

ดอกเคาะเตอร์ซิงค์

ประเภท และ ตัวเลือก

Tool Types and selections



Type				Material & Coating							Page
				HSS	HSSE	TiN	HSSE8	Red'X	Carbide	Hard'X	
Countersinks	3F		30°	-	✓	✓	-	-	-	-	85
			60°	-	✓	✓	-	-	✓	✓	85
			82°	-	✓	✓	-	-	-	-	86
			90°	✓	✓	✓	✓	✓	✓	✓	79-84
			100°	-	✓	✓	-	-	-	-	87
			120°	-	✓	✓	-	-	-	-	87
	1F		30°	-	✓	✓	-	-	-	-	88
			45°	-	✓	✓	-	-	-	-	88
			60°	-	✓	✓	-	-	-	-	89
			82°	-	✓	✓	-	-	-	-	90
			90°	-	✓	✓	-	-	-	-	91-92
			100°	-	✓	✓	-	-	-	-	92
			120°	-	✓	✓	-	-	-	-	93
	Hole		60°	-	✓	✓	-	-	-	-	94
			82°	-	✓	✓	-	-	-	-	95
			90°	-	✓	✓	-	-	-	-	96
			100°	-	✓	✓	-	-	-	-	97
			120°	-	✓	✓	-	-	-	-	97
	Hand		90°	-	✓	-	-	-	-	-	99
	Inter Exter		90°	-	✓	-	-	-	-	-	99

ประเภท และ ตัวเลือก

Tool Types and selections



Type				Material & Coating							Page
				HSS	HSSE	TiN	HSSE8	Red'X	Carbide	Hard'X	
Countersinks	Bi-Face		60° 90° 120°	-	-	-	-	-	✓	✓	100-101
				-	-	-	-	-	✓	✓	
Step Drills	Pre Thread Hole		90°	-	✓	-	-	✓	-	✓	102
	Step Drill		90°	-	✓	-	-	✓	-	-	103
			180°	-	✓	-	-	✓	-	-	104
	Multi Dia		20°	✓	-	✓	-	-	-	-	104
			90°	✓	-	✓	-	-	-	-	105
Counterbores	Counter Boere		180°	-	✓	✓	-	-	✓	-	106-109
	Pilot Counter-sink		90°	-	✓	✓	-	-	-	-	110

วัสดุและการชุบ – Materials and Coating

วัสดุ Material	H	HS5	HS8	C	TiN	RED'X	HARD'X
	HSS	HSSE (HSSE Cobalt 5%)	HSSE8 (HSSE Cobalt 8%)	Carbide	TiN Coating	Red'X Coating	Hard'X Coating
ความแข็ง Hardness	63HRC	65HRC	67HRC	1800HV	+2300HV	+3500HV	+3500HV (for carbide)



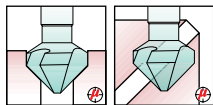
= วัสดุหลัก | Base Material



= วัสดุชุบ | Coating Material

ดอกเคาเตอร์ซิงค์

Anti Vibrations 3F Countersinks (90°) – ดอกเคาเตอร์ซิงค์ 90° 3ฟัน



NEW

90° Anti Vibrations Flute Design

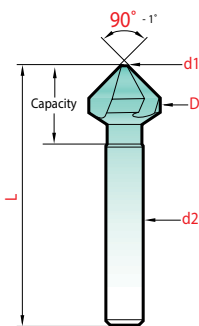


ฟันออกแบบใหม่ ขนาดรองไม่เท่ากัน
ช่วยลดการสั่นสะเทือนขณะใช้งาน
กัดได้ผิวที่เรียบยิ่งขึ้น

Unequal division design of the flutes reduce vibrations.
Considerably improving surface finish.



D	d1	d2	L	Order Code		
				HSSE	HSSE+TIN	HSSE+Red'X
mm				Model 0643A	Model 06483A	Model 06493A
4.3	1.3	4	40	0643A043000	06483A04300	06493A04300
5.3	1.5	4	40	0643A053000	06483A05300	06493A05300
6.0	1.5	5	45	0643A060000	06483A06000	06493A06000
6.3	1.5	5	45	0643A063000	06483A06300	06493A06300
8.0	2.0	6	50	0643A080000	06483A08000	06493A08000
8.3	2.0	6	50	0643A083000	06483A08300	06493A08300
9.4	2.2	6	50	0643A094000	06483A09400	06493A09400
10.0	2.5	6	50	0643A100000	06483A10000	06493A10000
10.4	2.5	6	50	0643A104000	06483A10400	06493A10400
11.5	2.8	8	56	0643A115000	06483A11500	06493A11500
12.0	2.8	8	56	0643A120000	06483A12000	06493A12000
12.4	2.8	8	56	0643A124000	06483A12400	06493A12400
15.0	3.2	10	60	0643A150000	06483A15000	06493A15000
16.5	3.2	10	60	0643A165000	06483A16500	06493A16500
20.5	3.5	10	63	0643A205000	06483A20500	06493A20500
25.0	3.8	10	67	0643A250000	06483A25000	06493A25000
28.0	4.0	12	71	0643A280000	06483A28000	06493A28000
30.0	4.2	12	71	0643A300000	06483A30000	06493A30000
31.0	4.2	12	71	0643A310000	06483A31000	06493A31000



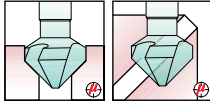
Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1

ชุดดอกเคาเตอร์ซิงค์ 90° Anti Vibrations Countersink Set

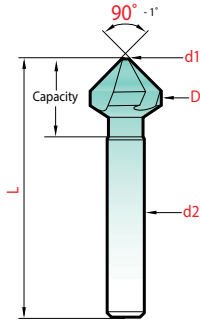


	Order Code	Material	Pcs / Set	Sizes
				1 pc each
HSSE	0643A000000	HSSE	5pcs Set	Ø10.4 / 16.5 / 20.5 / 25 / 31
HSSE+TIN	06483A00000	HSSE+TIN		
HSSE+Red'X	06493A00000	HSSE+Red'X		
HSSE	0643A000002	HSSE	6pcs Set	Ø6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5
HSSE+TIN	06483A00002	HSSE+TIN		
HSSE+Red'X	06493A00002	HSSE+Red'X		

3F Countersinks (90°) – ดอกเคาะเตอร์ซิงค์ 90° 3ฟัน



90°



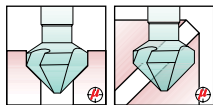
Standards	3Flutes	Tolerance	
		D	z9
		d2	h9
		L	±1



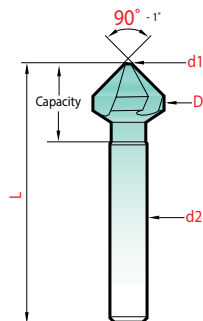
D					Order Code					
					d1	d2	L	HSSE	HSSE+TiN	HSSE8
								Model 06431	Model 064831	Model 06436
mm	inch							Model 064936	Model 064936	Model 068431
										Model 068431H
4.0		1.3	4	40				06431040000	06483104000	
4.3		1.3	4	40				06431043000	06483104300	06436043000
5.0		1.5	4	40				06431050000	06483105000	
5.3		1.5	4	40				06431053000	06483105300	06436053000
5.8		1.5	5	45				06431058000	06483105800	
6.0		1.5	5	45				06431060000	06483106000	
6.3		1.5	5	45				06431063000	06483106300	06436063000
6.35	1/4"	1.5	6.35	45				06431063500	06483106350	
7.0		1.8	6	50				06431070000	06483107000	
7.3		1.8	6	50				06431073000	06483107300	
7.93	5/16"	2	6.35	45				06431079300	06483107930	
8.0		2	6	50				06431080000	06483108000	
8.3		2	6	50				06431083000	06483108300	06436083000
9.0		2.2	6	50				06431090000	06483109000	
9.4		2.2	6	50				06431094000	06483109400	
9.52	3/8"	2.5	6.35	50				06431095200	06483109520	
10.0		2.5	6	50				06431100000	06483110000	
10.4		2.5	6	50				06431104000	06483110400	06436104000
11.5		2.8	8	56				06431115000	06483111500	
12.0		2.8	8	56				06431120000	06483112000	
12.4		2.8	8	56				06431124000	06483112400	06436124000
12.7	1/2"	2.9	6.35	50				06431127000	06483112700	
13.4		2.9	8	56				06431134000	06483113400	
14.4		2.9	8	56				06431144000	06483114400	
15.0		3.2	10	60				06431150000	06483115000	
15.0		3.2	8	56				06431150800	06483115080	
15.87	5/8"	3.2	9.52	60				06431158700	06483115870	

ดอกเคาเตอร์ซิงค์

3F Countersinks (90°) – ดอกเคาะเตอร์ซิงค์ 90° 3ฟัน



90°



Standards	3Flutes	Tolerance	
	DIN 335-C	D	z9
		d2	h9
		L	±1



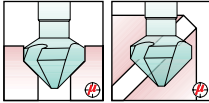
D		d1	d2	L	Order Code					
					HSSE	HSSE+TiN	HSSE8	HSSE8+Red`X	Carbide	Carbide+Hard`X
mm	inch				Model 06431	Model 064831	Model 06436	Model 064936	Model 068431	Model 068431H
16.5		3.2	10	60	06431165000	06483116500	06436165000	06493616500	06843116500	068431H1650
16.5		3.2	8	56	06431165800	06483116580				
19.0		3.5	10	63	06431190000	06483119000				
19.05	3/4"	3.5	9.52	60	06431190500	06483119050				
20.5		3.5	10	63	06431205000	06483120500	06436205000	06493620500	06843120500	068431H2050
23.0		3.8	10	67	06431230000	06483123000				
25.0		3.8	10	67	06431250000	06483125000	06436250000	06493625000	06843125000	068431H2500
25.4	1"	3.8	9.52	70	06431254000	06483125400				
26.0		3.8	10	67	06431260000	06483126000				
28.0		4	12	71	06431280000	06483128000				
30.0		4.2	12	71	06431300000	06483130000				
31.0		4.2	12	71	06431310000	06483131000	06436310000	06493631000	06843131000	068431H3100

ชุดดอกเคาเตอร์ซิงค์ 90°
Countersink Set



0°	Order Code	Material	Pcs / Set	Sizes
				1 pc each
	06431000000	HSSE	5pcs Set	ø10.4 / 16.5 / 20.5 / 25 / 31
	06483100000	HSSE+TiN		
	06431000002	HSSE	6pcs Set	ø6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5
	06483100002	HSSE+TiN		
	06843100002	Carbide		
	068431H0002	Carbide+Hard'X		

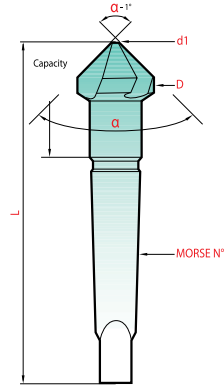
3F Countersinks (90°) MT Shank – ดอกเคาะเตอร์ซิงค์ 90° 3ฟัน ด้ามเทเปอร์



90°



D	d1	Morse Taper	L	Order Code
				HSSE
				Model 06431
10.4	2.5	MT1	84	06431104100
12.4	2.8	MT1	87	06431124100
16.5	3.2	MT1	90	06431165100
20.5	3.5	MT1	94	06431205100
25.0	3.8	MT2	105	06431250200
28.0	4	MT2	112	06431280200
30.0	4.2	MT2	112	06431300200
31.0	4.2	MT2	112	06431310200
34.0	4.5	MT2	133	06431340200
35.0	4.5	MT2	133	06431350200
37.0	4.5	MT2	145	06431370200
40.0	4.5	MT3	160	06431400300
45.0	4.5	MT2	149	06431450200
50.0	5	MT2	153	06431500200
50.0	5	MT3	168	06431500300
53.0	5	MT2	155	06431530200
63.0	10	MT2	167	06431630200
63.0	10	MT3	182	06431630300
80.0	14	MT4	229	06431800400
100.0	40	MT4	185	06431100040
125.0	50	MT4	192	06431125040



3Flutes

Magafor
Standard

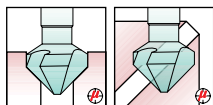
Tolerance

D z9

L ±1

ดอกเคาะตอร์ซิงค์

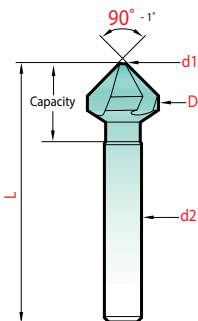
Flat Shank 3F Countersinks (90°) – ดอกเคาะตอร์ซิงค์ 90° 3ฟัน ก้านเจียร



90°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TIN
				Model 06437	Model 064837
6.3	1.5	5	45	06437063000	06483706300
8.3	2.0	6	50	06437083000	06483708300
10.4	2.5	6	50	06437104000	06483710400
12.4	2.8	8	56	06437124000	06483712400
14.4	2.9	8	56	06437144000	06483714400
15.0	3.2	10	60	06437150000	06483715000
16.5	3.2	10	60	06437165000	06483716500
20.5	3.5	10	63	06437205000	06483720500
25	3.8	10	67	06437250000	06483725000
31	4.2	12	71	06437310000	06483731000
34	4.5	16	103	06437340000	06483734000
35	4.5	16	103	06437350000	06483735000
37	4.5	16	118	06437370000	06483737000
40	4.5	16	118	06437400000	06483740000
45	4.5	12	116	06437450000	06483745000
50	5.0	16	126	06437500000	06483750000
63	10.0	16	140	06437630000	06483763000
80	14.0	16	166	06437800000	06483780000



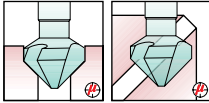
Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1



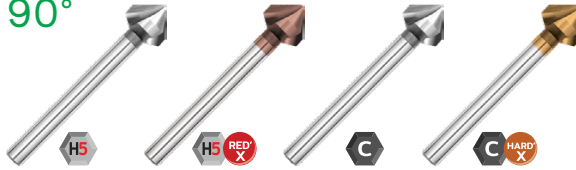
ก้านเจียร 3 ด้าน
3 sides flat shank

Countersinks

Long 3F Countersinks (90°) – ดอกเคาะเตอร์ซิงค์ 90° 3ฟัน รุ่นยาว



90°



D	d1	d2	L	Order Code			
				HSSE	HSSE+Red'X	Carbide	Carbide+Hard'X
				Model 064303	Model 064933	Model 068431L	Model 068431LH
6.3	1.3	6	84	06430306300	06493306300	068431L0630	068431LH063
8.3	1.8	8	85	06430308300	06493308300	068431L0830	068431LH083
10.4	2.2	10	87	06430310400	06493310400	068431L1040	068431LH104
12.4	2.5	10	108	06430312400	06493312400	068431L1240	068431LH124
16.5	2.8	12	112	06430316500	06493316500	068431L1650	068431LH165
20.5	3.0	12	115	06430320500	06493320500	068431L2050	068431LH205
25.0	3.2	12	118	06430325000	06493325000		

Standards

3Flutes

DIN 335-C

Tolerance

D z9

d2 h9

L ±1

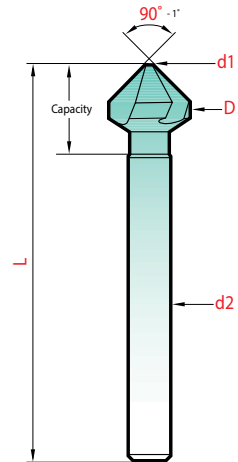
D	d1	d2	L	Order Code
				HSS
				Model 4307L
5.8	1.5	5	104	064307L0580
6.3	1.5	5	104	064307L0630
8.3	2.0	6	105	064307L0830
10.4	2.5	6	107	064307L1040
12.4	2.8	8	108	064307L1240
15.0	3.2	10	109	064307L1500
16.5	3.2	10	111	064307L1650
20.5	3.5	10	114	064307L2050
25.0	3.8	10	118	064307L2500

Xtra Long



D	d1	d2	L	Order Code
				HSS
				Model 4307XL
6.3	1.5	5	154	064307XL063
8.3	2.0	6	155	064307XL083
10.4	2.5	6	157	064307XL104
12.4	2.8	8	158	064307XL124
15.0	3.2	10	159	064307XL150
16.5	3.2	10	161	064307XL165
20.5	3.5	10	164	064307XL205
25.0	3.8	10	168	064307XL250

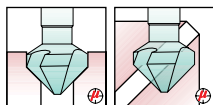
Super Long



Countersinks

ดอกเคาเตอร์ซิงค์

3F Countersinks (30°) – ดอกเคาเตอร์ซิงค์ 30° 3 ฟัน



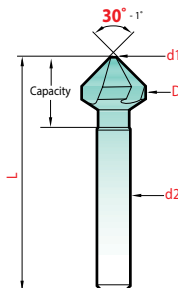
30°



H5 TiN

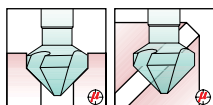


D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06439	Model 064839
6.3	2	5	50	06439063000	06483906300
12.4	3	8	65	06439124000	06483912400
16.5	4	10	76	06439165000	06483916500
25.0	6	10	90	06439250000	06483925000



Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1

3F Countersinks (60°) – ดอกเคาเตอร์ซิงค์ 60° 3 ฟัน



60°



H5 TiN

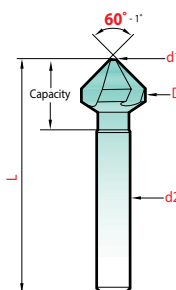
C

C HARD X



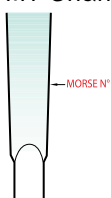
D	d1	d2	L	Order Code			
				HSSE	HSSE+TiN	Carbide	Carbide+Hard X
				Model 06432	Model 064832	Model 068432	Model 068432H
6.3	1.3	5	47	06432063000	06483206300	06843206300	068432H0630
8.3	1.8	6	52	06432083000	06483208300	06843208300	068432H0830
10.4	2.3	6	53	06432104000	06483210400	06843210400	068432H1040
12.4	2.5	8	60	06432124000	06483212400	06843212400	068432H1240
16.5	2.8	10	65	06432165000	06483216500	06843216500	068432H1650
20.5	3	10	69	06432205000	06483220500	06843220500	068432H2050
25.0	3.2	10	75	06432250000	06483225000	06843225000	068432H2500
31.0	3.5	12	81	06432310000	06483231000	06843231000	068432H3100

Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1



D	d1	Morse N°	L	Order Code	
				HSSE	
				Model 06432	
16.5	2.8	MT1	94	06432165100	
20.5	3	MT1	100	06432205100	
25	3.2	MT2	112	06432250200	
31	6	MT2	121	06432310200	
40	8	MT3	172	06432400300	
50	10	MT3	183	06432500300	
63	10	MT3	201	06432630300	
80	14	MT4	253	06432800400	

MT Shank



MORSE N°



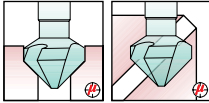
ชุดดอกเคาเตอร์ซิงค์ 60°
Countersink Set

Order Code	Pcs / Set	Sizes
		1 pc each
H5 06432000000	5pcs Set	Ø10.4 / 16.5
H5 TiN 06483200000		20.5 / 25 / 31

H5

H5 TiN

3F Countersinks (82°) – ดอกเคาะเตอร์ซิงค์ 82° 3ฟัน

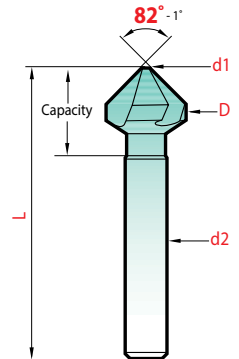


82°



D		d1	d2	L	Order Code	
					HSSE	HSSE+TiN
mm	inch				Model 06434	Model 064834
6.3		1.5	5	45	06434063000	06483406300
6.35	1/4"	1.5	6.35	45	06434063500	06483406350
7.93	5/16"	2.0	6.35	45	06434079300	06483407930
8.3		2.0	6	50	06434083000	06483408300
9.52	3/8"	2.5	6.35	50	06434095200	06483409520
10.4		2.5	6	50	06434104000	06483410400
12.4		2.8	8	56	06434124000	06483412400
12.7	1/2"	2.9	6.35	50	06434127000	06483412700
15.87	5/8"	3.2	9.52	60	06434158700	06483415870
16.5		3.2	10	61	06434165000	06483416500
19.05	3/4"	3.5	9.52	60	06434190500	06483419050
20.5		3.5	10	64	06434205000	06483420500
25.0		3.8	10	68	06434250000	06483425000
25.4	1"	3.8	9.52	70	06434254000	06483425400
31.0		4.2	12	73	06434310000	06483431000

Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1



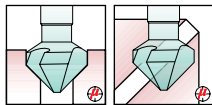
ชุดดอกเคาะเตอร์ซิงค์ 82° Countersink Set



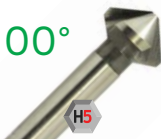
Order Code	Material	Pcs / Set	Sizes
			1 pc each
06434000000	HSSE	5pcs Set	Ø10.4 / 16.5
06483400000	HSSE+TiN		20.5 / 25 / 31

ดอกเคาเตอร์ซิงค์

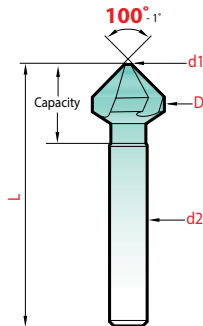
3F Countersinks (100°) – ดอกเคาเตอร์ซิงค์ 100° 3ฟัน



100°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06435	Model 064835
6.3	1.5	5	44	06435063000	06483506300
8.3	2.0	6	49	06435083000	06483508300
10.4	2.5	6	49	06435104000	06483510400
12.4	2.8	8	55	06435124000	06483512400
16.5	3.2	10	59	06435165000	06483516500
20.5	3.5	10	62	06435205000	06483520500
25.0	3.8	10	65	06435250000	06483525000
31.0	4.2	12	68	06435310000	06483531000



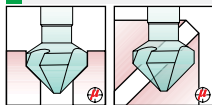
Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1

ชุดดอกเคาเตอร์ซิงค์ 100° Countersink Set



Order Code	Pcs / Set	Sizes
06435000000	5pcs Set	Ø10.4 / 16.5
06483500000		20.5 / 25 / 31

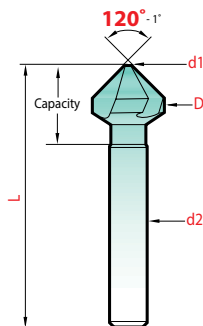
3F Countersinks (120°) – ดอกเคาเตอร์ซิงค์ 120° 3ฟัน



120°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06433	Model 064833
6.3	1.5	5	43	06433063000	06483306300
8.3	2.0	6	48	06433083000	06483308300
10.4	2.5	6	48	06433104000	06483310400
12.4	2.8	8	54	06433124000	06483312400
16.5	3.2	10	57	06433165000	06483316500
20.5	3.5	10	59	06433205000	06483320500
25.0	3.8	10	62	06433250000	06483325000
31.0	4.2	12	65	06433310000	06483331000



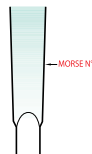
Standards	3Flutes
	DIN 335-C
Tolerance	
D	z9
d2	h9
L	±1

ชุดดอกเคาเตอร์ซิงค์ 120° Countersink Set



Order Code	Pcs / Set	Sizes
06433000000	5pcs Set	Ø10.4 / 16.5
06483300000		20.5 / 25 / 31

MT Shank



D	d1	Morse N°	L	Order Code	
				HSSE	
				Model 06433	
20.5	4.0	MT1	91	06433205100	
31.0	5.0	MT2	106	06433310200	
40.0	8.0	MT3	154	06433400300	

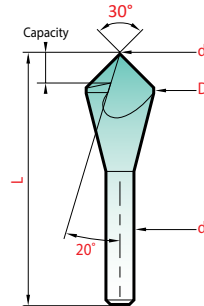
1F Countersinks (30°) – ดอกเคาะเตอร์ซิงค์ 30° 1 ฟัน



30°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TIN
				Model 06426	Model 064826
10	5.5	6	49	06426100000	06482610000
15	8.5	8	60	06426150000	06482615000
20	11.0	10	72	06426200000	06482620000
25	13.5	12	78	06426250000	06482625000
30	16.5	12	99	06426300000	06482630000



Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1

ชุดดอกเคาะเตอร์ซิงค์ 30° Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06426000000	HSSE	5pcs Set	Ø10 / 15
06482600000	HSSE+TIN		20 / 25 / 30

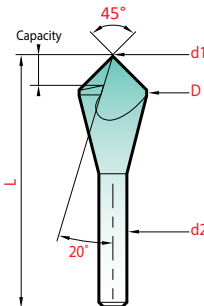
1F Countersinks (45°) – ดอกเคาะเตอร์ซิงค์ 45° 1 ฟัน



45°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TIN
				Model 06427	Model 064827
6	2.0	6	43	06427060000	06482706000
10	3.0	6	49	06427100000	06482710000
15	4.5	8	61	06427150000	06482715000
20	6.0	10	72	06427200000	06482720000
25	7.5	12	87	06427250000	06482725000
30	9.0	12	99	06427300000	06482730000



Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1

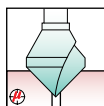
ชุดดอกเคาะเตอร์ซิงค์ 45° Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06427000000	HSSE	5pcs Set	Ø10 / 15
06482700000	HSSE+TIN		20 / 25 / 30

ดอกเคาเตอร์ซิงค์

1F Countersinks (60°) – ดอกเคาเตอร์ซิงค์ 60° 1 ฟัน



60°

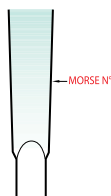


D	d1	d2	L	Order Code	
				HSSE	HSSE+TIN
				Model 06422	Model 064822
6	1	6	43	06422060000	06482206000
10	1	6	49	06422100000	06482210000
12	2	8	54	06422120000	06482212000
15	2	8	60	06422150000	06482215000
20	2	10	72	06422200000	06482220000
25	3	12	78	06422250000	06482225000
30	3	12	99	06422300000	06482230000

D		d1	d2	L	Order Code	
					HSSE	HSSE+TIN
mm	inch				Model 06422	Model 064822
3.17	1/8"	1	3.17	32	06422031700	06482203170
4.76	3/16"	1	4.76	35	06422047600	06482204760
6.35	1/4"	1	6.35	38	06422063500	06482206350
7.93	5/16"	1	6.35	42	06422079300	06482207930
9.52	3/8"	1	6.35	45	06422095200	06482209520
12.70	1/2"	2	6.35	51	06422127000	06482212700
15.87	5/8"	2	9.52	57	06422158700	06482215870
19.05	3/4"	2	12.7	67	06422190500	06482219050
22.22	7/8"	3	12.7	70	06422222200	06482222220
25.40	1"	3	12.7	70	06422254000	06482225400
31.75	1-1/4"	3	12.7	76	06422317500	06482231750

D	d1	Morse N°	L	Order Code
				HSSE
				Model 06422
15	2	MT1	96	06422150100
20	2	MT1	105	06422200100
25	3	MT1	106	06422250100
30	3	MT2	125	06422300200
35	5	MT2	146	06422350200
40	8	MT3	172	06422400300
50	10	MT3	183	06422500300
63	10	MT3	201	06422630300
80	10	MT4	253	06422800400

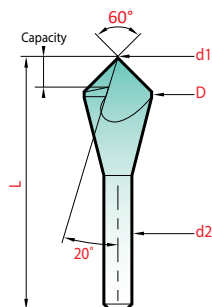
MT Shank



ชุดดอกเคาเตอร์ซิงค์ 60° Countersink Set

Order Code	Material	Pcs / Set	Sizes
			1 pc each
06422000000	HSSE	5pcs Set	Ø10 / 15
06482200000	HSSE+TIN		20 / 25 / 30

Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1



1F Countersinks (82°) – ดอกเคาะเตอร์ซิงค์ 82° 1 ฟัน



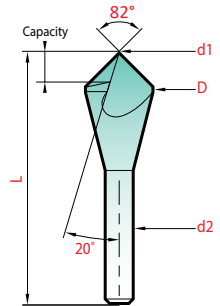
82°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06424	Model 064824
6	1	6	41	06424060000	06482406000
10	1	6	46	06424100000	06482410000
12	2	8	51	06424120000	06482412000
15	2	8	56	06424150000	06482415000
20	2	10	66	06424200000	06482420000
25	3	12	80	06424250000	06482425000
30	3	12	90	06424300000	06482430000

D		d1	d2	L	Order Code	
					HSSE	HSSE+TiN
mm	inch				Model 06424	Model 064824
3.17	1/8"	1	3.17	32	06424031700	06482403170
4.76	3/16"	1	4.76	35	06424047600	06482404760
6.35	1/4"	1	6.35	38	06424063500	06482406350
7.93	5/16"	1	6.35	42	06424079300	06482407930
9.52	3/8"	1	6.35	45	06424095200	06482409520
12.70	1/2"	2	6.35	51	06424127000	06482412700
15.87	5/8"	2	9.52	57	06424158700	06482415870
19.05	3/4"	2	12.7	67	06424190500	06482419050
22.22	7/8"	3	12.7	70	06424222200	06482422220
25.40	1"	3	12.7	70	06424254000	06482425400
31.75	1-1/4"	3	12.7	70	06424317500	06482431750

Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1



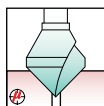
ชุดดอกเคาะเตอร์ซิงค์ 82° Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06424000000	HSSE	5pcs Set	Ø10 / 15
06482400000	HSSE+TiN		20 / 25 / 30

ดอกเคาเตอร์ซิงค์

1F Countersinks (90°) – ดอกเคาเตอร์ซิงค์ 90° 1 ฟัน

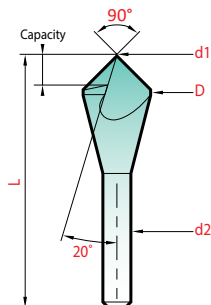


90°



D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06421	Model 064821
4	1	4	40	06421040000	06482104000
5	1	5	40	06421050000	06482105000
6	1	6	40	06421060000	06482106000
8	1	6	40	06421080000	06482108000
10	1	6	45	06421100000	06482110000
12	2	8	50	06421120000	06482112000
15	2	8	55	06421150000	06482115000
20	2	10	63	06421200000	06482120000
25	3	12	67	06421250000	06482125000
30	3	12	71	06421300000	06482130000
35	4	16	103	06421350000	06482135000
40	5	16	118	06421400000	06482140000
50	12	16	126	06421500000	06482150000

Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1



D		d1	d2	L	Order Code	
					HSSE	HSSE+TiN
mm	inch				Model 06421	Model 064821
3.17	1/8"	1	3.17	32	06421031700	06482103170
4.76	3/16"	1	4.76	35	06421047600	06482104760
6.35	1/4"	1	6.35	38	06421063500	06482106350
7.93	5/16"	1	6.35	42	06421079300	06482107930
9.52	3/8"	1	6.35	45	06421095200	06482109520
12.70	1/2"	2	6.35	51	06421127000	06482112700
15.87	5/8"	2	9.52	57	06421158700	06482115870
19.05	3/4"	2	12.7	67	06421190500	06482119050
22.22	7/8"	3	12.7	70	06421222200	06482122220
25.40	1"	3	12.7	70	06421254000	06482125400
31.75	1-1/4"	3	12.7	70	06421317500	06482131750

ชุดดอกเคาเตอร์ซิงค์ 90° Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06421000000	HSSE	5pcs Set	Ø10 / 15
06482100000	HSSE+TiN		20 / 25 / 30

1F Countersinks (90°) – ดอกเคาะเตอร์ซิงค์ 90° 1 ฟัน

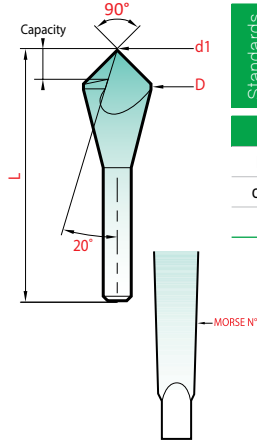


90°



H5 MT Shank

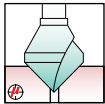
D	d1	Morse N°	L	Order Code	
				HSSE	Model 06421
15	2	MT1	91	06421150100	
20	2	MT1	106	06421200100	
25	3	MT1	110	06421250100	
30	3	MT2	114	06421300200	
35	5	MT2	135	06421350200	
40	5	MT2	145	06421400200	
40	5	MT3	160	06421400300	
50	5	MT2	153	06421500200	
50	5	MT3	168	06421500300	
63	10	MT3	182	06421630300	
80	10	MT4	229	06421800400	



Standards	1Flute
	Magafor Standard

Tolerance	
D	+0.3
d2	h9
L	±1

1F Countersinks (100°) – ดอกเคาะเตอร์ซิงค์ 100° 1 ฟัน

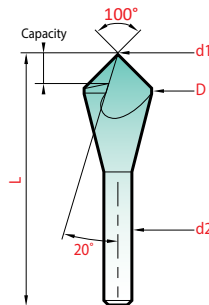


100°



H5 TIN

D	d1	d2	L	Order Code	
				HSSE	HSSE+TIN
				Model 06425	Model 064825
10	1	6	44	06425100000	06482510000
12	2	8	49	06425120000	06482512000
15	2	8	54	06425150000	06482515000
20	2	10	63	06425200000	06482520000
25	3	12	76	06425250000	06482525000
30	3	12	85	06425300000	06482530000



Standards	1Flute
	Magafor Standard

Tolerance	
D	+0.3
d2	h9
L	±1

ชุดดอกเคาะเตอร์ซิงค์ 100° Countersink Set



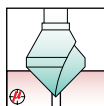
H5

H5 TIN

Order Code	Material	Pcs / Set	Sizes
			1 pc each
06425000000	HSSE	5pcs Set	Ø10 / 15
06482500000	HSSE+TIN		20 / 25 / 30

ดอกเคาเตอร์ซิงค์

1F Countersinks (120°) – ดอกเคาเตอร์ซิงค์ 120° 1 ฟัน



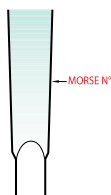
120°



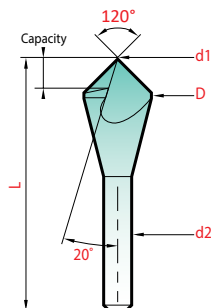
D	d1	d2	L	Order Code	
				HSSE	HSSE+TiN
				Model 06423	Model 064823
10	1	6	43	06423100000	06482310000
12	2	8	47	06423120000	06482312000
15	2	8	52	06423150000	06482315000
20	2	10	61	06423200000	06482320000
25	3	12	73	06423250000	06482325000
30	3	12	66	06423300000	06482330000

D	d1	Morse N°	L	Order Code	
				HSSE	
				Model 06423	
20	2	MT1	87	06423200100	
30	3	MT2	108	06423300200	
40	8	MT3	154	06423400300	
50	10	MT3	160	06423500300	

MT Shank



Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1



Countersinks

ชุดดอกเคาเตอร์ซิงค์ 120°
Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06423000000	HSSE	5pcs Set	Ø10 / 15
06482300000	HSSE+TiN		20 / 25 / 30

Countersinks with Hole (60°) – ดอกเคาะเตอร์ซิงค์ 60° มีรู



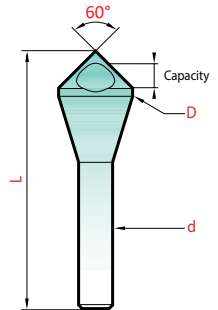
60°



D	Capacity	d	L	Order Code	
				HSSE	HSSE+TiN
				Model 06412	Model 064812
10	5 - 9	6	49	06412100000	06481210000
15	8 - 14	8	60	06412150000	06481215000
20	10 - 18	10	71	06412200000	06481220000
25	12 - 23	12	85	06412250000	06481225000
30	15-28	12	96	06412300000	06481230000
35	17-33	16	117	06412350000	06481235000

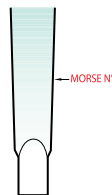
Standards	Hole
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1

#	D		Capacity	d	L	Order Code	
						HSSE	HSSE+TiN
	mm	inch				Model 06412	Model 064812
0	6.35	1/4"	3 - 5	6.35	45	06412063500	06481206350
1	11.20	7/16"	5 - 10	6.35	45	06412112000	06481211200
2	14.00	9/16"	7 - 13	6.35	50	06412140000	06481214000
3	20.40	13/16"	10 - 18	12.7	66	06412204000	06481220400
4	30.10	1-3/16"	15 - 28	12.7	87	06412301000	06481230100



D	Capacity	Morse N°	L	Order Code
				HSSE
				Model 06412
20	10 - 18	MT1	97	06412200100
25	12 - 23	MT1	104	06412250100
30	15 - 28	MT2	125	06412300200
40	20 - 38	MT2	160	06412400200
45	22 - 43	MT3	158	06412450300
50	25 - 48	MT2	145	06412500200
50	25 - 48	MT3	170	06412500300
60	30 - 58	MT3	175	06412600300
80	40 - 77	MT4	253	06412800400

MT Shank



ชุดดอกเคาะเตอร์ซิงค์ 60° Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06412000000	HSSE	5pcs Set	Ø10 / 15
06481200000	HSSE+TiN		20 / 25 / 30

ดอกเคาเตอร์ซิงค์

Countersinks with Hole (82°) – ดอกเคาเตอร์ซิงค์ 82° มีรู



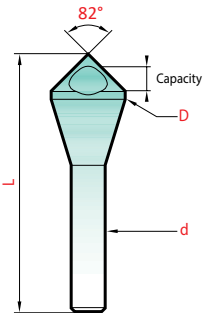
82°



D	Capacity	d	L	Order Code	
				HSSE	HSSE+TIN
				Model 06414	Model 064814
10	4 - 9	6	46	06414100000	06481410000
15	6 - 14	8	56	06414150000	06481415000
20	8 - 18	10	66	06414200000	06481420000
25	10 - 23	12	76	06414250000	06481425000
30	12 - 28	12	89	06414300000	06481430000
35	14 - 33	16	108	06414350000	06481435000

Standards	1Flute
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1

#	D		Capacity	d	L	Order Code	
						HSSE	HSSE+TIN
	mm	inch				Model 06414	Model 064814
0	6.35	1/4"	3 - 5	6.35	45	06414063500	06481406350
1	11.20	7/16"	5 - 10	6.35	46	06414112000	06481411200
2	14.00	9/16"	6 - 13	6.35	50	06414140000	06481414000
3	20.40	13/16"	9 - 18	12.7	66	06414204000	06481420400
4	30.10	1-3/16"	12 - 28	12.7	80	06414301000	06481430100



Countersinks

ชุดดอกเคาเตอร์ซิงค์ 82°
Countersink Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06414000000	HSSE	5pcs Set	Ø10 / 15
06481400000	HSSE+TIN		20 / 25 / 30

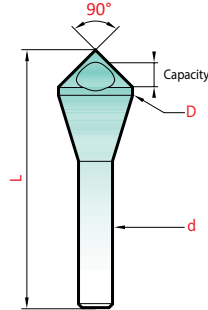
Countersinks with Hole (90°) – ดอกเคาะเตอร์ซิงค์ 90° มีรู



90°



D	Capacity	d	L	Order Code	
				HSSE	HSSE+TiN
				Model 06411	Model 064811
10	2 - 5	6	45	06411100600	06481110060
10	4 - 9	6	45	06411100000	06481110000
15	6 - 14	6	48	06411150600	06481115060
15	6 - 14	8	55	06411150000	06481115000
20	8 - 18	10	65	06411200000	06481120000
25	10 - 23	12	78	06411250000	06481125000
28	11 - 26	12	78	06411280000	06481128000
30	12 - 28	12	87	06411300000	06481130000
35	14 - 33	16	106	06411350000	06481135000
40	16 - 38	16	121	06411400000	06481140000
50	20 - 48	16	130	06411500000	06481150000

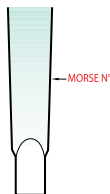


Standards	Hole
	Magafor Standard
Tolerance	
D	+0.3
d2	h9
L	±1

#	D		Capacity	d	L	Order Code	
						HSSE	HSSE+TiN
	mm	inch				Model 06411	Model 064811
0	6.35	1/4"	2 - 5	6.35	45	06411063500	06481106350
1	11.20	7/16"	5 - 10	6.35	45	06411112000	06481111200
2	14.00	9/16"	6 - 13	6.35	50	06411140000	06481114000
3	20.40	13/16"	9 - 18	12.7	66	06411204000	06481120400
4	30.10	1-3/16"	12 - 28	12.7	78	06411301000	06481130100

D	Capacity	Morse N°	L	Order Code	
				HSSE	
				Model 06411	
15	6 - 14	MT1	91	06411150100	
20	8 - 18	MT1	94	06411200100	
25	10 - 23	MT1	101	06411250100	
30	12 - 28	MT2	120	06411300200	
35	14 - 33	MT2	134	06411350200	
40	16 - 38	MT2	149	06411400200	
40	16 - 38	MT3	164	06411400300	
50	20 - 48	MT2	158	06411500200	
50	20 - 48	MT3	172	06411500300	
63	26 - 60	MT3	184	06411630300	
80	32 - 77	MT4	229	06411800400	

MT Shank



ชุดดอกเคาะเตอร์ซิงค์ 90° Countersink Set

Order Code	Material	Pcs / Set	Sizes
			1 pc each
06411000000	HSSE	5pcs Set	Ø10 / 15
06481100000	HSSE+TiN		20 / 25 / 30



ดอกเคาเตอร์ซิงค์

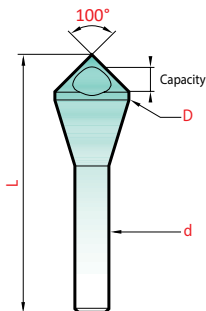
Countersinks with Hole (100°) – ดอกเคาเตอร์ซิงค์ 100° มีรู



100°



D	Capacity	d	L	Order Code	
				HSSE	HSSE+TiN
				Model 06415	Model 064815
10	4 - 9	6	44	06415100000	06481510000
15	6 - 14	8	54	06415150000	06481515000
20	7 - 18	10	63	06415200000	06481520000
25	9 - 23	12	76	06415250000	06481525000
30	11 - 28	12	85	06415300000	06481530000
35	13 - 33	16	103	06415350000	06481535000



Standards	1Flute
	Magafor Standard

Tolerance	
D	+0.3
d2	h9
L	±1

ชุดดอกเคาเตอร์ซิงค์ 100°
Countersink Set



Order Code	Pcs / Set	Sizes
		1 pc each
06415000000	5pcs Set	Ø10 / 15
06481500000		20 / 25 / 30

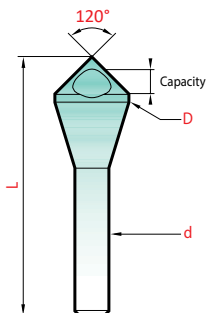
Countersinks with Hole (120°) – ดอกเคาเตอร์ซิงค์ 120° มีรู



120°



D	Capacity	d	L	Order Code	
				HSSE	HSSE+TiN
				Model 06413	Model 064813
10	4 - 9	6	43	06413100000	06481310000
15	5 - 14	8	52	06413150000	06481315000
20	6 - 18	10	61	06413200000	06481320000
25	8 - 23	12	68	06413250000	06481325000
30	10 - 28	12	82	06413300000	06481330000
35	12 - 33	16	99	06413350000	06481335000



Standards	1Flute
	Magafor Standard

Tolerance	
D	+0.3
d2	h9
L	±1

ชุดดอกเคาเตอร์ซิงค์ 120°
Countersink Set



Order Code	Pcs / Set	Sizes
		1 pc each
06413000000	5pcs Set	Ø10 / 15
06481300000		20 / 25 / 30

ข้อแนะนำการใช้งาน ดอกเคาเตอร์ซิงค์ – Recommendations for Countersinks

Vc = speed (m/min)

Vf = feed (mm/min)

$$Vc \times 1000$$

$$\pi \times \phi$$

เคาเตอร์ซิงค์
Countersinking



กัดมุม
Contouring



MATERIAL		HSSE	HSSE TiN	HSSEB	HSSEB RedX	Carbide	Carbide HardX	HSSE	HSSE TiN	HSSE	HSSE TiN	HSSE	HSSE TiN	HSSEB	HSSEB RedX	Carbide	Carbide HardX
Steels ≤ 500 N/mm2	Vc	17-22	17-22	35-45	35-45	40-80	40-80	35-45	35-45	35-45	35-45	17-22	17-22	35-45	35-45	40-80	40-80
	Vf	Ø10	85	85	165	165	250	165	165	165	165	85	85	165	165	250	250
		Ø20	45	45	85	85	125	85	85	85	85	45	45	85	85	125	125
		Ø30	30	30	55	55	85	55	55	55	55	30	30	55	55	85	85
Steels 500 ~ 800 N/mm2	Vc	10-15	10-15	20-30	20-30	30-60	30-60	20-30	20-30	20-30	20-30	10-15	10-15	20-30	20-30	30-60	30-60
	Vf	Ø10	60	60	110	110	170	110	110	110	110	60	60	110	110	170	170
		Ø20	30	30	55	55	85	55	55	55	55	30	30	55	55	85	85
		Ø30	20	20	35	35	60	35	35	35	35	20	20	35	35	60	60
Steels 800 ~ 1000 N/mm2	Vc	8-12	8-12	16-20	16-20	20-40	20-40	15-20	15-20	15-20	15-20	18-20	18-20	16-20	16-20	20-40	20-40
	Vf	Ø10	35	35	55	55	100	55	55	55	55	35	35	55	55	100	100
		Ø20	25	25	35	35	60	35	35	35	35	25	25	35	35	60	60
		Ø30	15	15	25	25	45	25	25	25	25	15	15	25	25	45	45
Stainless Steel 1000 ~ 1300 N/mm2	Vc	6-10	6-10	12-15	12-15	20-40	20-40	12-15	12-15	12-15	12-15	6-10	6-10	12-15	12-15	20-40	20-40
	Vf	Ø10	30	30	45	45	100	45	45	45	45	30	30	45	45	100	100
		Ø20	15	15	25	25	60	25	25	25	25	15	15	25	25	60	60
		Ø30	10	10	20	20	40	20	20	20	20	10	10	20	20	40	40
Abrasive Tough Steel < 420 HB	Vc				12-15	15-20	15-20								12-15	15-20	15-20
	Vf	Ø10			40	55	55								40	55	55
		Ø20			30	35	35								30	35	35
		Ø30			20	25	25								20	25	25
Hard Bronze	Vc			4-6	4-6	10-12	10-12							4-6	4-6	10-12	10-12
	Vf	Ø10		16	16	30	30							16	16	30	30
		Ø20		8	8	16	16							8	8	16	16
		Ø30		6	6	10	10							6	6	10	10
Treated Steel ≥ 60 HRC	Vc					8-12	10-12									8-12	10-12
	Vf	Ø10				20	30									20	30
		Ø20				10	16									10	16
		Ø30				8	10									8	10
Cast iron	Vc	15-25	15-25	20-40	20-40	40-80	40-80	20-40	20-40	20-40	20-40	15-25	15-25	20-40	20-40	40-80	40-80
	Vf	Ø10	70	70	125	125	250	125	125	125	125	70	70	125	125	250	250
		Ø20	40	40	75	75	150	75	75	75	75	40	40	75	75	150	150
		Ø30	30	30	50	50	100	50	50	50	50	30	30	50	50	100	100
Aluminium	Vc	35-45	35-45	50-60	50-60	40-100	40-100	50-60	50-60	50-60	50-60	35-45	35-45	50-60	50-60	40-100	40-100
	Vf	Ø10	200	200	255	255	350	255	255	255	255	200	200	255	255	350	350
		Ø20	130	130	180	180	230	180	180	180	180	130	130	180	180	230	230
		Ø30	110	110	150	150	200	150	150	150	150	110	110	150	150	200	200
Brass & Bronze	Vc	20-30	20-30	30-40	30-40			30-40	30-40	30-40	30-40	20-30	20-30	30-40	30-40		
	Vf	Ø10	120	120	150	150		150	150	150	150	120	120	150	150		
		Ø20	85	85	110	110		110	110	110	110	85	85	110	110		
		Ø30	70	70	90	90		90	90	90	90	70	70	90	90		
Copper	Vc	15-25	15-25	20-30	20-30	50-80	50-80	20-30	20-30	20-30	20-30	15-25	15-25	20-30	20-30	50-80	50-80
	Vf	Ø10	95	95	120	120	300	120	120	120	120	95	95	120	120	300	300
		Ø20	60	60	80	80	200	80	80	80	80	60	60	80	80	200	200
		Ø30	45	45	65	65	175	65	65	65	65	45	45	65	65	175	175
Laminated	Vc	35-70	35-70	35-70	35-70			50-100	50-100	50-100	50-100	35-70	35-70	35-70	35-70		
	Vf	Ø10	300	300	300	300		400	400	400	400	300	300	300	300		
		Ø20	200	200	200	200		300	300	300	300	200	200	200	200		
		Ø30	150	150	150	150		250	250	250	250	150	150	150	150		
Nylon - PVC Plastics	Vc	400	400	35-70	35-70			50-100	50-100	50-100	50-100	400	400	35-70	35-70		
	Vf	Ø10	300	300	400	400		450	450	450	450	300	300	400	400		
		Ø20	250	250	300	300		350	350	350	350	250	250	300	300		
		Ø30	250	250	250	250		300	300	300	300	250	250	250	250		

ดอกเคาเตอร์ซิงค์

Auto Lock Chuck – ด้ามจับสำหรับเคาเตอร์ซิงค์



Capacity	Weight (g)	Order Code	Handle
1 - 8mm	150	06400200000	



D	Capacity	L	Hex Shank	Order Code
				HSSE
				Model 06403
6.3	M2 - M3	50	6.35 (1/4")	06403063000
8.3	M4	50		06403083000
10.4	M5	50		06403104000
12.4	M6	50		06403124000
16.5	M8	50		06403165000
20.5	M10	50		06403205000

Tool Bits

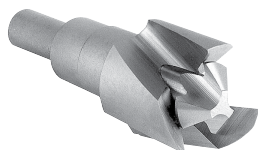
ทุกชิ้นก้านหกเหลี่ยมขนาด 6.35 มม (1/4") ขนาดมาตรฐานสามารถนำไปใช้ร่วมกับเครื่องมือไฟฟ้าทั่วไปได้ All countersink bits come with standard 6.35mm (1/4") hexagonal shank and can be used with regular power tools.

Set Box

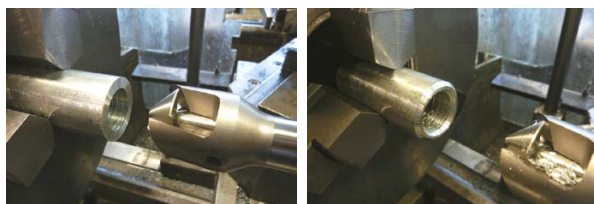
Order Code	Pcs / Set	Sizes
		1 pc each
06403000001	4pcs Set	Ø6.3 / 8.3 / 10.4 / 12.4
06403000002		Ø10.4 / 12.4 / 16.5 / 20.5



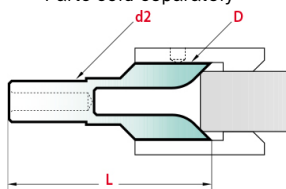
Inter Exter – ชุดเครื่องมือแชนเฟอร์ ใน และ นอก ของปลายท่อ



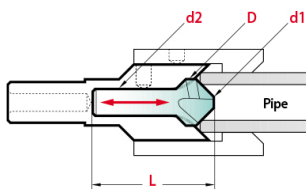
ชุดทุลที่สามารถทำแชนเฟอร์ปลายท่อได้ทั้งภายในและภายนอกในการทำงานเพียงครั้งเดียว ช่วยลดระยะเวลาการทำงานได้เท่าตัว
Specialty combination tool that can make chamfer of internal and external of pipe at the same time.



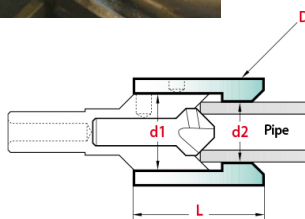
⚠ จำหน่ายแยกชิ้น
Parts sold separately



Exter



Inter



Guide



D	d2	L	Capacity	Order Code
				HSSE
				Model 06407
15	12	50	5.2 - 13.5	06407150000
32	12	88	12.2 - 30	06407320000
50	16	135	18 - 48	06407500000

D	d1	d2	L	Capacity	Model 06408
					HSSE
					Model 06408
11	2	5	38	2 - 11	06408110000
31	10	12	52	10 - 31	06408310000
50	20	12	72	20 - 50	06408500000

D	d1	d2	L	Model 06409
				HSSE
				Model 06409
25	15	6.2	35	06409250000
44	32	14.2	50	06409440000
-	-	-	-	-

Bi Face – ไบเฟส

Standards
90° & 60°
Magafor
Standard

ทำแชมเฟอร์ได้สองด้าน ทั้งด้านบน และ ด้านล่าง ในดอกเดียว
Back and Front chamfering with one tool.

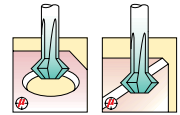
Bi face

Tolerance

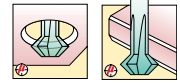
D ≤ 5	0 -0.05
D ≥ 6	0 -0.10
d2	h6
L	±1



magafor

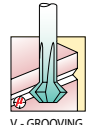


FRONT



BACK

HOLE DEBURRING



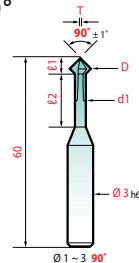
V - GROOVING



INTERNAL GROOVES
FOR O-RINGS

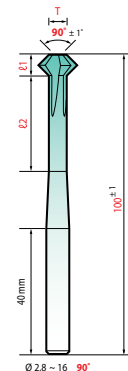
D	d1	T	d2	t1	t2	Order Code	
						Carbide	Carbide+Hard'X
						Model 068480	Model 068480H
1.0	0.7	0.30	3	0.50	5	06848001000	068480H0100
1.5	1.1	0.45	3	0.75	6	06848001500	068480H0150
1.8	1.4	0.60	3	0.75	8	06848001800	068480H0180
2.0	1.5	0.60	3	0.95	8	06848002000	068480H0200
2.8	2.1	0.90	3	1.30	10	06848002800	068480H0280
3.0	2.1	0.90	3	1.50	10	06848003000	068480H0300

90°



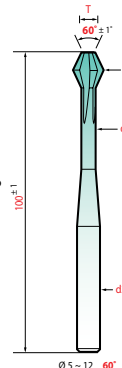
D	d1	T	d2	t1	t2	Order Code	
						Carbide	Carbide+Hard'X
						Model 068490	Model 068490H
2.8	2.2	1.2	6	1.10	10	06849002800	068490H0280
3.0	2.2	1.2	6	1.30	10	06849003000	068490H0300
3.8	2.9	1.6	6	1.55	12	06849003800	068490H0380
4.0	2.9	1.6	6	1.75	12	06849004000	068490H0400
4.8	3.4	2.0	6	2.10	15	06849004800	068490H0480
5.0	3.4	2.0	6	2.30	15	06849005000	068490H0500
5.8	3.8	2.4	6	2.70	18	06849005800	068490H0580
6.0	3.8	2.4	6	2.90	18	06849006000	068490H0600
7.8	4.9	4.9	6	2.80	34	06849007800	068490H0780
8.0	4.9	4.9	6	3.10	34	06849008000	068490H0800
9.8	5.9	5.9	6	3.80	34	06849009800	068490H0980
10.0	5.9	5.9	6	4.10	34	06849010000	068490H1000
11.8	5.9	5.9	6	5.80	34	06849011800	068490H1180
12.0	5.9	5.9	6	6.10	34	06849012000	068490H1200
15.8	7.9	7.9	10	7.80	34	06849015800	068490H1580
16.0	7.9	7.9	10	8.10	34	06849016000	068490H1600

90°



D	d1	T	d2	t1	t2	Order Code	
						Carbide	Carbide+Hard'X
						Model 068460	Model 068460H
5.0	3.4	3.4	6	2.80	15	06846005000	068460H0500
8.0	4.9	4.9	6	5.40	34	06846008000	068460H0800
12.0	5.9	5.9	6	10.60	34	06846012000	068460H1200

60°



ดอกเคาะเตอร์ซิงค์

Bi Face for M Thread – ไบเฟส สำหรับทำเกลียว

Standards

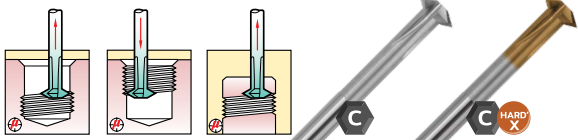
120°
Magafor
Standard

ใช้ทำเกลียวซ้ายและขวาได้ในดอกเดียว
Can make left and right hand thread with one tool.

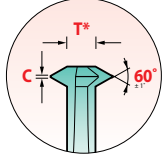
Tolerance

d2h5

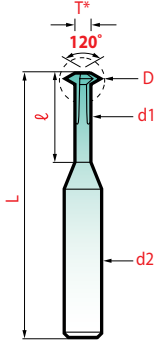
Td1 - 0.02







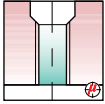
Screw Size	D	d1	d2	L	ℓ	C	T	Order Code	
								Carbide	Carbide+Hard'X
								Model 06845M	Model 06845MH
M0.8	0.57	0.31	3	39	2.40	0.010	0.29	06845M00800	06845MH0080
M0.9	0.64	0.35	3	39	2.70	0.010	0.33	06845M00900	06845MH0090
M1.0	0.71	0.39	3	39	3.00	0.015	0.37	06845M01000	06845MH0100
M1.2	0.91	0.57	3	39	3.60	0.015	0.55	06845M01200	06845MH0120
M1.4	1.06	0.66	3	39	4.20	0.020	0.64	06845M01400	06845MH0140
M1.6	1.20	0.75	3	39	4.80	0.020	0.73	06845M01600	06845MH0160
M2	1.50	0.99	3	39	6.00	0.020	0.97	06845M02000	06845MH0200
M2.5	1.90	1.33	3	39	7.00	0.025	1.31	06845M02500	06845MH0250
M3	2.30	1.62	6	66	9.00	0.030	1.60	06845M03000	06845MH0300
M4	3.10	2.19	6	66	12.00	0.040	2.17	06845M04000	06845MH0400
M5	4.00	2.98	6	66	15.00	0.050	2.96	06845M05000	06845MH0500
M6	4.80	3.55	6	75	18.00	0.070	3.53	06845M06000	06845MH0600
M8	6.50	4.96	8	80	22.00	0.080	4.94	06845M08000	06845MH0800
M10	7.90	6.07	8	80	26.00	0.090	6.05	06845M10000	06845MH1000



ข้อแนะนำการใช้งาน ไบเฟส
Recommendations of use Bi Face

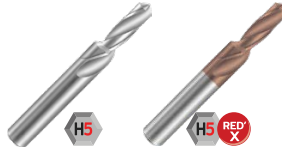
Materials	Speed m/min.		Feed mm/rev.				
	Materials		D				
	Carbide	Carbide+Hard'X	1 - 2	3 - 4	6 - 8	10 - 12	16
Steel < 500 N/mm ²	60 - 70	70 - 90	0.010	0.012	0.015	0.020	0.030
Steel 500 - 800 N/mm ²	40 - 60	50 - 80	0.010	0.012	0.015	0.020	0.030
Steel 800 - 1000 N/mm ²	35 - 40	45 - 60	0.010	0.012	0.013	0.017	0.025
Steel 800 - 1300 N/mm ²	30 - 35	40 - 55	0.010	0.012	0.013	0.017	0.025
Stainless Steel	25 - 30	35 - 50	0.007	0.010	0.010	0.015	0.020
Inconel	15 - 20	25 - 40	0.007	0.010	0.010	0.015	0.020
Cast Iron < 180HB	35 - 40	45 - 60	0.010	0.012	0.013	0.017	0.025
Cast Iron > 180HB	30 - 35	40 - 55	0.010	0.012	0.013	0.017	0.025
Copper / Brass / Bronze	50 - 80	60 - 100	0.012	0.012	0.015	0.020	0.030
Aluminum ≤ 6% Si	70 - 100	80 - 120	0.012	0.012	0.015	0.020	0.030
Aluminum > 6% Si	90 - 150	110 - 180	0.012	0.012	0.015	0.020	0.030
Thermoplast	100 - 150	130 - 200	0.015	0.025	0.030	0.040	0.050

Step Drills Before Thread – ดอกสแต็ปดริวเจาะรูก่อนทำเกลียว



ใช้สำหรับเตรียมรูก่อนทำเกลียว M มาตรฐาน

Drill and countersink hole before threading standard M thread.



ชุดดอกสแต็ปดริว
Step Drill Set

SCREW	D h6	d ±0.01	L ±1	f1	f2 ±1	Order Code	
						HSSE	HSSE+Red'X
						Model 06254	Model 062754
M3	3.4	2.5	52	20	8	06254034250	06275403425
M4	4.5	3.3	58	24	11	06254045330	06275404533
M5	5.5	4.2	66	28	13	06254055420	06275405542
M6	6.6	5.0	70	31	16	06254066500	06275406650
M8	9	6.8	84	40	20	06254096800	06275409680
M10	11	8.5	95	47	24	06254118500	06275411850
M12	14	10.2	107	54	29	06254141020	06275414102
M14	16	12.0	115	56	32	06254161200	06275416120
M16	18	14.0	135	60	34	06254181400	06275418140



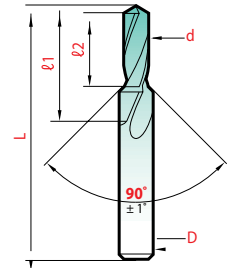
Order Code	Pcs / Set	Sizes 1 pc each
06254000000	6pcs Set	M3 / 4 / 5 / 6 8 / 10
06275400000		

Standards
90°
Magafor
Standard

รุ่นพิเศษแข็งแรงขึ้น เจาะรูจำนวนมาก
Special harder model for mass
production.



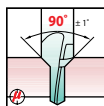
SCREW	D h8	d ±0.05	L ±1	f1	f2 ±1	Order Code	
						Carbide	Carbide+Hard'X
						Model 068254	Model 068254H
M0.8	3	0.60	39	6	2.4	068254M0080	068254H0360
M0.9	3	0.70	39	7	2.8	068254M0090	068254H0370
M1.0	3	0.75	39	7	2.9	068254M0100	068254H0375
M1.2	3	0.95	39	9	3.7	068254M0120	068254H0395
M1.4	3	1.10	39	10	4.2	068254M0140	068254H0311
M1.6	3	1.25	39	11	4.7	068254M0160	068254H03125
M1.8	3	1.45	39	12	5.2	068254M0180	068254HM018
M2.0	4	1.50	51	13	5.6	068254M0200	068254H0415
M2.5	4	2.05	51	17	7.5	068254M0250	068254H04205
M3	6	2.50	66	20	8.8	068254M0300	068254H0625
M4	6	3.30	66	24	11.4	068254M0400	068254H0633
M5	6	4.20	66	28	13.6	068254M0500	068254H0642
M6	8	5.00	79	31	16.5	068254M0600	068254H0850
M8	10	6.80	89	40	21	068254M0800	068254H1068
M10	12	8.50	102	47	25.5	068254M1000	068254H1285
M12	14	10.20	107	54	30	068254M1200	068254H14102



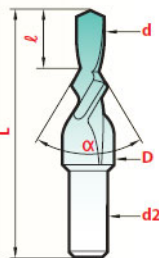
Countersinks

ดอกเคาะเตอร์ซิงค์

Step Drills (90°) – ดอกสแต็ปดริว 90°



SCREW	D h9	d ±0.05	L ±1	ℓ ±1	d2 h9	Order Code	
						HSSE	HSSE+Red'X
						Model 06255	Model 062755
M2	4.6	2.2	45	6	4.6	06255046220	06275504622
M2.5	5.7	2.7	45	7	5.7	06255057270	06275505727
M3	6.5	3.2	45	9	6.5	06255065320	06275506532
M3.5	7.6	3.7	50	10	7.6	06255076370	06275507637
M4	8.6	4.3	50	11	8.6	06255086430	06275508643
M5	10.4	5.3	55	13	10.4	06255104530	06275510453
M6	12.4	6.4	63	15	12.4	06255124640	06275512464
M8	16.4	8.4	100	19	12.5	06255164840	06275516484
M10	20.4	10.5	110	23	12.5	06255204105	062755204105
M12	25	13	120	28	12.5	06255251300	06275525130



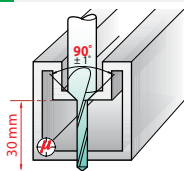
Standards
90°
Magafor
Standard

ชุดดอกสแต็ปดริว 90° Step Drill Set

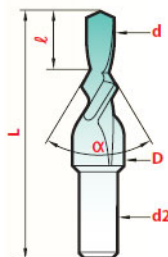
Order Code	Pcs / Set	Sizes
		1 pc each
06255000000	6pcs Set	M3 / 4 / 5 / 6
06275500000		8 / 10



Step Drills Long Type (90°) – ดอกสแต็ปดริว 90° รุ่นยาว



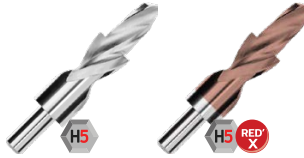
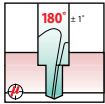
SCREW	D h9	d ±0.05	L ±1	ℓ ±1	d2 h9	Order Code
						HSSE
						Model 06257
M4	8.6	4.3	110	30	8.6	06257086430
M5	10.4	5.3	110	30	10.4	06257104530
M6	12.4	6.4	110	30	12.4	06257124640
M8	16.4	8.4	110	30	12.5	06257164840
M10	20.4	10.5	110	30	12.5	06257204105



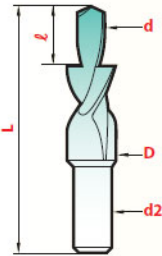
Standards
90°
Magafor
Standard

Countersinks

Step Drills (180°) – ดอกสแต็ปดริว 180°



SCREW	D h9	d ±0.05	L ±1	ℓ ±1	d2 h9	Order Code	
						HSSE	HSSE+Red'X
						Model 06256	Model 062756
M2	4.3	2.4	45	6	4.3	06256043240	06275604324
M2.5	5	2.9	45	7	5	06256052900	06275605290
M3	6	3.4	45	9	6	06256063400	06275606340
M4	8	4.5	50	11	8	06256084500	06275608450
M5	10	5.5	55	13	10	06256105500	06275610550
M6	11	6.6	63	15	11	06256116600	06275611660
M8	15	9	100	19	12.5	06256159000	06275615900
M10	18	11	110	23	12.5	06256181100	06275618110
M12	20	14	110	28	12.5	06256201400	06275620140
M14	24	16	120	34	12.5	06256241600	06275624160



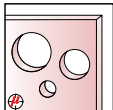
Standards
180°
Magafor
Standard

ชุดดอกสแต็ปดริว 180° Step Drill Set

Order Code	Pcs / Set	Sizes
		1 pc each
06256000000	6pcs Set	M3 / 4 / 5 / 6
06275600000		8 / 10



Multi Dia Taper Drill (20°) – ดอกสแต็ปดริวเทเปอร์ 20°

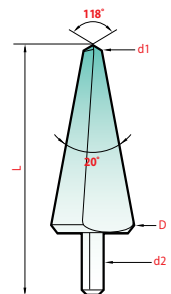


Standards
Multi-Dia
Magafor
Standard

MULTI-DIA



Capacity	D	d1	L	d2	Order Code	
					HSS	HSS+TIN
					Model 06472	Model 06478
3 - 14	14	3	62	6	06472140000	06478140000
6 - 20	20	6	72	8	06472200000	06478200000
6 - 30	30	6	94	10	0647230SL00	0647830SL00
25 - 40	40	25	87	12	06472400000	06478400000
37 - 53	53	37	98	12	06472530000	06478530000



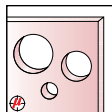
ชุดดอกสแต็ปดริว Multi Dia Taper Set



Order Code	Material	Pcs / Set	Sizes
			1 pc each
06472000000	HSS	3pcs Set	Ø14 / 20 / 30
06478000000	HSS+TIN		

ดอกเคาะเตอร์ซิงค์

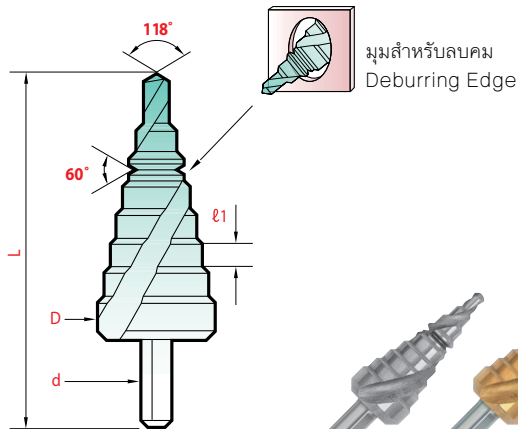
Multi Dia Step Drill (90°) – ดอกสแต็ปดริวซันบันได 90°



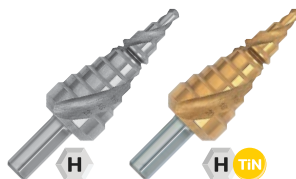
Standards
Multi-Dia
Magafor
Standard



MULTI-DIA



ก้านเจียร 3 ด้าน
3 sides flat shank



D	Steps Capacity	L	l1	d	Order Code	
					HSS	HSS+TIN
					Model 06475	Model 06470
12	4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12	79	5	6	06475120000	06470120000
20	4 / 6 / 8 / 10 / 12 / 14 / 16 / 18 / 20	67	3	8	06475200000	06470200000
30	4 / 6 / 8 / 10 / 12 / 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30	100	4	10	06475300000	06470300000
38	6 / 9 / 13 / 16 / 19 / 21 / 23 / 26 / 29 / 32 / 35 / 38	100	4	10	06475380000	06470380000

ชุดดอกสแต็ปดริว
Multi Dia Set



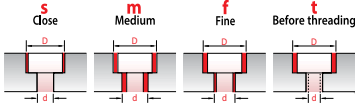
Order Code	Material	Pcs / Set	Sizes
			1 pc each
06475000000	HSS	3pcs Set	Ø12 / 20 / 30
06470000000	HSS+TIN		

Countersinks

Counterbores (180°) – ดอกเคาะเตอร์บอร์ 180°



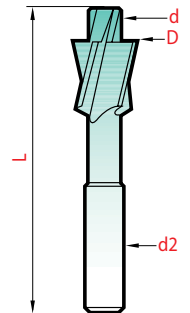
Series Types



D x d	L	d2	CAP SCREW M	Serie	Order Code		
					HSSE	HSSE+TiN	Carbide
					Model 0631	Model 063831	Model 068331
2.2 x 1.1	45	D	M1	f	06310221100		
2.5 x 1.3	45	D	M1.2	f	06310251300		
2.8 x 1.5	45	D	M1.4	f	06310281500		
3.2 x 1.5	45	D	M1.5	f	06310321500		
3.3 x 1.7	56	D	M1.6	f	06310331700		
3.8 x 1.8	56	D	M1.7	f	06310381800		
4.2 x 2.0	56	D	M2	s	06310422000		
4.3 x 2.2	56	D	M2	f	06310432200	06383104322	
4.3 x 2.4	56	D	M2	m	06310432400	06383104324	
4.6 x 2.4	56	D			06310462400		
5.0 x 2.7	56	D	M2.5	f	06310527000	06383105270	
5.0 x 2.9	56	D	M2.5	m	06310529000	06383105290	
5.2 x 2.5	56	D	M2.5	s	06310522500		
5.2 x 3.0	56	D			06310523000		
5.5 x 2.8	71	D	M2.6	f	06310552800		
5.5 x 3.0	71	D	M2.6	m	06310553000		
5.7 x 3.0	71	D	M3	s	06310573000		
6.0 x 2.5	71	D	M3	t	06310625000		
6.0 x 3.2	71	D	M3	f	06310632000	06383106320	06833106320
6.0 x 3.4	71	D	M3	m	06310634000	06383106340	
6.2 x 3.0	71	D			06310623000		
6.5 x 2.9	71	D	M3.5	t	06310652900		
6.5 x 3.4	71	D			06310653400		
6.5 x 3.7	71	D	M3.5	f	06310653700		
6.5 x 3.9	71	D	M3.5	m	06310653900		
7.2 x 3.5	71	D			06310723500		
7.2 x 4.0	71	D	M4	s	06310724000		
7.4 x 4.3	71	D			06310744300		
8.0 x 3.3	71	D	M4	t	06310833000		
8.0 x 4.3	71	D	M4	f	06310843000	06383108430	06833108430
8.0 x 4.5	71	D	M4	m	06310845000	06383108450	
8.2 x 4.0	71	D			06310824000		
8.2 x 5.0	71	D			06310825000		

Standards	180°

Tolerance	
D	z9
d	e8
L	±1

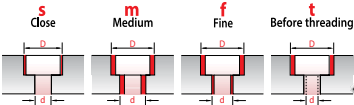


ดอกเคาะตอร์ซิงค์

Counterbores (180°) – ดอกเคาะตอร์รับเบอร์ 180°



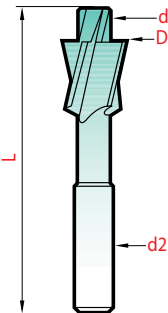
Series Types



D x d	L	d2	CAP SCREW M	Serie	Order Code		
					HSSE	HSSE+TiN	Carbide
					Model 0631	Model 063831	Model 068331
8.7 x 5.0	71	D	M5	s	06310875000		
9.2 x 4.5	80	D			06310924500		
9.2 x 5.0	80	D	M5	s	06310925000		
9.4 x 5.3	80	D			06310945300		
9.5 x 5.5	80	D			06310955500		
10.0 x 4.2	80	D	M5	t	06311042000		
10.0 x 5.3	80	D	M5	f	06311053000	06383110530	06833110530
10.0 x 5.5	80	D	M5	m	06311055000	06383110550	
10.2 x 5.0	80	D			06311025000		
10.2 x 6.0	80	D	M6	s	06311026000		
10.2 x 7.0	80	D			06311027000		
10.4 x 6.4	80	D			06311046400		
11.0 x 5.0	80	D	M6	t	06311150000		
11.0 x 6.4	80	D	M6	f	06311164000	06383111640	06833111640
11.0 x 6.6	80	D	M6	m	06311166000	06383111660	
11.2 x 8.0	80	D			06311128000		
12.2 x 6.0	80	D			06311226000		
12.2 x 7.0	80	D			06311227000		
13.2 x 8.0	100	12.5	M8	s	06311328000		
13.5 x 8.4	100	12.5			06311358400		
14.0 x 9.0	100	12.5			06311490000		
14.2 x 7.0	100	12.5			06311427000		
14.2 x 8.0	100	12.5	M8	s	06311428000		
15.0 x 6.8	100	12.5	M8	t	06311568000		
15.0 x 8.4	100	12.5	M8	f	06311584000	06383115840	06833115840
15.0 x 9.0	100	12.5	M8	m	06311590000	06383115900	
15.2 x 7.5	100	12.5			06311527500		
16.2 x 8.0	100	12.5			06311628000		
16.2 x 9.0	100	12.5			06311629000		
16.2 x 10	100	12.5	M10	s	06311621000		
16.5 x 10.5	100	12.5			06311651050		
17.2 x 10	100	12.5	M10	s	06311721000		
17.5 x 11	100	12.5			06311751100		

Standards	180°
	NF-E66024
	DIN 373
	ISO

Tolerance	
D	z9
d	e8
L	±1

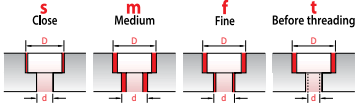


Countersinks

Counterbores (180°) – ดอกเคาะเตอร์บอร์ 180°

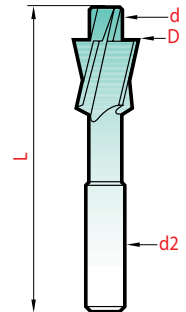


Series Types



D x d	L	d2	CAP SCREW M	Serie	Order Code		
					HSSE	HSSE+TiN	Carbide
					Model 0631	Model 063831	Model 068331
18 x 8.5	100	12.5	M10	t	06311885000		
18 x 10.5	100	12.5	M10	f	06311810500	06383118105	06833118105
18 x 11	100	12.5	M10	m	06311811000	06383118110	
18.2 x 9	100	12.5			06311829000		
18.2 x 10	100	12.5			06311821000		
18.2 x 12	100	12.5	M12	s	06311821200		
19 x 13	100	12.5			06311913000		
19.2 x 12	100	12.5	M12	s	06311921200		
20 x 10.2	100	12.5	M12	t	06312010200		
20 x 13	100	12.5	M12	f	06312013000	06383120130	06833120130
20 x 14	100	12.5	M12	m	06312014000	06383120140	
20.2 x 10	100	12.5			06312021000		
24 x 15	120	12.5	M14	f	06312415000		
24 x 16	120	12.5	M14	m	06312416000		
26 x 17	130	12.5	M16	f	06312617000		
26 x 18	130	12.5	M16	m	06312618000		

Standards	180°
	NF-E66024
	DIN 373
	ISO
Tolerance	
D	z9
d	e8
L	±1



ชุดดอกเคาะเตอร์บอร์ 180° Counterbore Set



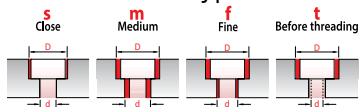
Order Code	Material	Serie	Pcs / Set	Sizes
				1 pc each
06310010000	HSSE	f	6pcs Set	M3 / M4 / M5 M6 / M8 / M10
06383101000	HSSE+TiN			
06310020000	HSSE	m	6pcs Set	
06383102000	HSSE+TiN			

ดอกเคาเตอร์ซิงค์

Counterbores Taper Shank (180°) – ดอกเคาเตอร์บอร์ 180°



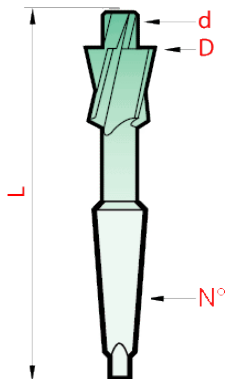
Series Types



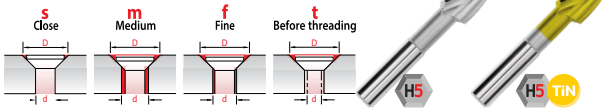
CAP SCREW M	Serie	D x d	L	Morse Taper N°	Order Code
					HSSE
					Model 0633
M10	f	18 x 10.5	150	MT2	06331810500
M10	m	18 x 11	150	MT2	06331811000
M12	f	20 x 13	150	MT2	06332013000
M12	m	20 x 14	150	MT2	06332014000
M12	s	21.2 x 12	150	MT2	06332121200
		21.2 x 14	160	MT2	06332121400
		22.2 x 11	160	MT2	06332221100
M14	s	22.2 x 14	160	MT2	06332221400
		23.2 x 14	160	MT2	06332321400
		24 x 12	160	MT2	06332412000
M14	f	24 x 15	160	MT2	06332415000
M14	m	24 x 16	160	MT2	06332416000
M16	t	25 x 17	190	MT3	06332517000
		26 x 14	190	MT3	06332614000
		26 x 17	190	MT3	06332617000
M16	f	26 x 18	190	MT3	06332618000
		26.2 x 16	190	MT3	06332621600
		27.2 x 18	190	MT3	06332721800
M18	s	28 x 19	190	MT3	06332819000
		28.2 x 14	190	MT3	06332821400
		29.2 x 18	190	MT3	06332921800
M18	t	30 x 15.5	190	MT3	06333015500
		30 x 19	190	MT3	06333019000
		30 x 20	190	MT3	06333020000
M20	s	32.2 x 16	190	MT3	06333221600
		32.2 x 20	190	MT3	06333222000
		33 x 17.5	190	MT3	06333317500
M20	f	33 x 21	190	MT3	06333321000
		33 x 22	190	MT3	06333322000
		35.2 x 22	205	MT3	06333522200
M22	f	36 x 23	205	MT3	06333623000
		36 x 24	205	MT3	06333624000
		38.2 x 24	205	MT3	06333822400
M24	t	40 x 21	205	MT3	06334021000
		40 x 25	205	MT3	06334025000
		43 x 30	240	MT4	06334330000
M30	f	48 x 33	240	MT4	06334833000

MT Shank

Standards	180°
	NF-E66024
	DIN 373
ISO	
Tolerance	
D	z9
d	e8
L	±1



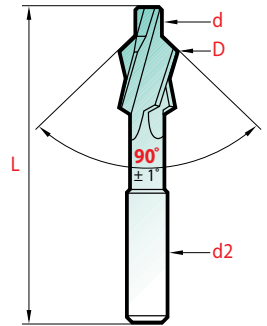
Piloted Countersinks (90°) – ดอกไฟลัดเคาเตอร์ซิงค์ 90°



CAP SCREW M	Serie	D x d	L	d2	Order Code	
					HSSE	HSSE+TiN
					Model 0632	Model 063832
M1	f	2.0 x 1.1	45	D	06320211000	
M1.2	f	2.5 x 1.3	45	D	06320251300	
M1.4	f	2.8 x 1.5	45	D	06320281500	
		3.2 x 1.5	45	D	06320321500	
M1.6	f	3.3 x 1.7	56	D	06320331700	
M1.8	f	3.8 x 1.9	56	D	06320381900	
M1.8	m	4.2 x 2.0	56	D	06320422000	
M2	f	4.3 x 2.2	56	D	06320432200	06383204322
M2	m	4.6 x 2.4	56	D	06320462400	
M2.5	f	5.0 x 2.7	56	D	06320527000	06383205270
M2.5	s	5.2 x 2.5	56	D	06320522500	
M2.5	m	5.7 x 2.9	56	D	06320572900	
M3	t	6.0 x 2.5	71	D	06320625000	
M3	f	6.0 x 3.2	71	D	06320632000	06383206320
M3	s	6.2 x 3.0	71	D	06320623000	
M3	m	6.5 x 3.4	71	D	06320653400	06383206534
M3.5	t	7.0 x 2.9	71	D	06320729000	
M3.5	f	7.0 x 3.7	71	D	06320737000	
M3.5	s	7.2 x 3.5	71	D	06320723500	
M3.5	m	7.6 x 3.9	71	D	06320763900	
M4	t	8.0 x 3.3	71	D	06320833000	
M4	f	8.0 x 4.3	71	D	06320843000	06383208430
M4	s	8.2 x 4.0	71	D	06320824000	
M4	m	8.6 x 4.5	71	D	06320864500	06383208645
M5	t	10.0 x 4.2	80	D	06321042000	
M5	f	10.0 x 5.3	80	D	06321053000	06383210530
M5	s	10.2 x 5.0	80	D	06321025000	
M5	m	10.4 x 5.5	80	D	06321045500	06383210455
M6	t	11.5 x 5.0	80	D	06321155000	
M6	f	11.5 x 6.4	80	D	06321156400	06383211564
M6	s	12.2 x 6.0	80	D	06321226000	
M6	m	12.4 x 6.6	80	D	06321246600	06383212466
		14.2 x 7.0	100	12.5	06321427000	
M8	t	15.0 x 6.8	100	12.5	06321568000	
M8	f	15.0 x 8.4	100	12.5	06321584000	06383215840
M8	s	16.2 x 8.0	100	12.5	06321628000	
M8	m	16.4 x 9.0	100	12.5	06321649000	06383216490
		18.2 x 9.0	100	12.5	06321829000	
M10	t	19 x 8.5	100	12.5	06321985000	
M10	f	19 x 10.5	100	12.5	06321910500	06383219105
M10	s	20.2 x 10	100	12.5	06322021000	
M10	m	20.4 x 11	100	12.5	06322041100	06383220411
		22.2 x 11	160	MT2	06322221100	
M12	s	24.2 x 12	160	MT2	06322421200	
M14	s	28.2 x 14	190	MT3	06322821400	
M16	s	32.2 x 16	190	MT3	06323221600	

Standards	90°
	NF-E66023
	DIN 1866
	ISO

Tolerance	
D	z9
d	e8
L	±1



ชุดดอกไฟลัดเคาเตอร์ซิงค์ 90° Piloted Countersink Set

Order Code	Material	Serie	Sizes
			1 pc each
06320000001	HSSE	f	M3 / M4 / M5 M6 / M8 / M10
06383200001	HSSE+TiN		
06320000002	HSSE	m	
06383200002	HSSE+TiN		