

# Cutting tools for CLT



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High quality surface - reduce fuzzy grain and burning  
Coated Insert " U-P11 W " for wood processing  
Reduced down-times with longer tool life

PAT.EP2939806B1, US10201908B2

## Coated Carbide Inserts " U-P11 W "

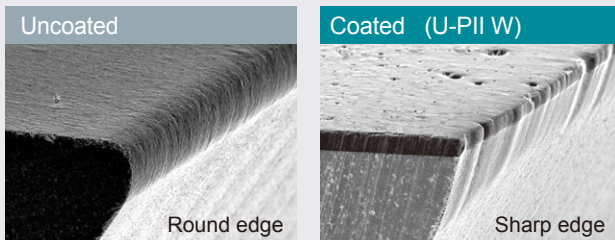


Patented

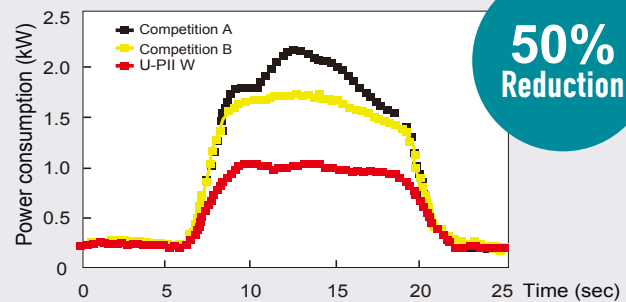
### Features

Kanefusa's coating technology with self-sharpening effects, maintains a sharp edge for longer tool life and reduces power consumption.

### Comparison of wear



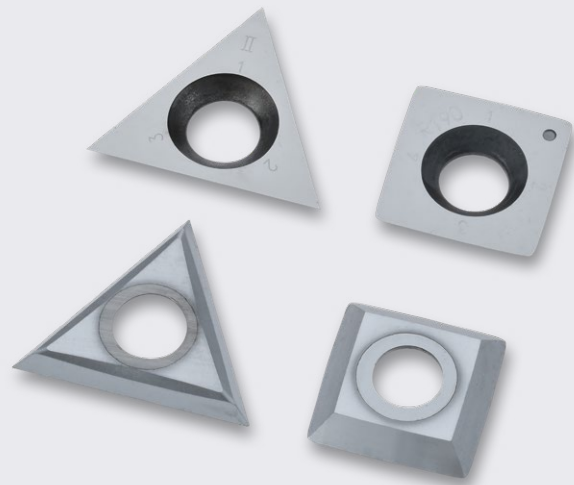
### Power consumption



" U-P11 W " saves 40-55% cutting power because of the superior wear resistance compared with other carbides of competitors.

### Lineup

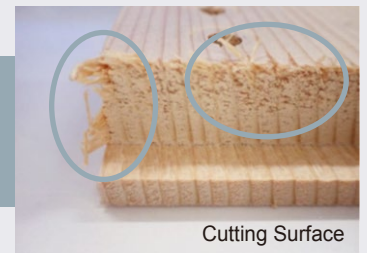
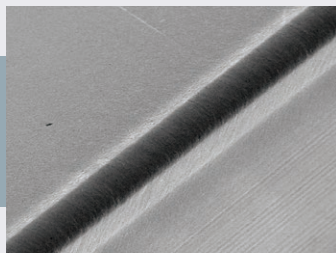
- 11 x 11 x 1.5
- 15 x 15 x 2.5
- 22 x 19 x 2.0 (triangle)



### Example

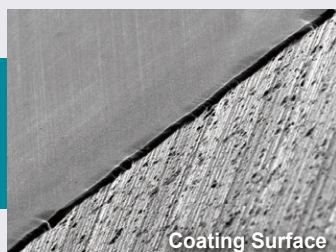
Material : European Pine Laminated Timber  
Cutting Parameter : N=4,000rpm F=1m / min  
Blade Outer Diameter :  $\Phi 200$   
After Cutting : 300m

Competitor  
Uncoated

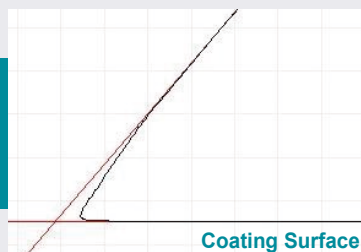


Cutting Surface

KANEFUSA  
Coated  
(U-P11 W)



Coating Surface



Coating Surface



Cutting Surface



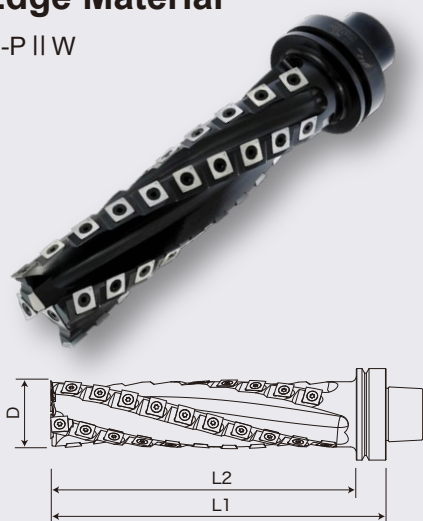
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## Endmill

### Edge Material

U-P II W



### Available Sizes

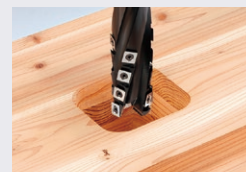
| HSK         | ΦD    | L1   | L2   |
|-------------|-------|------|------|
| HSK 63E     | 50~60 | ~300 | ~270 |
| HSK 80A/C/F | 50~80 | ~300 | ~270 |
| HSK 100A/C  | 50~80 | ~270 | ~240 |

### Features

- The integrated structure of the HSK section and blade body provides enhanced rigidity, minimizes fluffing and plucking, and ensures excellent cutting quality.
- The unique flute shape ensures optimal chip evacuation and prevents burning.

### Example

Processing : Hollowing out, Milling  
Material : Cedar CLT  
Tools : HSK80F x 60 x 325 x 250 x 4P  
Cutting Parameter : N=9,000rpm  
F=2.5m / min



### Monitor test results

CASE① Reduced the work noise.

Achieved three times longer compared to other brand.

CASE② Achieved two times longer tool life compared to other brand  
(45→90days).

## Hogger Cutter

### Edge Material

U-P II W



### Features

- Aluminum body minimizes the weight of cutterhead.
- The helical arrangement of blades reduces cutting resistance and achieves excellent surface.

### Example

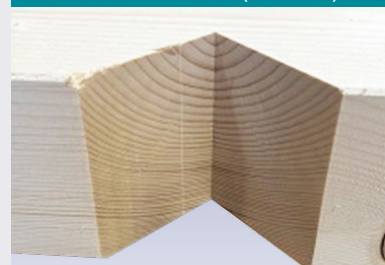
Processing : Rabbet grooving for panel (wall / floor) joint  
Material : Cedar CLT  
Available Sizes :  $D \leq 400$   
Tools : 12P 400 x 60-75 x 45  
Cutting Parameter : N=4,300rpm F=14.4m / min

### Grooving

Competitor Uncoated



KANEFUSA Coated (U-P II W)



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## Dovetail Cutter

### Edge Material

U-P II W



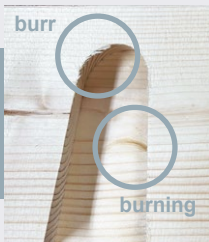
### Features

- Specially designed suitable cutting angles which minimize chip-out.
- Swarf is efficiently removed and material burning is prevented thanks to our unique gullet design.

### Example

Processing : Dovetail  
Material : Spruce Laminated Timber  
Tools : 30 x 60 x 150 x 35 x 6P  
Cutting Parameter : N=12,000rpm F=12m / min

Competitor  
Uncoated



KANEFUSA  
Coated  
(U-P II W)



## Strob Saw Blade

### Edge Material

Tungsten Carbide



### Application

Large strob sawblades are specialized in CLT / large section integrated lumber cutting.

### Features

- Stable and flat plate enables precise run-out for smoother finish and exact dimensions.
- Arranged suitable wipers to reduce the contact between timber and saw body.

### Lineup

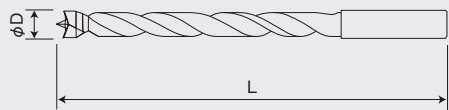
|                            |                            |
|----------------------------|----------------------------|
| 850 x 8.0 x 6.0 x 30 x 60  | 1000 x 8.5 x 6.0 x 40 x 36 |
| 900 x 8.0 x 6.0 x 30 x 54  | 1100 x 8.5 x 6.0 x 40 x 36 |
| 1000 x 8.0 x 6.0 x 30 x 36 | 1150 x 8.5 x 6.0 x 40 x 36 |

# Cutting tools for CLT

## Drill

### Edge Material

Tungsten Carbide



### Features

- Specialized edge design to prevent chip-out and burr at the exit.
- Two types of edge based on the application.
  - Standard type
  - Scoring type
- The drill bit is uniquely designed for preventing breakage.
- The surface treatment on the drill body (black part) ensures optimal chip evacuation.

### Available Sizes

- $D = \Phi 12 \sim \Phi 30$
  - $L \leq 460$
- \* Other sizes could be arranged upon request.

### Example

Processing : Drilling  
Material : European Pine Laminated Timber  
Cutting Parameter : N=3,600rpm F=1.8m / min

Entry

Exit

Standard-type



Clean cutting surface for both entry and exit side.

Scoring-type



Perfect cutting surface for entry side but more breakout in the exit side compared to standard type.



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