid carbide/nanofire 10646	...	Solid carbide/fire 10647	...	Solid carbide/blank 10648	...	Solid carbide/AlTiN nano 10649	...
110	11.00	2.10	4.50	7.50	100		100		100		100	
110	11.20	2.10	4.50	7.50	101		101		101		101	
115	11.50	2.10	4.50	7.50	102		102		102		102	
115	11.80	2.20	4.50	7.50	103		103		103		103	
120	12.00	2.20	5.00	7.70	104		104		104		104	
120	12.20	2.30	5.00	7.70	105		105		105		105	
125	12.50	2.30	5.00	7.70	106		106		106		106	
130	13.00	2.40	5.50	8.50	107		107		107		107	
135	13.50	2.50	5.50	8.50	108		108		108		108	
135	13.80	2.60	5.50	8.50	109		109		109		109	
140	14.00	2.60	6.00	9.60	110		110		110		110	
145	14.50	2.70	6.00	9.60	111		111		111		111	
145	14.80	2.70	6.00	9.60	112		112		112		112	
150	15.00	2.80	6.00	9.80	113		113		113		113	
155	15.50	2.90	6.00	9.80	114		114		114		114	
155	15.80	2.90	6.00	9.80	115		115		115		115	
160	16.00	3.00	7.00	11.00	116		116		116		116	
165	16.50	3.10	7.00	11.00	117		117		117		117	
170	17.00	3.10	7.00	11.00	118		118		118		118	
175	17.50	3.20	7.00	11.00	119		119		119		119	
180	18.00	3.30	8.00	12.60	120		120		120		120	
185	18.50	3.40	8.00	12.60	121		121		121		121	
190	19.00	3.50	8.00	12.60	122		122		122		122	
195	19.60	3.60	8.00	12.60	123		123		123		123	
200	20.00	3.70	9.00	13.90	124		124		124		124	
205	20.50	3.80	9.00	13.90	125		125		125		125	
210	21.00	3.90	9.00	13.90	126		126		126		126	
215	21.50	4.00	9.00	13.90	127		127		127		127	
220	22.00	4.10	10.00	15.30	128		128		128		128	
225	22.50	4.10	10.00	15.30	129		129		129		129	
230	23.00	4.20	10.00	15.30	130		130		130		130	
235	23.50	4.30	10.00	15.30	131		131		131		131	
240	24.00	4.40	11.00	15.80	132		132		132		132	
245	24.50	4.50	11.00	15.80	133		133		133		133	
250	25.00	4.60	11.00	15.80	134		134		134		134	
260	26.00	4.80	12.00	20.00	135		135		135		135	
270	27.00	5.00	12.00	20.00	136		136		136		136	
280	28.00	5.10	13.00	20.70	137		137		137		137	
290	29.00	5.30	13.00	20.70	138		138		138		138	
300	30.00	5.50	14.00	22.30	139		139		139		139	
310	31.00	5.70	14.00	22.30	140		140		140		140	
320	32.00	5.90	15.00	23.10	141		141		141		141	
330	33.00	6.10	15.00	23.10	142		142		142		142	
340	34.00	6.20	15.00	23.10	143		143		143		143	
350	35.00	6.40	15.00	23.10	144		144		144		144	
360	36.00	6.60	16.00	23.90	145		145		145		145	
370	37.00	6.80	16.00	23.90	146		146		146		146	
380	38.00	7.00	16.00	23.90	147		147		147		147	
390	39.00	7.10	16.00	23.90	148		148		148		148	
390	40.00	7.30	16.00	23.90	149		149		149		149	

Continued 

Continued

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<50HRC	<55HRC	<60HRC	<65HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10646	-	-	130	120	110	90	70	55	-	-	-	-	-	-	-	-	-
10647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-
10648	200	150	70-180	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10649	-	-	-	-	-	-	-	-	25	25	-	-	55	35	-	-	-

Info

Are you familiar with the HARTNER multiplex drilling system?

HARTNER

The tool system with internally cooled holders in different lengths as well as cutting plates that can be replaced, meaning

- No re-sharpening
- Always original grinding
- Length always remains constant

Each holder drills with plates in different diameters and cutting materials, such as coated HSS-E PM and solid carbide, depending on what is being processed. Drilling range from Ø 9.7 to 65 mm – often up to 7 x d. This tool is not suitable for drilling out pre-cast or pre-drilled holes.

What you have previously drilled conventionally, you can now drill with the MULTIPLEX DRILLING SYSTEM

- Quicker
- More precise
- Better
- Cheaper

The MULTIPLEX DRILLING SYSTEM has many benefits:

- No resharpening costs
- The coating benefit is fully maintained
- High cutting performance and optimum service life due to internal cooling
- Constant tool length
- Presetting times and adjustments for NC machines are not required
- Reduction in storage costs

Further development as a special tool for the operations

- Drilling
- Countersinking
- Levelling
- Chamfering
- Extracting
- Countersinking

The MULTIPLEX DRILLING SYSTEM drills down your spiralling costs!

10649–10674 Multiplex indexable insert twist drills

Design

With internal coolant supply.
With straight shank, right cutting.
Up to drilling Ø 35 mm hardened and nickel-plated.
Also nickel-plated. Without cutting plate.

Tip angle:

- Up to Ø 25.4 = 135°
- Over Ø 25.4 = 132°

Point thinning:

Special design with short chisel edge.

Applications

For drilling steel and steel casting alloyed and unalloyed up to 1100 N/mm² strength, grey cast iron, malleable iron, spheroidal graphite iron, sintered iron, nickel silver, bronze, brass.

10649

Twist drill with straight shank 3xD



3xD

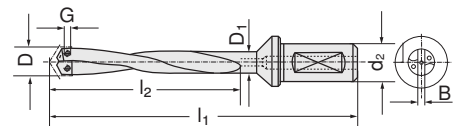
HARTNER



10649



For drilling range Ø D mm	l ₂ mm	l ₁ mm	D ₁ mm	d ₂ mm	B mm	TORX® screws G	10649	...
9.70–11.70	50	107	9.5	20	2.5	M 2.0 x 4		201
11.71–13.40	53	109	11.5	20	2.5	M 2.0 x 4		202
13.41–16.40	60	116	13.0	20	3.5	M 2.5 x 5		203
16.41–18.90	65	118	16.0	20	3.5	M 2.5 x 7		204
18.91–22.40	73	124	18.5	20	4.0	M 3.0 x 6		205
22.41–25.40	78	127	22.0	20	4.0	M 3.0 x 8		206
25.41–29.00	105	178	24.0	32	5.0	M 3.5 x 10		207
29.01–35.00	108	178	28.0	32	5.0	M 3.5 x 10		208
35.01–45.00	152	223	34.0	32	7.0	M 4.0 x 15		209
45.01–55.00	152	233	44.0	40	7.0	M 4.0 x 15		210
55.01–65.00	152	233	54.0	40	7.0	M 4.0 x 15		211

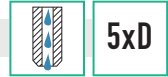


Continued

Twist drills | Multiplex drilling system

10650

Twist drill with straight shank 5xD



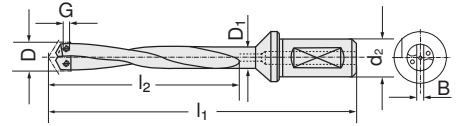
5xD

HARTNER



10650

For drilling range Ø D mm	l ₂ mm	l ₁ mm	D ₁ mm	d ₂ mm	B mm	TORX® screws G	10650	...
9.70–11.70	83	140	9.5	20	2.5	M 2.0 x 4		201
11.71–13.40	94	150	11.5	20	2.5	M 2.0 x 4		202
13.41–16.40	104	160	13.0	20	3.5	M 2.5 x 5		203
16.41–18.90	117	170	16.0	20	3.5	M 2.5 x 7		204
18.91–22.40	129	180	18.5	20	4.0	M 3.0 x 6		205
22.41–25.40	131	180	22.0	20	4.0	M 3.0 x 8		206
25.41–29.00	166	240	24.0	32	5.0	M 3.5 x 10		207
29.01–35.00	170	240	28.0	32	5.0	M 3.5 x 10		208
35.01–45.00	210	280	34.0	32	7.0	M 4.0 x 15		209
45.01–55.00	210	290	44.0	40	7.0	M 4.0 x 15		210
55.01–65.00	210	290	54.0	40	7.0	M 4.0 x 15		211



10651

Twist drill with straight shank 7xD



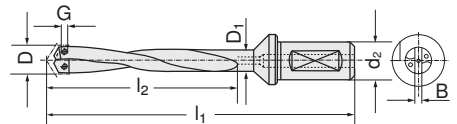
7xD

HARTNER



10651

For drilling range Ø D mm	l ₂ mm	l ₁ mm	D ₁ mm	d ₂ mm	B mm	TORX® screws G	10651	...
9.70–11.70	123	180	9.5	20	2.5	M 2.0 x 4		201
11.71–13.40	134	190	11.5	20	2.5	M 2.0 x 4		202
13.41–16.40	155	210	13.0	20	3.5	M 2.5 x 5		203
16.41–18.90	168	220	16.0	20	3.5	M 2.5 x 7		204
18.91–22.40	199	250	18.5	20	4.0	M 3.0 x 6		205
22.41–25.40	201	250	22.0	20	4.0	M 3.0 x 8		206
25.41–29.00	246	320	24.0	32	5.0	M 3.5 x 10		207
29.01–35.00	250	320	28.0	32	5.0	M 3.5 x 10		208
35.01–45.00	310	380	34.0	32	7.0	M 4.0 x 15		209
45.01–55.00	310	390	44.0	40	7.0	M 4.0 x 15		210
55.01–65.00	310	390	54.0	40	7.0	M 4.0 x 15		211



10654 - 10657

Indexable inserts for Multiplex system

HARTNER



Design

- With surface cut
- Right cutting

10654

Quality

HSS-E-PM/TiN for steel up to 1200 N/mm², cast iron, aluminium.

10655

Quality

HSS-E-PM/fire coating for increased service life in steel up to 1200 N/mm², cast iron, aluminium, brass, bronze. With chip divider groove for short chips.



10654

10654

Quality

HSS-E-PM/TiN for steel up to 1200 N/mm², cast iron, aluminium. With chip divider groove for short chips.

10657

Quality

Solid carbide/fire coating for another significant increase in service life and performance also in steel up to 48 HRC and chilled cast iron. With chamfer without chip divider groove.



10655



10657

Ø mm	B mm	HSS-E-PM/TiN		HSS-E-PM/Fire		H 22/Fire	
		10654	...	10655	...	10657	...
10.00	2.5			602		602	602
10.20	2.5			603			603
10.50	2.5					604	604
11.00	2.5			607		607	607
12.00	2.5			615		615	615
12.50	2.5			621		621	621
12.75	2.5			624			624
13.00	2.5			625		625	625
13.50	3.5			628		628	628

Ø mm	B mm	HSS-E-PM/TiN		HSS-E-PM/Fire		H 22/Fire	
		10654	...	10655	...	10657	...
13.75	3.5			629			629
14.00	3.5			630		630	630
14.25	3.5			631			631
14.50	3.5			633		633	633
14.75	3.5			634			634
15.00	3.5			635		635	635
15.25	3.5			636			636
15.50	3.5			637		637	637
15.75	3.5			638		638	638

Continued ▶

10654 - 10657 Indexable inserts for Multiplex system

Continued

		HSS-E-PM/TiN				HSS-E-PM/Fire		H 22/Fire				HSS-E-PM/TiN				HSS-E-PM/Fire		H 22/Fire						
Ø	B	10654	...	10655	...	10657	...	Ø	B	10654	...	10655	...	10657	...	Ø	B	10654	...	10655	...	10657	...	
mm	mm							mm	mm							mm	mm							
16.00	3.5			639		639		21.50	4.0			663		663		21.50	4.0			663		663		663
16.25	3.5							21.75	4.0			664		664		21.75	4.0			664		664		664
16.50	3.5			641		641		22.00	4.0			665		665		22.00	4.0			665		665		665
17.00	3.5			643		643		22.50	4.0			668		668		22.50	4.0			668		668		668
17.50	3.5			645		645		23.00	4.0			670		670		23.00	4.0			670		670		670
17.75	3.5			646		646		23.50	4.0			672		672		23.50	4.0			672		672		672
18.00	3.5			647		647		24.00	4.0			675		675		24.00	4.0			675		675		675
18.25	3.5			648		648		24.25	4.0							24.25	4.0							676
18.50	3.5			649		649		24.50	4.0			677		677		24.50	4.0			677		677		677
18.75	3.5			650		650		25.00	4.0			680		680		25.00	4.0			680		680		680
19.00	4.0			651		651		26.00	5.0							26.00	5.0							685
19.50	4.0			654		654		27.00	5.0							27.00	5.0							690
19.75	4.0			655		655		28.00	5.0							28.00	5.0							695
20.00	4.0			656		656		29.00	5.0							29.00	5.0							700
20.25	4.0			657		657		30.00	5.0							30.00	5.0							705
20.50	4.0			658		658		33.00	5.0							33.00	5.0							720
21.00	4.0			661		661		34.00	5.0							34.00	5.0							725
21.25	4.0			662		662		35.00	5.0							35.00	5.0							730

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10654																	
80-85	65-70	40-45	35-40	30-35	25-30	22-25	20-22	-	-	-	-	-	15-20	-	-	28-35	-
10655																	
80-85	65-70	40-50	42-48	40-45	35-40	25-28	18-25	-	-	-	-	-	17-23	-	-	33-40	-
10657																	
140-160	130-150	70-80	90-100	80-85	75-80	70-75	55-65	40-45	-	-	-	-	30-45	-	-	70-90	-

10672 Indexable inserts for Multiplex system



HARTNER

Design
- With surface cut
- Right cutting

Quality
HSS-E-PM/TiAlN for materials up to 1200 N/mm².



10672 600-613



10672 614-641

		HSS-E-PM/TiAlN				HSS-E-PM/TiAlN		HSS-E-PM/TiAlN		HSS-E-PM/TiAlN				
Ø	B	10672	...	10672	...	Ø	B	10672	...	Ø	B	10672	...	
mm	mm			mm	mm	mm	mm			mm	mm			
25	5	600		33	5	611		44	7	622		55	7	633
25.5	5	601		34	5	612		45	7	623		56	7	634
26	5	602		35	5	613		46	7	624		57	7	635
26.5	5	603		36	7	614		47	7	625		58	7	636
27	5	604		37	7	615		48	7	626		59	7	637
28	5	605		38	7	616		49	7	627		60	7	638
29	5	606		39	7	617		50	7	628		62	7	639
29.5	5	607		40	7	618		51	7	629		64	7	640
30	5	608		41	7	619		52	7	630		65	7	641
31	5	609		42	7	620		53	7	631				
32	5	610		43	7	621		54	7	632				

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
75-80	65-75	60-65	50-55	45-50	40-45	35-40	30-35	-	-	-	-	-	25-28	-	-	40-50	-

10674 TORX® clamping screws

HARTNER

Design
Pack = 5 units.

Applications
For Multiplex indexable insert twist drills
Art. no. 10649 ff.



10674

Designation	Drilling range mm	TORX® size	10674	...	Designation	Drilling range mm	TORX® size	10674	...
M 2.0 x 4	10-13	T 6	201		M 3.0 x 8	> 22-25	T 9	205	
M 2.5 x 5	> 13-16	T 7	202		M 3.5 x 10	> 25-35	T 15	206	
M 2.5 x 7	> 16-18	T 7	203		M 4.0 x 15	> 35-65	T 20	207	
M 3.0 x 6	> 18-22	T 9	204						





Design

- Right cutting
- With a cylindrical tool chuck
- With internal cooling

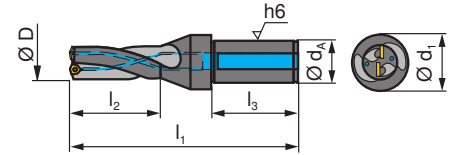
Scope of delivery:

- Basic body with clamping screws
- Without indexable inserts

Applications

Rotating or stationary in all stable machine tools.

11160



Ø D mm	Designation	Ø d _A mm	Ø d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	Indexable inserts	11160	...
18	3D.180.R.03	25	32	140	56	86	WC.. / XO.. 03..		105
19	3D.190.R.03	25	32	143	59	89	WC.. / XO.. 03..		106
20	3D.200.R.03	25	32	146	62	92	WC.. / XO.. 03..		107
21	3D.210.R.03	25	32	149	65	95	WC.. / XO.. 03..		108
22	3D.220.R.03	25	32	152	68	98	WC.. / XO.. 03..		109
23	3D.230.R.03	25	32	155	71	101	WC.. / XO.. 03..		110
24	3D.240.R.05	25	32	158	74	104	WC.. / XO.. 05..		111
25	3D.250.R.05	25	32	161	77	107	WC.. / XO.. 05..		112
26	3D.260.R.05	25	32	164	80	110	WC.. / XO.. 05..		113
27	3D.270.R.05	25	32	167	83	113	WC.. / XO.. 05..		114
28	3D.280.R.05	25	32	170	86	116	WC.. / XO.. 05..		115
29	3D.290.R.05	25	32	173	89	119	WC.. / XO.. 05..		116
30	3D.300.R.06	32	49	180	92	122	WC.. / XO.. 06..		117
31	3D.310.R.06	32	49	183	95	125	WC.. / XO.. 06..		118
32	3D.320.R.06	32	49	186	98	128	WC.. / XO.. 06..		119
33	3D.330.R.06	32	49	189	101	131	WC.. / XO.. 06..		120
34	3D.340.R.06	32	49	192	104	134	WC.. / XO.. 06..		121
35	3D.350.R.06	32	49	195	107	137	WC.. / XO.. 06..		122
36	3D.360.R.06	32	49	198	110	140	WC.. / XO.. 06..		123
37	3D.370.R.06	32	49	201	113	143	WC.. / XO.. 06..		124
38	3D.380.R.07	32	49	204	116	146	WC.. / XO.. 07..		125
39	3D.390.R.07	32	49	207	119	149	WC.. / XO.. 07..		126
40	3D.400.R.07	32	49	210	122	152	WC.. / XO.. 07..		127
41	3D.410.R.07	32	49	213	125	155	WC.. / XO.. 07..		128
42	3D.420.R.07	32	49	216	128	158	WC.. / XO.. 07..		129
43	3D.430.R.07	32	49	219	131	161	WC.. / XO.. 07..		130
44	3D.440.R.07	32	49	222	134	164	WC.. / XO.. 07..		131
45	3D.450.R.07	40	59	240	137	172	WC.. / XO.. 07..		132
46	3D.460.R.07	40	59	243	140	175	WC.. / XO.. 07..		133
47	3D.470.R.07	40	59	246	143	178	WC.. / XO.. 07..		134
48	3D.480.R.07	40	59	249	146	181	WC.. / XO.. 07..		135
49	3D.490.R.07	40	59	252	149	184	WC.. / XO.. 07..		136
50	3D.500.R.07	40	59	255	152	187	WC.. / XO.. 07..		137

Applications

Cemented carbide type

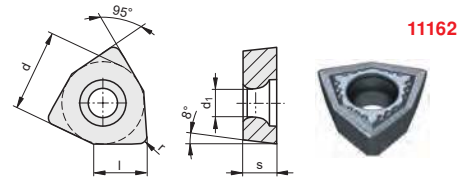
Coating



CTPP430 coated

11162

Designation	d mm	l mm	s mm	r mm	d ₁ mm	pcs.	...
XOMT 020204SN	5.50	3.39	2.30	0.40	2.25	10 pcs.	201
XOMT 030204SN	6.00	3.97	2.50	0.40	2.50	10 pcs.	202
XOMT 050304SN	8.00	5.29	3.00	0.40	2.80	10 pcs.	203
XOMT 060304SN	10.00	6.62	3.00	0.40	4.00	10 pcs.	204
XOMT 070304SN	12.00	3.97	3.80	0.40	4.40	10 pcs.	205



Spare parts

for indexable inserts

Size

Clamping screw	Key
17999	51932
101	202
102	203
103	204
104	207

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
150-500	150-300	150-300	180-300	160-280	140-250	130-220	100-200	100-200	-	-	-	-	100-160	80-150	40-100	80-200	-



Indexable insert drills

11165 - 11168

Indexable insert drill MaxiDrill 900



11165 - 11166

Design

- Strong structure
- Circumferential and centre cutting edge same indexable insert
- Long service life thanks to hard and tough coating
- Optimum chip removal

Scope of delivery:

- Basic body with clamping screws
- **Without** indexable inserts

11165

Applications

For drilling depths up to **3xD**.

11166

Applications

For drilling depths up to **5xD**.

11168

Indexable inserts

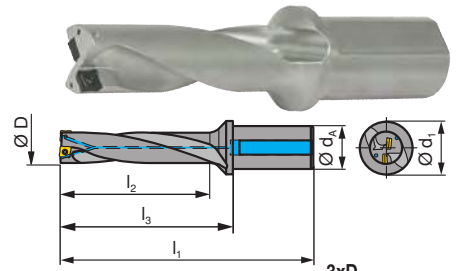
Design

- 4 effective cutting edges per indexable insert
- Indexable inserts wideband type

Note:

Please note the achievable drilling tolerances in the cutting data!

11165

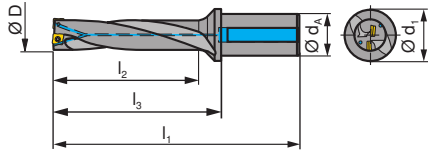


Ø D mm	Designation	Ø d _A mm	Ø d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	Indexable inserts	11165	...
12	MD-900.3D.120.R.03-C	20	28	102	26	52	SONT 03..		099
13	MD-900.3D.130.R.03-C	20	28	105	39	54	SONT 03..		100
14	MD-900.3D.140.R.04-C	20	30	109	42	59	SONT 04..		101
15	MD-900.3D.150.R.04-C	20	30	112	45	62	SONT 04..		102
16	MD-900.3D.160.R.05-C	20	30	115	48	65	SONT 05..		103
17	MD-900.3D.170.R.05-C	20	30	118	51	68	SONT 05..		104
18	MD-900.3D.180.R.06-C	25	32	128	54	72	SONT 06..		105
19	MD-900.3D.190.R.06-C	25	32	131	57	75	SONT 06..		106
20	MD-900.3D.200.R.06-C	25	32	134	60	78	SONT 06..		107
21	MD-900.3D.210.R.07-C	25	32	138	63	82	SONT 07..		108
22	MD-900.3D.220.R.07-C	25	32	141	66	85	SONT 07..		109
23	MD-900.3D.230.R.07-C	25	32	144	69	88	SONT 07..		110
24	MD-900.3D.240.R.08-C	32	40	155	72	95	SONT 08..		111
25	MD-900.3D.250.R.08-C	32	40	158	75	98	SONT 08..		112
26	MD-900.3D.260.R.08-C	32	40	161	78	101	SONT 08..		113
27	MD-900.3D.270.R.08-C	32	40	164	81	104	SONT 08..		114
28	MD-900.3D.280.R.09-C	32	40	167	84	107	SONT 09..		115
29	MD-900.3D.290.R.09-C	32	40	170	87	110	SONT 09..		116
30	MD-900.3D.300.R.09-C	32	40	173	90	113	SONT 09..		117
31	MD-900.3D.310.R.09-C	32	40	176	93	116	SONT 09..		118
32	MD-900.3D.320.R.09-C	32	40	179	96	119	SONT 09..		119
33	MD-900.3D.330.R.10-C	40	50	193	99	125	SONT 10..		120
34	MD-900.3D.340.R.10-C	40	50	196	102	128	SONT 10..		121
35	MD-900.3D.350.R.10-C	40	50	199	105	131	SONT 10..		122
36	MD-900.3D.360.R.10-C	40	50	202	108	134	SONT 10..		123
37	MD-900.3D.370.R.12-C	40	56	211	111	141	SONT 12..		124
38	MD-900.3D.380.R.12-C	40	56	214	114	144	SONT 12..		125
39	MD-900.3D.390.R.12-C	40	56	217	117	147	SONT 12..		126
40	MD-900.3D.400.R.12-C	40	56	220	120	150	SONT 12..		127
41	MD-900.3D.410.R.12-C	40	56	223	123	153	SONT 12..		128
42	MD-900.3D.420.R.13-C	40	60	229	126	159	SONT 13..		129
43	MD-900.3D.430.R.13-C	40	60	232	129	162	SONT 13..		130
44	MD-900.3D.440.R.13-C	40	60	235	132	165	SONT 13..		131
45	MD-900.3D.450.R.13-C	40	60	238	135	168	SONT 13..		132
46	MD-900.3D.460.R.13-C	40	60	241	138	171	SONT 13..		133
47	MD-900.3D.470.R.15-C	40	60	245	141	175	SONT 15..		134
48	MD-900.3D.480.R.15-C	40	60	248	144	178	SONT 15..		135
49	MD-900.3D.490.R.15-C	40	60	251	147	181	SONT 15..		136
50	MD-900.3D.500.R.15-C	40	60	254	150	184	SONT 15..		137
51	MD-900.3D.510.R.15-C	40	60	257	153	187	SONT 15..		138
52	MD-900.3D.520.R.15-C	40	60	260	156	190	SONT 15..		139
53	MD-900.3D.530.R.15-C	40	60	263	159	193	SONT 15..		140
54	MD-900.3D.540.R.15-C	40	60	266	162	196	SONT 15..		141
55	MD-900.3D.550.R.17-C	40	60	270	165	200	SONT 17..		142
56	MD-900.3D.560.R.17-C	40	60	273	168	203	SONT 17..		143
57	MD-900.3D.570.R.17-C	40	60	276	171	206	SONT 17..		144
58	MD-900.3D.580.R.17-C	40	60	279	174	209	SONT 17..		145
59	MD-900.3D.590.R.17-C	40	60	282	177	212	SONT 17..		146
60	MD-900.3D.600.R.17-C	40	62	285	180	215	SONT 17..		147
61	MD-900.3D.610.R.17-C	40	62	288	183	218	SONT 17..		148
62	MD-900.3D.620.R.17-C	40	64	291	186	221	SONT 17..		149

Continued ▶

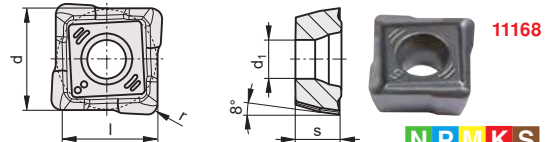


Continued



Ø D mm	Designation	Ø d _A mm	Ø d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	Indexable inserts	5xD	
								11166	...
12	MD-900.5D.120.R.03-C	20	28	126	60	76	SONT 03..		099
13	MD-900.5D.130.R.03-C	20	28	131	65	81	SONT 03..		100
14	MD-900.5D.140.R.04-C	20	30	137	70	87	SONT 04..		101
15	MD-900.5D.150.R.04-C	20	30	142	75	92	SONT 04..		102
16	MD-900.5D.160.R.05-C	20	30	147	80	97	SONT 05..		103
17	MD-900.5D.170.R.05-C	20	30	152	85	102	SONT 05..		104
18	MD-900.5D.180.R.06-C	25	32	164	90	108	SONT 06..		105
19	MD-900.5D.180.R.06-C	25	32	169	95	113	SONT 06..		106
20	MD-900.5D.200.R.06-C	25	32	174	100	118	SONT 06..		107
21	MD-900.5D.210.R.07-C	25	32	179	105	124	SONT 07..		108
22	MD-900.5D.220.R.07-C	25	32	184	110	128	SONT 07..		109
23	MD-900.5D.230.R.07-C	25	32	189	115	133	SONT 07..		110
24	MD-900.5D.240.R.08-C	32	40	203	120	143	SONT 08..		111
25	MD-900.5D.250.R.08-C	32	40	208	125	148	SONT 08..		112
26	MD-900.5D.260.R.08-C	32	40	212	130	152	SONT 08..		113
27	MD-900.5D.270.R.08-C	32	40	217	135	157	SONT 08..		114
28	MD-900.5D.280.R.09-C	32	40	221	140	161	SONT 09..		115
29	MD-900.5D.290.R.09-C	32	40	226	145	166	SONT 09..		116
30	MD-900.5D.300.R.09-C	32	40	230	150	170	SONT 09..		117
31	MD-900.5D.310.R.09-C	32	40	235	155	175	SONT 09..		118
32	MD-900.5D.320.R.09-C	32	40	239	160	179	SONT 09..		119
33	MD-900.5D.330.R.10-C	40	50	259	165	191	SONT 10..		120
34	MD-900.5D.340.R.10-C	40	50	264	170	196	SONT 10..		121
35	MD-900.5D.350.R.10-C	40	50	269	175	201	SONT 10..		122
36	MD-900.5D.360.R.10-C	40	50	274	180	206	SONT 10..		123
37	MD-900.5D.370.R.12-C	40	56	285	185	215	SONT 12..		124
38	MD-900.5D.380.R.12-C	40	56	290	190	220	SONT 12..		125
39	MD-900.5D.390.R.12-C	40	56	295	195	225	SONT 12..		126
40	MD-900.5D.400.R.12-C	40	56	300	200	230	SONT 12..		127
41	MD-900.5D.410.R.12-C	40	56	305	205	235	SONT 12..		128

Indexable inserts and spare parts



Use
Cemented carbide type
Coating

NPMKS
CTPP430 coated

Designation	d mm	l mm	s mm	r mm	d ₁ mm	10 pcs.	11168	...
SONT 031804ER-M30	5.4	3.9	1.8	0.4	2.1	10 pcs.		100
SONT 042105ER-M30	4.6	4.2	2.1	0.5	2.25	10 pcs.		101
SONT 052306ER-M30	5.3	4.8	2.3	0.6	2.25	10 pcs.		102
SONT 062506ER-M30	5.9	5.5	2.5	0.6	2.5	10 pcs.		103
SONT 072907ER-M30	6.5	6.1	2.9	0.7	2.5	10 pcs.		104
SONT 083308ER-M30	7.7	7.3	3.3	0.8	2.9	10 pcs.		105

Use
Cemented carbide type
Coating

NPMKS
CTPP430 coated

Designation	d mm	l mm	s mm	r mm	d ₁ mm	10 pcs.	11168	...
SONT 093808ER-M30	8.9	8.5	3.8	0.8	3.5	10 pcs.		106
SONT 104408ER-M30	10.1	9.6	4.4	0.8	4.1	10 pcs.		107
SONT 124810ER-M30	11.6	11.0	4.8	1.0	4.1	10 pcs.		108
SONT 135012ER-M30	13.0	12.2	5.0	1.2	5.3	10 pcs.		109
SONT 155312ER-M30	15.2	14.4	5.3	1.2	5.3	10 pcs.		110
SONT 175612ER-M30	17.5	16.7	5.6	1.2	5.3	10 pcs.		111

Spare parts

for indexable inserts	Clamping screw	Key	Clamping screw	Key
SONT 03..	M 1.8 x 3.0	IP 6	17999	51932
SONT 04/05..	M 2.0 x 4.0	IP 6
SONT 06/07..	M 2.2 x 5.0	IP 7		
SONT 08..	M 2.5 x 6.0	IP 8		
SONT 09..	M 3.0 x 7.0	IP 9		
SONT 10/12..	M 3.5 x 8.6	IP 15		
SONT 13/15/17..	M 4.5 x 10.5	IP 20		

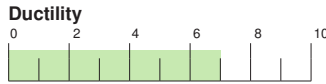
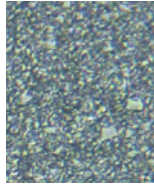
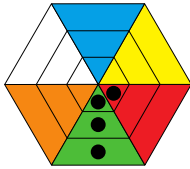
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
150-500	150-300	150-300	180-300	160-280	140-250	130-220	100-200	100-200	-	-	-	-	100-160	80-150	40-100	80-200	-

Info

EcoCut / drilling multi-function tools

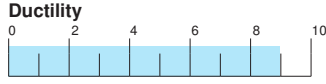
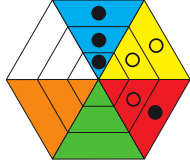
H216T

HW-K15



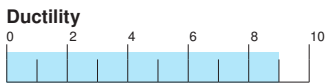
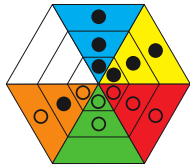
CTCP435/GM40

HC-P35
HC-M30
HC-K40



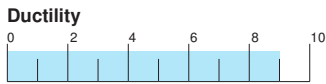
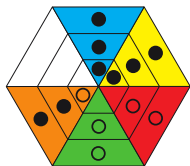
CTPP430/SR226

HC-P30
HC-M25
HC-S25



CTPP435

HC-P35
HC-M30
HC-S30



EcoCut Mini



Properties/Application:

- Ideally suited to aluminium
- High wear resistance
- High heat resistance
- Low adhesion

11170 - 11172

Drilling and lathe tool EcoCut Mini



Design

- Single-edged tool for drilling and turning
- New cemented-carbide type with improved toughness and heat resistance

Quality

Universal ultra-fine grain CTPP435.

Note:

Use only with holder art. no. 11172.

11170

Applications

For drilling depths up to 2.25xD.

11171

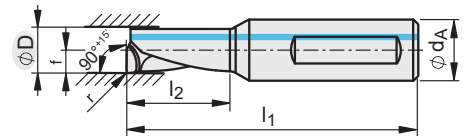
Applications

For drilling depths up to 4xD.

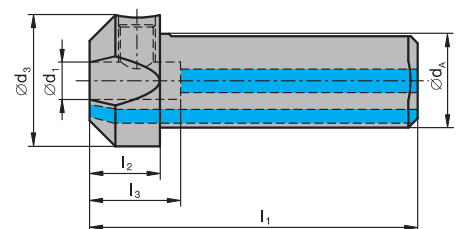
11172

Holder for fitting the EcoCut Mini

11170 - 11171



11172



2.25xD		right		left						
Ø D	Designation	Ø d _A	l ₁	l ₂	f	r	11170	...	11170	...
mm		mm	mm	mm	mm	mm				
4	ECM 04R/L-2.25D	6	35	9.00	2.0	0.2			101	201
5	ECM 05R/L-2.25D	6	37	11.25	2.5	0.2			102	202
6	ECM 06R/L-2.25D	8	38	13.50	3.0	0.2			103	203
7	ECM 07R/L-2.25D	8	42	15.75	3.5	0.2			104	204
8	ECM 08R/L-2.25D	8	45	18.00	4.0	0.2			105	205

4xD		right		left						
Ø D	Designation	Ø d _A	l ₁	l ₂	f	r	11171	...	11171	...
mm		mm	mm	mm	mm	mm				
4	ECM 04R/L-4.00D	6	41	16	2.0	0.2			101	201
5	ECM 05R/L-4.00D	6	45	20	2.5	0.2			102	202
6	ECM 06R/L-4.00D	8	49	24	3.0	0.2			103	203
7	ECM 07R/L-4.00D	8	53	28	3.5	0.2			104	204
8	ECM 08R/L-4.00D	8	57	32	4.0	0.2			105	205

Holder		right		left			
Ø d ₁	Designation	Ø d _A	Ø d ₃	l ₁	l ₂	11172	...
mm		mm	mm	mm	mm		
6	EC-ADX20-06	20	25	65	14		101
8	EC-ADX20-08	20	25	65	14		102

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
80-1300	80-600	80-300	60-230	60-200	60-180	50-160	40-150	40-140	-	-	-	-	40-200	40-100	30-120	80-200	-

**Design**

- Drilling and turning in one
- Multifunction tool with indexable insert
- Made of high-quality tool steel with hard and tough coating
- Chip booster coolant hole

Applications

- For drilling into the main body with an even base of the hole
- For facing
- For external and internal turning

Note:

For drilling depths up to 3xD deliverable on request.

11173**Design**

- Straight chip area

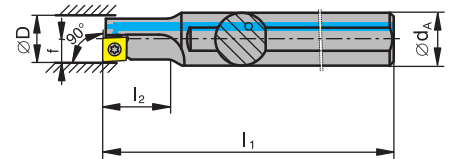
Applications

For drilling depths up to 1.5xD.

1,5xD



11173



1.5xD								right		left	
Ø D mm	Designation	Ø d _A mm	l ₁ mm	l ₂ mm	f mm	Indexable inserts		11173	...	11173	...
8	ECC 08R/L-1.5D 04	12	80	12	4	XC.. 0401..				101	201
10	ECC 10R/L-1.5D 05	12	90	15	5	XC.. 0502..				102	202
12	ECC 12R/L-1.5D 06	16	100	18	6	XC.. 0602..				103	203
14	ECC 14R/L-1.5D 07	16	110	21	7	XC.. 0703..				104	204
16	ECC 16R/L-1.5D 08	20	125	24	8	XC.. 0803..				105	205
18	ECC 18R/L-1.5D 09	25	135	27	9	XC.. 09T3..				106	206
20	ECC 20R/L-1.5D 10	25	150	30	10	XC.. 10T3..				107	207
25	ECC 25R/L-1.5D 13	32	180	37.5	12.5	XC.. 1304..				108	208
32	ECC 32R/L-1.5D 17	40	200	48	16	XC.. 1705..				109	209

11174**Design**

- Twisted chip area
- Optimised, axial collar

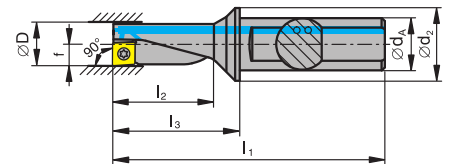
Applications

For drilling depths up to 2.25xD.

2,25xD



11174



2.25xD										right		left	
Ø D mm	Designation	Ø d _A mm	Ø d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	f mm	Indexable inserts		11174	...	11174	...
8	ECC 08R/L-2.25D 04	10	15	60.0	18.0	22.0	4	XC.. 0401..				101	201
10	ECC 10R/L-2.25D 05	12	18	69.5	22.5	27.5	5	XC.. 0502..				102	202
12	ECC 12R/L-2.25D 06	16	22	78.0	27.0	33.0	6	XC.. 0602..				103	203
14	ECC 14R/L-2.25D 07	16	23	83.5	31.5	38.5	7	XC.. 0703..				104	204
16	ECC 16R/L-2.25D 08	20	28	94.0	36.0	44.0	8	XC.. 0803..				105	205
18	ECC 18R/L-2.25D 09	25	36	109.5	40.5	53.5	9	XC.. 09T3..				106	206
20	ECC 20R/L-2.25D 10	25	35	111.0	45.0	55.0	10	XC.. 10T3..				107	207
25	ECC 25R/L-2.25D 13	32	44	129.0	56.5	69.0	12.5	XC.. 1304..				108	208
32	ECC 32R/L-2.25D 17	40	54	158.0	72.0	88.0	16	XC.. 1705..				109	209

Continued ►

11173 - 11175

Drilling and lathe tool EcoCut Classic

Z1

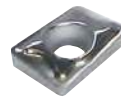


1,5xD

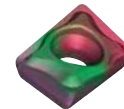
2,25xD

Continued

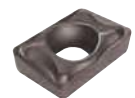
Indexable inserts and spare parts



N
H216T
Uncoated



PMK
CTCP435
Colourful coat



NPMKS
CTPP430
PVD/TiAlN

Use
Cemented carbide type
Coating
Coating thickness
Description

-
XCET ..
11175 ...

7.5 µm
XCNT ..
11175 ...

7.0 µm
XCNT ..
11175 ...

	r mm				
040102ER	0.2	10 pcs.			201 301
040102FR-27P	0.2	10 pcs.		101	
040104ER	0.4	10 pcs.			202 302
040104FR-27P	0.4	10 pcs.		102	
050202EN	0.2	10 pcs.			203 303
050202FN-27P	0.2	10 pcs.		103	
050204EN	0.4	10 pcs.			204 304
050204FN-27P	0.4	10 pcs.		104	
060202EN	0.2	10 pcs.			205 305
060202FN-27P	0.2	10 pcs.		105	
060204EN	0.4	10 pcs.			206 306
060204FN-27P	0.4	10 pcs.		106	
070304EN	0.4	10 pcs.			207 307
070304FN-27P	0.4	10 pcs.		107	
080304EN	0.4	10 pcs.			208 308
080304FN-27P	0.4	10 pcs.		108	
09T304EN	0.4	10 pcs.			209 309
09T304FN-27P	0.4	10 pcs.		109	
10T304EN	0.4	10 pcs.			210 310
10T304FN-27P	0.4	10 pcs.		110	
10T308EN	0.8	10 pcs.			211 311
10T308FN-27P	0.8	10 pcs.		111	
130404EN	0.4	10 pcs.			212 312
130404FN-27P	0.4	10 pcs.		112	
130408EN	0.8	10 pcs.			213 313
130408FN-27P	0.8	10 pcs.		113	
170508EN	0.8	10 pcs.			214 314
170508FN-27P	0.8	10 pcs.		114	

Spare parts

Clamping screw Key

for indexable inserts	Clamping screw	Key			
Size			17999	...	51932 ...
XC.. 0401..	M 1.8 x 3.0	IP 6	3.95	111	4.65 402
XC.. 0502..	M 2.0 x 4.3	IP 6	3.45	105	4.65 402
XC.. 0602..	M 2.2 x 5.0	IP 7	3.35	106	4.65 403
XC.. 0703..	M 2.5 x 6.0	IP 8	4.30	107	4.65 404
XC.. 0803../09T3..	M 3.0 x 7.0	IP 9	3.25	108	4.85 405
XC.. 10T3	M 3.5 x 8.6	IP 15	3.25	109	5.20 407
XC.. 1304../1705..	M 4.5 x 10.5	IP 20	3.25	110	5.90 408

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-1500	100-800	100-400	60-230	60-200	60-180	50-160	40-150	40-140	-	-	-	-	40-200	40-100	30-120	80-250	-