

# Catalog

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F. Standard  
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Dual -function vacuum  
cleaner and water filter

Coolant system

Spindle sleeve  
(option)



- TOP WORK -  
TG - 系列



- TOP WORK -  
TR - 系列



- TOP WORK -  
SI - 系列



- TOP WORK -  
M - 系列



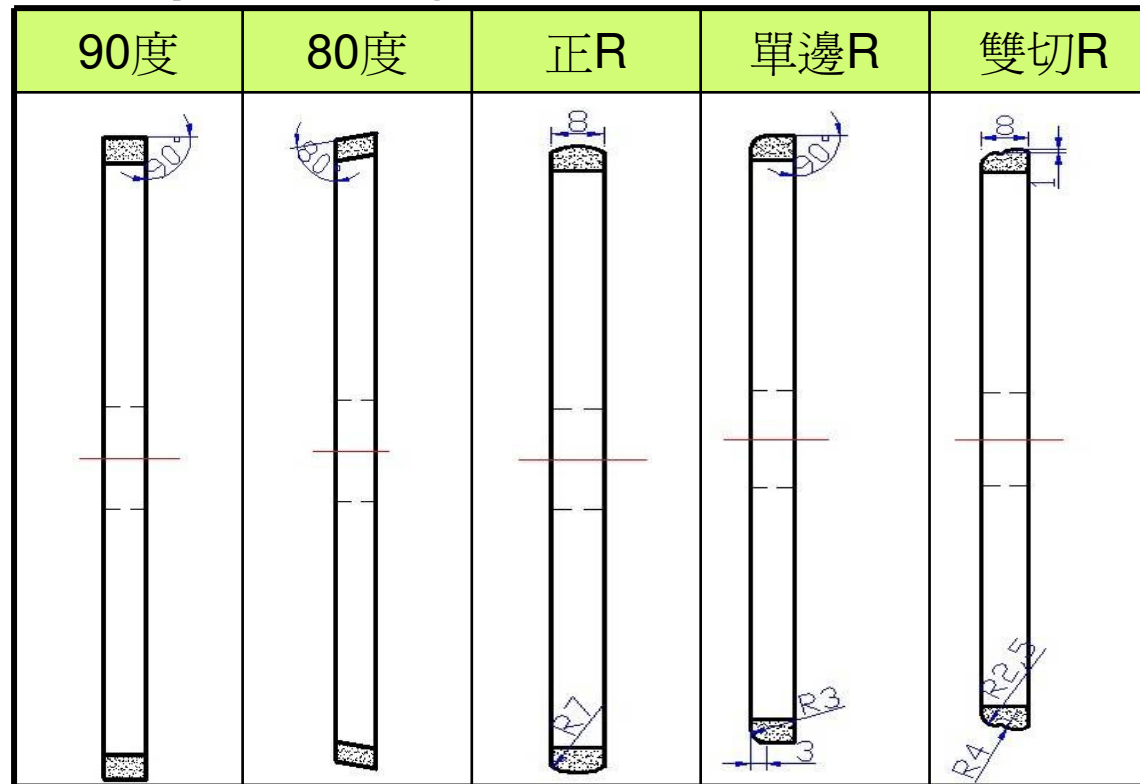
- TOP WORK -  
CM - 系列



- TOP WORK -  
HS - 系列

# Function

**TD-series is a PLC system wheel dressing machine. Especially, it can dress the wheel which can be fast for carbide end mill processing.**



- TOP WORK -  
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- TOP WORK -  
CM - 系列



- TOP WORK -  
HS - 系列

## Specification

Type	Axis	Software	CCD	Monitor
<b>TD-2P</b>	<b>2 Axis</b> (X axis 、 Swing axis)	<b>Photo M</b> (measurement)	<b>8X~50X</b>	<b>17"</b>
<b>TD-3P</b>	<b>3 Axis</b> (X axis 、 B axis 、 Swing axis)	<b>Photo TM</b> (DXF input)	<b>20X~120X</b>	<b>17"</b>



- TOP WORK -  
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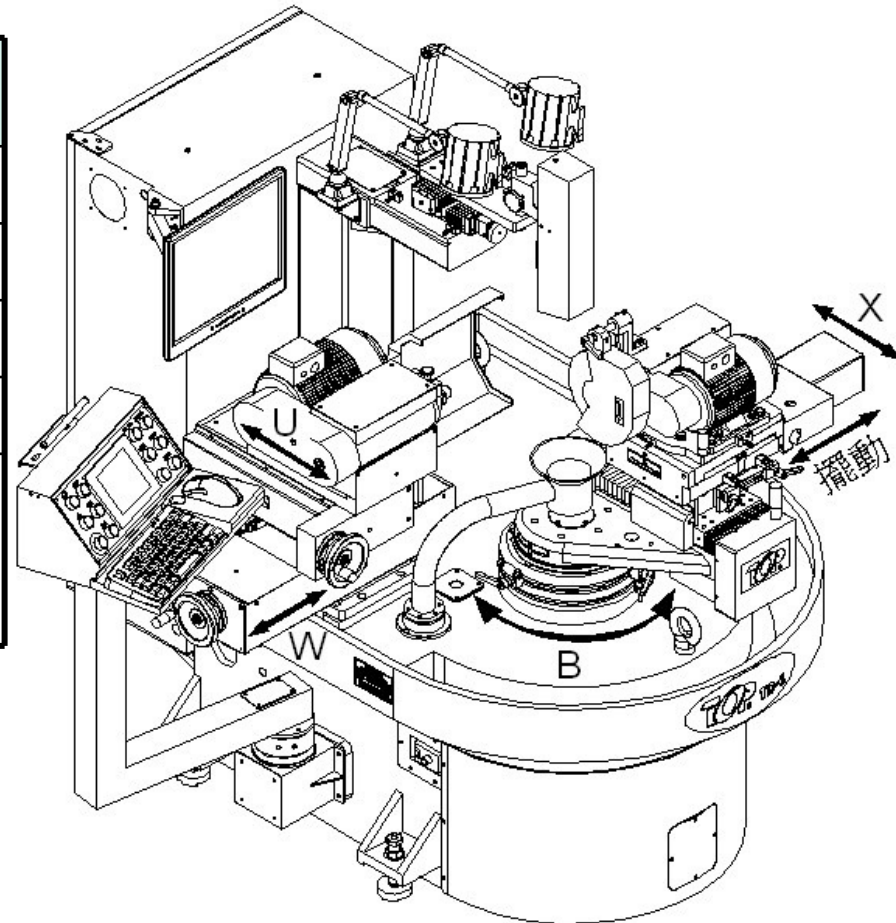
- TOP WORK -  
CM - 系列



- TOP WORK -  
HS - 系列

## A. Axis

Axis	Characteristics
X	Horizontality
U	Horizontality
W	Horizontality
B	Rotation
Wheel head mount	Oscillation stroke



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## B. CONTROL SYSTEM

### CONTROL SYSTEM : Mitsubishi PLC

Control axes (X axis 、 B axis 、 Swing axis)

The user could choose MGP hand wheel or double program when use the feed mode.



Type : Mitsubishi PLC  
(FX-3G)



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## C. Electric servo

### Specification of motor

#### (MITSUBISHI SERVO MOTOR)

Axis	Power (Kw)	Precision
X axis	0.4kw	131072 pulse/rev
B axis	0.5kw	131072 pulse/rev
Swing axis	60w	0~50 times/min



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## D. Axis feature

### Spindle

Spindle	Power	Speed
Wheel spindle	1.5(kw)	100~1200RPM
Dressing wheel spindle	0.75(kw)	200~3500RPM

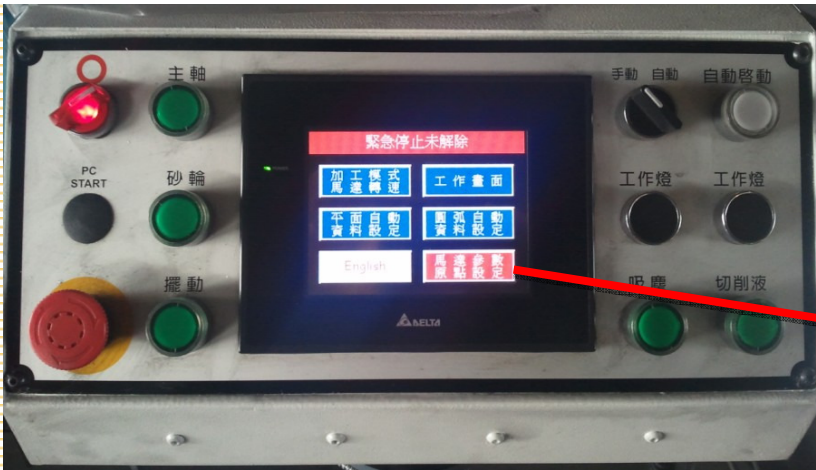
### Bearing (NSK)

Spindle	Bearing	Arrangement
Dressing wheel spindle	P4 type bearing	Front*2 Back*2
Wheel spindle	P4 type bearing	Front*2 Back*2



# E. Operating panel and main screen

## Sample of operating panel and touch screen.



Operating panel



Touch screen



## E-1. Introduction of function

The dressing function can support two kinds of mode and three kinds of feed mode which are straight line、arc modes and single、double、center.

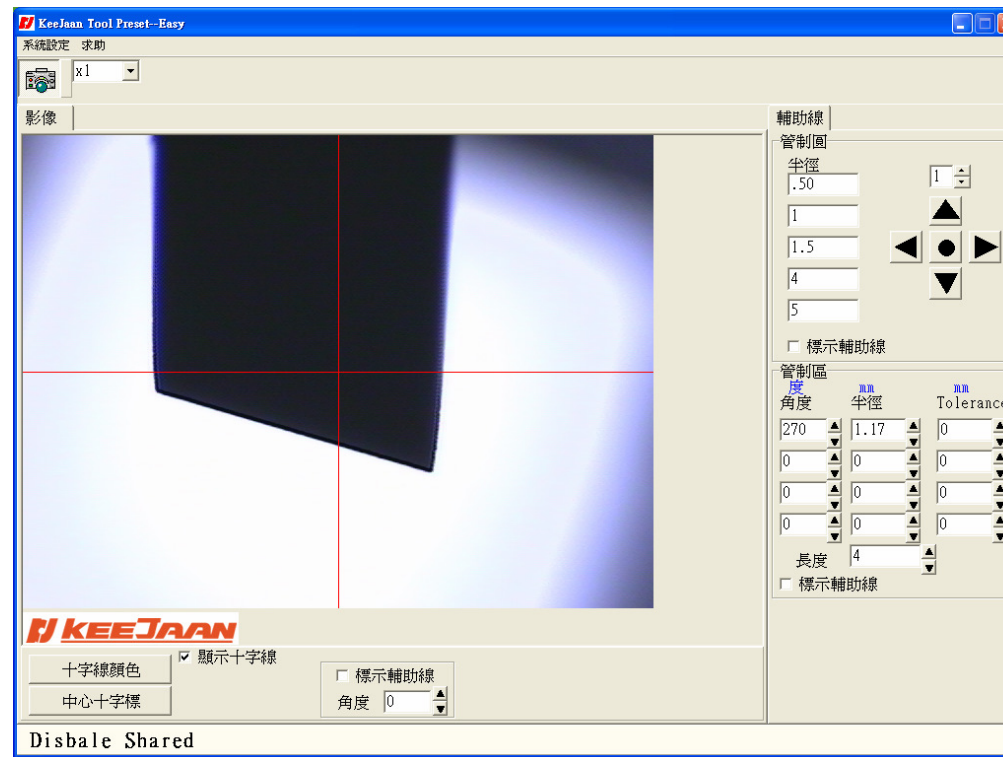


### Parameter setting / Mode selection



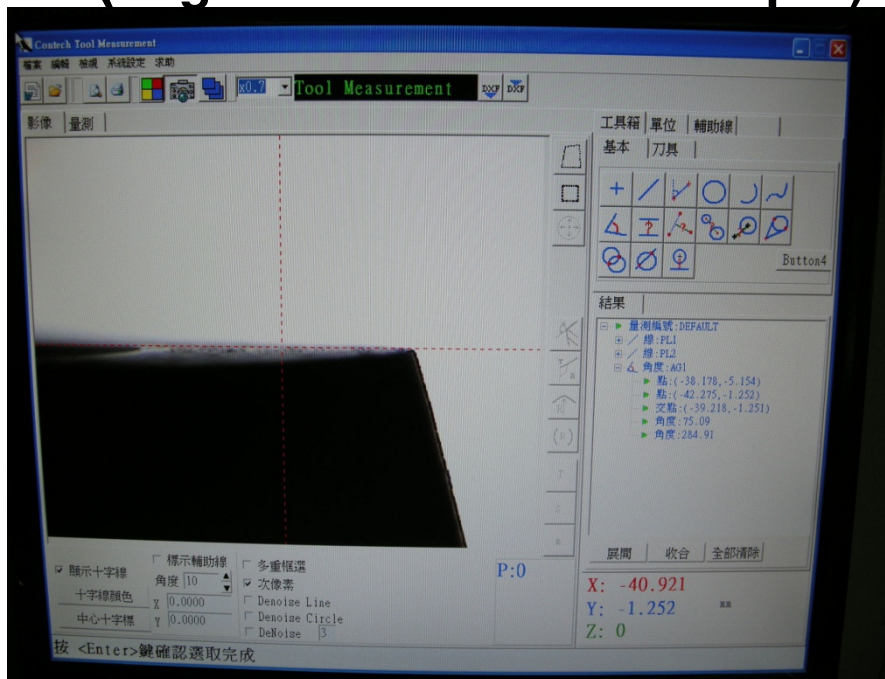
## E-2. measure software (simple) standard.

The software could make cross scale and arc which can check angle 、 arc radius and depth.



## E-3. measure software (DXF) optional.

The measure software can measure wheel handily.  
(angle 、 arc radius and depth)

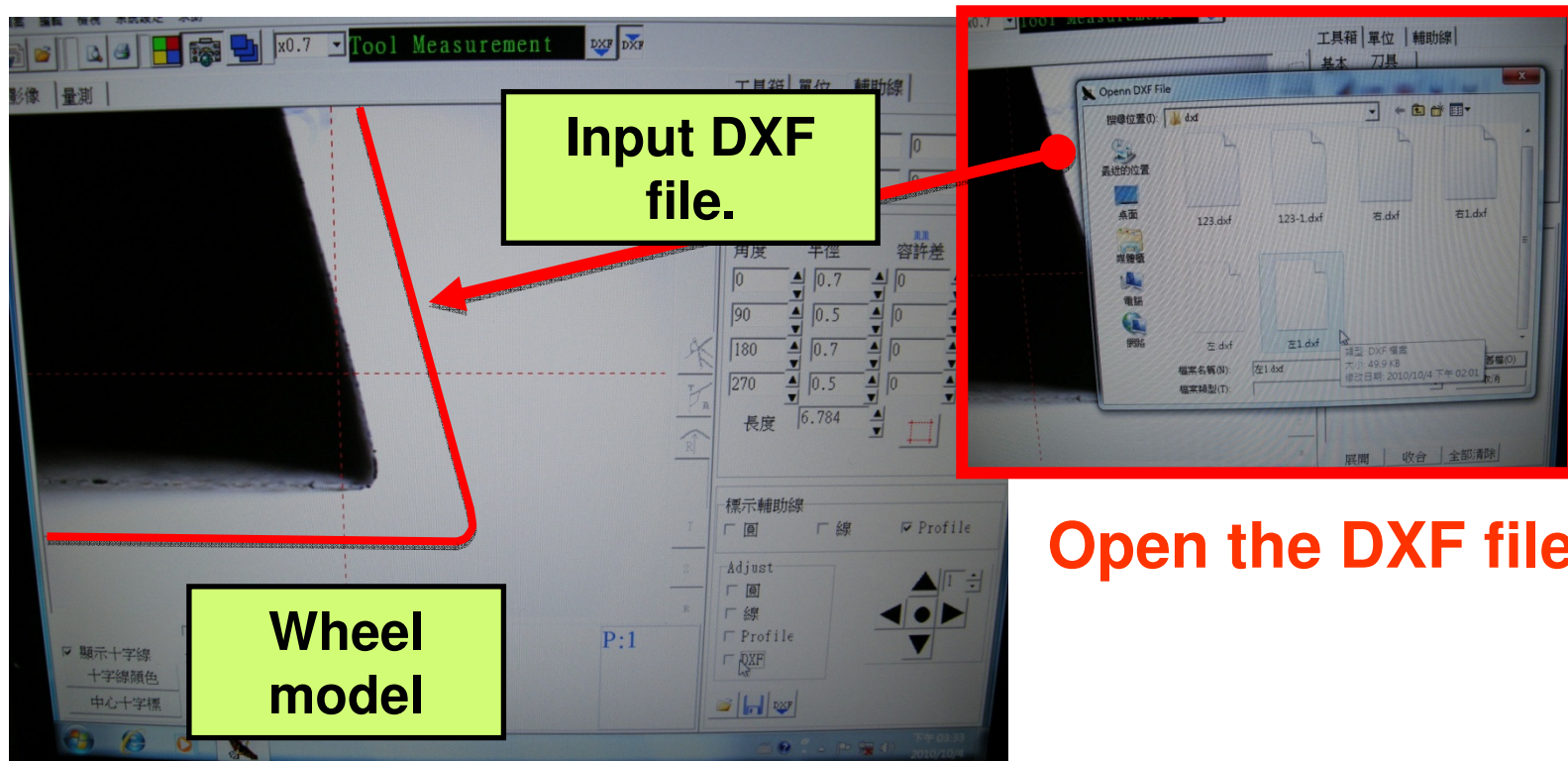


**Measure mode**



## E-4. Operating screen of measure software

**Input DXF file be a model while it grinds. That can check error of wheel and model. The DXF file proportion and CCD rate are all the same.**

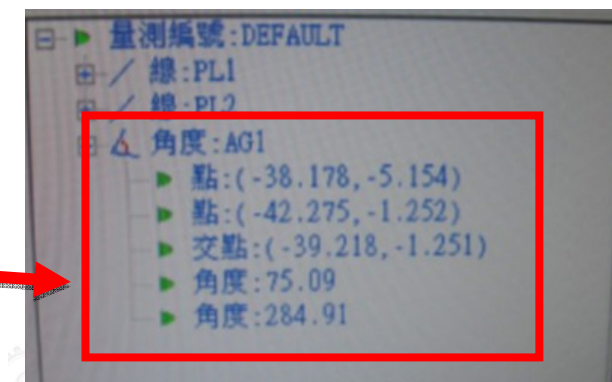
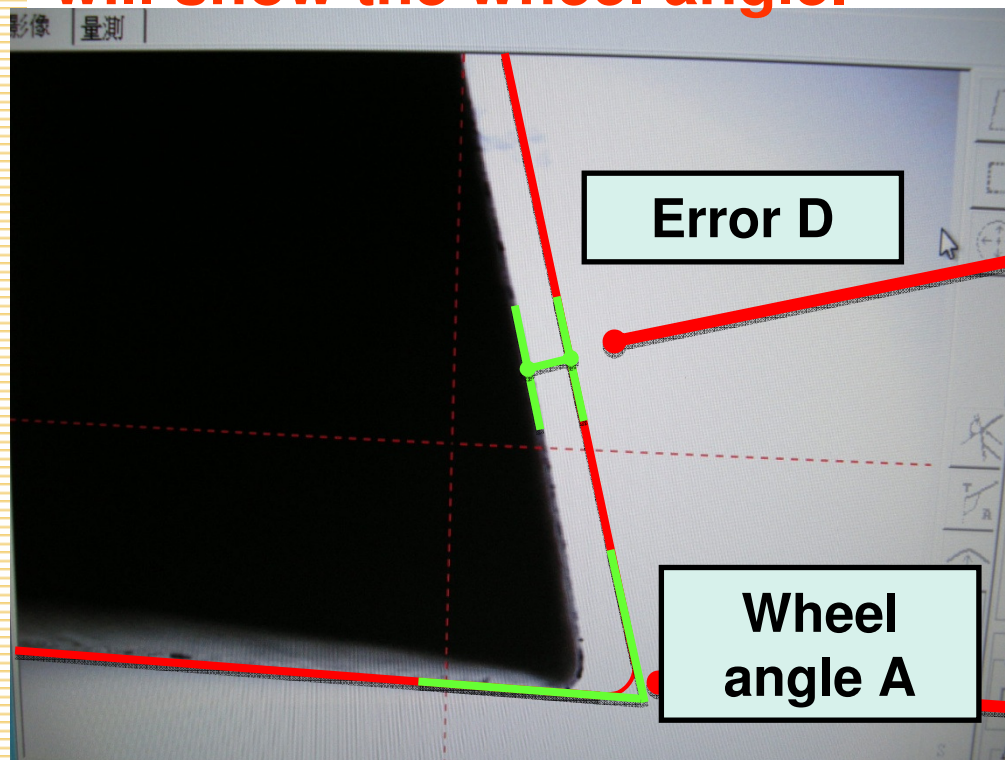


**Open the DXF file.**



## E-5. Operating screen of measure software

**Move the W axis to check model while grinding.  
The monitor will show the error then measure software  
will show the wheel angle.**



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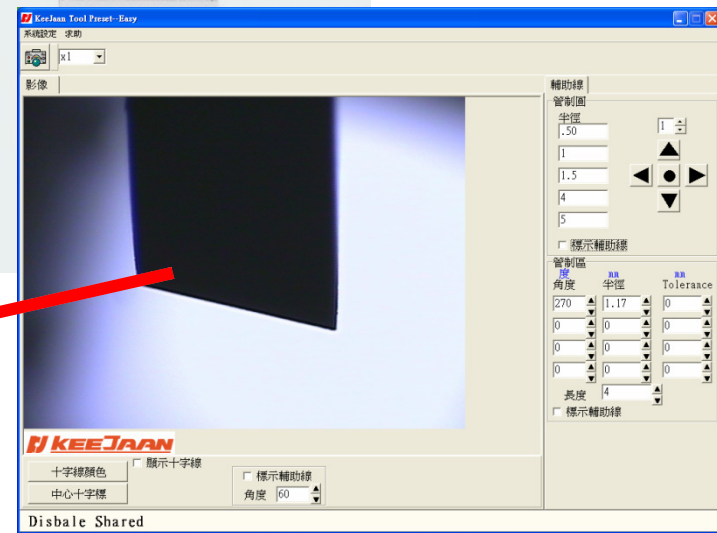
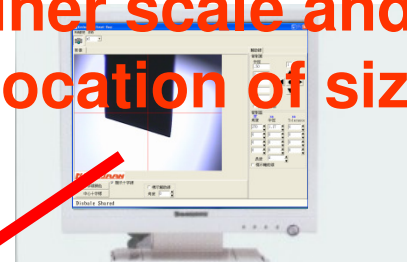
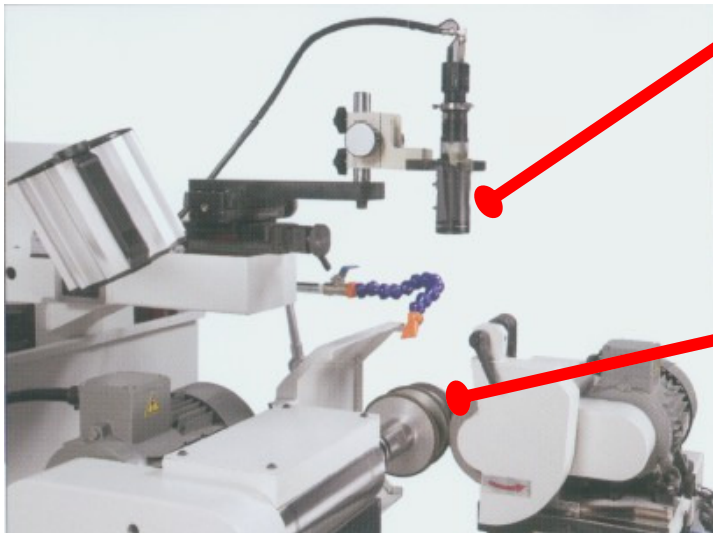
- TOP WORK -  
CM - 系列



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HS - 系列

## E-6. Wheel grinding dress and check

It can dress wheel while measuring wheel at same time. That could reduce the error. Each fixed axis installs the light liner scale and encoder that can show the location of size correctly.



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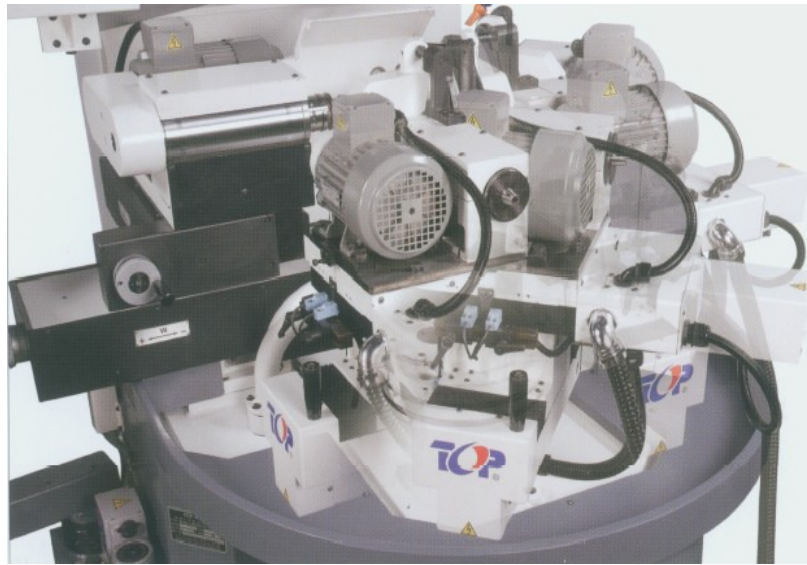
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HS - 系列

## E-7.Movable workhead and oscillational workhead

**The radius grinding wheel can dress standard R radius.  
By using oscillational workhead that could extend  
lifespan of wheel and reduce the cost.**



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## F. Dual –function vacuum cleaner and water filter (Standard Accessories)



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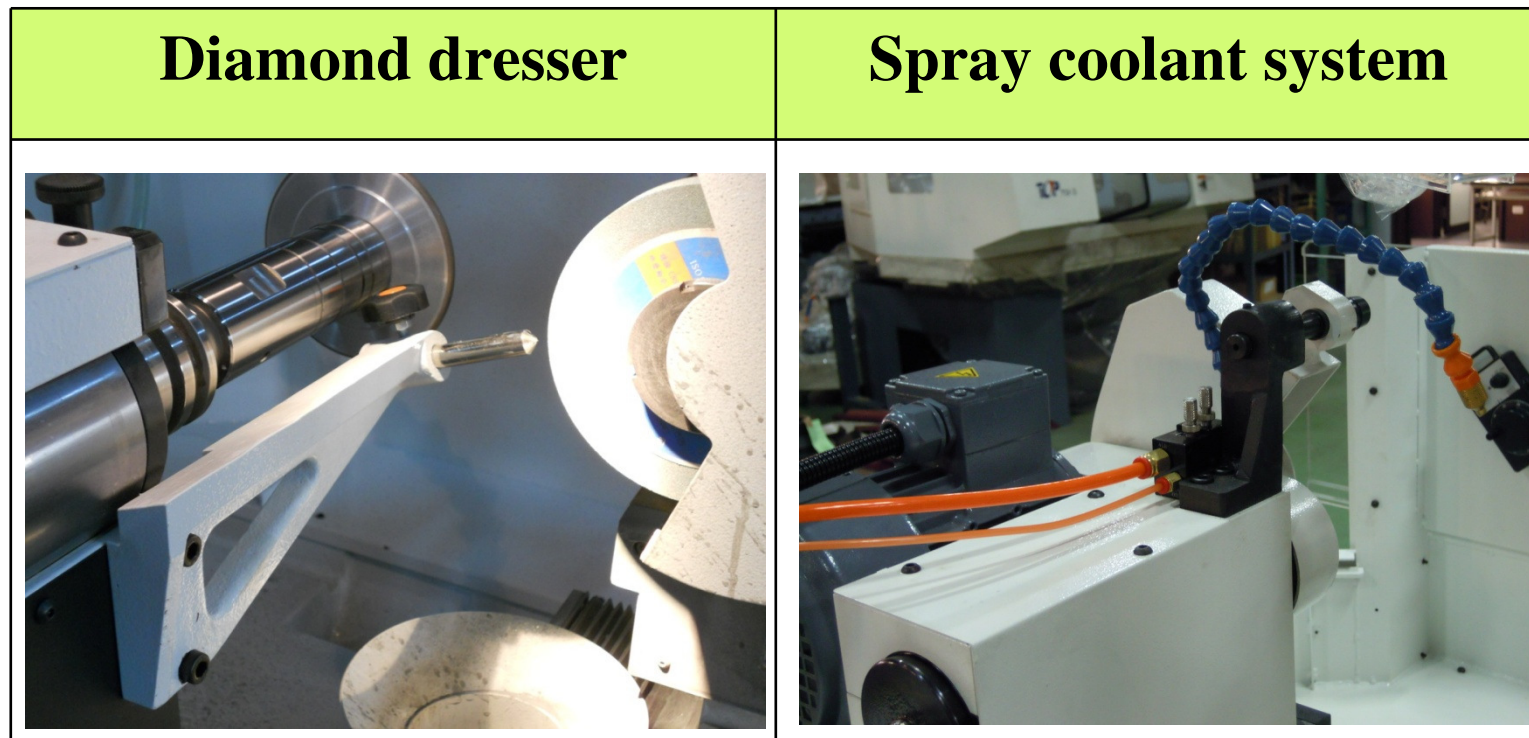
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CM - 系列



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HS - 系列

## F-1.Diamond dresser & Spray coolant system (Standard Accessories)

The function of diamond dresser can correct run-out and clean surface. The spray coolant system can reduce dust and make fine surface.



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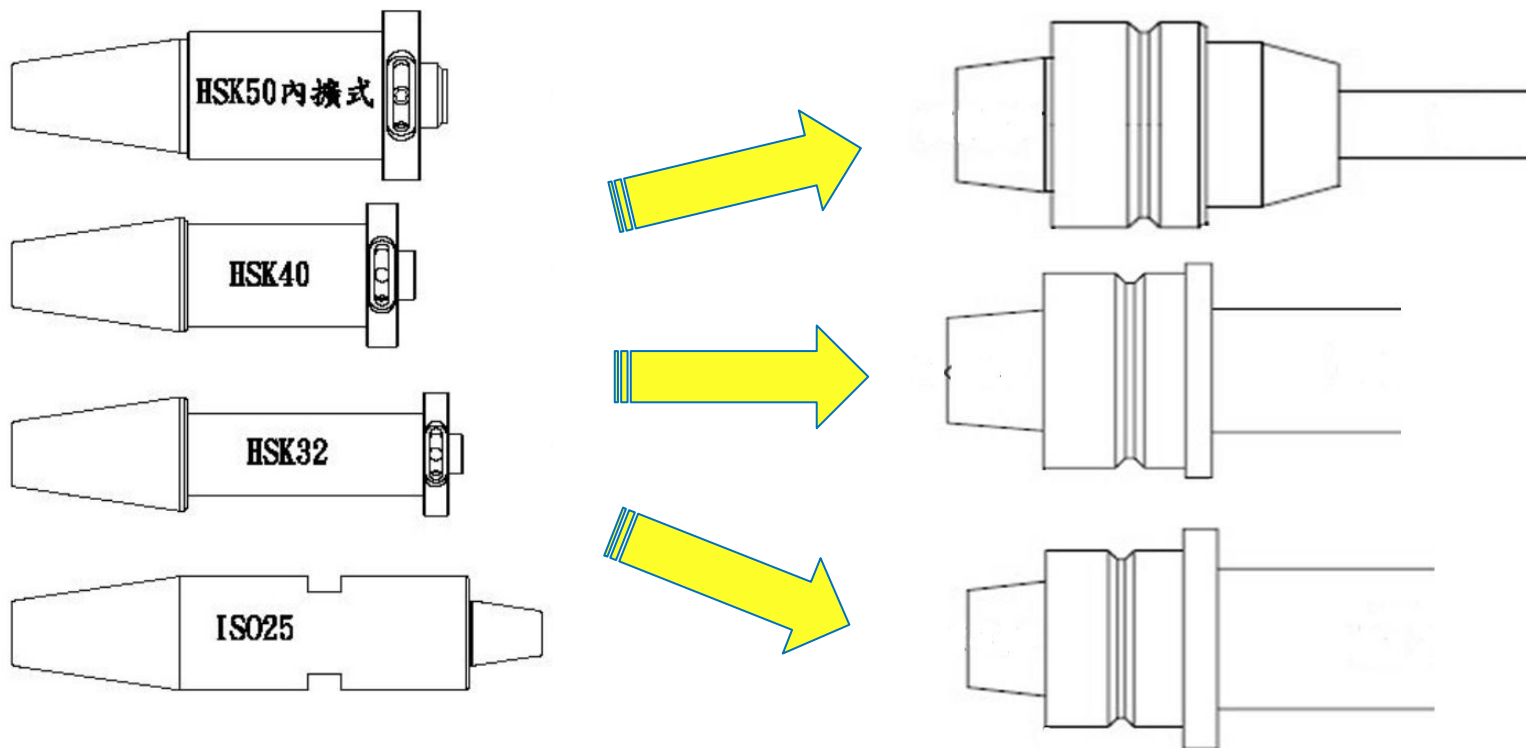
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CM - 系列



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HS - 系列

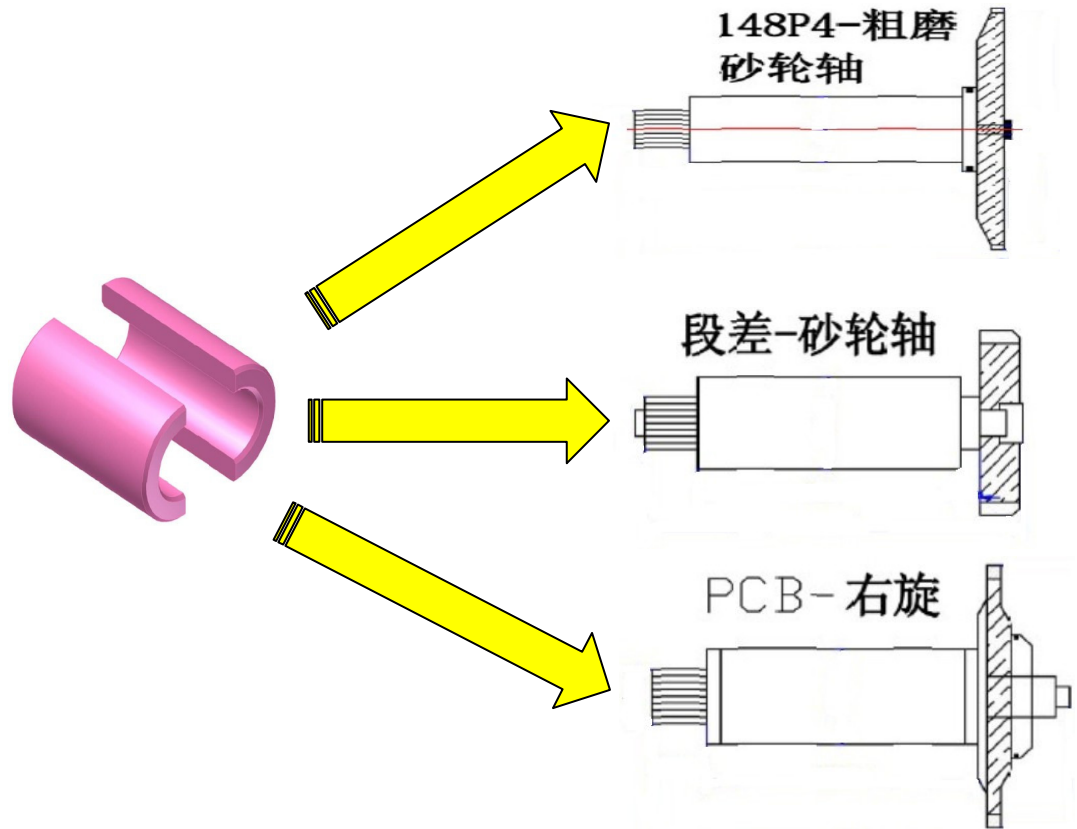
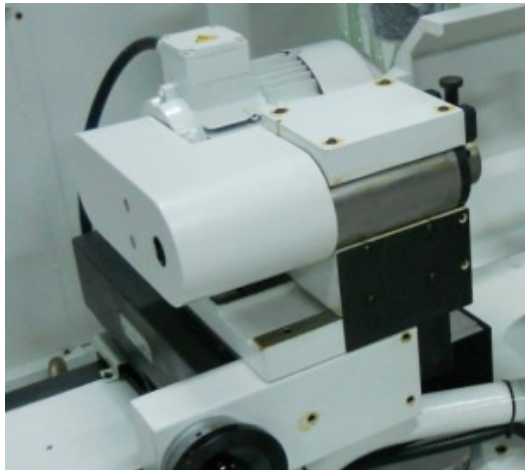
F-2.Spindle wheel and tool holder  
(option)

# Grinding wheel flange (HSK)



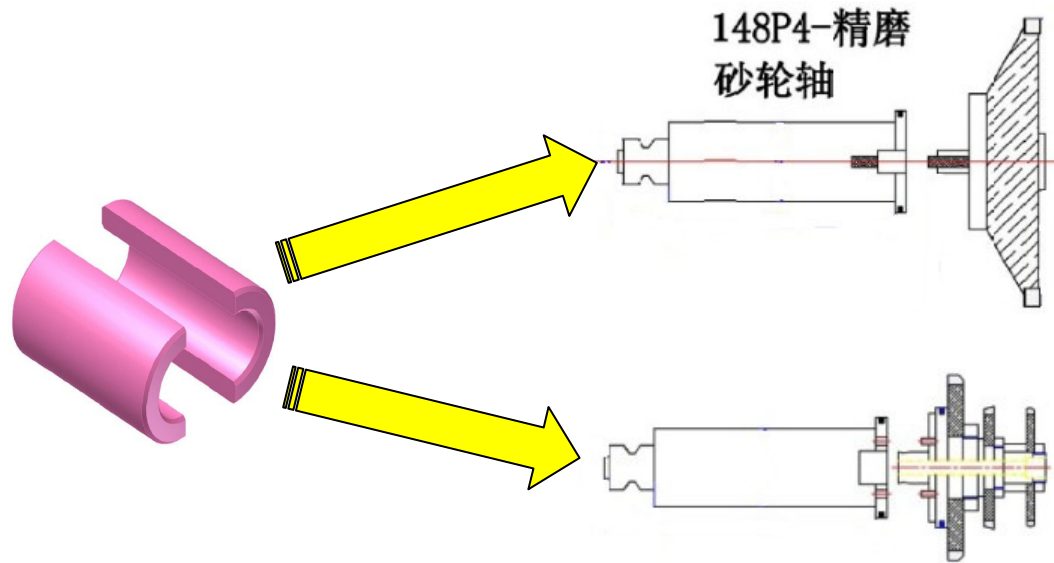
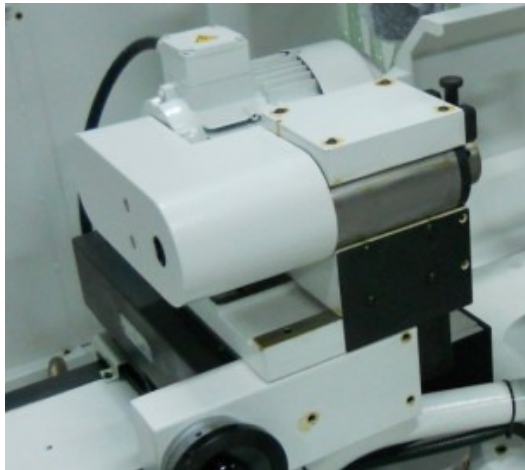
## F-3. Spindle sleeve (optional)

**Spindle series (could change grinding wheel spindle directly)**



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**Spindle series (could change grinding wheel spindle directly)**



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