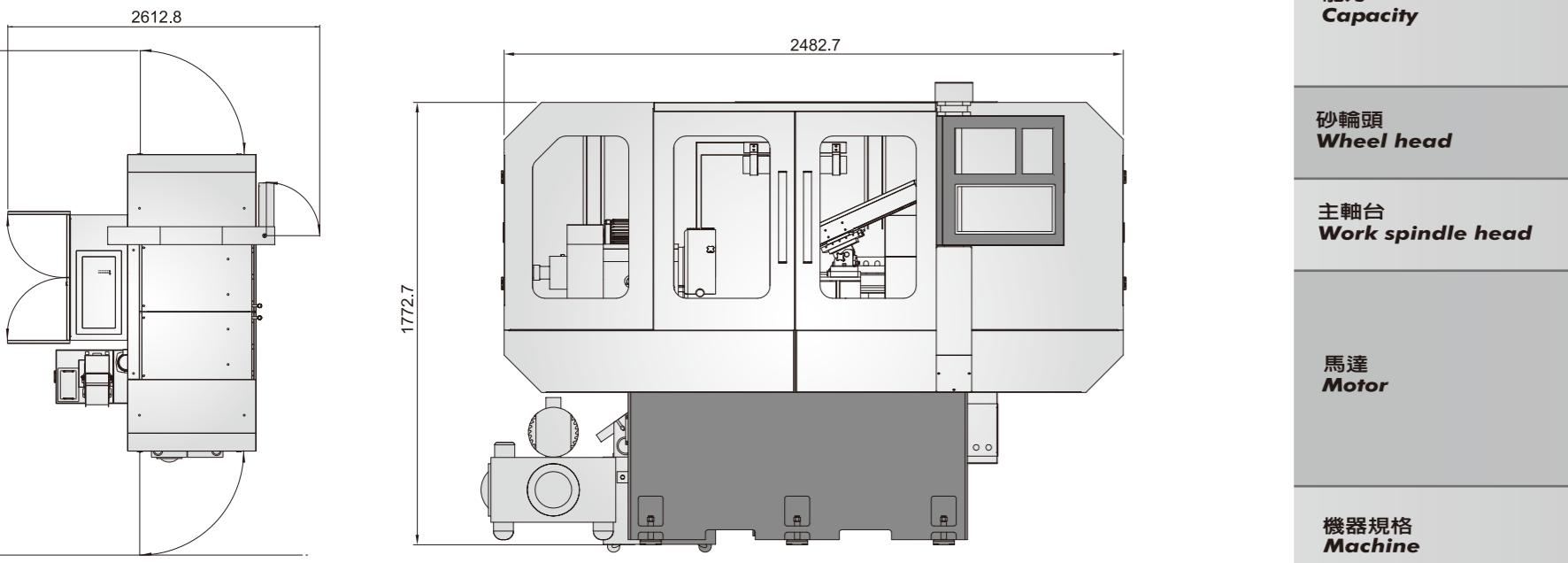
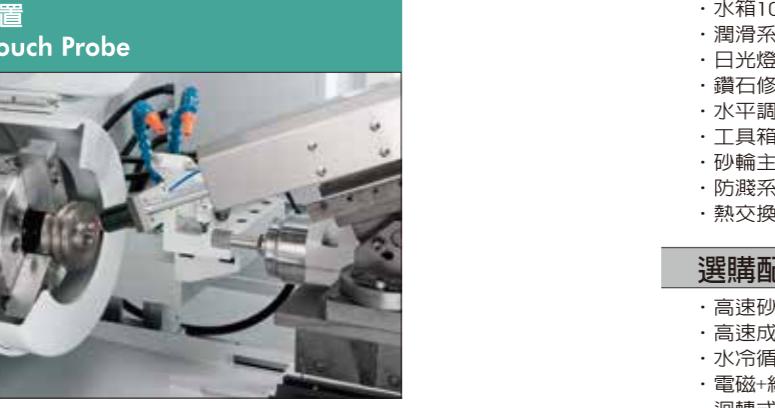
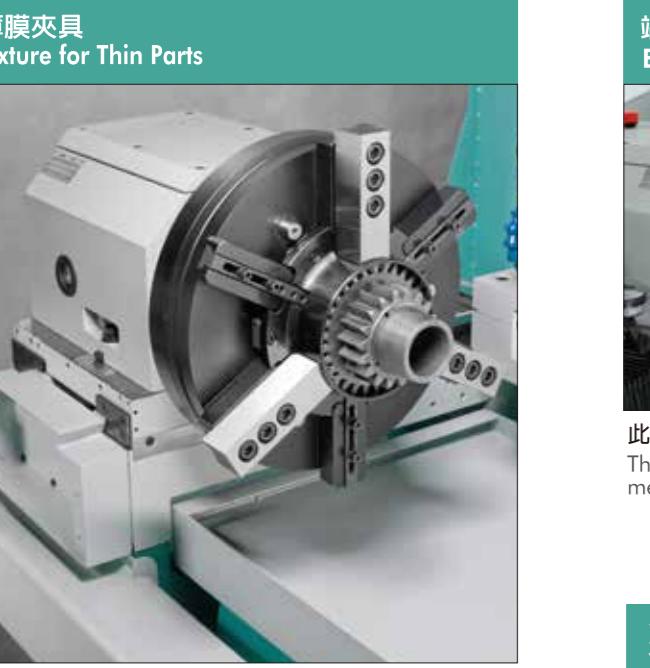


機器外觀尺寸圖 MACHINE DIMENSIONS



選購配備 OPTIONAL ACCESSORIES



此裝置提供快速，方便的端面基準點之量測。
The touch probe is used for fast and convenient measurement for reference point of end face.

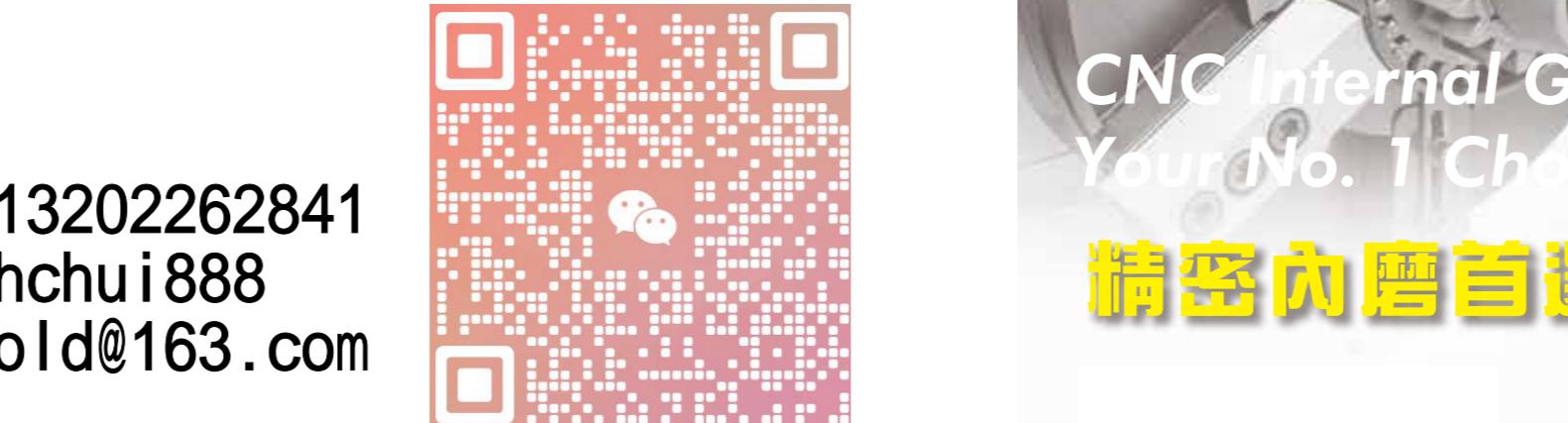


X, Y, Z軸可依客戶要求，加裝光學尺，提供閉迴路控制。
以提升定位精度。
Upon customer's request, the X, Y, Z-axis is available to be fitted with a linear scale. It provides a close loop control for increasing positioning accuracy.

規格 Capacity	SPECIFICATIONS		SRI-150
研磨內徑範圍 Inside diameter range	Ø6~Ø150mm		
最大研磨深度 Max. grinding depth	150mm		
最大夾持長度 Max. chucking length	200mm		
床面旋徑 Swing over bed	520mm		
防水蓋旋徑 Swing over fluid guard	320mm		
最大進給速度 Max. feed rate	8m/min		
最大行程 Max. travel	100mm		
最小設定單位 Min. setting unit	0.001mm		
主軸轉速 Spindle speed	13,800 R.P.M		
主軸 Spindle	A2-5		
迴轉角度 Swivel angle	+3°~-7°		
砂輪主軸馬達 Workhead spindle	2kw		
工作主軸馬達 X-axis AC servomotor	2HP2P + freq. inverter		
Y軸伺服馬達 Y-axis AC servomotor	750W AC 伺服馬達		
Z軸伺服馬達 Z-axis AC servomotor	750W AC 伺服馬達		
冷卻液馬達 Coolant pump	1/4HP		
油壓馬達 Hydraulic pump	2HP4P		
機器尺寸 Machine dimensions	2300 x 1020 x 1800		
淨重 Net weight	2400 kg		
毛重 Gross weight	2600 kg		

標準配備 Standard Accessories
<ul style="list-style-type: none">CNC控制器濾波器 80A水箱100L、1/4泵浦潤滑系統日光燈 24V鑽石修刀組水平調整螺絲及墊塊工具箱砂輪主軸(台制) (10000-50000RPM, 任選一支)防濺系統熱交換機

選購配備 Optional Accessories
<ul style="list-style-type: none">高速砂輪高速成型砂輪水冷循環機電磁+紙帶過濾機迴轉式修整裝置IMT高速主軸光學尺(3軸)備用砂輪主軸(皮帶式)砂輪噴霧給油裝置內藏式主軸(台制)端面量測電磁過濾機 40L自動門皮帶張力自動調整裝置油壓3爪夾頭 8吋變頻器空調式冷卻器 KAC-2FS



SigmaTop
Grinder

電控系統符合歐規
Control System Meets European Standards



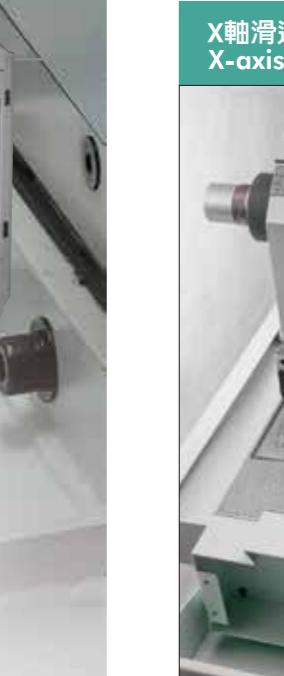
本機配備最先進的CNC控制器，附導導式畫面。易學易操控。
電控箱內部具防塵，防水特性。
自動以圖形對話產生加工程式。可大幅降低準備前置時間，提升加工效率。

先進CNC控制器
Advanced CNC Control



The control system consists of top quality electronic components which comply with European safety requirements.
The interior of the control cabinet is dust-proof and fluid-proof.
The control system has a self-diagnostic function and warning light indicating machine status.

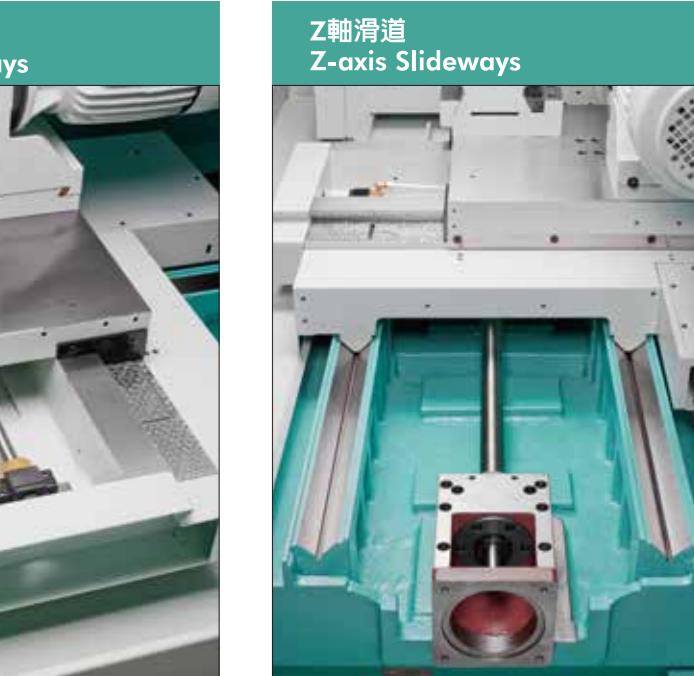
直結傳動搭配精密鏟花滑道
Direct Transmission System with Fine-Scrapped Slideways



X軸滑道
X-axis Slideways



Y軸滑道
Y-axis Slideways



Z軸滑道
Z-axis Slideways

X軸滑道為鳩尾槽滑道，經精密鏟花處理。
X軸採用伺服馬達驅動，配合精密滾珠螺桿，動作快速順暢，定位精準。

The X-axis moves on dovetail slideways with precision scraping.

The X-axis employs a servo motor, which directly drives a ball screw for smooth movement and high positioning accuracy.

Y軸滑道為鳩尾槽滑道，經精密鏟花處理。
Y軸採用伺服馬達直接驅動滾珠螺桿，動作快速順暢，定位精準。

The Y-axis moves on double "V" slideways with precision scraping.

The Y-axis employs a servo motor, which directly drives a ball screw for smooth movement and high positioning accuracy.

Z軸滑道為雙 "V" 型滑道，配合大跨距設計，穩定性優異。
Z軸採用伺服馬達直接驅動滾珠螺桿。

The Z-axis moves on double "V" slideways in combination with a large span between them, exhibiting outstanding stability.

The Z-axis employs a servo motor, which directly drives the ball screw.

CNC Internal Grinder
Your No. 1 Choice in Internal Grinding
精密內磨首選

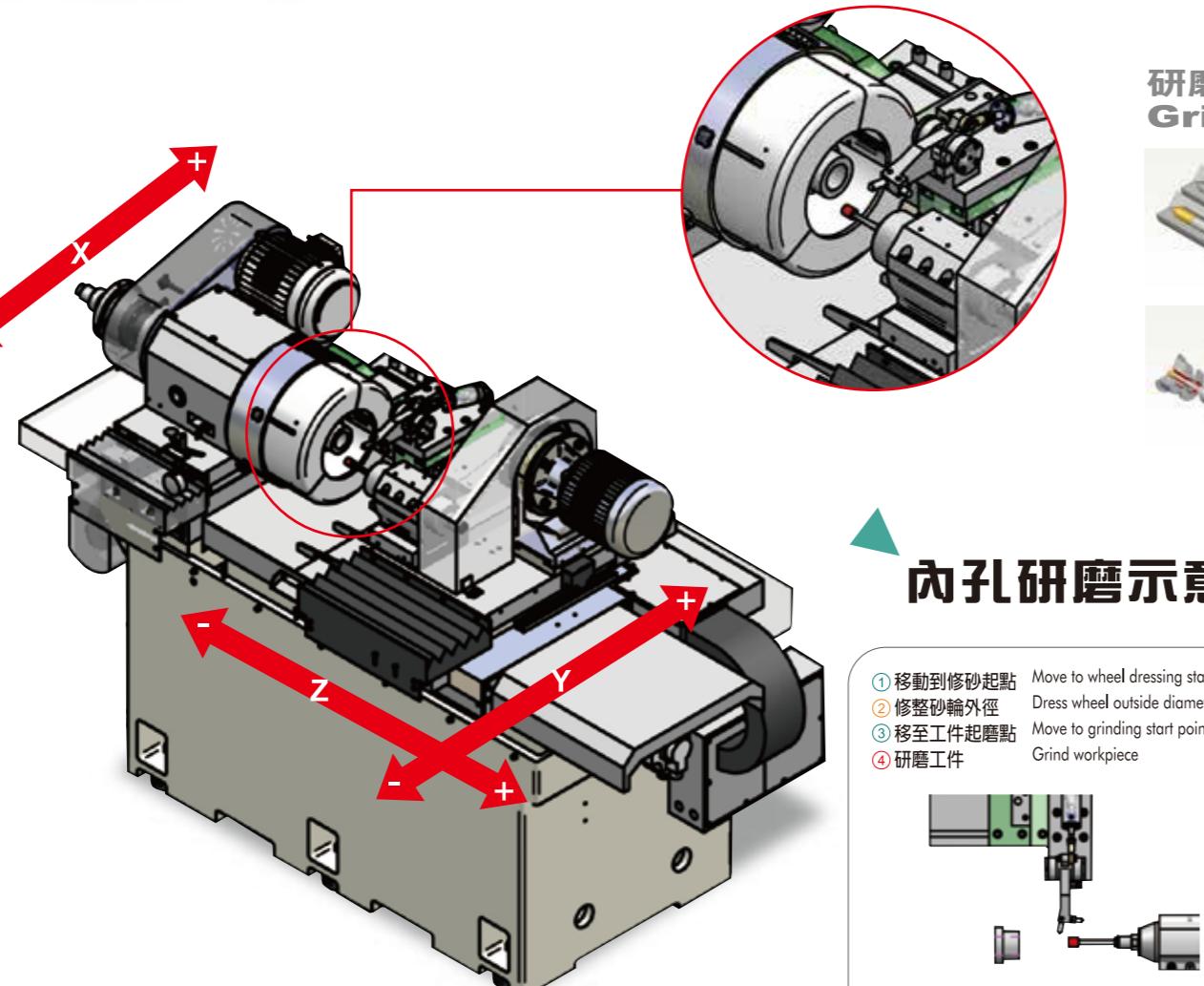


SIGMA TOP SRI-150

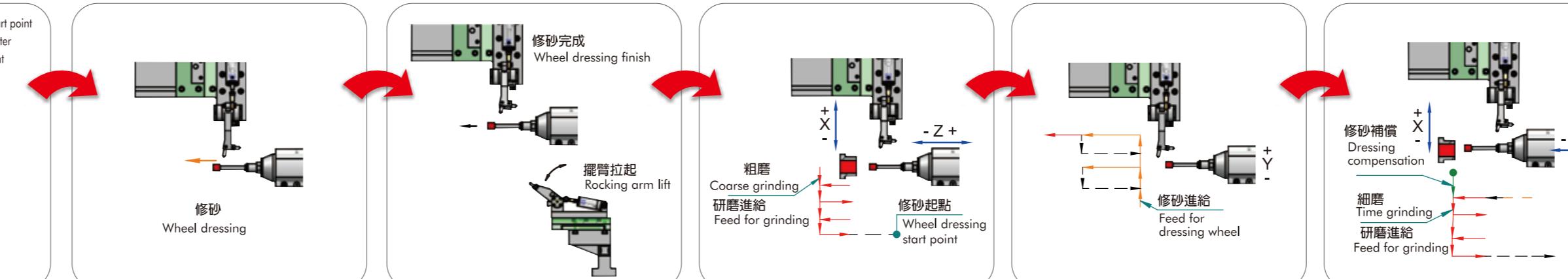
強調精密、穩定性的辛格承CNC內圓磨床，特別適用於精密機械零件、汽機車零件、醫療器材等精密零件的內孔研磨。砂輪頭最小設定單位可達0.001 mm，展現高精度研磨的獨特性能。獨創可移動式X軸，使操作更方便。更搭載最先進的教導式CNC控制器，大幅提升加工效率。

Designed with precision and stability in mind, the SIGMA TOP CNC Internal Grinder is especially ideal for precision parts grinding, such as machine parts, automotive and motorcycle parts and medical equipments, etc.

With 0.001 mm setting unit on the wheel head, this machine will fully exhibit its unmatched grinding accuracy. Exclusively designed moving X-axis provides increased convenience of operation. The machine is equipped with the latest CNC control with teach-in programming for dramatically increased efficiency.



內孔研磨示意圖 Internal Grinding Diagram



研磨例 Grinding Examples



主軸台角度角度調整
主軸台角度調整範圍+3°~ -7°適合斜度研磨。

Work Head Swiveling Adjustment
The work head can be swiveled between +3°~ -7° for taper grinding.

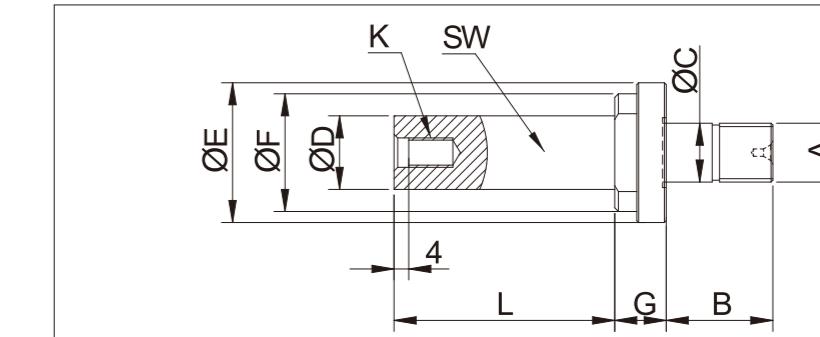
主軸台感應器
主軸台裝有感應器，除了可節省砂輪及工件之裝卸時間，並可檢測主軸轉速，以及皮帶是否斷裂。

Sensor On Work Head
The work head is equipped with a sensor. It not only saves time in grinding wheel and workpiece mounting and dismounting, but also can detect spindle speed and belt breakage.

油箱
此油箱配備雙泵浦。可提供油壓夾頭的動力源，以及主軸潤滑效果。

Oil Tank
The oil tank is equipped with double pumps, providing power for the hydraulic chuck and lubrication for slide ways of work spindle head.

主軸尺寸圖 Dimensional Drawing of Spindle



註：最佳研磨工件的孔徑與研磨長度比為1:3，最大研磨長度為150 mm。
NOTE: Optimal Grinding Size Ratio Workpiece bore: grinding length=1:3 Max. grinding length=150mm

孔徑Ø Bore Ø	主軸轉速(RPM) Spindle Speed	尺寸 Size									
		A	B	C	D	E	G	K	L	SW	
80-150	8,000 Grease	M26	42	28	Ø40	58	16	M8	50 106	18	
40-80	10,000 Grease 20,000 Qie mist	M16	29	17	Ø30 Ø25 Ø20	38	14	M8	90 70 50	24	
25-40	20,000 Grease 30,000 Qie mist	M14	28	15	Ø24 Ø20 Ø16	32	11	M6	80 60 40	19	
16-25	30,000 Grease 40,000 Qie mist	M10	21	10.5	Ø16 Ø13 Ø40	26	9	M4	40 30 25	17	
13-16	40,000 Grease 50,000 Qie mist	M8	20	8.5	Ø12 Ø10 Ø8	23	8	M4	35 30 25	14	
10-13	50,000 Grease 60,000 Qie mist	M7	18	7.5	Ø6 Ø7 Ø8	20	7	M4	30 25 20	11	