

Name:5-Axis CNC Machining Center

Model: Emerald F550



Emerald F550 5-Axis CNC Machining Center

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Designed for high-precision milling, cutting, and machining of aluminum and light alloy profiles, the Emerald F550 features a robust gantry structure, advanced automation, and seamless software integration.

Key Features:

5-Axis Machining: Capable of high-precision milling and cutting with multi-angle capabilities.

User-Friendly Operation: Connects with ERP software, allowing barcode-based automatic processing.

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One-Step Clamping: Capable of completing all machining tasks in one setup, including sawing, milling end tenons, lock slots, drainage grooves, pressure balance holes, and installation holes. Effectively a "one-person" window production line.

Advanced Gantry Structure: Features a moving beam and moving column gantry design for stable operation and enhanced machine rigidity.

High-End CNC System: Equipped with premium CNC systems from Beckoff (Germany).

Precision Components: Utilizes imported high-quality servo motors, ball screws, linear guides, and bearings, ensuring high processing accuracy, stability, and reliability. Pre-tensioning of feed movement maintains precision.

Imported Five-Axis Head: Allows machining at any angle on all surfaces except the bottom. Includes an automatic tool changer with a disc-type tool holder.

Centralized Lubrication: Centralized and timed lubrication maintains precision stability.

Product Information

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Serial No: 3

Pneumatic Clamping Table: Speeds up loading and unloading.

High-Accuracy Measurement: Equipped with Renishaw interferometers for precision compensation.

Dual Working Zones: Two independent working zones improve production efficiency.

System Protection: Includes UPS and AC to protect the operating system.









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Machining Specifications	
X-axis stroke	7,000/9,000/12,000mm
Y-axis stroke	1,730mm
Z-axis stroke	670mm
X-axis travelling speed	0~60m/min
Y-axis travelling speed	0~30m/min
Z-axis travelling speed	0~30m/min
B-axis swivel range	±185°
C-axis swivel range	±320°
B-axis speed	Max120°/S
C-axis speed	Max120°/S
Positioning accuracy	±0.03mm
Repeat positioning accuracy	±0.01mm
Cutting surface roughness	Ra12.5µm
Spindle	HSK-63F S1=15KW S6=17KW 24,000rpm
Type of tool magazine	Bucket hat type
Tool magazine capacity	12-18 pcs
Lubrication/cooling system	Automatic
Clamp	8

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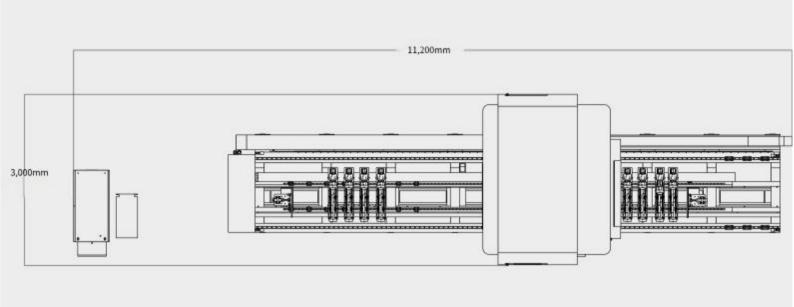


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General Specifications	
Power	25KW
Power supply	380V/50Hz
Air pressure	0.6-0.8Mpa
Air consumption	120L/min
Weight	11,000kg
Overall Dimension	11,200×3,000×3,200mm

LAYOUT



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