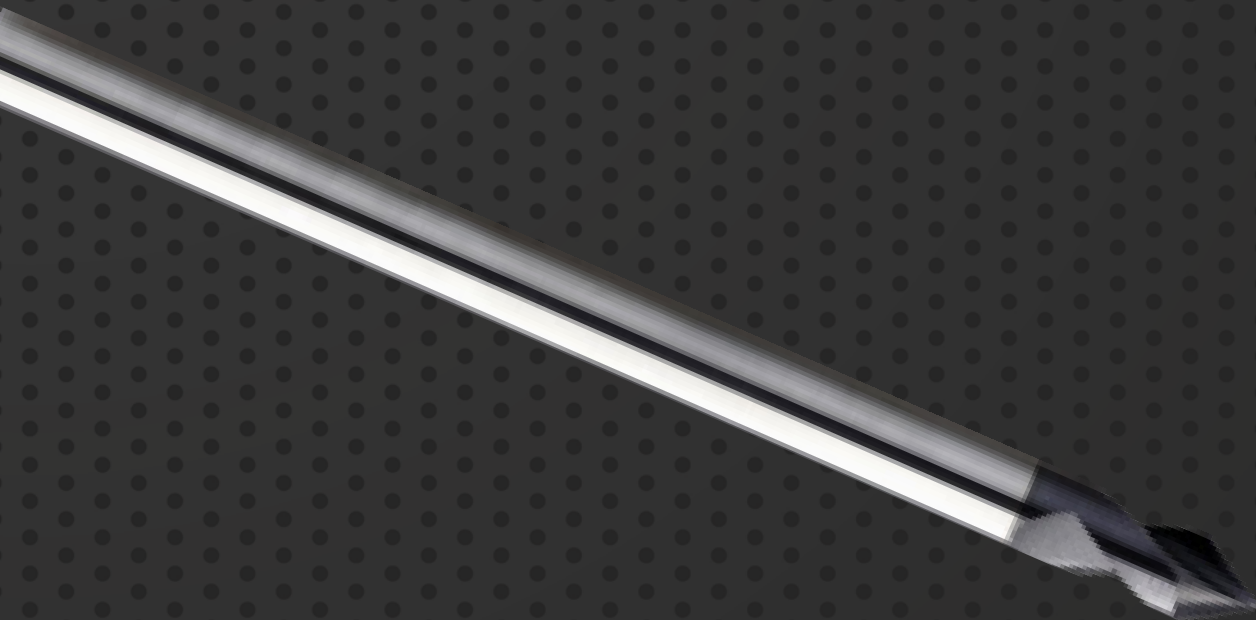




DRILLS

DR NC

For material applications P, K, N, O with a hardness of ≤ 35 HRC.

Index - Drills, For 35 - 68 HRC

Suitable for Material Groups

Adapté pour les matériaux

适用于材料

Geeignet für die Materialgruppen

Adatto per il materiale

P	M	K	N
S	H	O	

EDP Number	Hardness		Type	No. Z	Helix Angle	Coating	Performance	Page Number
662	≤ 35 HRC		DR NC 60°	2	30°	UC	G	443
953			DR NC 60°	2	30°	B0819	G	443
664			DR NC 90°	2	30°	UC	G	444
955			DR NC 90°	2	30°	B0819	G	444
666			DR NC 120°	2	30°	UC	G	445
957			DR NC 120°	2	30°	B0819	G	445
D09	Non Ferrous Metal		DR ALU OF - 3 x Ø	2	30°	UC	P	449
D10			DR ALU OF - 5 x Ø	2	30°	UC	P	450
NEW W16	≤ 35 HRC		EZ Drill - 3 x Ø	2	30°	T8090	G	454
NEW W17			EZ Drill - 5 x Ø	2	30°	T8090	G	456
D07			DR NiTiCo OF - 3 x Ø	2	30°	T8090	P	459
D08			DR NiTiCo OF - 5 x Ø	2	30°	T8090	P	460
C73	≤ 45 HRC		DR VA OF- 3 x Ø	2	30°	T8090	P	464
C77			DR VA OF- 5 x Ø	2	30°	T8090	P	465
W08			DR-S - 3 x Ø	2	30°	T8090	P	469
W09			DR-S - 5 x Ø	2	30°	T8090	P	470
W10			DR-S OF - 3 x Ø	2	30°	T8090	P	471
W11			DR-S OF - 5 x Ø	2	30°	T8090	P	472
H03			DR MINI OF - 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø	2	30°	T8090	P	479
NEW W05			DR-LX OF - 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø	2	30°	T8090	P	485
F33			DR 45 SB OF - 8 x Ø	2	30°	T8090	P	493
821	≤ 60 HRC		DR 60 - 5 x Ø	2	15°	D0120	P	497
823			DR 60 - 3 x Ø	2	15°	D0120	P	498

G - General P - Performance

NC SPOTTING DRILLS, 60° POINT ANGLE

- VHM NC Positionierungsbohrer Spitzenwinkel: 60°
- Punte pilota NC, con angolo di punta 60°
- Forets NC de pointage, angle de pointe: 60°
- 整体硬质合金 定心钻 2刃-顶角60°



Order Number	Dimension (mm)					UC	Order Number	Dimension (mm)					B0819
	D (h6)	I 1	I 2	L	d2 (h6)			D (h6)	I 1	I 2	L	d2 (h6)	
662 0300 040	3	6		40	3	°	953 0300 040	3	6		40	3	°
662 0300 060				60	3	•	953 0300 060				60	3	•
662 0300 100				100	3	°	953 0300 100				100	3	°
662 0400 050	4	8		50	4	•	953 0400 050	4	8		50	4	•
662 0400 075				75	4	°	953 0400 075				75	4	°
662 0400 100				100	4	°	953 0400 100				100	4	°
662 0500 050	5	12		50	5	•	953 0500 050	5	12		50	5	•
662 0500 075				75	5	°	953 0500 075				75	5	°
662 0500 100				100	5	°	953 0500 100				100	5	°
662 0600 050	6	16		50	6	•	953 0600 050	6	16		50	6	°
662 0600 075				75	6	°	953 0600 075				75	6	•
662 0600 100				100	6	•	953 0600 100				100	6	°
662 0800 064	8	20		64	8	•	953 0800 064	8	20		64	8	•
662 0800 100				100	8	°	953 0800 100				100	8	°
662 1000 070				70	10	•	953 1000 070				70	10	•
662 1000 100	10	25		100	10	°	953 1000 100	10	25		100	10	°
662 1000 125				125	10	°	953 1000 125				125	10	°
662 1000 150				150	10	°	953 1000 150				150	10	•
662 1200 075	12	25		75	12	•	953 1200 075	12	25		75	12	•
662 1200 100				100	12	°	953 1200 100				100	12	•
662 1200 125				125	12	°	953 1200 125				125	12	°
662 1200 150	16	26		150	12	°	953 1200 150	16	26		150	12	°
662 1600 090				90	16	°	953 1600 090				90	16	•
662 1600 125				125	16	°	953 1600 125				125	16	°
662 1600 150				150	16	°	953 1600 150				150	16	°

Material Group | Material-Gruppe | Groupe Matiere | Gruppo Materiali | 材质主类

N01

N02

N03

K01

K02

P01

P02

P03

M01

M02

S01

S02

S03

H01

H02

O01

O02

Cutting Parameter

446

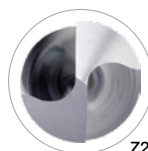
NC SPOTTING DRILLS, 90° POINT ANGLE

🇩🇪 VHM NC Positionierungsbohrer Spitzenwinkel: 90°

🇮🇹 Punta pilota NC, con angolo di punta 90°

🇫🇷 Forets NC de pointage, angle de pointe: 90°

🇨🇳 整体硬质合金 定心钻 2刃-顶角90°



Order Number	Dimension (mm)					UC	Order Number	Dimension (mm)					B0819
	D (h6)	I 1	I 2	L	d2 (h6)			D (h6)	I 1	I 2	L	d2 (h6)	
664 0300 040				40	3	•	955 0300 040				40	3	•
664 0300 060	3	6		60	3	•	955 0300 060	3	6		60	3	•
664 0300 100				100	3	•	955 0300 100				100	3	•
664 0400 050				50	4	•	955 0400 050				50	4	•
664 0400 075	4	8		75	4	•	955 0400 075	4	8		75	4	•
664 0400 100				100	4	•	955 0400 100				100	4	•
664 0500 050				50	5	•	955 0500 050				50	5	•
664 0500 075	5	12		75	5	•	955 0500 075	5	12		75	5	•
664 0500 100				100	5	•	955 0500 100				100	5	•
664 0600 050				50	6	•	955 0600 050				50	6	•
664 0600 075	6	16		75	6	•	955 0600 075	6	16		75	6	•
664 0600 100				100	6	•	955 0600 100				100	6	•
664 0800 064	8	20		64	8	•	955 0800 064	8	20		64	8	•
664 0800 100				100	8	•	955 0800 100				100	8	•
664 1000 070				70	10	•	955 1000 070				70	10	•
664 1000 100	10			100	10	•	955 1000 100	10			100	10	•
664 1000 125				125	10	•	955 1000 125				125	10	•
664 1000 150				150	10	•	955 1000 150				150	10	•
664 1200 075		25		75	12	•	955 1200 075		25		75	12	•
664 1200 100				100	12	•	955 1200 100				100	12	•
664 1200 125	12			125	12	•	955 1200 125	12			125	12	•
664 1200 150				150	12	•	955 1200 150				150	12	•
664 1600 090				90	16	•	955 1600 090				90	16	•
664 1600 125	16	26		125	16	•	955 1600 125	16	26		125	16	•
664 1600 150				150	16	•	955 1600 150				150	16	•

Material Group | Material-Gruppe | Groupe Matière | Gruppo Materiali | 材质主类

N01	N02	N03	K01	K02	P01	P02	P03	M01	M02	S01	S02	S03	H01	H02	O01	O02
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Cutting Parameter

446

NC SPOTTING DRILLS, 120° POINT ANGLE

- VHM NC Positionierungsbohrer Spitzenwinkel: 120°
- Punte pilota NC, con angolo di punta 120°
- Forets NC de pointage, angle de pointe: 120°
- 整体硬质合金 定心钻 2刃-顶角120°



Order Number	Dimension (mm)					UC	Order Number	Dimension (mm)					B0819
	D (h6)	I 1	I 2	L	d2 (h6)			D (h6)	I 1	I 2	L	d2 (h6)	
666 0300 040	3	6		40	3	°	957 0300 040	3	6		40	3	°
666 0300 060				60	3	°	957 0300 060				60	3	°
666 0300 100				100	3	°	957 0300 100				100	3	°
666 0400 050	4	8		50	4	°	957 0400 050	4	8		50	4	°
666 0400 075				75	4	°	957 0400 075				75	4	°
666 0400 100				100	4	°	957 0400 100				100	4	°
666 0500 050	5	12		50	5	°	957 0500 050	5	12		50	5	°
666 0500 075				75	5	°	957 0500 075				75	5	°
666 0500 100				100	5	°	957 0500 100				100	5	°
666 0600 050	6	16		50	6	°	957 0600 050	6	16		50	6	°
666 0600 075				75	6	°	957 0600 075				75	6	°
666 0600 100				100	6	°	957 0600 100				100	6	°
666 0800 064	8	20		64	8	°	957 0800 064	8	20		64	8	°
666 0800 100				100	8	°	957 0800 100				100	8	°
666 1000 070				70	10	°	957 1000 070				70	10	°
666 1000 100	10	25		100	10	°	957 1000 100	10	25		100	10	°
666 1000 125				125	10	°	957 1000 125				125	10	°
666 1000 150				150	10	°	957 1000 150				150	10	°
666 1200 075	12	25		75	12	°	957 1200 075	12	25		75	12	°
666 1200 100				100	12	°	957 1200 100				100	12	°
666 1200 125				125	12	°	957 1200 125				125	12	°
666 1200 150	16	26		150	12	°	957 1200 150	16	26		150	12	°
666 1600 090				90	16	°	957 1600 090				90	16	°
666 1600 125				125	16	°	957 1600 125				125	16	°
666 1600 150				150	16	°	957 1600 150				150	16	°

Material Group | Material-Gruppe | Groupe Matiere | Gruppo Materiali | 材质主类

N01

N02

N03

K01

K02

P01

P02

P03

M01

M02

S01

S02

S03

H01

H02

O01

O02

Cutting Parameter
446

Recommended Cutting Data



Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition



NC Spotting Drills, 60°, 90°, 120° - 662, 664, 666, 953, 955, 957

Spotting	N						K				S	
Working Material	Wrought Aluminium		Cast Aluminium		Copper Alloy		Grey Cast Iron		Ductile Cast Iron		Titanium alloy	
Properties	Si < 9%		Si ≥ 9%		-		-		-		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
3	220	0.055	150	0.053		0.052	110	0.052	60	0.037	40	0.034
4		0.075		0.073		0.071		0.071		0.052		0.045
5		0.097		0.095		0.092		0.090		0.066		0.060
6		0.120		0.118		0.112		0.110		0.082		0.074
8		0.164		0.162		0.152		0.150		0.115		0.105
10		0.210		0.208		0.192		0.185		0.142		0.135
12		0.280		0.274		0.235		0.233		0.190		0.175
16		0.345		0.342		0.312		0.305		0.245		0.235

NC Spotting Drills, 60°, 90°, 120° - 662, 664, 666, 953, 955, 957

Spotting	P						M				S	
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
3	120	0.055	100	0.047	85	0.046	70	0.041	50	0.036	30	0.030
4		0.074		0.064		0.062		0.056		0.050		0.040
5		0.094		0.084		0.080		0.073		0.064		0.054
6		0.115		0.101		0.096		0.088		0.080		0.065
8		0.155		0.140		0.134		0.125		0.110		0.085
10		0.193		0.176		0.166		0.155		0.140		0.120
12		0.248		0.220		0.215		0.200		0.180		0.170
16		0.320		0.288		0.280		0.258		0.242		0.215

NC SPOT
DR ALU
EZ LINE -
DRILL
DR NITCO
DR VA
DR-S
DR MINI
DR-LX
DR 45 SB
DR 60