

HSS CONE CUTTERS

- Manufacturing process: fully ground
 - Point angle: 118°
 - Flutes: straight flutes
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: Nr.1-Nr.9



Size	Drilling Range	d	FL	OAL
Nr.1	3 to 14	6	34	58
Nr.2	5 to 20	8	44	71
Nr.3	16 to 31	9	52	76
Nr.4	24 to 40	10	62	89
Nr.5	36 to 50	12	68	97
Nr.6	40 to 61	13	75	103
Nr.7	5 to 25.4	10	81	87
Nr.8	5 to 31	9	81	103
Nr.9	5 to 22.5	8	81	79

Size	Drilling Range	d	FL	OAL
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HSS STEP DRILLS

- Manufacturing process: fully ground
 - Point angle: 118°
 - Flutes: straight flutes, spiral flutes
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: Nr.0/5-N.r13

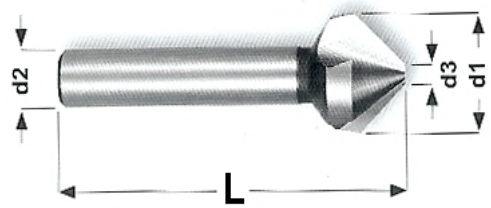


Size	Drilling Range	d	FL	OAL
Nr.0/5	4 to 12	6	5	65
Nr.0/9	4 to 12	6	9	65
Nr.1	4 to 20	8	9	75
Nr.2	4 to 30	10	14	100
Nr.3	6 to 38	10	12	100
Nr.4	6 to 26.75	10	8	75
Nr.5	4 to 39	10	13	107
Nr.6	6 to 32	10	8	75
Nr.7	6 to 37	10	7	69
Nr.8	6 to 30.5	10	9	80
Nr.9	6 to 37	10	12	100
Nr.13	6 to 40	13	16	105

Size	Drilling Range	d	FL	OAL
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DIN335C HSS COUNTERSINKS

- Manufacturing process: fully ground
 - Sinking angle: 60°, 90°, 120°
 - Flutes: 3 flutes
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: 6.3-31mm

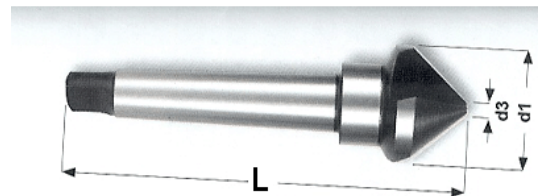


d1	d2	d3	OAL	For thread
6.3	5.0	1.5	45.0	M3
8.3	6.0	2.0	50.0	M4
10.4	6.0	2.5	50.0	M5
12.4	8.0	2.8	56.0	M6
16.5	8.0	3.2	60.0	M8
20.5	10.0	3.5	63.0	M10
25	10.0	3.8	67.0	M12
31	12.0	4.2	71.0	M16

d1	d2	d3	OAL	For thread

DIN335D HSS TAPER SHANK COUNTERSINKS

- Manufacturing process: milled
 - Point angle: 90°
 - Flutes: 3 flutes
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: 15-80mm

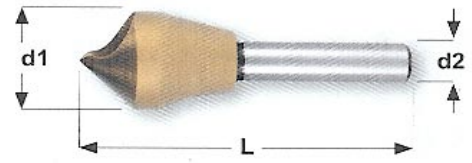


d1	d3	MT	OAL	For thread
15	3.2	MT1	85.0	M8
16.5	3.2	MT1	85.0	M8
19	3.5	MT2	100.0	M10
20.5	3.5	MT2	100.0	M10
23	3.8	MT2	106.0	M12
25	3.8	MT2	106.0	M12
26	3.8	MT2	106.0	M14
28	4.0	MT2	112.0	M14
30	4.2	MT2	112.0	M16
31	4.2	MT2	112.0	M16
34	4.5	MT2	118.0	M18
37	4.8	MT2	118.0	M20
40	10.0	MT3	140.0	
50	14.0	MT3	150.0	
63	16.0	MT4	180.0	
80	20.0	MT4	180.0	

d1	d2	d3	OAL	For thread

HSS DEBURRING COUNTERSINKS

- Manufacturing process: fully ground
 - Sinking angle: 90°
 - Flutes: single flute
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: 5/10-40/50mm



Drilling range	d1	d2	OAL
5 to 10	14	6	45
10 to 15	21	10	65
15 to 20	28	12	85
20 to 25	35	15	102
25 to 30	44	15	115
30 to 35	48	15	127
35 to 40	53	15	136
40 to 50	64	18	166

Drilling range	d1	d2	OAL

DIN373 HSS FLAT COUNTERSINKS

- Manufacturing process: fully ground
 - Point angle: 180°
 - Flutes: 3 flutes
 - Material: HSS or HSS-Co
 - Finish: bright, TiN
- Size: 15-80mm



d1	d2	d3	OAL	For thread
3.2	6.0	5.0	71.0	M3
4.3	8.0	5.0	71.0	M4
5.3	10.0	8.0	80.0	M5
6.4	11.0	8.0	80.0	M6
8.4	15.0	12.5	100.0	M8
10.5	18.0	12.5	100.0	M10
13	20.0	12.5	100.0	M12

d1	d2	d3	OAL	For thread