Inverted Vertical

Five-axis machine

倒立式五軸加工機

WT-V22

Inverted Vertical five-axis machining machine

汽車工業 // Car industrial

高精度、高穩定性工件的加工需求

High precision, high stability workpiece processing requirements

WEI TAI International Co., Ltd.

Technical data

技術性資料

項 目 Item		WT-V22
重要諸元 The important factor	X 軸 行 程 X-axis travel	740 mm
	Y 軸 行 程 Y-axis travel	80 mm
	Z 軸 行 程 Z-axis travel	175 mm
	A 軸傾斜角度範圍 A axis tilt Angle range	(-20° ~ 90°)
	工件主軸鼻端至加工主軸距離 Distance from nose of workpiece spindle to machining spindle	200
主 軸 Spindle	工件主軸鼻端規格 Specification of nose end of workpiece spindle	A2-6
	主軸轉速 Spindle speed	4500 rpm 選配 (Optional)
	工件主軸馬達 Workpiece spindle motor	5 kW 選配 (Optional)
	主軸夾具 Main shaft fixture	德制筒夾 German collet / 選配 (Optional)
	加工主軸 Processing of the main shaft	DGZX-15010 (24kw)
	加工主軸內孔規格 Machining spindle bore specification	HSK63
三 軸 進 給 Three axis feed	X 軸快速進給速率 X-axis fast feed rate	30 m/min. 選配 (Optional)
	Y 軸快速進給速率 Y-axis fast feed rate	30 m/min. 選配 (Optional)
	Z 軸快速進給速率 Z-axis fast feed rate	30 m/min. 選配 (Optional)
精 度 Fine degree	定位精度 Positioning accuracy	0.008 mm
	重現精度 Fidelity	0.005 mm
一 般 規 格 General specification	控制器 Controller	SIEMENS / FANUC / SYNTEC 選配(Optional)
	總功率 Total power	35 KW
	氣壓需求 Air pressure requirements	6 kg/cm²
	機器重量 Weight	17,000 kg
	機械佔地面積 (長 x 寬 x 高) Machine floor area (L x W x H)	4,000 x 3,700 x 2,500 mm

※ 可依客戶不同產品需求設計。 Can be designed according to different product needs of customers.
※ 以上規格如有變更，恕不另行通知。 Specifiations are subject to change without notice.

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WT-V22 系列倒立式五軸加工機

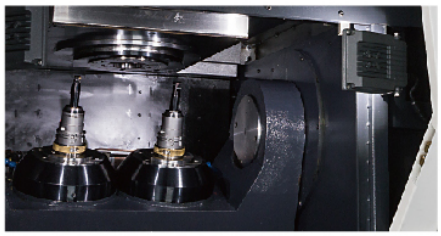
WT-V22 series inverted vertical five-axis machining machine

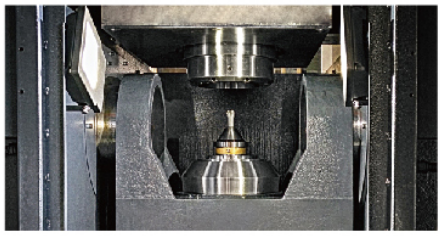
符合工業 4.0 製造環境需求的高速 5 軸同動加工中心機，(智能加工技術) 和 ARTTM (AXILE 可靠性技術) 實現高精度、高可靠性之表現，並提供使用者降低機台維護成本和可預測的維修及生產規劃安排。

作為追求卓越的工業 4.0 產品和服務提供商，**WT**對於創新設計，並將不斷致力開發更多高端機器和提供最佳服務，為客戶創造最佳利潤。

High-speed 5-axis co-motion machining center machine meeting the requirements of industry 4.0 manufacturing environment, (intelligent machining technology) and ARTTM (AXILE reliability technology) realize the performance of high precision and high reliability and provide users with the maintenance cost reduction and predictable maintenance and production planning arrangement.

As an industry 4.0 product and service provider in pursuit of excellence, **WT** is committed to innovative design and will continuously strive to develop more high-end machines and provide the best service to create the best profit for customers.





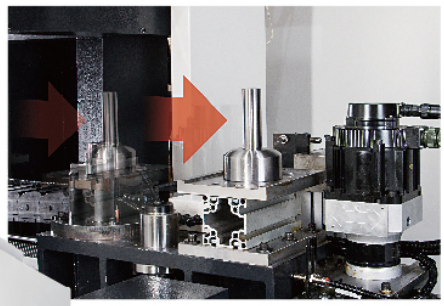
右方圖示 Illustration on the right

V22單工位、雙主軸特寫 Double spindle close-up //

V22單工位、單主軸特寫 Single spindle close-up //

V22進料特寫 Feed close-up //

V22出料特寫 Discharge close-up //



4.0 industry

Fine workmanship·Courage to innovate

精工細琢·與於創新

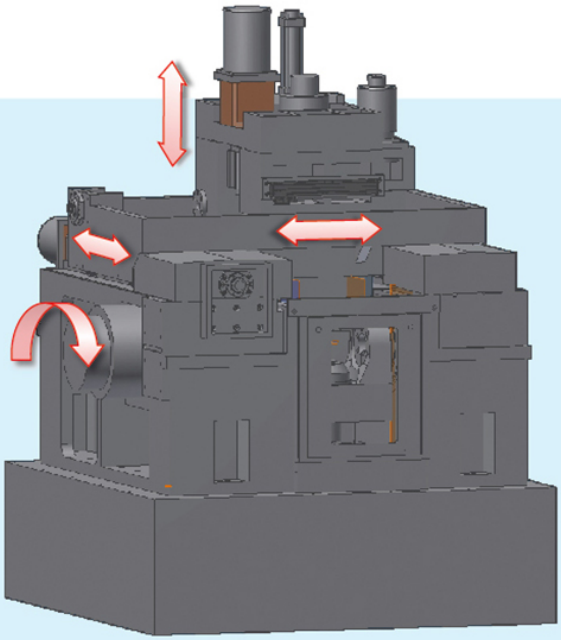
WT-V22S

WT-V22

高剛性結構
High rigidity structure

機器床体花岡石結構及所有鑄件結構皆經過 FEM 有限元素分析，具有設計最佳化、結構等優點，確保整機最佳結構剛性。

The machine bed structure and all casting structure are FEM analysis, with the advantages of optimal design, structure, to ensure the best structural rigidity of the machine.



A X/Y/Z/A/C/ 5軸驅動倒立式主軸夾具結構設計，主軸可自動至上料台抓起工件進入擺臂C軸區進行車、銑等加工、實現全自動化、符合人體功學、安全性、智能化、全自動化連線設計理念。

X/Y/Z/A/C Five-axis drive inverted vertical fixture structure design, the spindle can automatically top the feed table to grab the workpiece into the swing arm C shaft area for turning, milling and other processing, achieve full automation, in line with the ergonomics, safety, intelligent, fully automated line design concept.

B 床體花岡石結構大跨距立柱結構，即使高速位移頭部亦不晃動，提供極佳的切削剛性。

Bed body granite structure long span column structure, even high-speed displacement head is not shaking, providing excellent cutting rigidity.

C 立柱與花岡石底座結合面等關鍵接觸面，皆經過手工鏟花程序，以達成最佳的組裝精度、結構強度與均衡負載，花岡石底座採用最佳跨距設計，提供優異的支撐剛性，確保最佳動態精度。

The key contact surfaces, such as the bonding surface between the column and the granite base, are all processed by a manual machine scraping procedure to achieve the best assembly accuracy, structural strength and negative balance for loading, the granite base adopts the best span design to provide excellent support rigidity and ensure the best dynamic precision.

D X/Y/Z三軸及C軸標準配置高解析度德制海德漢全閉迴路光學尺，可確保極致的定位與重覆精度。

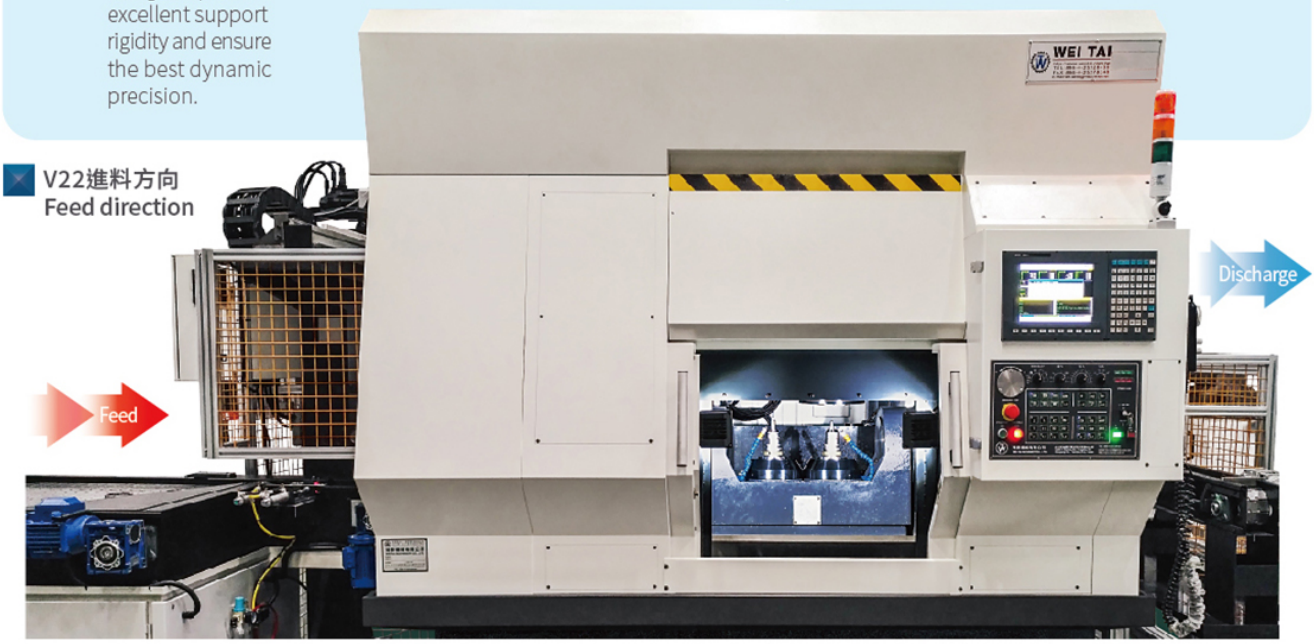
X/Y/Z triaxial and C axis standard configuration high-resolution German HEIDENHAIN full closed-loop optical ruler, can ensure the ultimate positioning and repeat accuracy.

E 三軸採用高剛性滾柱型線性滑軌設計，兼具線軌的快速移動、低磨耗與硬軌的重切削剛性等特色。X/ Y/Z軸快速進給。

The three axes adopt the linear slide rail design of high rigidity roller type, which has the characteristics of fast moving of the line rail, low abrasion and heavy cutting rigidity of the hard track. X/Y/Z fast feed.

F 各軸螺桿之馬達座、軸承座，與底座採用鑄造設計，可確保軸向系統之整體剛性。

The motor seat, bearing seat and base of each shaft screw are designed by casting to ensure the overall rigidity of the axial system.



V22進料方向
Feed direction