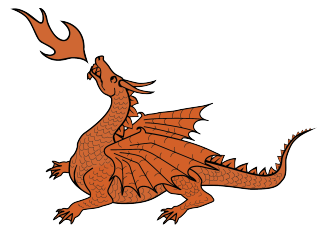


PRECISION SURFACES INTERNATIONAL



# Precision Diamond Saw

CL50



**Robust  
and  
durable**

**Various  
vises with a  
wide variety**

## Instruction



Operation video

### Cutting

Gravity feed system

### Handle Wheel

Easy to adjust the vise movement



### Cover

Safe and easy to observe the cutting process

### Vises

Various vises to cut a wide variety and size of sample

### Control panel

Easy to read the cutting thickness by digital display

### Dressing system

To extend the usage lifetime of blade



### Coolant tray

Removable coolant reservoir, easy to pick up the sample after cutting

# Features



### Horizontal wheel/clamp

Adjust to the cutting thickness units, the adjustable distance is 40mm. Select between imperial or metric units for thickness



### Standard



### Tray

Prevent sample drop into tank

### Options

### Perforated Plate

Increase the cutting range and apply to different fixtures system



### Dressing chuck

Blades can easily be dressed to resume optimal cutting performance.



### Coolant tray

Fast cleaning and easy removal of cut sample

**Options**

<b>CL500507</b> Fragile vise kit	<b>CL500505A</b> irregular vise kit	<b>CL500506</b> Round/elliptic vise kit
		

<b>CL500508</b> Long type kit (standard)


<b>CL500509</b> Double vise kit	<b>CL50051001A</b> Round test kit
	

Please refer to Appendix 1/2/3/4 for the cutting capacity

**Option**



**Cutting table**  
Allow to cut larger sample in wide range



**Options**





Options- Slide clamping  
Easy and safe to cut the sample



## Worthy Options - Working Table

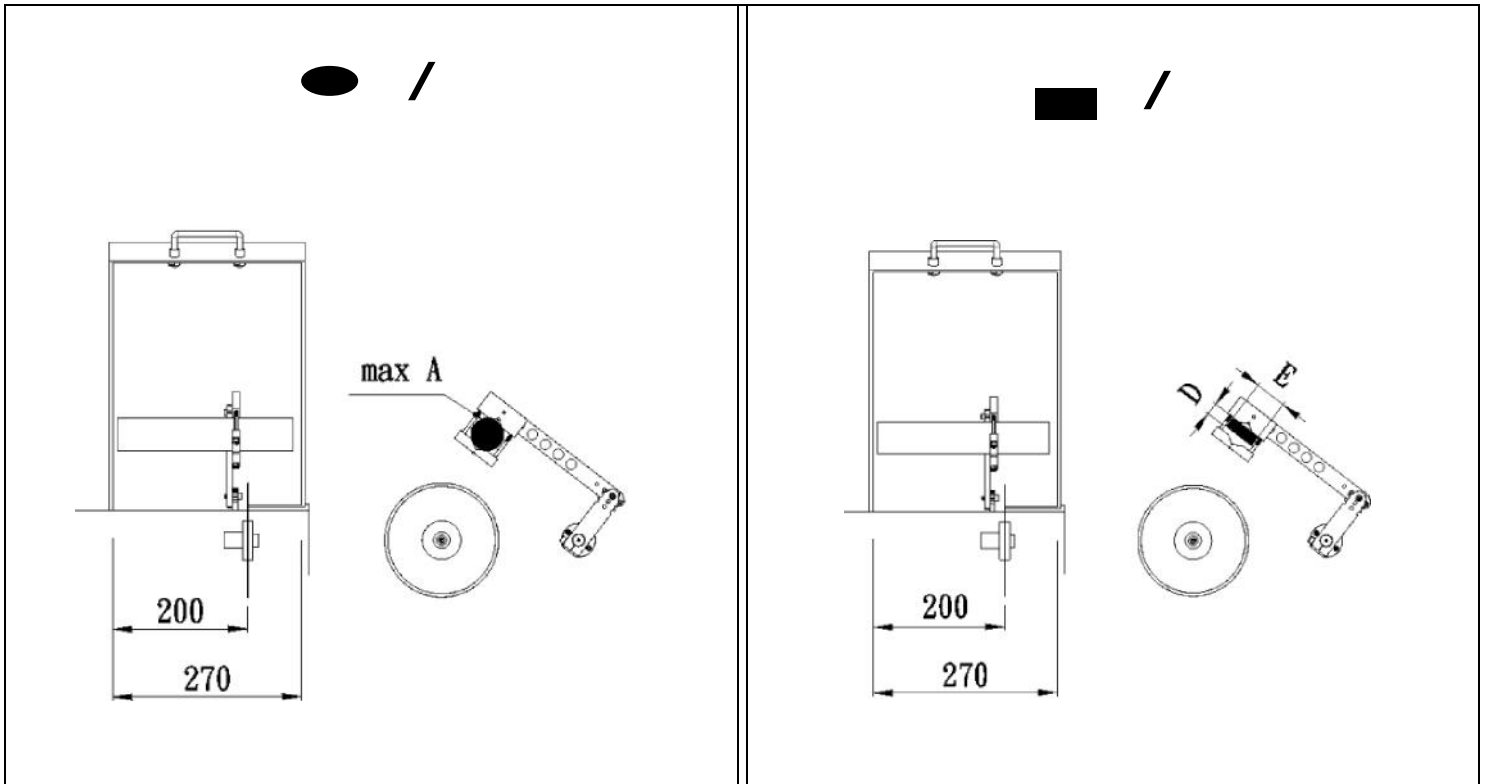


**Working Table**  
Multifunctional working table, it supplies you a place to put your machine and store your accessories. It can be moved easily.

Model No.	TF01	TF02
Size	1000*690*700 mm	1000*950*700 mm
Sample		



## Appendix 1: Cutting capacity for vie (standard)



Cut-off blade	● /		■ /	
	A (mm)	A cutting area (mm <sup>2</sup> )	E (mm)	E x D (mm <sup>2</sup> )
5"	30	706	50	50x10
6"	40	1256	50	50x25
7"	50	1963	50	50x35

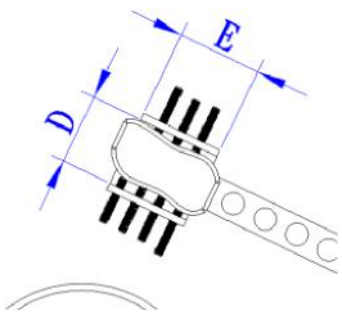
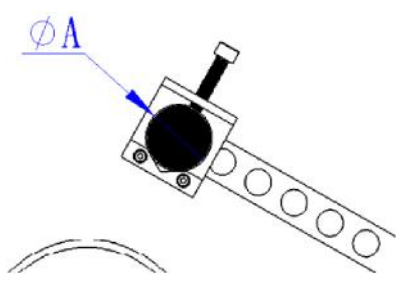
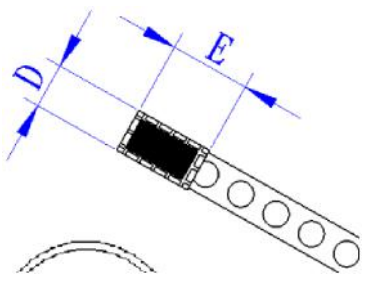
The measure of square area:

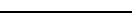
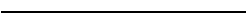

Max width is E · E x D □ A cutting area

Material restrictions are non-ferrous metals, non-metallic, ceramic, glass, titanium, precision cutting, polymer materials



## Appendix 2: Cutting capacity for various vises (options)

CL500505A irregular vise kit		CL500506 Round/elliptic vise kit		CL500507 Fragile vise	
● /	_ /	● /	_ /	● /	_ /
A (mm)	E x D (mm <sup>2</sup> )	A (mm)	E x D (mm <sup>2</sup> )	A (mm)	E x D (mm <sup>2</sup> )
-	60x50	Max.40	50x35	-	50x28
					

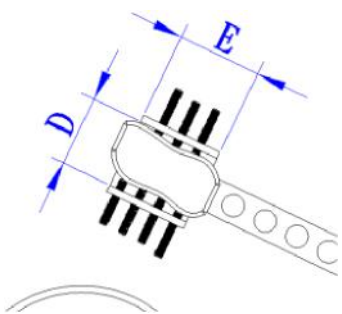

CL500509 Double vise kit		CL50051001A Round test kit (032)		CL50051002A Round test kit (040)	
● /	_ /	● /	_ /	● /	_ /
A (mm)	E x D (mm <sup>2</sup> )	A (mm)	E x D (mm <sup>2</sup> )	A (mm)	E x D (mm <sup>2</sup> )
Max.50	50x35	Max.32	-	Max.40	-
					

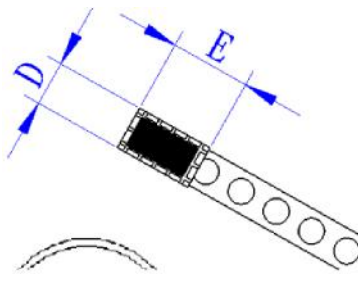




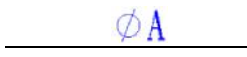


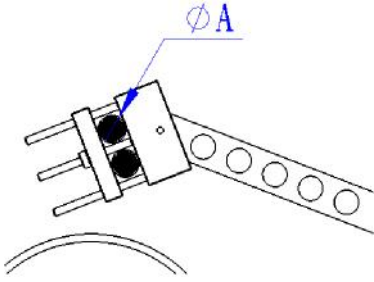
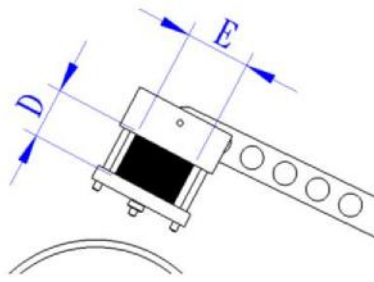
### Appendix 3: Cutting capacity for various vises (options-smaller)

CL400051A irregular vise kit		CL400052-L Long type kit (Ø20)		CL400053 Round/elliptic vise kit	
● /	_ /	● /	● /	_ /	_ /
A (mm)	E x D (mm <sup>2</sup> )	A (mm)	A (mm)	E x D (mm)	E x D (mm <sup>2</sup> )
-	38x25	Max. 20	-	38x25	
					

CL400054 Fragile vise kit		CL400055-D Double vise kit		CL50051001A Round test kit	
● /	_ /	● /	● /	_ /	_ /
A (mm)	E x D (mm <sup>2</sup> )	A (mm)	A (mm)	E x D (mm <sup>2</sup> )	E x D (mm <sup>2</sup> )
-	50x28	Max. 20	-	50x28	
					

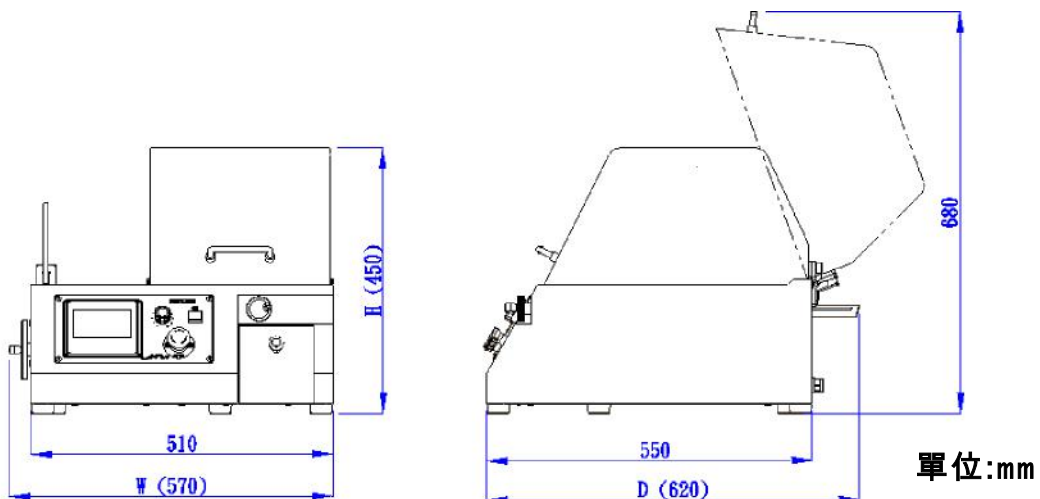
## Appendix 4: Cutting capacity for various vises (options)

CL50051101A Teardrop vise kit		CL50051102A Teardrop vise kit		CL500512 Biomedical vise kit	
• /	m/	• /	m/	• /	m/
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
5-20	-	18-40	-	Max.40	40x30
					

CL500513 Screw vise kit		CL500514 Double vise (4)41**)			
• /	m/	• /	m/		
A (mm)	E x D (mm)	A (mm)	E x D (mm)		
Max.18	-	-	45x35x3T		
					

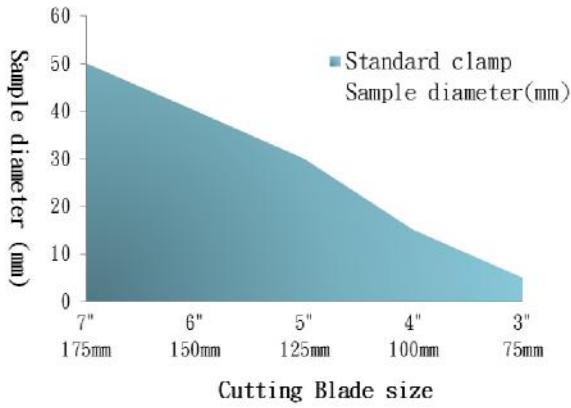
## Specification

<b>Model</b>	<b>CL50</b>
<b>Motor power</b>	120W
<b>Noise level</b>	62~68dB
<b>Sample Dim. Max.(mm)</b>	Ø 50mm
<b>Cutting chamber</b>	<a href="#">Appendix 5</a>
<b>Diamond blade</b>	Ø 5"~ Ø 7"
<b>Loading pressure</b>	0~700g
<b>Cutting Method</b>	Gravity-fed system, the blade stop rotating once cutting finished
<b>Rotational speed</b>	150~2000 RPM
<b>Vise (standard)</b>	Long type kit
<b>Horizontal movement</b>	40mm
<b>Coolant tank capacity</b>	1 L
<b>Machine size (W x L x H)</b>	57 x 62 x 45cm
<b>Machine weight Kg</b>	43 Kg
<b>Power</b>	AC110V/200V-1Ø
<b>Standard accessory</b>	coolant 1 L、 standard clamp*1
<b>Options</b>	Various vise, dressing system

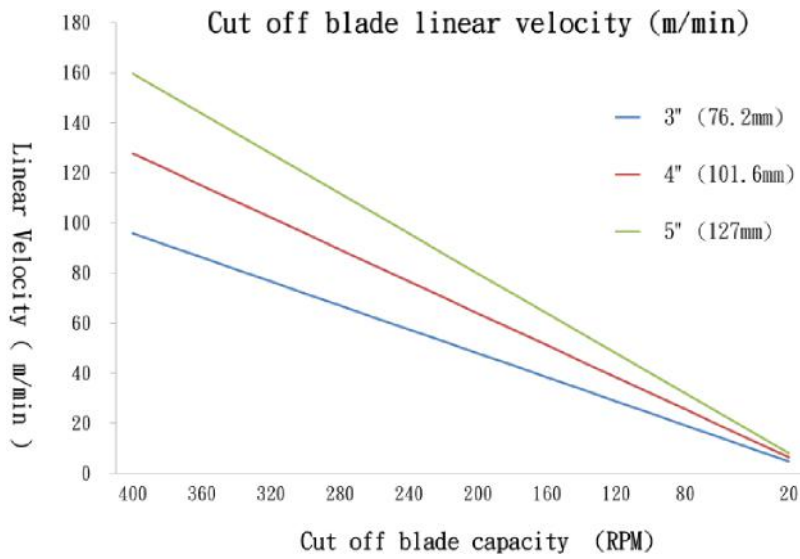
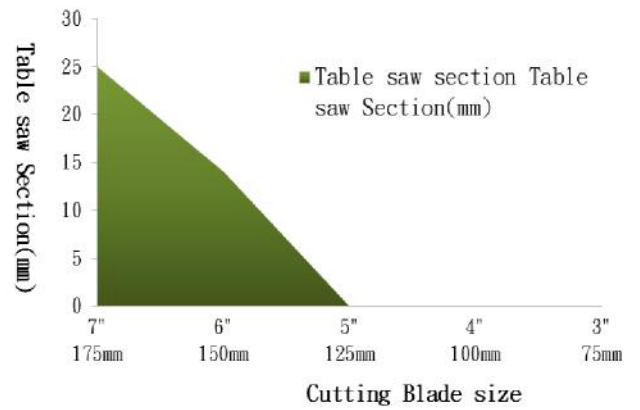


# Parameters

Cutting Capacity-1 CL50



Cutting Capacity-2 CL50



Cutting area-1: Use standard clamp, take away Perforated plate

Cutting area-2: During using Table saw section, open cutting protection cover

1. Parameter for reference only.

2. Practically parameter depends on wheel, sample material, cutting speed, vise, 10



## Consumables Diamond Wheel

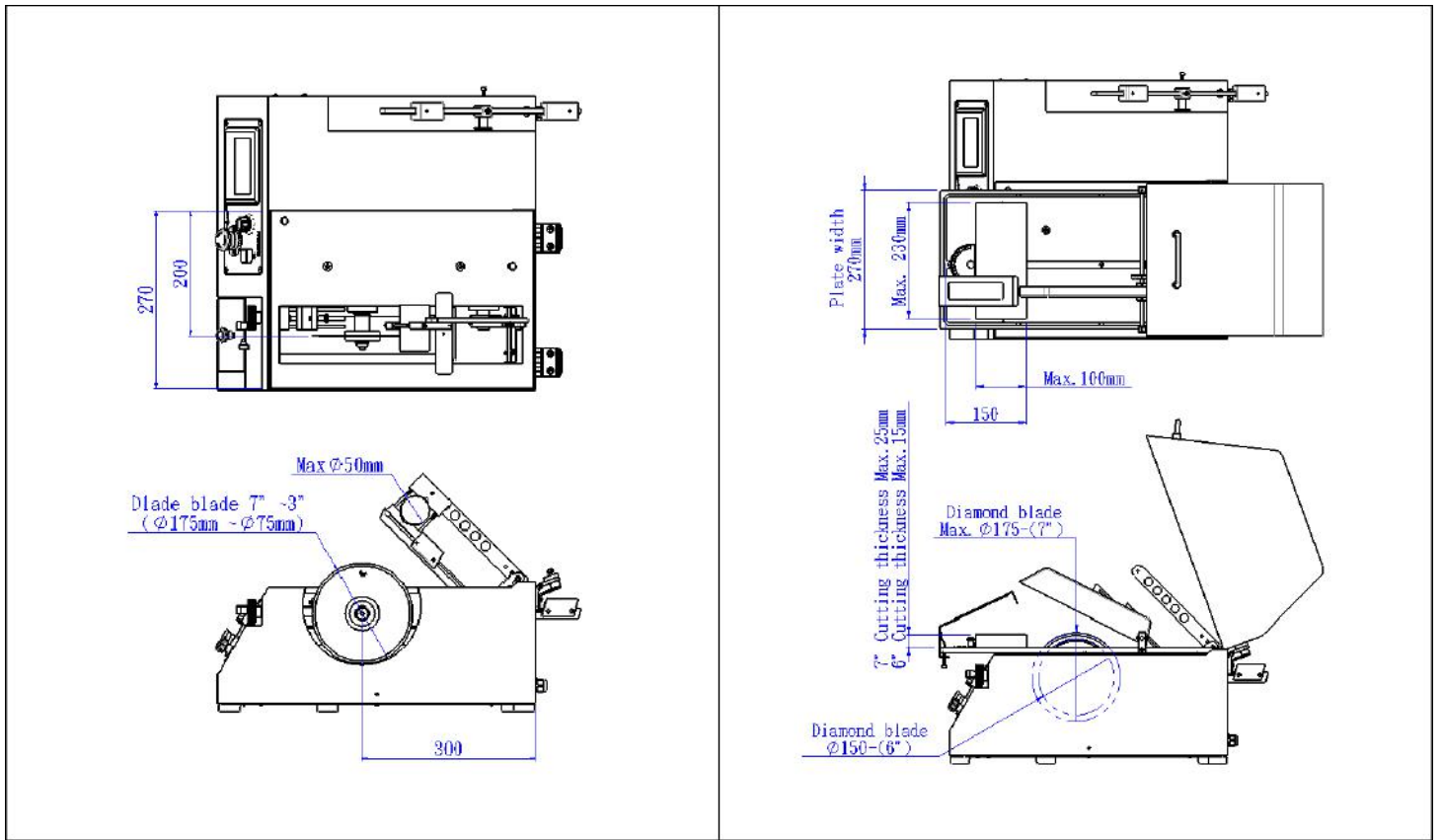
Item No.	Cutting material	Wheel size	MOQ	Remark
HW21120602L	Non-ferrous metals , non-mental, ceramic, glass, titanium alloy, aluminum alloy, tungsten steel	Ø 125XØ 12.7X0.5	1	metal-bonded
HW21130602L	Hard, brittle, mineral material, non-ferrous metals ,hard alloy, ceramic, glass, titanium alloy, quartz, silicon	Ø 127XØ12.7X0.6	1	resin-bonded
HW21220602L	Carbon steel, alloy steel, tool steel, stainless steel, bearing steel	Ø 127XØ 12.7X0.5	1	CBN metal-bonded (boron nitride)
HW21120702L	Non-ferrous metals , non-mental, ceramic, glass, titanium alloy, aluminum alloy, tungsten steel	Ø 152XØ 12.7X0.5	1	metal-bonded
HW21130702L	Hard, brittle, mineral material, non-ferrous metals ,hard alloy, ceramic, glass, titanium alloy, quartz, silicon	Ø 152XØ12.7X0.6	1	resin-bonded
HW21220702L	Carbon steel, alloy steel, tool steel, stainless steel, bearing steel	Ø 152XØ12.7X0.5	1	CBN metal-bonded (boron nitride)
HW21110808	Mounting sample, resin, plastic sample, soft-medium gem, quartz, glass, rubber, asbestos, aluminum, copper, FRP, PC board	Ø 150XØ25.4X1.2	1	resin-bonded
HW21121003L	Non-ferrous metals , non-mental, ceramic, glass, titanium alloy, aluminum alloy, tungsten steel	Ø 175XØ 25.4X0.6	1	metal-bonded
HW21111208H	Mounting sample, resin, plastic sample, soft-medium gem, quartz, glass, rubber, asbestos, aluminum, copper, FRP, PC board	Ø 200XØ12.7X1.2	1	resin-bonded
HW21121207L	Non-ferrous metals , non-mental, ceramic, glass, titanium alloy, aluminum alloy, tungsten steel	Ø 200XØ 25.4X1.0	1	metal-bonded

## Coolant

Item No.	Description	Features	MOQ	Remark
S01004	Coolant	Clear , flowability	1L	Coolant



## Appendix 5: Cutting chamber



**TOP TECH**  
Perfect Surface Above

*Metallographic Sample Preparation Equipment  
Equipment of Materials Analysis  
Metallographic Surface Preparation*

**TOP TECH** | SGS | CE

Vertical: TW021800

The advertisement features a central image of a grinding process with a microscope. Below this, a row of various metallographic sample preparation machines is shown, including a large cabinet model on the right and several smaller benchtop models on the left.

*Perfect Surface.  
Always*



**Cutting / Mounting / Grinding & Polishing / Spin Coater**

**PRECISION SURFACES INTERNATIONAL, INC.**



922 Ashland St., Houston, TX 77008

Tel: (713) 426-2220

[www.psidragon.com](http://www.psidragon.com) [www.psimetallography.com](http://www.psimetallography.com)

[E-mail: info@psidragon.com](mailto:info@psidragon.com)

NO.A16-01

