

# 4 Flutes CrN COAT for Copper Electrode Milling



Size  $\phi 3 \sim \phi 12$

# CRN-ES4000



Material Applications (★ Highly Recommended ● Recommended ○ Suggested)

Work Material																	
Carbon Steels S45C S55C	Alloy Steels SK / SCM SUS	Prehardened Steels NAK HPM	Hardened Steels					Cast Iron	Aluminum Alloys	Graphite	Copper	Plastics	Glass Filled Plastics	Titanium Alloys	Heat Resistant Alloys	Cemented Carbide	Hard Brittle (Non-Metallic) Materials
			~50HRC	~55HRC	~60HRC	~65HRC	~70HRC										
											★	○					

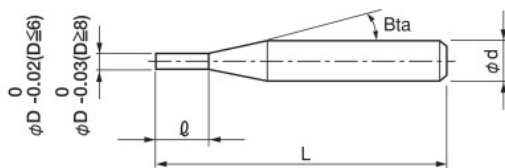
## Features

CrN COAT offers longer tool life.

Special geometry designed for Copper offers excellent milling performance.

Refer to page 186 for 2 flute CRN-ES.

Diameter Tolerance:  $0/-0.02(D \leq 6)$ ,  $0/-0.03(D \geq 8)$



The shank taper angle shown is not an exact value and to avoid contact with the work piece, we recommend the user controls the precise value of this angle. Shank taper angle should not make contact with the work piece.

Total 10 models

Unit (mm)

Model Number	Outside Diameter $\phi D$	Length of Cut $\ell$	Shank Taper Angle $B_{ta}$	Overall Length $L$	Shank Diameter $\phi d$	Suggested Retail Price ¥
<b>CRN-ES 4030-0900</b>	3	9	11°	50	6	4,620
<b>CRN-ES 4030-1200</b>		12	11°	55	6	6,820
<b>CRN-ES 4040-1200</b>	4	12	11°	50	6	4,950
<b>CRN-ES 4040-1600</b>		16	11°	55	6	7,150
<b>CRN-ES 4050-1500</b>	5	15	11°	55	6	5,060
<b>CRN-ES 4060-1800</b>	6	18	—	60	6	5,390
<b>CRN-ES 4060-2400</b>		24	—	65	6	8,250
<b>CRN-ES 4080-2400</b>	8	24	—	80	8	9,480
<b>CRN-ES 4100-3000</b>	10	30	—	100	10	12,720
<b>CRN-ES 4120-3600</b>	12	36	—	100	12	15,840