CNC Software Tools

Development Tools

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Products
Some of the items in this catalog are under development. Therefore the software and CNC display are subject to change without notice.

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Some of the items in this catalog are under development, therefore the software and CNC display are subject to change without notice.
Of the various types of servo motors, which one is the best for my machine?

Find it with NC Servo Selection!

Set the machine constants according to the following explanation.

The spindle acceleration/deceleration times are shown in a graph.

The spindle acceleration/deceleration times are shown in a graph.

Servo motor selection

Input the machine constants for selection of the optimum servo motor. This function automatically calculates spindle acceleration/deceleration times and selects the optimum power supply unit.

Main functions
- Servo motor capacity selection
- Spindle acceleration/deceleration time calculation
- Power supply unit selection
- Power supply facility capacity calculation
- Multi-axis drive unit combination function
- Saves selected data

NC Servo Selection

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NC Designer2

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<tr>
<td>OS supported</td>
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<td>Languages</td>
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<td>Languages supported for original screen</td>
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<td>CNCs supported</td>
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NC Trainer2 plus supports customization development; it helps to program the ladder programming of the user PLC to be developed by machine tool builders and debug it and check the operations of customized screens.

**Main functions**
- Development support for customized screens.
- (Even if there is no NC device, it can be debugged using a computer.)
- Development support for user PLC (ladder)
- Provides machine operating environment (customized machine operation panel) that meets the specifications of the user's machine tool.

### How can I check the operation of customized screens or PLC programs, etc. be conducted on my computer?

**Debugging is easy with NC Trainer2 plus!**

- Edit PLC program with PLC development tool of NC Trainer2 plus.
- Customize a screen using NC Designer2 and check its operation using NC Trainer2 plus.

### NC Trainer2 plus Main specifications

<table>
<thead>
<tr>
<th>OS supported</th>
<th>Windows® 7 SP1 or later/Windows® 8/Windows® 8.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Languages</td>
<td>English, Japanese, Simplified Chinese, Traditional Chinese</td>
</tr>
<tr>
<td>CNCs supported</td>
<td>M800 (equivalent to M830) / M80 / M700V (equivalent to M730V) / M70V / E70 Series</td>
</tr>
<tr>
<td>Operational environment</td>
<td>CPU: 2.66GHz or higher and processor with 2 or more cores</td>
</tr>
<tr>
<td>Memory</td>
<td>2GB or more</td>
</tr>
<tr>
<td>Available hard disk space: 400MB or more (excluding the free space necessary for running the OS)</td>
<td></td>
</tr>
<tr>
<td>Display resolution: XGA (1024 x 768) or higher</td>
<td></td>
</tr>
</tbody>
</table>

### NC Trainer2 plus (Customization Support)

**Development Tools**
- Development support for customized screens.
- (Even if there is no NC device, it can be debugged using a computer.)
- Development support for user PLC (ladder)
- Provides machine operating environment (customized machine operation panel) that meets the specifications of the user's machine tool.

**Main functions**
- Development support for customized screens.
- (Even if there is no NC device, it can be debugged using a computer.)
- Development support for user PLC (ladder)
- Provides machine operating environment (customized machine operation panel) that meets the specifications of the user's machine tool.

**Development Tools**
- Setup
- Edit PLC program with PLC development tool of NC Trainer2 plus.
- Customize a screen using NC Designer2 and check its operation using NC Trainer2 plus.

**Design**
- Create a screen using NC Designer2 and check its operation using NC Trainer2 plus.

**Setup**
- Check the contents of the parameters in the help section.
- Check and setup the parameter list using a computer.

### NC Configurator2 (NC Parameter Setup)

**Main functions**
- NC parameter setting/search
- Help (parameter explanation)
- Offline comparison of parameter input/output
- NC data input
- Printing

**Easy setup using NC Configurator2!**

**Main functions**
- NC parameter setting/search
- Help (parameter explanation)
- Offline comparison of parameter input/output
- NC data input
- Printing

**The following are included in the full-mounted version.**
- Parameter initial setting wizard
- Function parameters

### NC Configurator2 Main specifications

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<td>CNCs supported</td>
<td>M800 (equivalent to M830) / M80 / M700V (equivalent to M730V) / M70V / E70 Series</td>
</tr>
<tr>
<td>CNC connections</td>
<td>Connection configuration : Ethernet (parameter read/write in serial communication)/ RS-232C/USB (C70 Series only)</td>
</tr>
<tr>
<td>Connectable CNCs</td>
<td>8 (max.)</td>
</tr>
<tr>
<td>Precaution</td>
<td>Free version has limited in functions.</td>
</tr>
</tbody>
</table>
NC Analyzer2 helps the servo parameter settings by measuring and analyzing the machine's characteristics. Measurement and analysis can be done by running a servo motor using the machining program for adjustment, or using the vibration signal. This function can sample various types of data.

Servo parameter adjustment sounds complicated…

I don't have a tool for measuring the machine's characteristics on hand...

**Easy adjustment and measurement with NC Analyzer2!**

- Main functions
  - Adjustment wizard
  - Speed loop gain adjustment
  - Notch filter setting
  - Circularity adjustment
  - Display adjustment progress
  - Graph
  - Bode diagram
  - Measurement display
  - Servo waveform measurement
  - Display waveforms before/after adjustments
  - Project management
  - Measured waveform batch management

**NC Analyzer2 Main specifications**

- **OS supported**: Windows® 7 SP1 or later/Windows® 8/Windows® 8.1
  - Supports 32-and 64-bit OS (WOW64 available for 64-bit)
- **Languages**: English/Japanese/Simplified Chinese/Korean
- **CNC connections**: M800/M80/M700V/M70V/E70 Series
  - Connection configuration: Ethernet

How can I train myself in CNC operation without access to the machine?

**Hone operating skills with NC Trainer2/NC trainer2 plus!**

- Main functions
  - Create projects that reproduce a variety of machining environments.
  - Not only the NC screen, but also the NC keyboard and the operation panel are displayed on the computer.

**NC Trainer2/NC Trainer2 plus Main specifications**

- **OS supported**: Windows® 7 SP1 or later/Windows® 8/Windows® 8.1
  - Supports 32-and 64-bit OS (WOW64 available for 64-bit)
- **Languages**: English/Japanese/Simplified Chinese/Traditional Chinese
- **CNCs supported**: M800 (equivalent to M830)/M80/M700V (equivalent to M730V)/M70V/E70 Series
- **Operational environment**
  - CPU: 2.66GHz or higher and processor with 2 or more cores
  - Memory: 2GB or more
  - Available hard disk space: 400MB or more (excluding the free space necessary for running the OS)
  - Display resolution: XGA (1024 × 768)
- **Precaution**: Before executing machining programs on an actual CNC, sufficient review should be conducted to prevent interference or any other errors.

This is an application for operating the CNC screen and machining programs on a computer without the CNC control unit or a special display unit. It can also be used for learning CNC operation and checking machining programs. The machining programs created on NC Trainer2/NC Trainer2 plus can be used on actual CNCs.
CNC machining data file can be operated using Windows® Explorer on a computer when the computer is connected with multiple CNCs via Ethernet.

How can I transfer data prepared on a computer to a CNC?

**Easy data transfer using NC Explorer!**

Drag and drop to transfer machining data files

CNC machining data file can be operated using Windows® Explorer on a computer when the computer is connected with multiple CNCs via Ethernet.

**Main functions**
- Cooperation with Windows® Explorer
- Operational CNCs are displayed as folders on Windows® Explorer:
  - Drag and drop to transfer the files.

**NC Explorer Main specifications**

- **OS supported**: Windows® 7 SP1 or later/Windows® 8/Windows® 8.1
  - Supports 32-and 64-bit OS (WOW64 available for 64-bit)
- **CNC connections**:
  - CNCs supported: M800/M80/M700V/M70V/E70 Series
  - Connection configuration: Ethernet

How can I monitor a CNC on a computer in the office without visiting the factory?

**Easy monitoring with NC Monitor2!**

Monitor the status of multiple CNCs on one computer

Taking advantage of the network in a plant, CNC operation status can be monitored from remote locations. Several CNCs can be connected and monitored simultaneously.

**Main functions**
- Adopts the same screen structure
  - The monitoring display is constructed to mirror the CNC display unit.
- The screen structure of 10.4-type display is applied when 15-type or 19-type display is connected.
- Possible to select a monitoring screen that is not synchronized with display of the CNC in operation.
- Limit display/setting operation of CNCs
  - By setting parameters in a CNC, the availability of displaying and setting using this software can be restricted.
- Connectable CNCs are automatically listed
  - Connectable CNCs in a network group are automatically displayed in a list, and the CNCs can be connected by selecting them.

**NC Monitor2 Main specifications**

- **OS supported**: Windows® 7 SP1 or later/Windows® 8/Windows® 8.1
  - Supports 32-and 64-bit OS (WOW64 available for 64-bit)
- **Languages**: English/Japanese
- **CNC connections**:
  - CNCs supported: M800/M80/M700V/M70V/E70 Series
  - Connection configuration: Ethernet
  - Connectable CNCs: 10 (max.)
- **Precaution**: Please use the Remote Monitor Tool for the C70.