Micro Spot Drill >>>

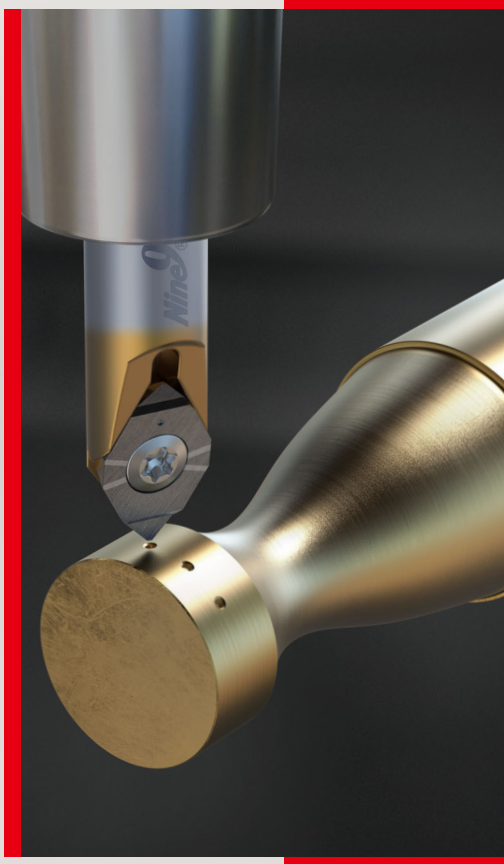
90° / 120° / 142°

0.1 & 0.2mm

It produces a consistent surface for micro drill successfully to enter the workpiece.

P M K N H

MCC Minimum Consumable Cutting Indicator 5%

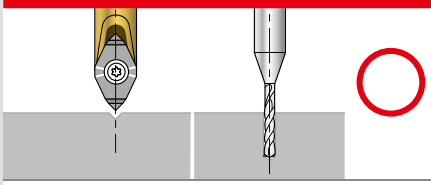
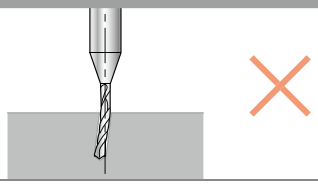


Features >

One Holder Supports The Entire X060 Series Insert.

Each Insert Has 2 Cutting Edges.

- Micro spot drill geometries are designed to optimize rigidity and accuracy with a point angle to guide micro drill towards the hole's center line.
- Carbide insert can stand very long tool life.
- It produces a consistent surface for micro drill to enter the workpiece especially for round, angled or curved surfaces.

Spotting + Drilling	Without Spotting
	
• Better position accuracy and diameter tolerance.	• Resulted off-center drilling, poor hole quality and reduced tool life.

0.1 and 0.2mm
Micro Spot Drill 90°, 120° & 142°

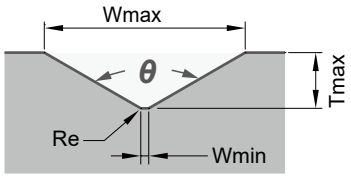
90°
120°
142°

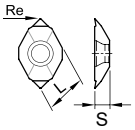
Inserts >>

NC2032: • For all kinds of steel from < 40 HRC, carbon steel, alloy steel,and cast iron.

NC2035: • ALDURA coating, reduces heat and tool wear.
• For steel with heat treatment up to 56 HRC.

XP9001: • For non-ferrous metal, aluminum, brass, copper, plastic, acrylic.

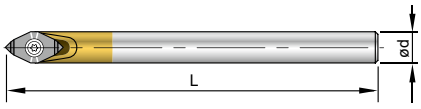


Angle	Code	Parts No.		Coating	Grade		Dimensions L	Dimensions S	Dimensions Re	Wmin.	Wmax.	Tmax.
90°	01X0082	X060A90W010R	NC2032	TiAlN	K20F		6	2.05	0.02	0.1	1.1	0.5
	01X0221		NC2035	ALDURA								
	01X0220		XP9001	Uncoated								
90°	01X0207	*X060A90W020R	NC2032	TiAlN	K20F				0.04	0.2	2.2	1.0
	01X0208		NC2035	ALDURA								
	01X0209		XP9001	Uncoated								
120°	01X0222	X060A120W010R	NC2032	TiAlN	K20F				0.02	0.1	2.53	0.7
142°	01X0223	X060A142W010R	NC2032	TiAlN	K20F				0.02	0.1	2.42	0.4

* X060A90W020R is also good for engraving.

Holder >>

• One holder supports the entire X060 series of carbide inserts.



Code	Parts No.	Shank	Ød	L	Screw	Key
69X001	00-99619-X060-06	Steel	6	40	*NS-22044 0.9Nm	NK-T7
69X002	00-99619-X060-06L	Carbide	6	60		
69X003	00-99619-X060-06LS	Steel	6			
69X004	00-99619-X060-06XL	Carbide	6	100		
69X005	00-99619-X060-08	Steel	8	60		

*Torque screwdriver is recommended.

Cutting Data >>

Workpiece Material		S (r.p.m)	f (mm/rev.) X060A90W010R	f (mm/rev.) X060A90W020R	f (mm/rev.) X060A120W010R X060A142W010R	Grade of Insert
P	Carbon steel C<0.3%	8000 ~ 40000	0.002 ~ 0.012	0.002 ~ 0.015	0.001 ~ 0.015	NC2032
P	Carbon steel C>0.3%		0.002 ~ 0.010	0.002 ~ 0.012	0.001 ~ 0.012	NC2032
P	Alloy steel		0.002 ~ 0.010	0.002 ~ 0.010	0.001 ~ 0.010	NC2032, NC2035
M	Stainless steel		0.002 ~ 0.008	0.002 ~ 0.010	0.001 ~ 0.010	NC2032
K	Casting iron		0.002 ~ 0.010	0.002 ~ 0.010	0.001 ~ 0.010	NC2032
N	Non-ferrous metal (Al, Cu)		0.002 ~ 0.015	0.002 ~ 0.020	-	XP9001
H	Hardened steel up 56 HRC		0.002 ~ 0.006	0.002 ~ 0.006	-	NC2035