

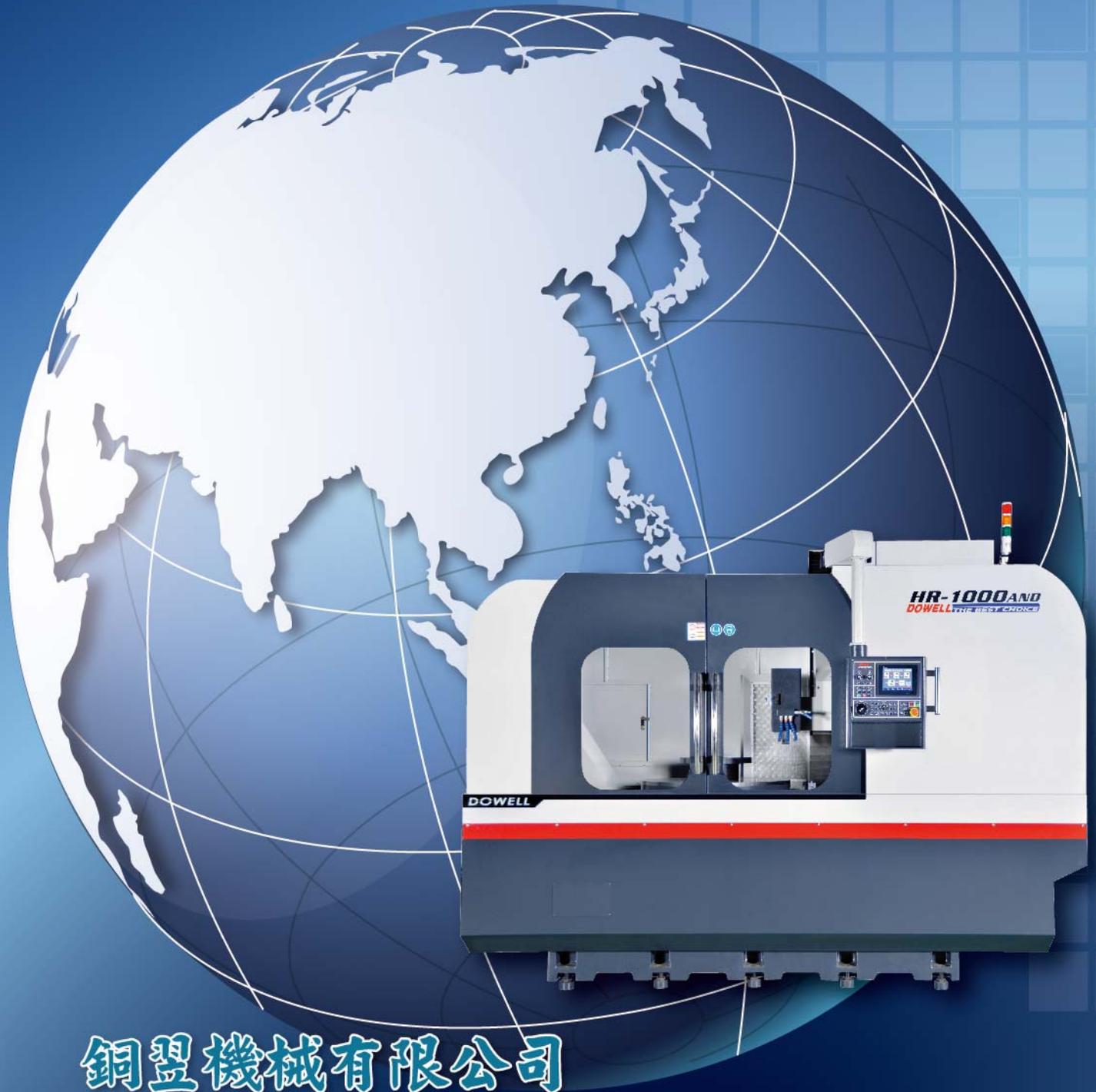


WERKZEUGMASCHINEN GMBH

# DOWELL®

## 精密旋轉台式磨床

### High Precision Rotary Grinding Machine



## 銅盟機械有限公司

### HR-1000/1200

### VR-1000



## 高精密型旋轉台磨床 High Precision Rotary Grinders

### 機械特性 Feature:

- 米漢納高級鑄鐵(FC30)高剛性、高耐磨性之滑道可使機器精度永久保持。
- 側向設計之主軸頭在重切削時，具有高穩定性。
- 昇降進給軌道採用2支高剛性滾柱型線性滑軌，65CA(滑軌x6)使上下進給順暢，亦兼顧高剛性。
- 工作台採用細目電磁盤，吸力特強，利於小工件吸附。
- Meehanite Class FC30 casting with slide way provides high stiffness and wear resistance maintaining the accuracy of the machine.
- Spindle lateral design creates stability during heavy cutting.
- Vertical feeding uses 2 high stiffness and rigidity linear roller guides allowing smoothly vertical feeding whilst maintaining high stiffness.
- Small workpiece suction is accomplished by fine electrical magnetic chuck.



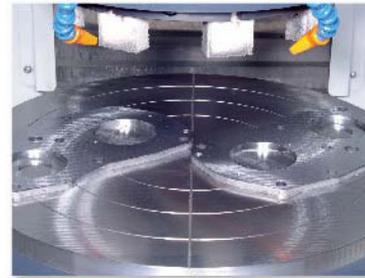
超寬硬軌 HR1000/1200 (OPT.)  
Extra wide box guide-way

### 主要加工項目

- 精密軸承
- 油壓元件
- 精密製刀
- 汽機車零件
- 其他精密零件

### Main Processing Item

- Precision bearings
- Hydraulic components
- Precision knife
- Automotive components
- Other Precision parts



研磨狀態 (立式主軸)  
Grinding operation (Vertical spindle)



研磨狀態 (臥式主軸)  
Grinding Operation (Horizontal spindle)



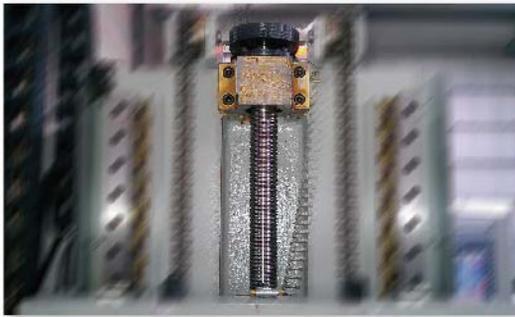
自動修整補償功能  
Automatic trim compensation

### 砂輪主軸 Spindle And Motor

主軸採用六個超精密斜角滾珠軸承支撐，能承受重負荷研磨。  
The large spindle is support by CP6 precision angular contact ball bearing.  
20HP SIEMENS motor ensures powerful accurate cutting.

# HR-1000A

## 新式樣專利 請勿仿冒



- Y軸採用精密滾柱型線性滑軌，並搭配滾珠螺桿驅動。  
Y axis uses high rigidity linear roller guides way (block x 6) and with precision ball screw drive.



- 可調式操作面板  
Adjustable operation panel



### HR-1000AND / HR-1200AND VR-1000AND

- 本機台含特別配件  
The Picture includes optional accessories.



- 寬敞研磨空間以利於取放工件  
Wide space in machine working area increases convenience of workpiece loading and unloading



- 供油系統  
Automatic lubrication system



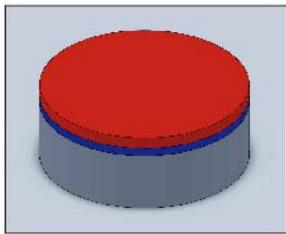
- Z軸採用硬軌式滑道，經由研磨加工及人工精密鏟花，提升機器使用壽命及精度。  
Z axis uses high rigidity slideway by precision grinding and precisely hand scraped.

## 控制系統 (AND) : AND Control System PLC

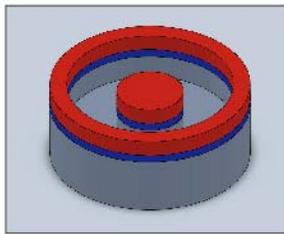
- 簡易式的對話操作模式能讓使用者輕易選擇研磨方式依據設定畫面輸入研磨數據，既能進行自動研磨。
- 不需有20年加工實務經驗，不需要有高智慧、高學歷，就算是不懂機械操作的一般員工，也可掌握一手不同凡響的精密研磨加工技藝。
- User-friendly control allows inexperienced, staff or any operators to master operation very ease.
- Simple Dialogue control only requires a size input to start grinding cycle.



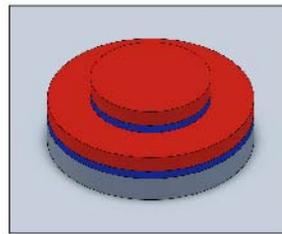
## 研磨範例 Workpiece Sample



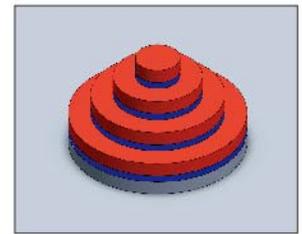
平面研磨  
Surface grinding



凹槽研磨  
Plunge grinding

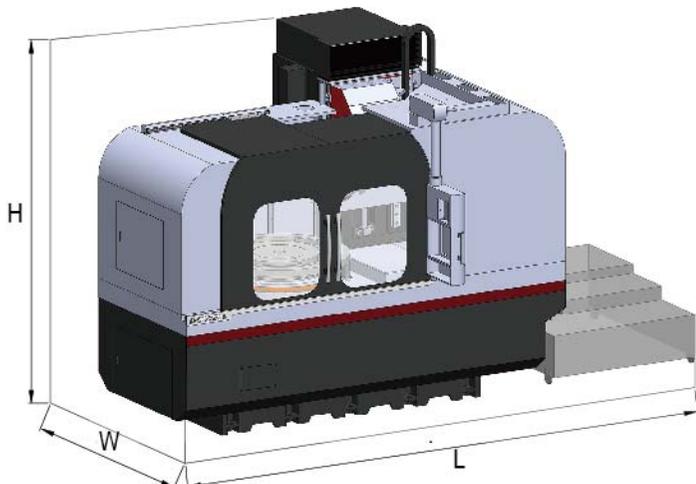


階段研磨  
Step grinding



複合研磨  
Multi-step grinding

## 佔地面積 Floor Plan



型號 TYPE	L(mm)	W(mm)	H(mm)
HR1000	5100	2950	3000
HR1200	5300	3150	3000
VR1000	5100	3950	3000

## 機台規格 Specification

機台型式 Machine type		臥式主軸 Horizontal spindle		立式主軸 Vertical spindle
項目	DESCRIPTION	HR-1000AND	HR-1200AND	VR-1000AND
研磨台面直徑	Rotary magnetic chuck dia.	1000mm	1200mm	1000mm
磁盤最大研磨半徑	Maxi grinding radius.	525mm	625mm	500mm
工作台面至主軸中心距	Distance of table surface to spindle surface center.	700mm	700mm	400mm
旋轉台轉速	Rotary magnetic chuck speed .	10-60r.p.m.	10-50r.p.m.	5-20r.p.m.
旋轉台馬力	Rotary magnetic chuck horse power.	7kw	10kw	7kw
主軸馬達	Spindle motor.	SIEMENS, V3, 20HP	SIEMENS, V3, 20HP	50HP
主軸轉速	Spindle speed (50/60Hz)	1450/1750r.p.m.	1450/1750r.p.m.	870/1175r.p.m.
自動進給動力來源	Auto downfeed horse power.	1.5kw	1.5kw	1.5kw
上下手輪進給(每轉)	Vertical hand wheel downfeed per revolution.	x1, x5, x10 (MPG) / 0.1, 0.5, 1mm		
上下手輪進給(每刻度)	Vertical hand wheel downfeed per graduation.	x1, x5, x10 (MPG) / 0.001, 0.005, 0.01mm		
砂輪尺寸(直徑×寬×孔徑)	Wheel size (dia x width x bore)	500x50x203mm	500x50x203mm	150x50x25x8mm
淨重/毛重(大約)	Net weight / gross weight (approx)	12500/13500kg	14000/15500kg	13000/14000kg
裝箱尺寸(長×寬×高)	Packing size (LxWxH)(mm)	5100x2950x3200	5300x3150x3200	5100x2950x3200

※本公司保留變更設計·規格·機構·外觀等之權利,恕不另行通知。

※The manufacturer reserves right to modify the design, specification mechanisms etc. without notice.

※HR-1200AND以上規格接受訂製

※HR-1200AND Above specifications are available to be changed.

## 選購配件 Optional accessories



☐ 單用水機  
Coolant system



☐ 磁鐵式過濾水機  
Magnetic filter



☐ 電動紙袋附磁鐵過濾水機  
Auto. paper strip filter  
with magnetic separator  
and coolant system



☐ 油霧回收機  
Oil mist collector



☐ 退磁器  
Demagnetizer



☐ 線上砂輪平衡系統(手動)  
On line wheel balance system (Manual)



☐ SBS(自動)  
(Auto)



☐ 光學尺  
Digital readout



☐ 變頻器  
Inverter



☐ 電控空調冷卻機  
Air-Conditioner