

**NOGAMIT**  
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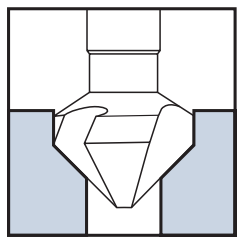
**3 FLUTE MACHINING COUNTERSINKS - 90°**



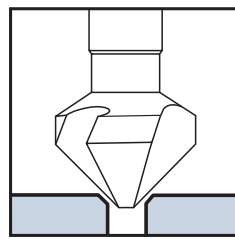


## 3 FLUTE MACHINING COUNTERSINKS - 90°

90° | 3 Flutes | DIN 335C | HSS | TiN | TiAlN | Solid Carbide | AlTiN



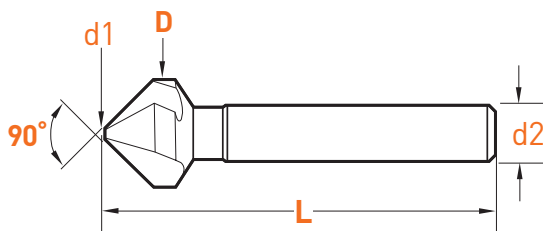
COUNTERSINKING



DEBURRING

NogaMT 3 flute machining countersinks are designed to perform a variety of jobs including: deburring and countersinking.

NogaMT 3 flute machining countersinks are superior to the traditional multi-flute milling cutters, the wide flutes provide good chip evacuation.



Tolerances

D	Angle	d1	d2	L
z9	-1°	max	h9	± 1 mm

### ADVANTAGES

- Open groove geometry allows for greater chip evacuation
- High Positive Cut
- Accurate self centering countersink
- Almost eliminates vibration
- Faster cutting process
- Longer service life

## NOGAMT COUNTERSINKS RECOMMENDED APPLICATIONS

MATERIAL	Steel <= 500 N/mm2	Steel 500 - 800 N/mm2	Steel 800 - 1000 N/mm2	Steel 1000 - 1300 N/mm2	Abrasive Tough Steel	Hard Bronze	Treated Steel >=60HRC	Aluminum	Cast Aluminum
HSS	●			✗	✗	✗	✗	●	
HSS TiN	●	●			✗	✗	✗	●	
HSS - E		●	●		✗	✗	✗		●
HSS - E TiAlN			●	●	✗	✗	✗		●
Carbide				●	●	●	✗		
Carbide - AlTiN					●	●	●		

● First choice    ● Second choice    ✗ Not suitable

# HIGH SPEED STEEL

## PROPERTIES

**HSS** - Achieves the best performance in mild steel and nonferrous materials considerably less feed force required. Extremely quiet running, optimal and smooth surface, perfect chip removal.

**HSSE (Cobalt)** - Provides better wear resistance in hardness and toughness compared to HSS. Longer service life and faster deburring / countersinking.

**TiN coating** increases the tool life for intensive use.

**TiAlN** increases wear resistance and improves surface finish.



HSS



HSS with TiN coating



HSSE - Cobalt



HSSE with TiAlN coating

D	d1 - max	d2	L	ordering no. HSS	ordering no. HSSE-Cobalt	ordering no. HSS TiN Coated	ordering no. TiAlN Coated
5.3	1.5	4	40	CM1103	CM1204	CM1304	CM1404
6.3	1.5	5	45	CM1106	CM1209	CM1309	CM1409
6.35	1.5	6.35	45	-	CM1210	-	CM1411
7.93	2.0	6.35	45	-	CM1214	-	CM1414
8.3	2.0	6	50	CM1110	CM1216	CM1316	CM1416
9.52	2.5	6.35	50	-	CM1219	-	CM1419
10.4	2.5	6	50	CM1113	CM1221	CM1321	CM1421
12.4	2.8	8	56	CM1115	CM1225	CM1324	CM1424
12.7	2.9	6.35	50	-	CM1227	-	CM1425
15	3.2	10	60	CM1118	CM1230	CM1328	CM1428
15.87	3.2	9.52	60	-	CM1232	-	CM1430
16.5	3.2	10	60	CM1120	CM1233	CM1331	CM1431
19.05	3.5	9.52	60	-	CM1237	-	CM1434
20.5	3.5	10	63	CM1124	CM1238	CM1335	CM1435
25	3.8	10	67	CM1128	CM1241	CM1337	CM1437
25.4	3.8	9.52	70	-	CM1243	-	CM1438
31	4.2	12	71	CM1134	CM1249	CM1344	CM1442

Lubrication is recommended while working.

All measurements are in mm unless otherwise mentioned.

# SOLID CARBIDE

## PROPERTIES

NogaMT 3 Flute Carbide machining countersinks are made from Solid Carbide for extra strength, the AlTiN coating gives a high thermic stability and excellent protection against heat and wear. Ideal for dry machining - high speed cut - in treated steels and dies up to 67 Rc.



Solid Carbide



Solid Carbide with AlTiN coating

D	d1 - max	d2	L	ordering no. Solid Carbide	ordering no. AlTiN Coated
6.3	1.5	5	45	CM1504	CM1604
8.3	2.0	6	50	CM1506	CM1606
10.4	2.5	6	50	CM1508	CM1608
12.4	2.8	8	56	*CM1510	*CM1610
16.5	3.2	10	60	*CM1512	*CM1612
20.5	3.5	10	63	*CM1513	*CM1613
25	3.8	10	67	*CM1514	*CM1614

\* 3 flatted shank

Lubrication is recommended while working.

All measurements are in mm unless otherwise mentioned.

## HSS Countersink Sets



## Solid Carbide Countersink Sets



- 1 NogaMT HSS Set - CM2100**  
Contains 5 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm / 20.5 mm / 25 mm
- 2 NogaMT HSS-E Set - CM2200**  
Contains 5 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm / 20.5 mm / 25 mm
- 3 NogaMT HSS TiN Set - CM2300**  
Contains 5 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm / 20.5 mm / 25 mm
- 4 NogaMT HSS TiAlN Coated Set - CM2400**  
Contains 5 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm / 20.5 mm / 25 mm

- 1 NogaMT Solid Carbide Set - CM2500**  
Contains 3 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm
- 2 NogaMT Solid Carbide AlTiN Coated Set - CM2600**  
Contains 3 pieces  
Diameters: 6.3 mm / 10.4 mm / 16.5 mm

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