

Horizontal Metal Machining Center

This high-precision horizontal machining center is designed for versatile metal cutting applications. The robust machine features a rigid frame construction ensuring stability and accuracy during heavy-duty machining operations.



Overview

High-Efficiency Horizontal Machining Center

The SCALAR4050 is a high-performance horizontal machining center engineered for maximum productivity and precision in metalworking. Featuring a robust FEM-tested cast-iron construction and a fully functional 4th-axis rotary table, it enables efficient 4-sided machining in a single clamping. Equipped with an automatic pallet changer and a 24-station arm-type tool changer, this machine is designed to minimize downtime and maximize throughput for complex industrial applications.

Performance Metrics

Key Performance Indicators

18.4 kW

Main Motor Power

7000 rpm

Max Spindle Speed

20 m/min

Rapid Feed Rate

500 kg

Max Loading Weight

Technical Specifications

Work Table Specifications

Feature	Specification
Quantity	2
Dimensions	400 x 500 mm
Max Loading Weight	500 kg
Table Change Time	~20 s

Precision & Accuracy

- Positioning Accuracy (X/Y/Z): $\pm 0.01\text{mm}$
- Repeatability (X/Y/Z): $\pm 0.005\text{mm}$
- Rotary Table Positioning Accuracy: 0.01°

Travel Dimensions (X/Y/Z)

550mm / 515mm / 515mm

Tooling & Spindle

Automatic Tool Changer (ATC)

- Type: Arm type
- Capacity: 24 tools
- Tool Taper: BT40
- Tool Changing Time: 2.5s
- Max Tool Weight: 10kg

Equipment Features

Optional Equipment

Coolant Through Spindle • High-Speed Spindle

Standard Equipment

Pallet Changer, 4th Axis Rotary Table, Chip Conveyor, Coolant System, Electronic Hand-wheel, Automatic Central Lubrication, Work Lamp, Fully Enclosed Housing