

# PRECISO-CL Series Precision Diamond Saw



## CL50

- Automatic stop cutting protection device
- The gravity feeding system minimizes the deformation of delicate parts
- Horizontal movement micro-adjustment up to 40mm
- Display accuracy 0.01mm
- LCD touch screen displays parameters
- Dressing system for the diamond cut-off wheel



*Perfect Surface.  
Always*

## Introduction & Feature

- Application range: research & education institution, electronic industry, and manufacturing industry
- Suitable for ceramic, plastic, steel, copper, iron, PCB boards, glass and carbon fiber composite

### Anti-corrosive aluminum alloy body and stainless components

### LCD touch screen displays parameters

The cutting parameters can be displayed on the high-definition LCD touch screen, which also features a zeroing function. The display accuracy is as high as 0.01mm.



### Dressing System

Properly dressing the cut-off wheel can help extend its lifespan and maintain its sharpness. The dressing system can also be used during cutting.

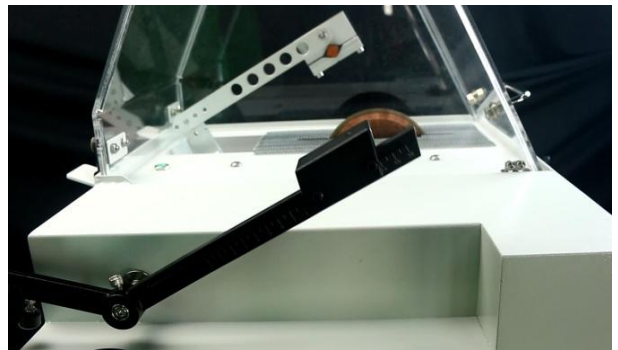


### Automatic stop cutting protection device

The device's flexible adjustment capability based on sample dimensions helps save cutting time.

### Counterweight rock arm cutting

Loading pressure can be adjusted according to the sample materials, minimizing the deformation of delicate parts.



### Horizontal movement system

The device is equipped with a horizontal movement micro-adjustment system that allows for manual serial cutting with a movement distance up to 40mm.

### Spindle speed variation function

An effective spindle rotational speed from 150 to 2000rpm, allowing for adjustment of the suitable speed according to the materials. It is recommended to use a low rotational speed for cutting delicate parts such as glass and ceramic to minimize the risk of damage.

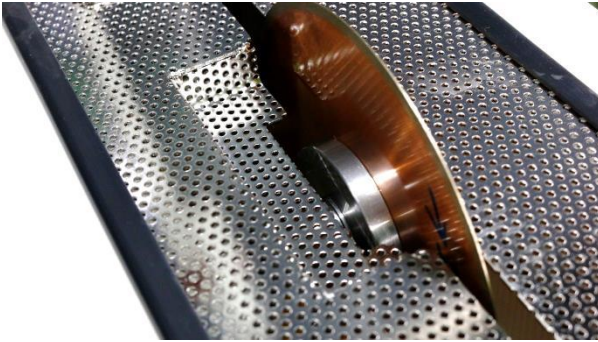
### Low noise and low vibration

Suitable for use in research and educational institutions as well as laboratory applications.

## Introduction & Feature

### Drop prevention platform

Easy to remove. It prevent samples from dropping after cutting.



### Cutting platform (Option)

The cutting platform is suitable for cutting board-type samples or long-type samples such as glass or PCB boards.

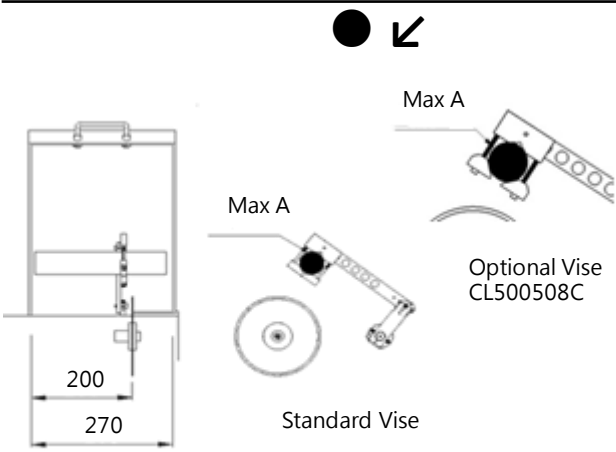
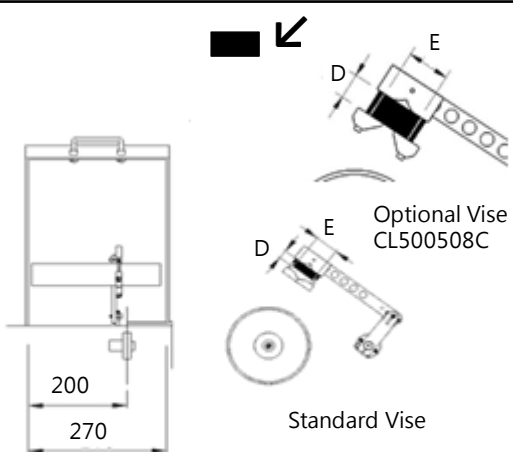


### Various Clamps for Choice (Option)

The device is designed with easy-to-replace clamps, allowing for flexibility in operation based on the dimensions, shapes, and features of the samples being cut. Users can choose the appropriate clamps to ensure the accurate cutting of the samples.



## Cutting Capacity







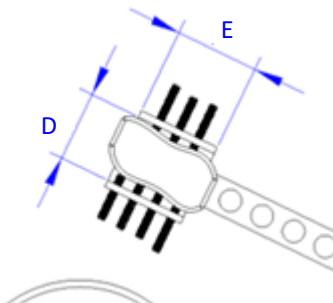
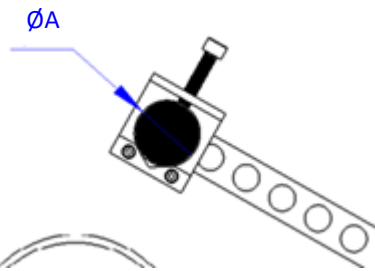
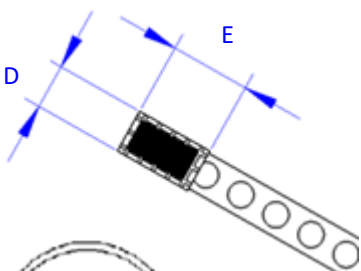
				
Cut-off wheel	●		■	
	A(mm)	A cutting area (mm <sup>2</sup> )	E(mm)	E x D(mm <sup>2</sup> )
Standard Vise				
5"	23	415	50	50x8
6"	35	961	50	50x19
7"	45	1590	50	50x31
Optional Vise (CL500508C)				
5"	30	706	50	50x10
6"	40	1256	50	50x25
7"	50	1963	50	50x35

The measure of square area:







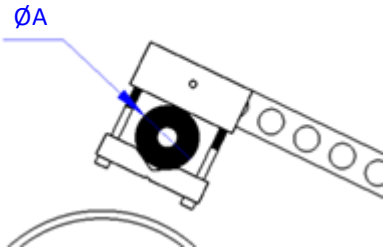
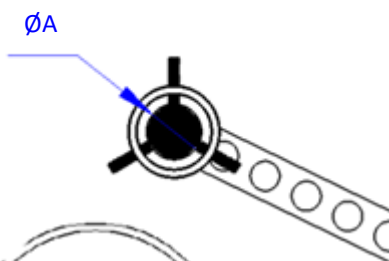
Max width is E,  $E \times D \leq A$  cutting area

Material restrictions are non-ferrous metals, non-metallic, titanium, precision cutting, polymer materials, aluminum alloy and tungsten steel

## Cutting Capacity of Optional Vise

CL500505A Irregular shape vise kit		CL500506 Round and elliptic vise kit		CL500507 Fragile vise kit	
					
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
-	60x50	Max.40	50x35	-	50x28
					

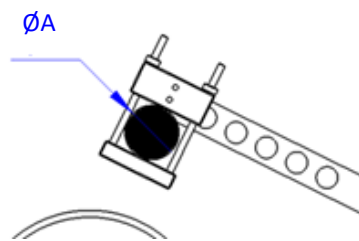
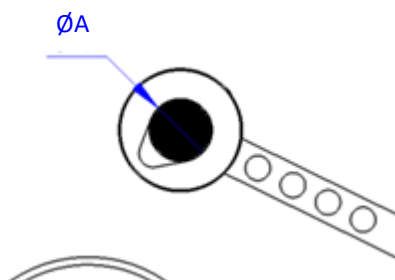
  

CL500509 Double clamping vise kit		CL50051001A Round vise kit (Ø32)		CL50051002A Round vise kit (Ø40)	
					
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
Max.50	50x35	Max.32	-	Max.40	-
					

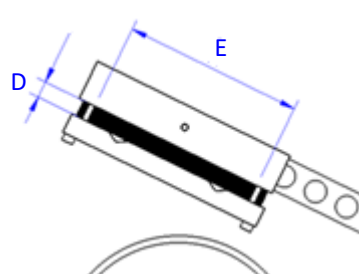
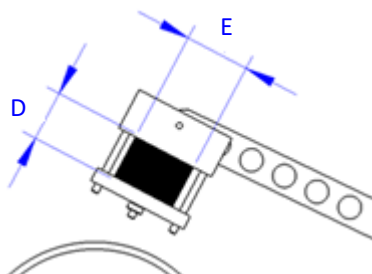
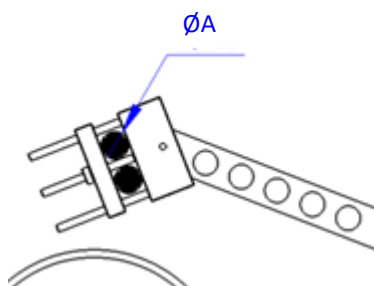


## Cutting Capacity of Optional Vise







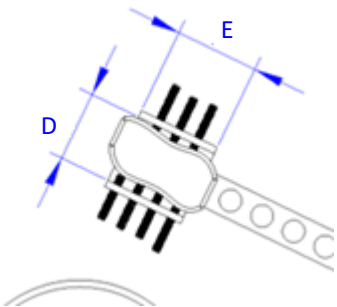
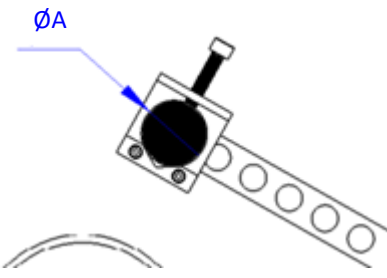
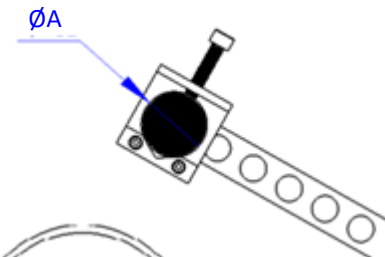
CL50051101A Teardrop type vise kit		CL50051102A Teardrop type vise kit		CL500512 Biomedical use vise kit	
● ↙	■ ↙	● ↙	■ ↙	● ↙	■ ↙
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
5~20	-	18~40	-	Max.40	40x30









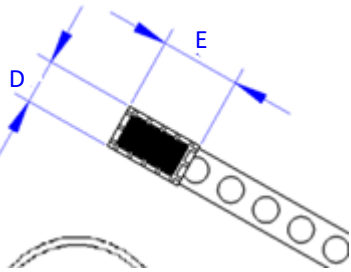
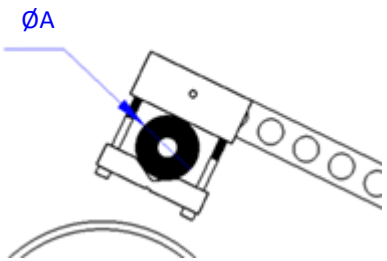
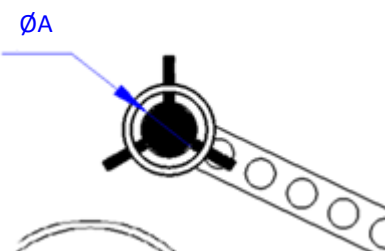
CL500513 Screw clamping vise kit		CL500514 Double clamping vise kit (Thin section analysis)		CL500303A Long type clamping vise	
● ↙	■ ↙	● ↙	■ ↙	● ↙	■ ↙
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
Max.18	-	-	45x35x3T	-	130*12



## Cutting Capacity of Optional Vise

CL400051A Irregular shape vise kit		CL400052-L Single clamping vise kit (Ø20)		CL400053 Round and elliptic vise kit	
 ↙	 ↙	 ↙	 ↙	 ↙	 ↙
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
-	38x25	Max. 20	20x30	Max. 14	38x10
					

CL400054A Fragile vise kit		CL400070-D Double clamping vise kit		CL50051001A Round vise kit	
 ↙	 ↙	 ↙	 ↙	 ↙	 ↙
A (mm)	E x D (mm)	A (mm)	E x D (mm)	A (mm)	E x D (mm)
-	50x28	Max. 20	20x30	Max. 32	-
					

## Desk for Metallographic Equipment



Model No.

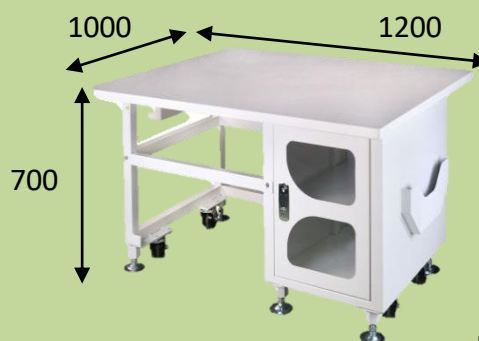
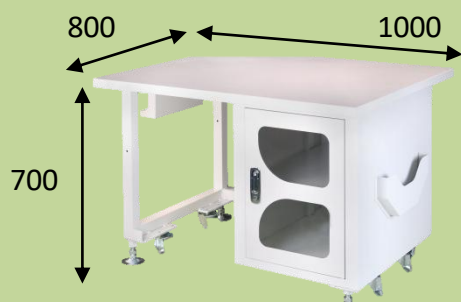
TF01

TF02

Dimension(WxDxH)

1000\*800\*700 mm

1200\*1000\*700 mm

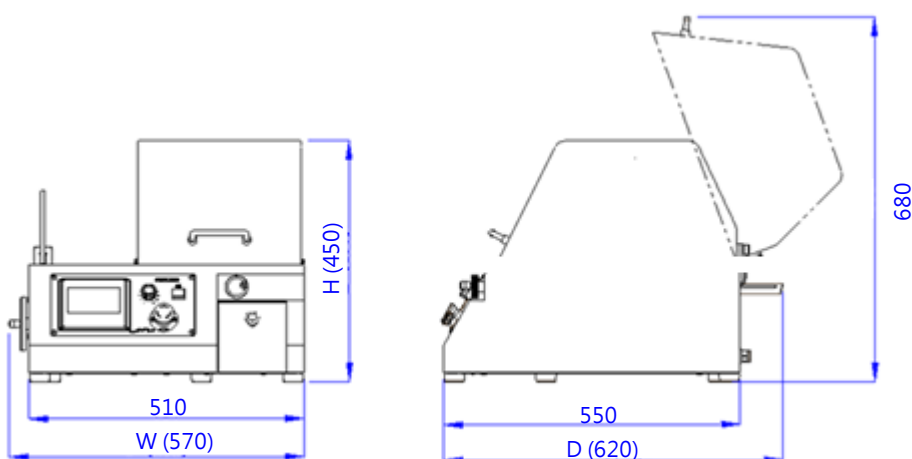


Unit: mm



## Specification

Model No.	CL50
Motor Power (w)	400
Cutting Ability (mm)	Max. $\varnothing 50$
Cut-off Wheel	$\varnothing 5'' \sim \varnothing 7''$ ( $\varnothing 125\text{mm} \sim \varnothing 175\text{mm}$ )
Idling Noise Level (dB)	62~68
Loading Pressure	Counterweight 0~700g
Cutting Method	Rock arm feeding system Automatic stop cutting protection device
Rotational Speed (rpm)	150~2000 (Rotational speed can be customized)
Cutting Vise (Standard)	Long type vise kit
Horizontal Movement (mm)	40
Coolant Tank Capacity (ml)	1000 (Recirculating in coolant tank)
Machine Dimension (mm)	570 x 620 x 450
Machine Weight (kg)	43
Power Supply	AC 110V/220V 1 $\phi$
Standard Accessories	coolant 1 L 、 standard vise*1( $\varnothing 50$ )
Cutting Platform WxD (mm)	274 x 550 (Use with $\varnothing 7''$ cut-off wheel)
Options	Various vise, cutting table, cut-off wheel

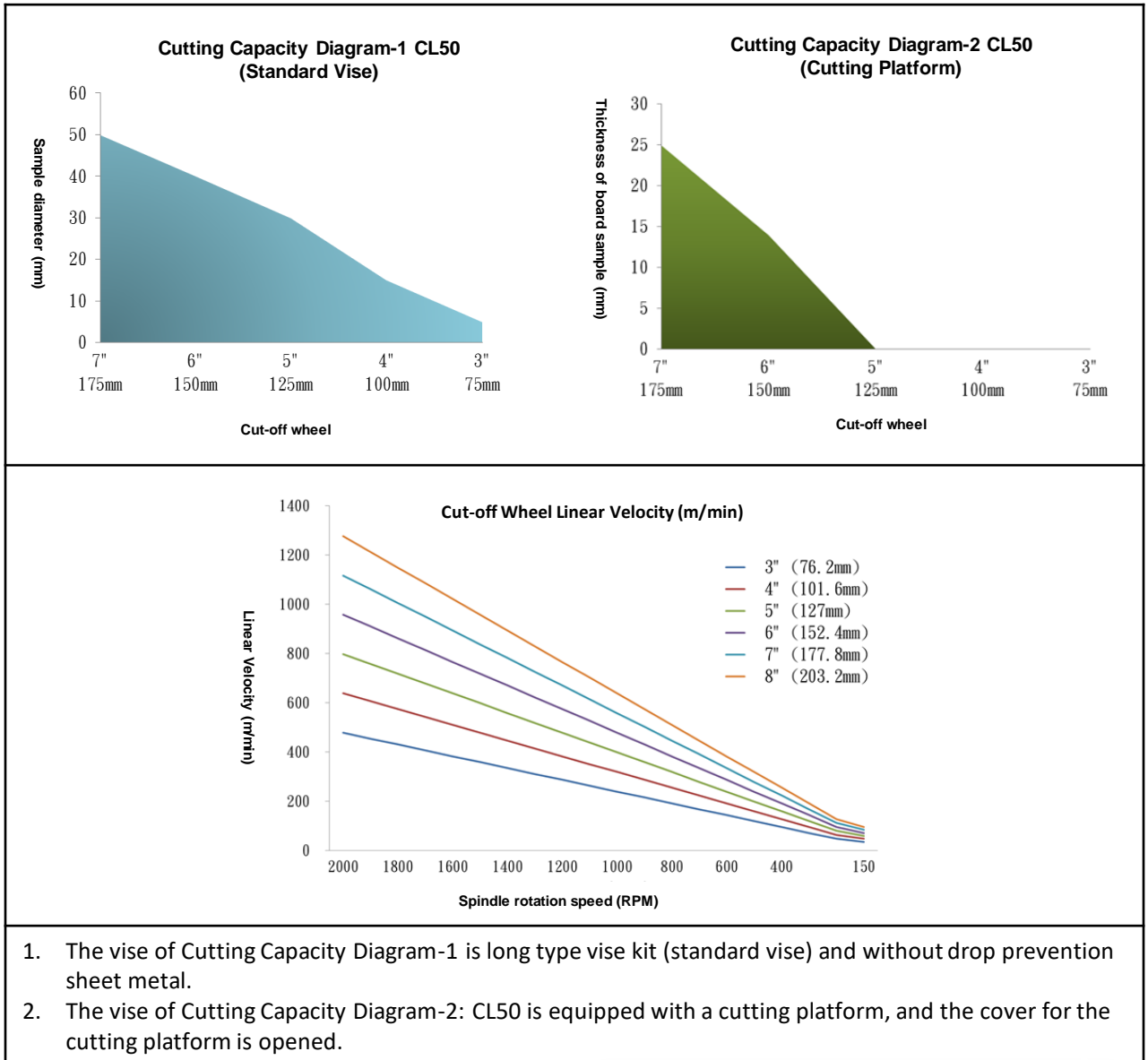


Unit: mm



## Parameter

### Cutting capacity and Cut-off Wheel Linear Velocity



Cutting platform is designed for the cutting of board-type samples.



## Consumables (Option)

### Diamond Cut-off Wheel Electroplating

- Single layer grain
- Quick and aggressive grinding with max stock removal rates



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
For cutting of glass, ceramics, gem asbestos, alloy, and rubber			
HW21110607	5"	Ø125xØ12.7x1.0	1
HW21110808	6"	Ø150xØ25.4x1.2	1
HW21111008	7"	Ø175xØ25.4x1.2	1

### Diamond Cut-off Wheel Metal Bond

- Best grain with good wear resistance
- Smooth cutting-surface and long life span



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
For cutting of cement, non-metal material and electronic component			
HW21120602L	5"	Ø125xØ12.7x0.5	1
HW21120702L	6"	Ø150xØ12.7x0.5	1
HW21121003L	7"	Ø175xØ25.4x0.6	1

### Diamond Cut-off Wheel Resin Bond

- Flexible cut-off wheel is suitable for cutting brittle specimen



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
or cutting of quartz, glass, non-iron metal, ceramics and silicon wafer			
HW21130602L	5"	Ø125xØ12.7x0.5	1
HW21130702L	6"	Ø150xØ12.7x0.5	1
HW21131003L	7"	Ø175xØ25.4x0.6	1

※ Please contact us for customized specification.

## Consumables (Option)

### CBN Cut-off Wheel Electroplating

- Single layer grain
- Quick and aggressive grinding with max stock removal rates



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
For cutting of glass, ceramics, gem asbestos, alloy, and rubber			
HW21210607L	5"	Ø125xØ12.7x1.0	1
HW21210808L	6"	Ø150xØ25.4x1.2	1
HW21211008L	7"	Ø175xØ25.4x1.2	1

### CBN Cut-off Wheel Metal Bond

- Best grain with good wear resistance
- Smooth cutting-surface and long life span



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
For cutting of cement, non-metal material and electronic component			
HW21220602L	5"	Ø125xØ12.7x0.5	1
HW21220702L	6"	Ø150xØ12.7x0.5	1
HW21221003L	7"	Ø175xØ25.4x0.6	1

### CBN Cut-off Wheel Resin Bond

- Flexible cut-off wheel is suitable for cutting brittle specimen



Order No.	Size	O.D x I.D x T(mm)	Package(pcs/box)
For cutting of quartz, glass, non-iron metal, ceramics and silicon wafer			
HW21230602L	5"	Ø125xØ12.7x0.5	1
HW21230702L	6"	Ø150xØ12.7x0.5	1
HW21231005L	7"	Ø175xØ25.4x0.8	1

## Cutting Fluid



Order No.	Cutting Fluid	
S01003	Oily, Transparent (Red Bottle cap)	20L
S01004	Oily, Transparent (Red Bottle cap)	1L

# Top Tech distributors



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Agent

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