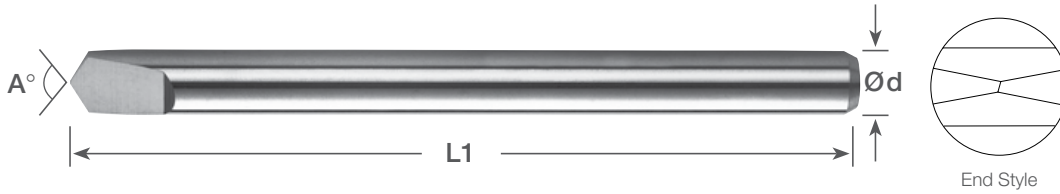


SPADE

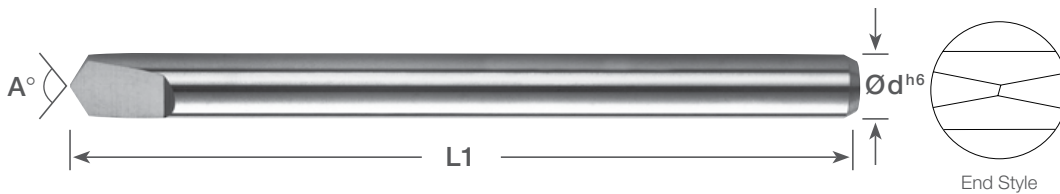
MICRO ENGRAVING TOOLS FOR SPOTTING OR CHAMFERING

30° - 118° ANGLES
Mirror Surface Finishes
Sub Micron Grain Carbide



1/8" Shank

Uncoated		A° ^{+1°} _{-1°}	Dimensions (in)	
Part Number	Stock		Ød	L1
SPD1250-030	●	30°	1/8	1 1/2
SPD1250-045	●	45°	1/8	1 1/2
SPD1250-060	●	60°	1/8	1 1/2
SPD1250-090	●	90°	1/8	1 1/2
SPD1250-118	●	118°	1/8	1 1/2



3.00mm Shank

Uncoated		A° ^{+1°} _{-1°}	Dimensions (mm)	
Part Number	Stock		Ød ^{h6}	L1
SPD1181-030	●	30°	3	38
SPD1181-045	●	45°	3	38
SPD1181-060	●	60°	3	38
SPD1181-090	●	90°	3	38
SPD1181-118	●	118°	3	38

- L SOLID TOOLS
- DRILLS
- END MILLS
- ROUTERS
- THREAD MILLS & TAPS
- ENGRAVERS
- BORING BARS
- REAMERS
- TECHNICAL

SERIES SPD WORKPIECE MATERIAL																
Coating	P	P	H	H	M	K	N	N	N	N	N	N	N	S	S	
	Steel ~30HRC	Steel 30~40HRC	Hardened Steel ~55HRC	Hardened Steel ~68HRC	Stainless Steel	Cast Iron	Aluminum	Graphite	Copper Alloy	Brass	CFRP	Plastic	Thermoset Plastic	High Density Plastic	Nickel / Cobalt	Titanium Alloy
Uncoated	★	★	☆	☆	☆		☆	☆	☆	☆	☆				☆	☆

★ : Priority ☆ : Applicable Materials

Symbol Descriptions Page L3