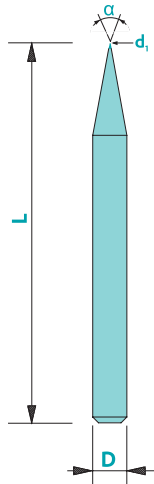
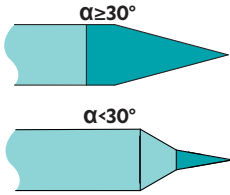
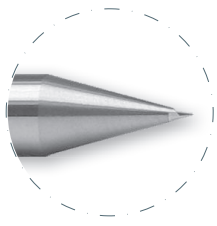


## Engraving mill V-shape - reinforced



Material	n [tr/min]	Ap	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm <sup>2</sup>	25 - 40'000	0.05 - 0.40	□	■	Tisi (BQ)
Steel > 700 N/mm <sup>2</sup>	20 - 40'000	0.05 - 0.30	-	■	Tisi (BQ)
Stainless steel	20 - 30'000	0.05 - 0.30	-	□	Tisi (BQ)
Cast iron	25 - 40'000	0.05 - 0.40	□	■	Tisi (BQ)
Copper	20 - 40'000	0.05 - 0.40	□	■	Solo (DA)
Brass - Bronze	25 - 40'000	0.05 - 0.40	■	■	Solo (DA)
Aluminium	25 - 40'000	0.05 - 0.50	□	■	Solo (DA)
Gold - Silver	20 - 40'000	0.05 - 0.40	■	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	□	■	-
Titanium	25 - 40'000	0.05 - 0.40	□	■	RICO (ZB)

not adapted - adapted □ highly adapted ■

Tolerances d<sub>1</sub>: +/- 0.01  
D: h5

Article number: 119-4a##d#.##

Example: End mill ref. 119-4 with 25° angle and tip diameter 0.05 mm: 119-4a25d0.05



α*	d <sub>1</sub> **	D	L		
				Uncoat.	Nemo*
15-45°	0.02-0.09	3	33	▲	▲
15-45°	0.10-0.30	3	33	▲	▲
50-140°	0.02-0.09	3	33	▲	▲
50-140°	0.10-0.30	3	33	▲	▲

\*Available angles: every 5° between 15° and 45°; every 10° between 50° and 140°

\*\*Available radius: every 0.01 mm between 0.02 and 0.09 mm; every 0.05 mm between 0.10 and 0.30 mm

Other dimensions (angle, radius, shank) upon request

\* Prices for other coatings: contact us!

To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated (see page 308)

0.02-0.30

λ 0°

**CARB**