



# PCD Endmill

## PolyCrystalline Diamond

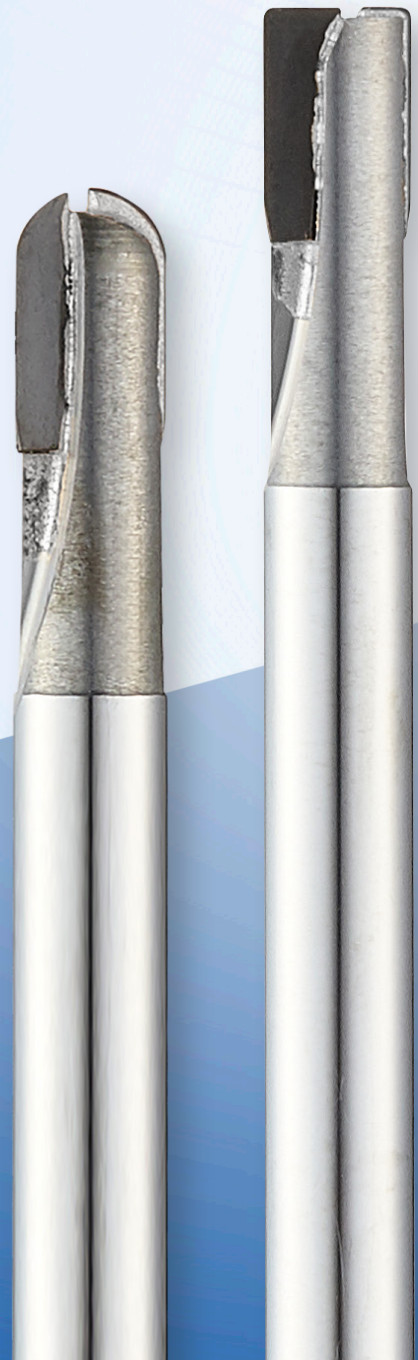
*For Non-ferrous, Aluminum alloy steel*

Excellent performance on non-ferrous steel by treating the high rake angle and cutting edge

Reduce or eliminate processing burr due to high quality diamond cutting edge

Excellent work surface with stable processing quality

Excellent stability due to tight tool tolerances



# PCD ENDMILL



## Features

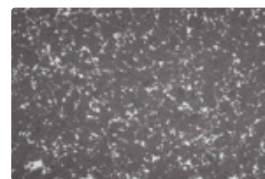
- Guaranteed long tools life, high level of productivity due to high quality diamond cutting edge(s)

### Cutting edge

- Separated raw material by geometry to maximize tool characteristics and to increase versatility

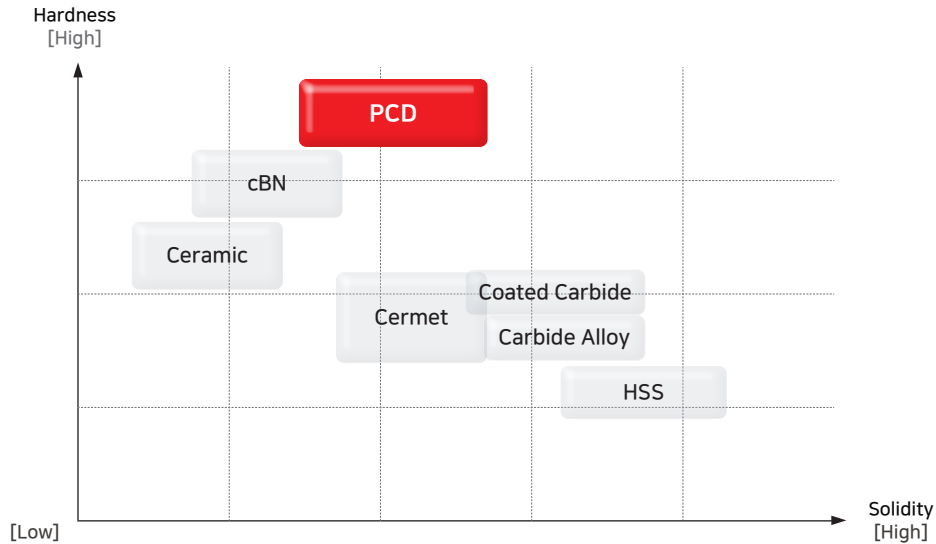


### PCD material



- 10 $\mu$ m diamond particle used (Optimized for Aluminum, Plastic & other Non-ferrous materials)
- Extreme chipping resistance with excellent rigidity

## PCD Tool Materials hardness and solidity



## EDP No. System

**ZP R 9 0 2 A 016 030**

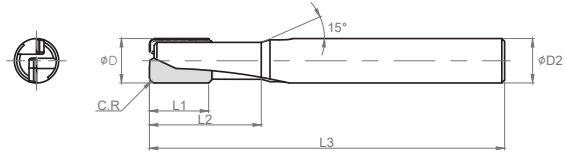
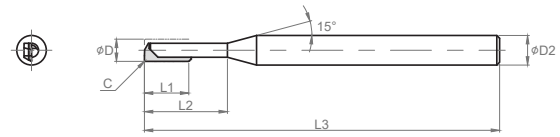
Section	Geometry	Grade	Length, Shank Type	FLUTE	Appearance	Corner Radius	Corner R
PCD endmil	B : Ball	9 : Grade	0 : Neck	1 : 1Flute	A : Inch	006 : 3/32" / 008 : 1/8"	010 : .010"
	E : Squarel			2 : 2Flute		012 : 3/16" / 016 : 1/4"	015 : .015"
	R : Radius					024 : 3/8" / 034 : 1/2"	030 : .030"

## Contents

Section		EDP. No	Geometry	Type	Diameter		Page
Type	Flutes				Min	Max	
Flat	2F	ZPE901(2)		1~2 FLUTES SQUARE ENDMILL	3/32"	1/2"	4
Ball	2F	ZPB901(2)		1~2 FLUTES BALL ENDMILL	3/32"	1/4"	5
Radius	2F	ZPR901(2)		1~2 FLUTES RADIUS ENDMILL	3/32"	1/2"	6
Recommended Cutting Condition							7

# ZPE901(2)

1~2 FLUTE SQUARE PCD ENDMILL



## TOLERANCE

D		SHANK DIA.
~ 1/4"	0 ~ -0.012	h6
3/8"~1/2"	0 ~ -0.015	



EDP No.	Description (mm)						
	D	L1	L2	L3	D2	Z	Stock
ZPE901A006	3/32"	3/16"	3/8"	1-1/2"	1/8"	1	○
ZPE901A008	1/8"	1/4"	1/2"	1-1/2"	1/8"	1	○
ZPE902A012	3/16"	1/4"	5/8"	2"	3/16"	2	●
ZPE902A016	1/4"	1/4"	3/4"	2-1/2"	1/4"	2	●
ZPE902A024	3/8"	1/4"	15/16"	2-1/2"	3/8"	2	●
ZPE902A032	1/2"	1/4"	1"	3"	1/2"	2	●

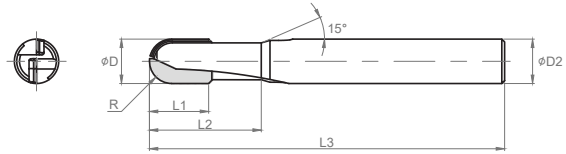
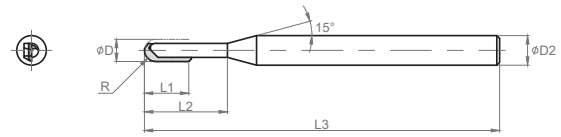
## Applicable Working Material

Carbon Steel ~HB225	Alloy Steel HB225~325	Pre-hardened Steel HRc30~50	Aluminum Alloy	Aluminum Casting	Magnesium & bronze Alloy	Graphite	Plastic
			◎	◎	◎	◎	○

○ : Good ◎ : Excellent

# ZPB901(2)

1~2 FLUTE BALL PCD ENDMILL



### TOLERANCE

D	SHANK DIA.
~ 1/4"	0~-0.00047 h6



EDP No.	Description (mm)							
	D	R	L1	L2	L3	D2	Z	Stock
ZPB901A006	3/32"	.0468"	3/16"	3/8"	1-1/2"	1/8"	1	○
ZPB901A008	1/8"	.0625"	1/4"	1/2"	1-1/2"	1/8"	1	○
ZPB902A012	3/16"	.0937"	1/4"	5/8"	2"	3/16"	2	●
ZPB902A016	1/4"	.125"	5/16"	3/4"	2-1/2"	1/4"	2	●

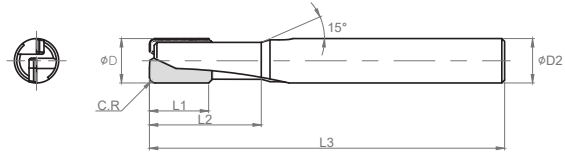
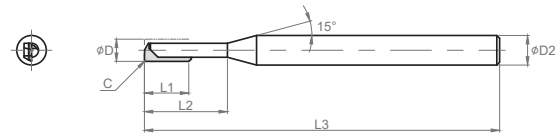
### Applicable Working Material

Carbon Steel ~HB225	Alloy Steel HB225~325	Pre-hardened Steel HRc30~50	Aluminum Alloy	Aluminum Casting	Magnesium & bronze Alloy	Graphite	Plastic
			◎	◎	◎	◎	○

○ : Good ◎ : Excellent

# ZPR901(2)

1~2 FLUTE RADIUS PCD ENDMILL



■ TOLERANCE

D		SHANK DIA.
~ 1/4"	0~-0.00047	h6
3/8"~1/2"	0~-0.00059	



EDP No.	Description (mm)							
	D	C.R	L1	L2	L3	D2	Z	Stock
ZPR901A006010	3/32"	.010"	3/16"	3/8"	1-1/2"	1/8"	1	○
ZPR901A008015	1/8"	.015"	1/4"	1/2"	1-1/2"	1/8"	1	○
ZPR902A012015	3/16"	.015"	1/4"	5/8"	2"	3/16"	2	●
ZPR902A016030	1/4"	.030"	1/4"	3/4"	2-1/2"	1/4"	2	●
ZPR902A024030	3/8"	.030"	1/4"	15/16"	2-1/2"	3/8"	2	●
ZPR902A032030	1/2"	.030"	1/4"	1"	3"	1/2"	2	●

■ Applicable Working Material

Carbon Steel ~HB225	Alloy Steel HB225~325	Pre-hardened Steel HRc30~50	Aluminum Alloy	Aluminum Casting	Magnesium & bronze Alloy	Graphite	Plastic
			◎	◎	◎	◎	○

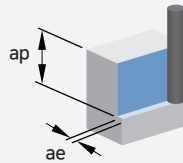
○ : Good ◎ : Excellent

## ZPE901(2), ZPR901(2) SERIES

Workpiece Cutting diameter (mm)	Aluminum alloy & casting		Magnesium & bronze alloy		Graphite	
	Sfm	IPT	Sfm	IPT	Sfm	IPT
3/32"	600	0.00063	600	0.00063	500	0.00079
1/8"	700	0.0009	700	0.0009	600	0.0011
3/16"	1000	0.00059	1000	0.00059	800	0.00074
1/4"	1200	0.00077	1200	0.00077	900	0.00099
3/8"	1600	0.00099	1600	0.00099	1200	0.00131
1/2"	2000	0.00131	2000	0.00131	1300	0.00197

Feed Table

-  $ap = 1.5xD$  /  $ae = 0.15xD$

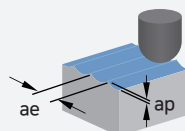


## ZPB901(2) SERIES

Workpiece Cutting diameter (mm)	Aluminum alloy & casting		Magnesium & bronze alloy		Graphite	
	Sfm	IPT	Sfm	IPT	Sfm	IPT
3/32"	800	0.00053	800	0.00053	700	0.00061
1/8"	900	0.00071	900	0.00071	800	0.00082
3/16"	1300	0.00046	1300	0.00046	1100	0.00054
1/4"	1600	0.00058	1600	0.00058	1300	0.00069

Feed Table

-  $ap = 0.45xD$  /  $ae = 0.15xD$





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