

COUNTERSINKS 3-FLUTE MACHINING - 90°



COUNTERSINKS 3-FLUTE MACHINING

For more than 40 years NOGA has been recognized worldwide for it's state-of-the-art Hand Deburring Tools, designed to be used extensively in industrial applications.

We are proud to introduce our new Countersink program for deburring and countersinking.

This product line has been developed and produced especially for Noga, working closely with our engineers and receiving customer's feedback to ensure ours and your high levels of satisfaction.



A good tool improves the way you work.

INDEX

Description	Page
Basic information	2
HSS 90°	3
HSS-Co-TiN 90°	3
HSS-Co 90°	3
HSS-Co TiAlN 90°	3
Solid Carbide 90°	3
Solid Carbide TiAlN 90°	3
VarioLine HSS 90°	4

This selected program contains the most popular countersinks in HSS, HSS-Co and Solid Carbide. Coated and uncoated.

All are 3-flute machine countersinks in 90°, long, extra long, MK-shank or even in 60°, 75° or 120°. Also the newest development in cutting geometry, unequal divided flutes, with extremely high performances you will find in our VarioLine. A complete line designed to perform in deburring and countersinking.

Our tools improve the products you make. **Noga is innovation**

Description	Page
VarioLine HSS TiN 90°	4
VarioLine HSS TiAlN 90°	4
HSS 60°	5
HSS 75°	5
HSS 120°	5
HSS 90° long and extra long	6
HSS MK shank	6
Sets	8





COUNTERSINKS - MATERIALS



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

HSS-Co

Provides better wear resistance in hardness and toughness compared to HSS. Longer service life and faster deburring/countersinking.



Solid Carbide for extra strength, Ideal for - high speed cut - in treated steels and dies up to 67 Rc.

COUNTERSINKS - COATINGS

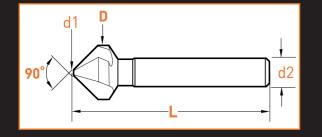


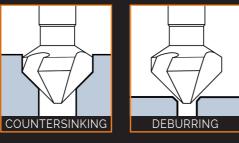
Coating increases the tool life for intensive use.



Increases wear resistance and improves surface finish.

COUNTERSINKS - SIZINGS & USAGE





COUNTERSINKS - RECOMMENDED APPLICATIONS

MATERIAL	Steel ≤ 900N/ mm²	Steel ≤ 1100N/ mm²	Steel ≤ 1300N/ mm²	Stainless steel	Aluminium	Brass	Bronze	Cast iron	Titanium alloys	Emulsion	Dry cutting
HSS							0	0			
HSS TiN		0		0			0	0		•	0
HSS-TiAIN		•		•	•		0	0			
HSS-Co		•		•	•		0	0		•	
HSS-Co TiAIN			0	•	•		0	0			
Carbide			•			0					
Carbide TiAIN		•			•	0					



HSS(-Co) Countersinks 90°

This are NogaMT HSS Countersinks. Performed according to DIN 335C with 3 flutes in 90° and all have a cylindrical shank. In standard HSS or HSS-Co provided with a TiN coating.

A	
T	
L'AMONANAI	Chroman

HSS	HSS-Co-TiN	D	d1
CM1106	CM1309	6,3	1,5
CM1110	CM1316	8,3	2
CM1113	CM1321	10,4	2,5
CM1115	CM1324	12,4	2,8
CM1118	CM1328	15	3,2
CM1120	CM1331	16,5	3,2
CM1124	CM1335	20,5	3,5
CM1128	CM1337	25	3,8
CM1134	CM1344	31	4,2

HSS-Co Countersinks 90°

This are NogaMT HSS-Cobalt Countersinks. Performed according to DIN 335C with 3 flutes in 90° and all have a cylindrical shank. In standard HSS-Cobalt or provided with a TiAIN coating.

	HSS-Co	HSS-Co-TiAIN	D
	CM1209	CM1409	6,3
	CM1216	CM1416	8,3
	CM1221	CM1421	10,4
	CM1225	CM1424	12,4
Chinese	CM1230	CM1428	15
	CM1233	CM1431	16,5
	CM1238	CM1435	20,5
	CM1241	CM1437	25
	CM1249	CM1444	31

Solid Carbide Countersinks 90°

NogaMT Countersinks made out of solid carbide. Performed according DIN 335C with 3 flutes in 90° and all have a cylindrical shank In solid carbide or profided with a TiAIN coating. Used on special materials like Steels up to 60 Rc, Hardox 400/500, Titanium, Titanium alloys, Inconel en Manganese steel.

		Carbide	Carbide TiAIN	D	d1	L.	d2
T		CM1504	CM1604	6,3	1,5	45	5
		CM1506	CM1606	8,3	2	50	6
		CM1508	CM1608	10,4	2,5	50	6
20	20	CM1510	CM1610	12,4	2,8	56	8
LUNCONN		CM1512	CM1612	16,5	3,2	60	10
		CM1513	CM1613	20,5	3,5	63	10
CM1504	CM1604	CM1514	CM1614	25	3,8	67	10
		CM1516	CM1616	31	4,2	71	12



L	d2
45	5
50	6
50	6
56	8
60	10
60	10
63	10
67	10
71	12



d1	L	d2
1,5	45	5
2	50	6
2,5	50	6
2,8	56	8
3,2	60	10
3,2	60	10
3,5	63	10
3,8	67	10
4,2	71	12





COUNTERSINKS 3-FLUTE MACHINING - 90°

VarioLine HSS Countersinks 90°

This are the new NogaMT HSS Countersinks with a special cutting flute geometry. They all have 3 unequal devided flutes! This VarioLine has a patented shaft (from D=8,3) which gives a 100% protection against slipping in the chuck. In HSS or provided with a TiN or TiAIN coating.

HSS	HSS-TiN	HSS-TIAIN	D	d1	L	d2	90°	TIN
CM1701	CM1711	CM1721	6,3	1,5	45	5		
CM1702	CM1712	CM1722	8,3	2	50	6	(3)	TIAIN
CM1703	CM1713	CM1723	10,4	2,5	50	6	Flutes	TIAIN
CM1704	CM1714	CM1724	12,4	2,8	56	8		
CM1705	CM1715	CM1725	15	3,2	60	10	HSS	
CM1706	CM1716	CM1726	16,5	3,2	60	10		
CM1707	CM1717	CM1727	20,5	3,5	63	10		
CM1708	CM1718	CM1728	25	3,8	67	10		
CM1709	CM1719	CM1729	31	4,2	71	12		



COUNTERSINKS 3-FLUTE MACHINING - 60°/75°/120°

HSS Countersinks 60°

This are NogaMT HSS Countersinks. Performed according to DIN 334C with 3 flutes in 60° and all have a cylindrical shank.

60°	D	d1	L	
CM1802	6,3	1,7	45	
CM1803	8	2,1	50	
CM1804	10	2,6	53	
CM1805	12,5	3,3	56	
CM1806	16	4,1	63	
CM1807	20	5,1	67	
CM1808	25	6,4	71	
CM1809	31,5	10,1	76	

HSS Countersinks 75°

This are NogaMT HSS Countersinks with 3 flutes in 75° and all have a cylindrical shank.

	75°	D	d1	L.	d2
	CM1812	6,3	1,6	45	5
	CM1813	8,3	2,2	50	6
	CM1814	10,4	2,7	51	6
5	CM1815	12,4	3,2	55	8
Choose	CM1816	16,5	3,7	61	10
	CM1817	20,5	4,2	65	10
	CM1818	25	5,2	69	10

HSS Countersinks 120°

This are NogaMT HSS Countersinks with 3 flutes in 120° and all have a cylindrical shank.

-					
J.	120°	D	d1	L	
T	CM1822	6,3	1,7	44	
	CM1823	8,3	2,2	48	
	CM1824	10,4	2,7	50	
	CM1825	12,4	3,2	53	
	CM1826	16,5	3,7	56	
	CM1827	20,5	4,2	59	
	CM1828	25	5,2	61	



d2	
5	
6	
6	
8	
10	
10	
10	
12	







COUNTERSINKS 3-FLUTE MACHINING - 90°

HSS Countersinks 90°, long

This are NogaMT HSS Countersinks. Performed according to DIN 335C with 3 flutes in 90° and all have a long (L) cylindrical shank.

	HSS-L	D	d1	L	d2
	CM1852	6,3	1,5	85	5
	CM1853	8,3	2	85	6
	CM1854	10,4	2,5	88	6
	CM1855	12,4	2,8	108	8
	CM1856	16,5	3,2	112	10
	CM1857	20,5	3,5	115	10
J	CM1858	25	3,8	118	10



HSS Countersinks 90°, extra long

This are NogaMT HSS Countersinks. Performed according to DIN 335C with 3 flutes in 90° and all have an extra long (XL) cylindrical shank.

D	d1	L	d2
6,3	1,5	154	5
8,3	2	155	6
10,4	2,5	157	6
12,4	2,8	158	8
16,5	3,2	161	10
20,5	3,5	164	10
	6,3 8,3 10,4 12,4 16,5	6,3 1,5 8,3 2 10,4 2,5 12,4 2,8 16,5 3,2	6,3 1,5 154 8,3 2 155 10,4 2,5 157 12,4 2,8 158 16,5 3,2 161



HSS Countersinks 90°, MK shank

This are NogaMT HSS Countersinks. Performed according to DIN 335D with 3 flutes in 90° and a Morse Cone (MK) shank.

	HSS-MK	D	d1	L	d2
	CM1902	15	3,2	85	MK1
A Distance in the second	CM1904	16,5	3,2	85	MK1
	CM1908	20,5	3,5	100	MK2
	CM1912	25	3,8	106	MK2
	CM1916	28	4	112	MK2
	CM1920	31	4,2	112	MK2
	CM1926	40	10	140	MK3
	CM1930	50	14	150	MK3
	CM1932	63	16	180	MK4
	CM1934	80	22	190	MK4









COUNTERSINK SETS, NogaMT

HSS(-Co) Countersinks 90°



This are 5 pieces NogaMT HSS Countersink Sets. Performed according to DIN 335C with 3 flutes in 90° and all have a cylindrical shank. In standard HSS or HSS-Co provided with a TiN coating packed in a Rose Plastic box.

HSS	HSS-Co-TiN	Description
CM2100	CM2300	HSS Countersink Set, contains 5 pieces: 6,3 - 10,4 - 16,5 - 20,5 - 25,0 mm

HSS-Co Countersinks 90°



This are 5 pieces NogaMT HSS-Cobalt Countersink Sets. Performed according to DIN 335C with 3 flutes in 90° and all have a cylindrical shank. In standard HSS-Cobalt or provided with a TiAIN coating packed in a Rose Plastic box.

HSS-Co	HSS-Co-TiAIN	Description
CM2200	CM2400	HSS-Co Countersink Set, contains 5 pieces: 6,3 - 10,4 - 16,5 - 20,5 - 25,0 mm





This are 5 pieces NogaMT HSS Countersink Sets with a special geometry. They all have 3 unequal devided flutes! This VarioLine has a patented shaft (from D=8,3) which gives a 100% protection against slipping in the chuck. In HSS or provided with a TiN or TiAIN coating, packed in a Rose Plastic box.

CM2700 CM2800 CM2900

HSS-TiN

HSS

HSS-T



Description





HSS (-Co) TiN



HSS (-Co) TiAIN



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