



# Micro Spot Drill >>

90° / 120° / 142°

0.1 & 0.2mm (0.0039" & 0.0079")

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



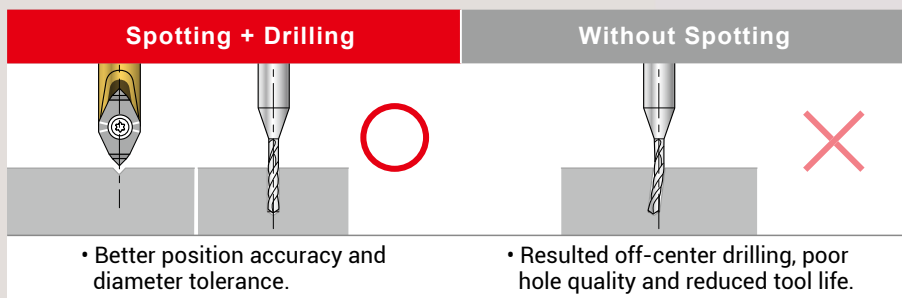
► One Holder Supports The Entire X060 Series Insert.



## Features >

► 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.

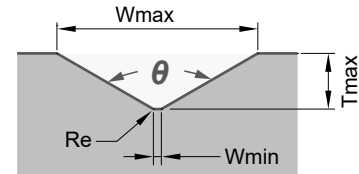


# 0.0039" & 0.0079" Micro Spot Drill 90°, 120° & 142°



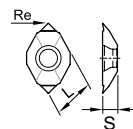
## ► Inserts >>

- 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.



Micro Spot Drill

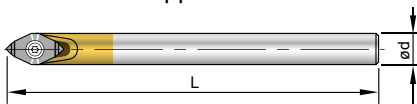
Angle	Parts No.	Coating	Grade	Dimensions			Wmin.	Wmax.	Tmax.	
				L	S	Re				
90°	X060A90W010R	NC2032	TiAlN	6 (0.236")	2.05 (0.081")	0.02 (0.0008")	0.1 (0.004")	1.1 (0.043")	0.5 (0.020")	
		NC2035	ALDURA							K20F
		XP9001	Uncoated							
90°	*X060A90W020R	NC2032	TiAlN	6 (0.236")	2.05 (0.081")	0.04 (0.0015")	0.2 (0.008")	2.2 (0.087")	1.0 (0.040")	
		NC2035	ALDURA							K20F
		XP9001	Uncoated							
<b>NEW</b> 120°	X060A120W010R	NC2032	TiAlN			0.02 (0.0008")	0.1 (0.004")	2.53 (0.100")	0.7 (0.028")	
<b>NEW</b> 142°	X060A142W010R	NC2032	TiAlN			0.02 (0.0008")	0.1 (0.004")	2.42 (0.095")	0.4 (0.016")	



\* X060A90W020R is also good for engraving.

## ► Holder >>

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



Parts No.	Shank	Ød	L	Screw	Key
99619-X060-06	Steel		40 (1.575")		
99619-X060-06L	Carbide	6 (0.236")	60 (2.362")	NS-22044 0.9Nm	NK-T7
99619-X060-06LS	Steel				
99619-X060-06XL	Carbide				
<b>NEW</b> 99619-X060-08	Steel	8 (0.315")	60 (2.362")		

## ► Cutting Data >>

Workpiece Material	S (r.p.m)	IPR (inch/rev.)			Grade of Insert
		X060A90W010R	X060A90W020R	X060A120W010R X060A142W010R	
<b>P</b> Carbon steel	8000 ~ 40000	0.0008 ~ 0.0005	0.0008 ~ 0.0006	0.0008 ~ 0.0006	NC2032
Alloy steel		0.0008 ~ 0.0004	0.0008 ~ 0.0004	0.0008 ~ 0.0004	NC2032, NC2035
<b>M</b> Stainless steel		0.0008 ~ 0.0003	0.0008 ~ 0.0004	0.0008 ~ 0.0004	NC2032
<b>K</b> Cast iron		0.0008 ~ 0.0004	0.0008 ~ 0.0004	0.0008 ~ 0.0004	NC2032
<b>N</b> Non-ferrous metal		0.0008 ~ 0.0006	0.0008 ~ 0.0008	-	XP9001
<b>H</b> Hardened steel < HRC56		0.0008 ~ 0.0002	0.0008 ~ 0.0002	-	NC2035