

Dia.	Shank dia.	Overall length	Flute length
Dc	Ds	L	ℓ

JIS

①

Spiral Fluted Taps
(for blind hole)

②

Spiral Fluted Taps
(for through hole)

③

Spiral Pointed Taps
(for through hole)

④

Hand Taps

⑤

Cemented Carbide Taps

⑥

Roll Taps

⑦

Special Thread Taps
Simple inspection tools

⑧

Pipe Taps

⑨

Thread Mills
Premium Thread Mills

⑩

Dies

⑪

Center Drills
Centering Tools

⑫

Precision Machinery/
Medical Surgical Instruments

NC-SD V

NC Starting Drills for Chamfering (90°), Coated



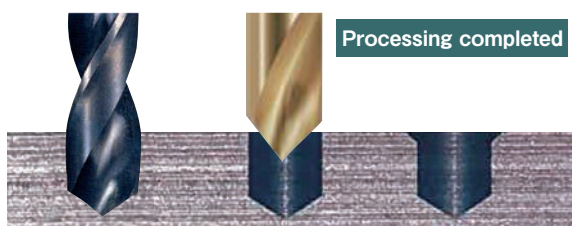
Specification Cutting Speed depending on Materials

HSS-Co	Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
	25~40 (m/min)	25~35 (m/min)	25~30 (m/min)	15~25 (m/min)
Coating	Stainless steels ステンレス鋼	Tool steels 工具鋼	Cast irons 鋳鉄	Aluminum alloy castings アルミ合金鋳物
	5~10 (m/min)	5~10 (m/min)	20~35 (m/min)	60~90 (m/min)

Product Features

After drilling with a general purpose drill, using a NC - SD V (90°) that is larger than the drilled hole diameter makes an excellent chamfer surface finish.

Universal Drill NC-SD V 90°



NC-SD

NC Starting Drills for Center Positioning (125°)



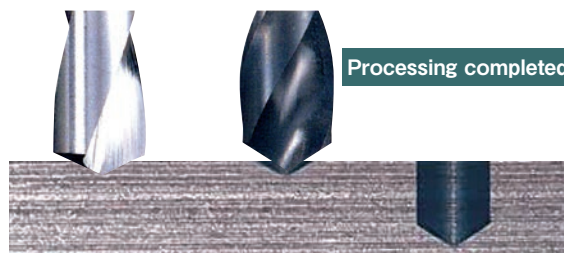
Specification Cutting Speed depending on Materials

HSS-Co	Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼
	20~30 (m/min)	20~30 (m/min)	20~25 (m/min)	10~20 (m/min)
Coating	Stainless steels ステンレス鋼	Tool steels 工具鋼	Cast irons 鋳鉄	Aluminum alloy castings アルミ合金鋳物
	5~10 (m/min)	5~10 (m/min)	15~30 (m/min)	50~70 (m/min)

Product Features

The NC starting drill with a 125° drill point is a positioning drill dedicated to centering to increase hole positioning accuracy. The NC starting drill with a 125° drill is selected to be slightly larger than the tip angle of the general-purpose drill. This creates a highly accurate hole positioning without causing chipping on the cutting edge of the drill.

NC-SD 125° Universal Drill



Difference between starting drill and center hole drill

It is also possible to use a center hole drill for positioning. If the center hole drill is used first and is allowed to go too deep, there is a chance the general purpose drill will hit the hole diameter instead of the center of the hole location. This can cause the drills cutting edge to chip.



Recommended cutting conditions.

Unit: min⁻¹

Workpiece Material	Cutting Speed (m/min)	Diameter (mm)									
		φ 3	φ 4	φ 5	φ 6	φ 8	φ 10	φ 12	φ 16	φ 20	φ 25
SS400	25 ~ 40	3400	2600	2100	1700	1300	1050	850	640	510	410
S50C	25 ~ 32	3000	2300	1800	1500	1150	900	750	560	450	360
FC250	20 ~ 35	2900	2200	1750	1450	1100	860	720	540	430	350
SCM440	15 ~ 25	2200	1600	1300	1100	800	640	540	400	320	260
SUS304	7 ~ 12	1100	800	640	540	400	320	270	200	160	130
SKD61	8 ~ 15	1200	880	700	590	440	360	300	220	180	150
SKD11	7 ~ 12	1100	800	640	540	400	320	270	200	160	130
AC4C	60 ~ 90	8000	6000	4800	4000	3000	2400	2000	1500	1200	1000

* Standard feed rates (mm / rev) should be 1% to 3% of the drill diameter. In the case of machining on a curved surface or an inclined surface, please set a consistent feed rate of 0.1 mm / rev.

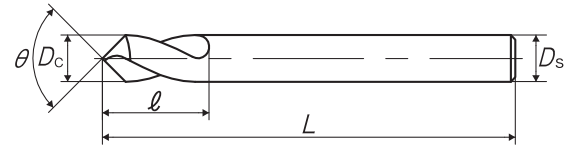
Dia.	Shank dia.	Overall length	Flute length
Dc	Ds	L	ℓ

11

JIS

NC-SD V NC Starting Drills for Chamfering (90°), Coated

TYPE: 1

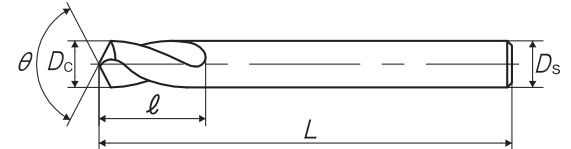


Segment : 56

Size Dc × θ	Code	Dc (mm)	Ds (mm)	L (mm)	ℓ (mm)	TYPE	MSRP
3 × 90°	VCS-D3.0Q	3	3	46	10	1	¥ 2,650
4 × 90°	VCS-D4.0Q	4	4	55	12	1	¥ 3,140
5 × 90°	VCS-D5.0Q	5	5	62	13	1	¥ 3,410
6 × 90°	VCS-D6.0Q	6	6	66	15	1	¥ 3,600
8 × 90°	VCS-D8.0Q	8	8	79	20	1	¥ 4,770
10 × 90°	VCS-D010Q	10	10	89	23	1	¥ 6,530
12 × 90°	VCS-D012Q	12	12	102	26	1	¥ 9,760
16 × 90°	VCS-D016Q	16	16	115	32	1	¥ 13,100
20 × 90°	VCS-D020Q	20	20	131	40	1	¥ 18,400
25 × 90°	VCS-D025Q	25	25	151	50	1	¥ 28,900

NC-SD NC Starting Drills for Center Positioning (125°)

TYPE: 1



Segment : 56

Size Dc × θ	Code	Dc (mm)	Ds (mm)	L (mm)	ℓ (mm)	TYPE	MSRP
3 × 125°	CS-D3.0	3	3	46	10	1	¥ 2,050
4 × 125°	CS-D4.0	4	4	55	12	1	¥ 2,300
5 × 125°	CS-D5.0	5	5	62	13	1	¥ 2,600
6 × 125°	CS-D6.0	6	6	66	15	1	¥ 2,780
8 × 125°	CS-D8.0	8	8	79	20	1	¥ 3,430
10 × 125°	CS-D010	10	10	89	23	1	¥ 5,220
12 × 125°	CS-D012	12	12	102	26	1	¥ 7,810
16 × 125°	CS-D016	16	16	115	32	1	¥ 9,570
20 × 125°	CS-D020	20	20	131	40	1	¥ 13,800
25 × 125°	CS-D025	25	25	151	50	1	¥ 20,200

Spiral Fluted Taps
(for blind hole) ①Spiral Fluted Taps
(for through hole) ②Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented
Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪Precision Machinery/
Medical Surgical Instruments ⑫