

PaNacea-ECO **NEW**
Solid Carbide End Mills

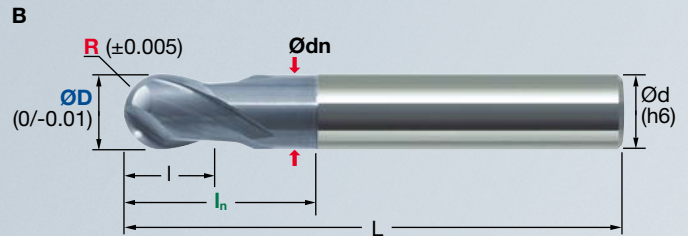
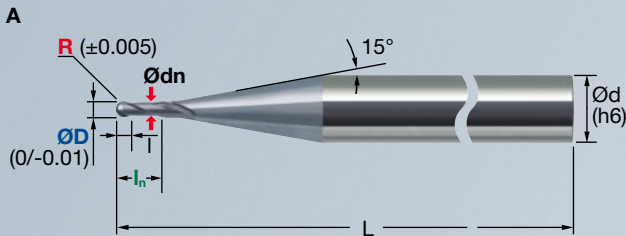
No. 434



New PN Coating
High adhesion and wear resistance
• Short Length - $l_n \sim 2.5 \times \text{ØD}$

HECOB-2-PN | PaNacea **ECO**

V max High Speed **▽** Roughing **▽▽** Finishing **HRC** 50



Carbide Micro Grain **PN** PaNacea Coating **Rake Angle** Positive

D	0 / -0.01 mm
R	± 0.005 mm
ød	h6
Helix angle	30°

ID Code	Item Code	Z	ØD	R	l	ln	Ødn	L	ød	Type
EL057	HECOB-2010-PN	2	1	0.5	1	2.5	0.95	40	4	A
EL058	HECOB-2020-PN		2	5	1.95	45	6			
EL059	HECOB-2030-PN		3	7.5	2.9					
EL060	HECOB-2040-PN		4	10	3.9					
EL061	HECOB-2050-PN		5	12.5	4.9					
EL062	HECOB-2060-PN		6	15	5.9					
EL063	HECOB-2080-PN		8	20	7.9			60	8	B
EL064	HECOB-2100-PN		10	25	9.9	65	10			
EL065	HECOB-2120-PN		12	30	11.9	75	12			

Features PaNacea ECO

Oxidation temp. °C vs Coating Hardness (Hv)

Friction coefficient vs Coating Hardness (Hv)

TiAlN

1000°C / 5 min.

2 µm

PaNacea (AlCrN)

1000°C / 540 min.

Oxidation Layer
2 µm