

FANUC Series 300i/310i/320i-MODEL A



The FANUC Series 300i/310i/320i-MODEL A is multi-axis and multi-path Nano CNC suitable for advanced compound machine tools. This CNC flexibly supports various machine tools such as automatic machines, lathes, combined machines, 5-axis machines and high-speed high-accuracy machines which are increasing control paths, feed axes, and spindles and getting more and more complex.

Remarkably Improved CNC Computing Power

The latest high-speed microprocessor is used as the CNC processor, which serves as the nerve center of CNC commands. The CNC internal bus has also been made faster. The rate of data transfer among the processors, which make up a CNC, has remarkably been improved.

Ultra-Compact, Ultra-Thin Control Unit [US Patent No. 5940292]

The LCD-mounted type CNC of which CNC functions are installed on the back of the LCD greatly reduces the CNC installation space of a machine and contributes to downsize the machine. It realizes a thin CNC control unit 60 mm in depth.

The stand-alone type CNC, for which the LCD and CNC control unit are separated, is also available. This type reduces by half the space in the maximum configuration, as compared with the conventional CNC.



Large LCD Improving Operability

A large LCD unit with a 15-inch color LCD is available as a CNC LCD unit. This unit makes full use of high resolution to display bulk information on its screen. In addition to soft keys horizontally arranged at the bottom of the screen, new soft keys have been arranged vertically on the side of the screen. These two types of soft keys can be used to simply operate the screen.

A new QWERTY keyboard, the standard layout of personal computer keyboards, is provided as a keyboard for inputting various types of data in the CNC. Users who are familiar with operation of personal computers can operate CNC's with no sense of incompatibility because this keyboard allows them to enter data in the same way as for a personal computer

High Reliability Enabled by ECC (Patent pending)

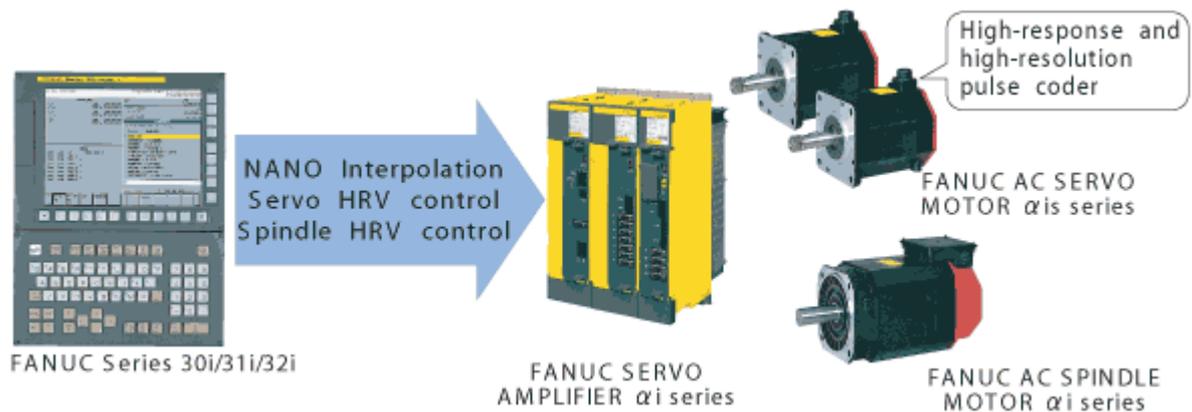
Error correcting code (ECC) is a leading-edge high-reliability technology. With ECC, error correcting codes are added to data during transfer of various types of data. If an error occurs during data transfer, the error can be detected and corrected based on error correcting code.

This ECC technology further enhances the reliability of FANUC CNC's that have a established reputation for high reliability.

NANO CNC System

High-Quality Machining Achieved by Coordination between "High-Precision Operation in Nanometers" and "State-of-the-Art Servo Technology"

Nano interpolation that computes position commands for the digital servo control unit in nanometers, servo HRV control and spindle HRV control for which the control cycle is made faster, and FANUC SERVO MOTOR α i series with a high-resolution pulse coder are used as standard and make up "NANO CNC System," which achieves high-speed, high-quality machining.



With plenty of network functions and application packages, you can construct an optimum system for a CNC machine tool.

High-Speed Ethernet

Embedded Ethernet on which communication can be performed at a rate of 100 Mbps is supported as standard. A CNC can be connected to a personal computer to transfer NC programs and check the operating status of the machine, which allows real-time centralized monitoring of operation at the machining site. A CNC can also be connected to the office and machining site via a factory network. This connection allows the management of the entire factory using machining production directions and operation performance, which can improve productivity. Connection to the Internet allows remote monitoring of the operating status of a machine from another office outside the factory or home.

Inserting a PCMCIA LAN card into the slot on the side of a display unit allows simple connection to a personal computer for the adjustment and maintenance of a machine.