



Size  $\phi 0.2 \sim \phi 6$

# DCES2000

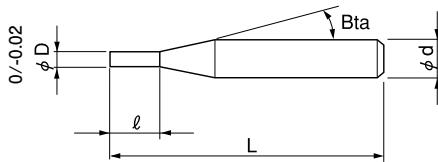


Material Applications (☆ Highly Recommended ● Recommended ○ Suggested)

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
			~55HRC	~60HRC	~70HRC										
							○	☆	○	○	●				○

**Features**

DIA COAT 2 flute square for Graphite electrodes.  
New diamond coating, with a highly adhesive base layer, offers excellent wear resistance and longer tool life.  
Refer to page 102 for 4 flute DCES.



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 8 models

Unit (mm)

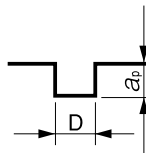
Model Number	Outside Diameter $\phi D$	Length of Cut $\ell$	Shank Taper Angle $Bta$	Overall Length $L$	Shank Diameter $\phi d$	Price (¥)
DCES 2002-0060	0.2	0.6	16°	45	4	17,000
DCES 2005-0150	0.5	1.5	16°	45	4	14,500
DCES 2010-0300	1	3	16°	45	4	14,500
DCES 2015-0450	1.5	4.5	16°	45	4	14,500
DCES 2020-0600	2	6	16°	45	4	14,500
DCES 2030-0900	3	9	16°	45	6	17,000
DCES 2040-1200	4	12	16°	50	6	18,100
DCES 2060-1800	6	18	—	60	6	19,300

## Milling Conditions for DCES (2 Flutes)

WORK MATERIAL			GRAPHITE				
Model Number	Outside Diameter (mm)	Length of Cut (mm)	Spindle Speed (min <sup>-1</sup> )	Feed Rate mm/min	Side Milling		Slotting
					$a_p$ Axial Depth (mm)	$a_e$ Radial Depth (mm)	$a_p$ Axial Depth (mm)
2002-0060	0.2	0.6	30,000	1,000	0.6	0.01	0.006
2005-0150	0.5	1.5	30,000	1,100	1.5	0.025	0.02
2010-0300	1	3	28,000	1,300	3	0.05	0.05
2015-0450	1.5	4.5	25,000	1,500	4.5	0.075	0.12
2020-0600	2	6	24,000	1,800	6	0.1	0.15
2030-0900	3	9	25,000	2,600	9	0.15	0.3
2040-1200	4	12	19,000	2,000	12	0.24	0.6
2060-1800	6	18	13,000	1,500	18	0.36	1.2

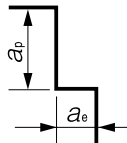
### Slotting

$a_p$  : Axial Depth (mm)  
D : Outside Diameter (mm)



### Side Milling

$a_p$  : Axial Depth (mm)  
 $a_e$  : Radial Depth (mm)



### Note:

- Use a milling machine dedicated for Graphite.
- Recommend air blow for Graphite.

