

# CNC Milling System Controller

The GSK 25i is a high-performance CNC system controller designed for precision milling applications. It features multi-axis linkage and five-axis control functions like RTCP and inclined plane machining.



## Overview



User-friendly interface with real-time coordinate monitoring and parameter display.

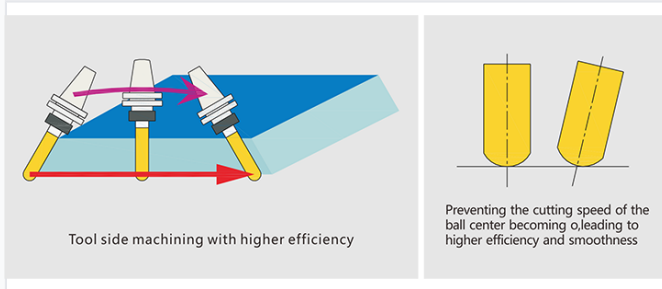
### High-Performance CNC Milling Controller

This advanced CNC milling system is designed for high-precision, multi-function machining centers, boring, and drilling machines. Built on a robust hardware platform with a Linux operating system, it supports up to 8 controlled axes with 5-axis linkage, enabling complex operations like RTCP (tool center point control) and inclined plane (3+2) machining. The system integrates real-time industrial Ethernet bus control and high-resolution servo feedback, ensuring superior surface quality and machining efficiency for demanding industrial applications.

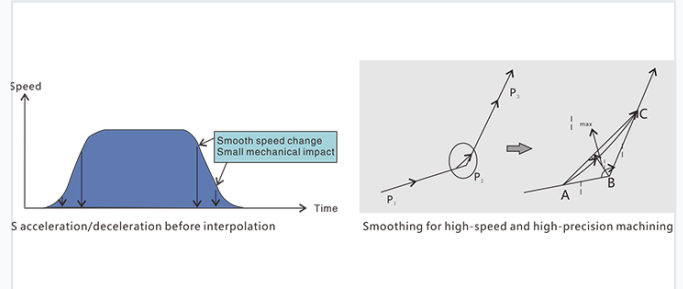
#### Core Capabilities

5-Axis Linkage, Ethernet Bus Control, High-Speed Machining, Absolute Encoder Support, Linux OS

## Axis & Motion Control



Optimized toolpath planning for higher efficiency and smoother surface finish.



Advanced acceleration/deceleration control reduces mechanical stress during toolpath transitions.

### Axis Configuration

**8 axes**

Max Controlled Axes

**5 axes**

Max Linkage Axes

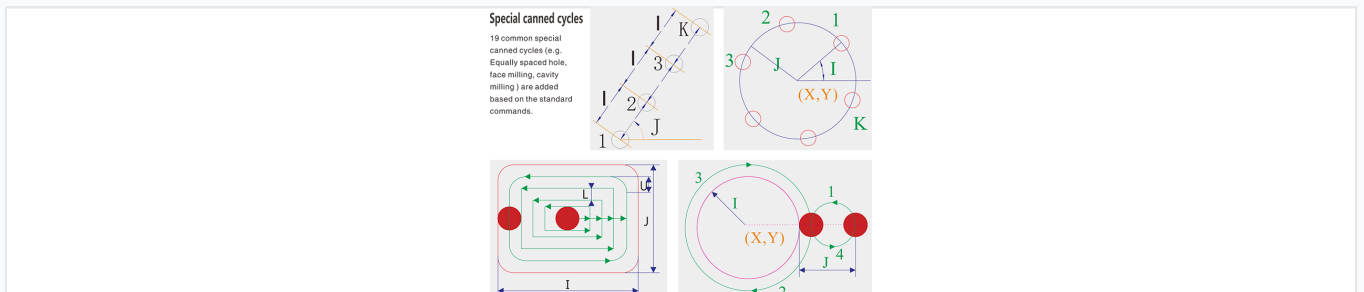
**200 m/min**

Max Feedrate

### Motion Control Features

- 5-Axis RTCP (Tool Center Point Control)
- Inclined Plane (3+2) Positioning
- Feed Axis Synchronization
- PLC Axis Control
- Advanced Preview Control (1000 blocks)
- Jerk Control

## Programming & Machining



### Storage Capacity

**240 MB**

Standard Memory

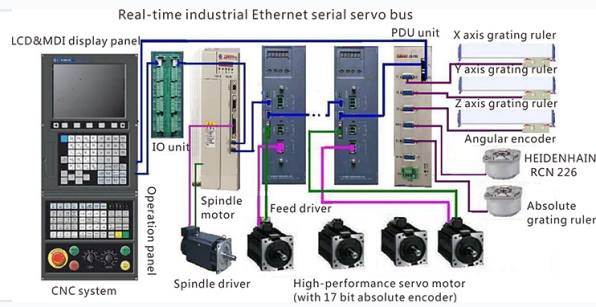
**500 MB**

Max Expandable Memory

### Interpolation Modes

- Linear Interpolation
- Circular Interpolation
- Helical Interpolation
- Cylindrical Interpolation
- Polar Coordinate Interpolation
- NURBS Interpolation

## Hardware & Interface



High-performance hardware platform featuring real-time industrial Ethernet bus control.

### Display Specifications

Screen Size	Resolution
10.4 inch	800 x 600
8.4 inch	640 x 480

### Connectivity

Ethernet, USB, RS232, Industrial Ethernet Bus

## Safety & Maintenance

### Safety Functions

- Emergency Stop
- Hard & Soft Limit Checks
- Spindle & Feed Safety Speed Monitoring
- Following Error Monitor
- Multi-Authority Data Protection

### Maintenance & Diagnostics

- Operation & Alarm History
- CNC Running State Diagnosis
- PLC Interface Diagnosis
- Speed Waveform Diagnosis
- Data Backup & Recovery