

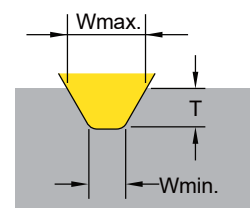
# Engraving Tool 45°

V045



## ▶ Inserts >>

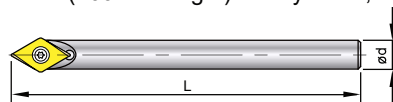
- NC2032:**
  - Long tool life
  - For all kinds of steel from 30~50 HRC, carbon steel, alloy steel, and cast iron.
- NC2071:**
  - Strong edge on chip groove best suited for min. DOC 0.2 mm
  - Universal grade for all kinds of steel <30 HRC, non-ferrous metal and stainless steel.
- NC9031:**
  - Fully positive ground rake angle, very sharp edge for shallow engraving.
  - For non-ferrous metal such as aluminum, brass, copper, titanium, plastic and acrylic.



Angle	Code	Parts No.	Coating	Grade	Re	Dimensions			W		T	
						L	S	Re	Wmin.	Wmax.	Tmin.	Tmax.
45°	0104501	NC2071	TiN	K20F	0.2	6.35	2.0	0.2	0.65	2.1	0.20	2.0
	0104502	V04506T1W06	TiAlN						0.65		0.20	
	0104504	NC9031	TiN						0.45		0.05	

## ▶ Holder >>

- Carbide shank holders designed for shrink-fit holder, engraving machines, high speed cutting.
- XL (100mm length) is only for Al, Al-alloy cutting, unbalanced <0.6gm.



Angle	Code	Parts No.	Ød	L	Screw	Key
45°	691001	00-99619-V045-06	6	40	*NS-22044 0.9Nm	NK-T7
	♦ 691002	00-99619-V045-06L		60		
	♦ 691003	00-99619-V045-06XL		100		

Note: DC Slim chuck, see page 6-2.

\*Torque screwdriver is recommended, see page 6-4.

## ▶ Starter Kit >> V045 & V060

Angle	Code	Parts No.	Shank Ø	Insert included	Content
45°	691201-4501	00-99619-V045-03K-71	Ø6 99619-V045-06	V04506T1W06-NC2071	1 x Holder 1 x T7 Key 3 x inserts
	691201-4502	00-99619-V045-03K-32		V04506T1W06-NC2032	
	691201-4504	00-99619-V045-03K-31		V04506T1W06-NC9031	
60°	692201-6001	00-99619-V060-03K-71	Ø6 99619-V060-06	V06006T1W06-NC2071	
	692201-6002	00-99619-V060-03K-32		V06006T1W06-NC2032	
	692201-6003	00-99619-V060-03K-35		V06006T1W06-NC2035	
	692201-6004	00-99619-V060-03K-31		V06006T1W06-NC9031	