

Your specials are our standards.

당신의 스페셜은 우리의 표준품입니다.



# **LONG** Life **HIGH** **Performance**

최상의 표면조도를 위한

## **LASER** 가공!

Laser machining for ultimate surface



**Polycrystalline  
diamond**

우수한 내마모성과 고속 절삭을 위한

# **PCD ENDMILL**

For excellent wear resistance and high-speed cutting

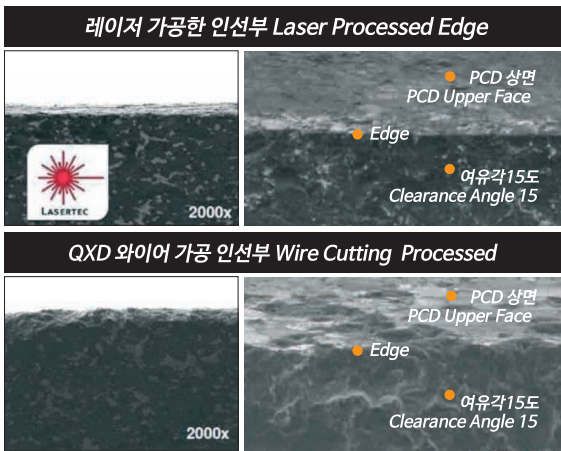


**지금까지의 혁신의 의미를 바꾼다 !**  
 This will change the meaning of innovation !



**레이저 가공의 장점 Advantages of Laser cutting**

- 인선부의 Sharpness를 5 $\mu$ m이하로 가공이 가능하며, 정밀한 R형상 구현에 최고의 성능을 발휘합니다.
- 피삭재에 가해지는 데미지는 최소화하고 가공성은 극대화 함으로써, 가공물의 조도가 우수합니다.
- 칩 브레이커 가공이 가능하며, 칩 말림을 방지하고 칩으로 인한 악영향을 최소화합니다.
- The sharpness of the edge can be achieved below 5 $\mu$ m, minimizing damage to the work material during machining, and improve cutting force to maximize machining performance and surface roughness.
- Laser processing can be applied in  $\mu$ m units, and 5-axis machining can produce and process various shapes. Also, it has the best performance with precise R shape.
- Chip breaker processing method can only be produced by laser processing, preventing chip load in advance, and minimizing bad effects on the work materials caused by chip.



**알루미늄 합금 및 비철 금속 전용 엔드밀**

Endmills for aluminum alloys and non-ferrous metals

**PCD 엔드밀 시리즈**

**PCD (Polycrystalline diamond) EndMill series**

흑연, 알루미늄 및 알루미늄 합금 등 비철, 비금속 전용

Endmills for Graphite, Aluminum, AL alloy, non-ferrous and non-metallic materials.

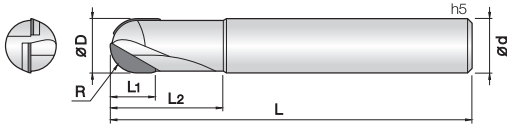
알루미늄 합금이나 동 합금 가공시 가공 정밀도가 매우 우수하고, 경면과 같은 표면조도를 얻을 수 있습니다.

PCD는 경도가 매우 높아 세라믹이나 초경합금의 절삭이 가능하며, 열전도율 또한 우수해 Ti합금 등의 절삭시에도 탁월한 성능을 발휘합니다.

Using PCD(Polycrystalline Diamond) tool to cut aluminum or copper alloys, the machining accuracy is excellent, and surface roughness such as mirror finishing can be achieved.

PCD has very high hardness and can also be applied to cutting ceramic or ultra-hard alloy. Also, the thermal conductivity is very high, indicating suitability cutting titanium alloy.





**알루미늄합금및비철금속전용PCD 엔드밀**

- LASER 가공으로 날부 인선을 5 $\mu$ m이하로 구현하여 탁월한 절삭성능과 피삭재의 표면 조도가 뛰어납니다.
- 뛰어난 동심도로 제작되어 정밀가공이 가능합니다.
- 인선부를 폴리싱 처리하여 절삭 칩의 배출이 원활합니다.

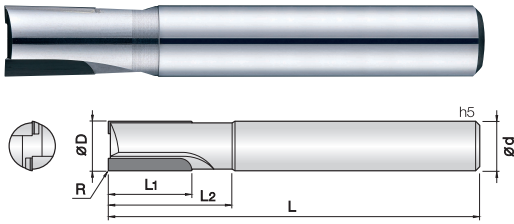
**PCD endmills for aluminum alloys and non-ferrous metals.**

- Laser processing enables the blade to be less than 5 $\mu$ m, providing excellent cutting performance and surface finish of the workpiece.
- Designed with excellent concentricity for precision machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



D Size	D Tolerance
Ø 3 ~ 6	+0 ~ -0.012mm
Ø 8 ~ 12	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm
Ø 16	+0 ~ -0.022mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고	Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고
1BPCD 030 080 S06	1.5R X 3	2.3	8	50	6								
1BPCD 030 120 S06	1.5R X 3	2.3	12	50	6								
1BPCD 030 180 S06	1.5R X 3	2.3	18	60	6								
2BPCD 040 100 S06	2R X 4	3.3	10	50	6								
2BPCD 040 120 S06	2R X 4	3.3	12	50	6								
2BPCD 040 180 S06	2R X 4	3.3	18	60	6								
2BPCD 060 120 S06	3R X 6	5.1	12	60	6								
2BPCD 060 150 S06	3R X 6	5.1	15	65	6								
2BPCD 060 200 S06	3R X 6	5.1	20	70	6								
2BPCD 060 250 100	3R X 6	5.1	25	100	6								
2BPCD 080 150 S08	4R X 8	7	15	60	8								
2BPCD 080 300 110	4R X 8	7	30	110	8								
2BPCD 100 200 S10	5R X 10	8	20	70	10								
2BPCD 100 300 110	5R X 10	8	30	110	10								
2BPCD 100 350 150	5R X 10	8	35	150	10								
2BPCD 120 250 S12	6R X 12	9	25	80	12								
2BPCD 120 350 110	6R X 12	9	35	110	12								
2BPCD 120 400 150	6R X 12	9	40	150	12								
2BPCD 160 350 S16	8R X 16	12	35	90	16								
2BPCD 160 450 110	8R X 16	12	45	110	16								
2BPCD 160 500 150	8R X 16	12	50	150	16								



- 알루미늄 합금 및 비철 금속 전용 PCD 엔드밀
- LASER 가공으로 날부 인선을 5 $\mu$ m이하로 구현하여 탁월한 절삭성능과 피삭재의 표면 조도가 뛰어납니다.
- 뛰어난 동심도로 제작되어 정밀가공이 가능합니다.
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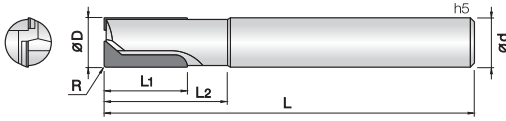
- PCD endmills for aluminum alloys and non-ferrous metals.
- Laser processing enables the blade to be less than 5 $\mu$ m, providing excellent cutting performance and surface finish of the workpiece.
- Designed with excellent concentricity for precision machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



D Size	D Tolerance
Ø 3 ~ 6	+0 ~ -0.012mm
Ø 8 ~ 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm
Ø 16 ~ 20	+0 ~ -0.022mm

단위: mm

Order Number	날경 Diameter D×R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter D×R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
1PCD 030 080 S04	3 X R0.1	4	8	50	4		3PCD 120 300 090	12 X R0.1	20	30	90	12	
2PCD 040 100 S06	4 X R0.1	5	10	50	6		3PCD 160 250 S16	16 X R0.1	15	25	90	16	
2PCD 060 200 S06	6 X R0.1	10	20	60	6		3PCD 160 350 S16	16 X R0.1	20	35	130	16	
2PCD 060 250 S06	6 X R0.1	15	25	60	6		3PCD 160 400 S16	16 X R0.1	25	40	160	16	
2PCD 060 250 080	6 X R0.1	15	25	80	6		3PCD 200 250 S20	20 X R0.1	15	25	90	20	
2PCD 080 200 S08	8 X R0.1	10	20	60	8		3PCD 200 350 S20	20 X R0.1	20	35	130	20	
2PCD 080 250 S08	8 X R0.1	15	25	60	8		3PCD 200 400 S20	20 X R0.1	25	40	160	20	
2PCD 080 300 S08	8 X R0.1	20	30	70	8		4PCD 160 250 S16	16 X R0.1	15	25	90	16	
2PCD 080 300 100	8 X R0.1	20	30	100	8		4PCD 160 350 S16	16 X R0.1	20	35	130	16	
2PCD 100 250 S10	10 X R0.1	10	25	70	10		4PCD 160 400 S16	16 X R0.1	25	40	160	16	
2PCD 100 300 S10	10 X R0.1	15	30	70	10		4PCD 200 250 S20	20 X R0.1	15	25	90	20	
2PCD 100 300 080	10 X R0.1	20	30	80	10		4PCD 200 350 S20	20 X R0.1	20	35	130	20	
2PCD 100 300 110	10 X R0.1	20	30	110	10		4PCD 200 400 S20	20 X R0.1	25	40	160	20	
2PCD 120 250 S12	12 X R0.1	10	25	80	12								
2PCD 120 300 S12	12 X R0.1	15	30	80	12								
2PCD 120 300 090	12 X R0.1	20	30	90	12								
2PCD 120 300 130	12 X R0.1	20	30	130	12								
2PCD 160 250 S16	16 X R0.1	10	25	90	16								
2PCD 160 300 S16	16 X R0.1	15	30	90	16								
2PCD 160 350 S16	16 X R0.1	20	35	100	16								
2PCD 200 250 S20	20 X R0.1	10	25	90	20								
2PCD 200 300 S20	20 X R0.1	15	30	90	20								
2PCD 200 300 100	20 X R0.1	20	30	100	20								



- 알루미늄합금및비철금속전용PCD 엔드밀
- LASER 가공으로날부인선을5 $\mu$ m이하로구현하여탁월한절삭성능과 피삭재의표면조도가뛰어납니다.
- 뛰어난동심도로제작되어정밀가공이가능합니다.
- 인선부를폴리싱처리하여절삭칩의배출이원활합니다.

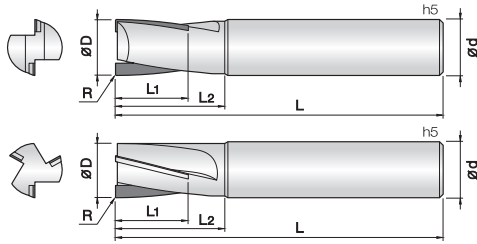
- PCD endmills for aluminum alloys and non-ferrous metals.
- Laser processing enables the blade to be less than 5 $\mu$ m, providing excellent cutting performance and surface finish of the workpiece.
- Designed with excellent concentricity for precision machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



D Size	D Tolerance
Ø 6	+0 ~ -0.012mm
Ø 8 ~ 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm
Ø 16 ~ 20	+0 ~ -0.022mm

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Dia d	비고
2CPCD 060 200 S06	6 X R0.1	10	20	60	6	
2CPCD 060 250 S06	6 X R0.1	15	25	60	6	
2CPCD 080 200 S08	8 X R0.1	10	20	60	8	
2CPCD 080 250 S08	8 X R0.1	15	25	60	8	
2CPCD 080 250 070	8 X R0.1	20	25	70	8	
2CPCD 100 250 S10	10 X R0.1	10	25	70	10	
2CPCD 100 300 S10	10 X R0.1	15	30	70	10	
2CPCD 100 300 080	10 X R0.1	20	30	80	10	
2CPCD 120 250 S12	12 X R0.1	10	25	80	12	
2CPCD 120 300 S12	12 X R0.1	15	30	80	12	
2CPCD 120 300 090	12 X R0.1	20	30	90	12	
2CPCD 160 250 S16	16 X R0.1	10	25	90	16	
2CPCD 160 300 S16	16 X R0.1	15	30	90	16	
2CPCD 160 300 100	16 X R0.1	20	30	100	16	
2CPCD 200 250 S20	20 X R0.1	10	25	90	20	
2CPCD 200 300 S20	20 X R0.1	15	30	90	20	
2CPCD 200 300 100	20 X R0.1	20	30	100	20	

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Dia d	비고
3CPCD 160 250 S16	16 X R0.1	15	25	90	16	
3CPCD 160 300 S16	16 X R0.1	20	30	100	16	
4CPCD 200 300 S20	20 X R0.1	15	30	90	20	
4CPCD 200 350 S20	20 X R0.1	20	35	100	20	



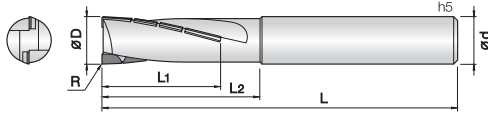
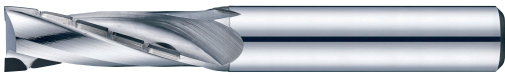
- 알루미늄 합금 및 비철 금속 전용 PCD 엔드밀
- LASER 가공으로 날부 인선을 5 $\mu$ m이하로 구현하여 탁월한 절삭성과 피삭재의 표면 조도가 뛰어납니다.
- 뛰어난 동심도로 제작되어 정밀가공이 가능합니다.
- 옆날 인선부의 헬릭스 설계로 절삭저항이 적으며, 내마모 성능을 향상 시켰습니다.
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1 2 3 WC 미립자 PCD DI +0-0.012  $\phi$ 4~6 DI +0-0.015  $\phi$ 8~10 DI +0-0.018  $\phi$ 12 DI +0-0.022  $\phi$ 16~20 20° Helix Angle A Type 12° Helix Angle B Type

D Size	D Tolerance
$\phi$ 4 ~ 6	+0 ~ -0.012mm
$\phi$ 8 ~ 10	+0 ~ -0.015mm
$\phi$ 12	+0 ~ -0.018mm
$\phi$ 16 ~ 20	+0 ~ -0.022mm

단위: mm

Order Number	날경 Diameter D x R	날장 Length of cut L1	유효장 Effective Length L2	타입 Type	전장 Overall Length L	샙크 Shank Dia d	Order Number	날경 Diameter D x R	날장 Length of cut L1	유효장 Effective Length L2	타입 Type	전장 Overall Length L	샙크 Shank Dia d
1HPCD 040 180 S06	4 X R0.1	10	18	A	60	6	3HPCD 120 250 S12	12 X R0.1	15	25	A	80	12
2HPCD 060 180 S06	6 X R0.1	10	18	A	60	6	3HPCD 120 450 S12	12 X R0.1	30	45	B	100	12
2HPCD 060 250 S06	6 X R0.1	15	25	B	80	6	3HPCD 160 300 S16	16 X R0.1	20	30	A	90	16
2HPCD 080 200 S08	8 X R0.1	10	20	A	70	8	3HPCD 160 450 S16	16 X R0.1	30	45	B	110	16
2HPCD 080 250 S08	8 X R0.1	20	25	B	90	8	3HPCD 200 400 S20	20 X R0.1	25	40	A	100	20
2HPCD 100 220 S10	10 X R0.1	12	22	A	70	10	3HPCD 200 550 S20	20 X R0.1	40	55	B	110	20
2HPCD 100 400 S10	10 X R0.1	25	40	B	100	10							
2HPCD 120 250 S12	12 X R0.1	15	25	A	80	12							
2HPCD 120 450 S12	12 X R0.1	30	45	B	100	12							
2HPCD 160 300 S16	16 X R0.1	20	30	A	90	16							
2HPCD 160 450 S16	16 X R0.1	30	45	B	110	16							
2HPCD 200 400 S20	20 X R0.1	25	40	A	100	20							
2HPCD 200 550 S20	20 X R0.1	40	55	B	110	20							



• 알루미늄 합금 및 비철 금속 전용 PCD 엔드밀

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- 옆날 인선부의 헬릭스 설계로 절삭저항이 적으며, 내마모 성능을 향상 시켰습니다.
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2

3

WC  
미립자

PCD

D  
+0-0.015  
Ø10

D  
+0-0.018  
Ø12

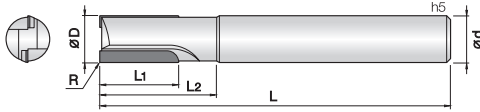
D  
+0-0.022  
Ø16 ~ 20

20°  
Helix Angle

D Size	D Tolerance
Ø 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm
Ø 16 ~ 20	+0 ~ -0.022mm

단위: mm

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d
2RPCD 100 300 S10	10 X R0.1	20	30	80	10	3RPCD 100 300 S10	10 X R0.1	20	30	80	10
2RPCD 100 400 S10	10 X R0.1	30	40	90	10	3RPCD 100 400 S10	10 X R0.1	30	40	90	10
2RPCD 120 300 S12	12 X R0.1	20	30	80	12	3RPCD 120 300 S12	12 X R0.1	20	30	80	12
2RPCD 120 400 S12	12 X R0.1	30	40	90	12	3RPCD 120 400 S12	12 X R0.1	30	40	90	12
2RPCD 160 400 S16	16 X R0.1	30	40	100	16	3RPCD 160 400 S16	16 X R0.1	30	40	100	16
2RPCD 160 650 S16	16 X R0.1	50	65	130	16	3RPCD 160 650 S16	16 X R0.1	50	65	130	16
2RPCD 200 400 S20	20 X R0.1	30	40	100	20	3RPCD 200 400 S20	20 X R0.1	30	40	100	20
2RPCD 200 650 S20	20 X R0.1	50	65	130	20	3RPCD 200 650 S20	20 X R0.1	50	65	130	20



- 알루미늄 합금 및 비철 금속 전용 PCD 엔드밀
- LASER 가공으로 날부 인선을 5µm 이하로 구현하여 탁월한 절삭성과 피삭재의 표면 조도가 뛰어납니다.
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- Designed with excellent concentricity for precision machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



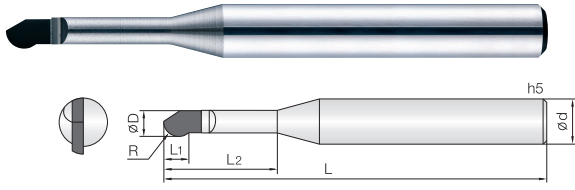
D Size	D Tolerance
Ø 4 ~ 6	+0 ~ -0.012mm
Ø 8 ~ 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샹크 Dia d	비고
1PCDC 040 002 100	4 X R0.2	5	10	50	6	
1PCDC 040 003 100	4 X R0.3	5	10	50	6	
2PCDC 060 003 200	6 X R0.3	6	20	60	6	
2PCDC 060 003 250	6 X R0.3	15	25	60	6	
2PCDC 060 005 200	6 X R0.5	6	20	60	6	
2PCDC 060 005 250	6 X R0.5	15	25	60	6	
2PCDC 060 010 200	6 X R1	6	20	60	6	
2PCDC 060 010 250	6 X R1	15	25	60	6	
2PCDC 080 003 200	8 X R0.3	8	20	60	8	
2PCDC 080 003 250	8 X R0.3	15	25	60	8	
2PCDC 080 005 200	8 X R0.5	8	20	60	8	
2PCDC 080 005 250	8 X R0.5	15	25	60	8	
2PCDC 080 010 200	8 X R1	8	20	60	8	
2PCDC 080 010 250	8 X R1	15	25	60	8	
2PCDC 100 005 250	10 X R0.5	10	25	70	10	
2PCDC 100 005 300	10 X R0.5	15	30	70	10	
2PCDC 100 010 250	10 X R1	10	25	70	10	
2PCDC 100 010 300	10 X R1	15	30	70	10	
2PCDC 120 005 250	12 X R0.5	10	25	80	12	
2PCDC 120 005 300	12 X R0.5	15	30	80	12	
2PCDC 120 010 250	12 X R1	10	25	80	12	
2PCDC 120 010 300	12 X R1	15	30	80	12	

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샹크 Dia d	비고

단위: mm





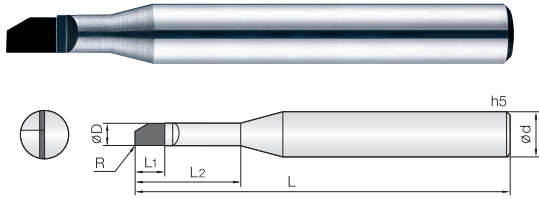
- **그라파이트(흑연), 알루미늄 합금 및 비철 금속 전용**
- PCD 날부 인선을 구현하여 그라파이트 가공시 피삭재의 표면 조도가 뛰어나며 내마모성이 탁월합니다.
- 인선부를 폴리싱 처리하여 절삭 칩의 배출이 원활합니다.
- **PCD endmills for graphite, aluminum alloys and non-ferrous metals.**
- The edge of the PCD flute enables excellent surface finish and wear resistance during graphite machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.

R1.5 ~ 6

D Size	D Tolerance
Ø 3 ~ 6	+0 ~ -0.012mm
Ø 8 ~ 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm

단위: mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고	Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고
1BPCDW 030 060 S04	1.5R X 3	2.3	6	60	4								
1BPCDW 030 100 S04	1.5R X 3	2.3	10	80	4								
1BPCDW 030 200 S04	1.5R X 3	2.3	20	80	4								
1BPCDW 030 300 S04	1.5R X 3	2.3	30	80	4								
1BPCDW 040 060 S06	2R X 4	3.3	6	60	6								
1BPCDW 040 100 S06	2R X 4	3.3	10	80	6								
1BPCDW 040 200 S06	2R X 4	3.3	20	80	6								
1BPCDW 040 300 S06	2R X 4	3.3	30	80	6								
2BPCDW 060 051 S06	3R X 6	5.1	-	60	6								
2BPCDW 060 200 S06	3R X 6	5.1	20	90	6								
2BPCDW 060 300 S06	3R X 6	5.1	30	90	6								
2BPCDW 060 400 S06	3R X 6	5.1	40	100	6								
2BPCDW 080 300 S08	4R X 8	7	30	80	8								
2BPCDW 080 500 S08	4R X 8	7	50	150	8								
2BPCDW 100 300 S10	5R X 10	8	30	80	10								
2BPCDW 100 500 S10	5R X 10	8	50	150	10								
2BPCDW 120 300 S12	6R X 12	9	30	80	12								
2BPCDW 120 500 S12	6R X 12	9	50	150	12								



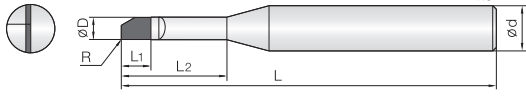
- 그래파이트(흑연), 알루미늄합금및비철금속전용
- PCD 날부 인선을 구현하여 그래파이트 가공시 피삭재의 표면 조도가 뛰어나며 내마모성이 탁월합니다.
- 인선부를 폴리싱 처리하여 절삭 칩의 배출이 원활합니다.
- PCD endmills for graphite, aluminum alloys and non-ferrous metals.
- The edge of the PCD flute enables excellent surface finish and wear resistance during graphite machining.
- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



D Size	D Tolerance
Ø 3 ~ 6	+0 ~ -0.012mm
Ø 8 ~ 10	+0 ~ -0.015mm
Ø 12	+0 ~ -0.018mm

단위: mm

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
1PCDW 030 060 S04	3 X R0.1	4	6	60	4								
1PCDW 030 100 S04	3 X R0.1	4	10	80	4								
1PCDW 030 200 S04	3 X R0.1	4	20	80	4								
1PCDW 030 300 S04	3 X R0.1	4	30	80	4								
1PCDW 040 060 S06	4 X R0.1	5	6	60	6								
1PCDW 040 100 S06	4 X R0.1	5	10	80	6								
1PCDW 040 200 S06	4 X R0.1	5	20	80	6								
1PCDW 040 300 S06	4 X R0.1	5	30	80	6								
2PCDW 060 100 S06	6 X R0.1	10	-	60	6								
2PCDW 060 200 S06	6 X R0.1	10	20	90	6								
2PCDW 060 300 S06	6 X R0.1	10	30	90	6								
2PCDW 060 400 S06	6 X R0.1	10	40	100	6								
2PCDW 080 300 S08	8 X R0.1	10	30	80	8								
2PCDW 080 500 S08	8 X R0.1	10	50	150	8								
2PCDW 100 300 S10	10 X R0.1	12	30	80	10								
2PCDW 100 500 S10	10 X R0.1	12	50	150	10								
2PCDW 120 300 S12	12 X R0.1	12	30	80	12								
2PCDW 120 500 S12	12 X R0.1	12	50	150	12								



- 그래파이트(흑연), 알루미늄 합금 및 비철 금속 전용
- PCD 날부 인선을 구현하여 그래파이트 가공시 피삭재의 표면 조도가 뛰어나며 내마모성이 탁월합니다.
- 인선부를 폴리싱 처리하여 절삭 칩의 배출이 원활합니다.

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- An additional polishing process on the edge of flutes to facilitates the cutting chip emission.



R0.2 ~ 1

D Size	D Tolerance
ø 4 ~ 6	+0 ~ -0.012mm
ø 8 ~ 10	+0 ~ -0.015mm
ø 12	+0 ~ -0.018mm

단위: mm

Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter D × R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
1CPCDW 040 002 100	4 X R0.2	5	10	50	6		1CPCDW 040 002 100	4 X R0.2	5	10	50	6	
1CPCDW 040 003 100	4 X R0.3	5	10	50	6		1CPCDW 040 003 100	4 X R0.3	5	10	50	6	
2CPCDW 060 003 200	6 X R0.3	6	20	60	6		2CPCDW 060 003 200	6 X R0.3	6	20	60	6	
2CPCDW 060 003 250	6 X R0.3	15	25	60	6		2CPCDW 060 003 250	6 X R0.3	15	25	60	6	
2CPCDW 060 005 200	6 X R0.5	6	20	60	6		2CPCDW 060 005 200	6 X R0.5	6	20	60	6	
2CPCDW 060 005 250	6 X R0.5	15	25	60	6		2CPCDW 060 005 250	6 X R0.5	15	25	60	6	
2CPCDW 060 010 200	6 X R1	6	20	60	6		2CPCDW 060 010 200	6 X R1	6	20	60	6	
2CPCDW 060 010 250	6 X R1	15	25	60	6		2CPCDW 060 010 250	6 X R1	15	25	60	6	
2CPCDW 080 003 200	8 X R0.3	8	20	60	8		2CPCDW 080 003 200	8 X R0.3	8	20	60	8	
2CPCDW 080 003 250	8 X R0.3	15	25	60	8		2CPCDW 080 003 250	8 X R0.3	15	25	60	8	
2CPCDW 080 005 200	8 X R0.5	8	20	60	8		2CPCDW 080 005 200	8 X R0.5	8	20	60	8	
2CPCDW 080 005 250	8 X R0.5	15	25	60	8		2CPCDW 080 005 250	8 X R0.5	15	25	60	8	
2CPCDW 080 010 200	8 X R1	8	20	60	8		2CPCDW 080 010 200	8 X R1	8	20	60	8	
2CPCDW 080 010 250	8 X R1	15	25	60	8		2CPCDW 080 010 250	8 X R1	15	25	60	8	
2CPCDW 100 005 250	10 X R0.5	10	25	70	10		2CPCDW 100 005 250	10 X R0.5	10	25	70	10	
2CPCDW 100 005 300	10 X R0.5	15	30	70	10		2CPCDW 100 005 300	10 X R0.5	15	30	70	10	
2CPCDW 100 010 250	10 X R1	10	25	70	10		2CPCDW 100 010 250	10 X R1	10	25	70	10	
2CPCDW 100 010 300	10 X R1	15	30	70	10		2CPCDW 100 010 300	10 X R1	15	30	70	10	
2CPCDW 120 005 250	12 X R0.5	10	25	80	12		2CPCDW 120 005 250	12 X R0.5	10	25	80	12	
2CPCDW 120 005 300	12 X R0.5	15	30	80	12		2CPCDW 120 005 300	12 X R0.5	15	30	80	12	
2CPCDW 120 010 250	12 X R1	10	25	80	12		2CPCDW 120 010 250	12 X R1	10	25	80	12	
2CPCDW 120 010 300	12 X R1	15	30	80	12		2CPCDW 120 010 300	12 X R1	15	30	80	12	

### PCD End Mill Cutting Condition

• RPM : rev./min • Feed : mm/min

피삭재 Material	VC m/min	FEED RATE (fz)			
		2 ~ 3mm	4 ~ 6mm	7 ~ 11mm	12 ~ 20mm
AL-alloy Si <1%	150 ~ 6,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
AL-alloy Si <12%	150 ~ 4,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
AL-alloy Si >12%	150 ~ 2,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
Magnesium alloy	150 ~ 6,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
Cooper alloy	150 ~ 5,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
Brass ally	150 ~ 5,001	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
GFRP	150 ~ 3,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
CFRP	150 ~ 4,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3
Graphite	150 ~ 3,000	0.007 ~ 0.05	0.02 ~ 0.150	0.02 ~ 0.20	0.04 ~ 0.3

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FOR Powerful high-speed milling

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**Carbide endmill, drill, router for composite material**

Advanced nano diamond coated of tool for CFRP, GFRP, glass/carbon fiber, graphite, etc.

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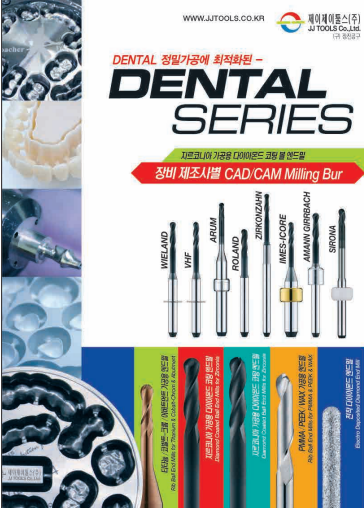


**Carbide THREAD MILLS**

고 품질의 효율적인 가공!  
드릴링, 나사가공, 챔퍼링을 한번에 -

Drilling, threading and chamfering in one tool operation without changing tools.  
High-quality and efficient milling!

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정밀 가공에 최적화된 -  
정비 제조시절 CAD/CAM Milling Bur

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경사진 표면 및 곡면 가공을 위한  
FLAT 디자인 적용!

Applied flat design for inclined or curved surfaces when counter boring and drilling

가격만족, 성능만족 - 다기능 플랫드릴 시리즈

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플래트스 25°-30° 오일용 타입 적용!  
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Wide range of products

**15,113**

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- For Hardened Steel
- For Pre-hardened Steel
- For SUS & TITANUM
- For Cast Iron
- For Composite
- For Copper & Aluminum
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- For A.S.S.
- Taper
- For General Purpose
- Flute
- RCD End Mill
- Ball
- Fluted Ball



**LONG Life HIGH Performance**

FINISHING 초경 정삭용 인서트  
**INSERTS**

TSIN-S coating

New Products

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