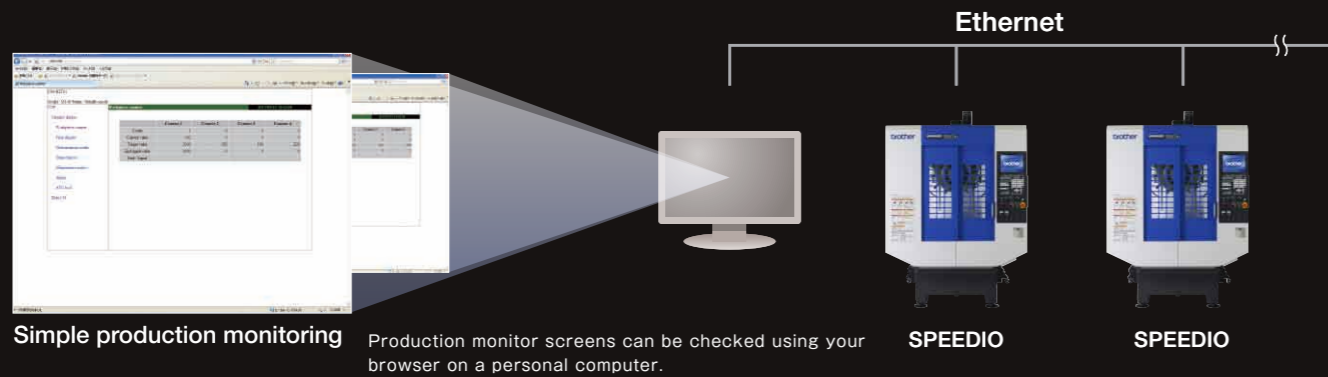


Network function

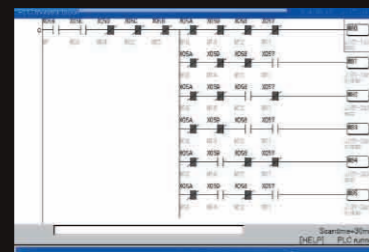
High capacity program data can be transferred quickly via Ethernet. The simple production monitoring function also allows you to monitor the machine's operating screen on a personal computer.



Brother's NC unit CNC-C00

System capacity

Standard equipped with PLC to be able to easily respond to the control of peripheral equipment. Ladder program capacity has been greatly increased to approximately three times the capacity of the previous model.



Built-in PLC



EXIO board
(max. 1,024 points each)

Input/output points:
16 points each (standard)
1,024 points each (optional)

Number of steps:
Approx. 25,000 for standard ladder
Approx. 3,000 for high-speed ladder

NC unit specifications	
CNC model	CNC-C00
Control axes	5 axes (X,Y,Z, two additional axes)
Simultaneously controlled axes	Positioning 5 axes (X,Y,Z,A,B)
	Interpolation Linear: 4 axes (X,Y,Z one additional axis) Circular: 2 axes Helical/conical: 3 axes (X,Y,Z)
Least input increment	0.001mm, 0.0001 inch, 0.001 deg.
Max. programmable dimension	±9999.999mm, ±999.9999 inch
Display	12.1-inch color LCD
Memory capacity	Approx. 100 Mbytes (Total capacity of program and data bank)
External communication	USB memory interface, Ethernet, RS232C 1ch
No. of registrable programs	4,000 (Total capacity of program and data bank)
Program format	NC language, conversation (changed by parameter) conversion from conversation program to NC language program available

*When program size is bigger than 2 Mbytes, machine works with extended memory operation.

*Ethernet is a trademark or registered trademark of XEROX in the United States.

Standard NC functions		
<ul style="list-style-type: none"> Absolute / incremental Inch / metric Corner C / Corner R Rotational transformation Synchronized tap Coordinate system setting Dry run Restart Backlash compensation Pitch error compensation Raid traverse override Cutting feed override Alarm history (1,000 pieces) Status log Machine lock Computer remote Built-in PLC Motor insulation resistance measurement Operation log High accuracy mode BI (look-ahead 30 blocks) 	<ul style="list-style-type: none"> High-accuracy mode AIII Tool length measurement Tool life management / spare tool Background editing Graphic display Subprogram Helical / conical interpolation Tool washing filter with filter clogging detection Automatic power off (energy saving function) Servomotor off standby mode (energy saving function) Chip shower off delay Automatic coolant off (energy saving function) Automatic work light off (energy saving function) Heat expansion compensation system II (X,Y,Z axes) Tap return function Automatic workpiece measurement *1 Waveform display Operation level External input signal key 	<ul style="list-style-type: none"> (NC) Expanded workpiece coordinate system Scaling Mirror image Menu programming Program compensation Tool length compensation Cutter compensation Macro function Local coordinate system One-way positioning Operation in tape mode (Conversation) Operation log Schedule program Automatic tool selection Automatic cutting condition setting Automatic tool length compensation setting Automatic cutter compensation setting Automatic calculation of unknown number input Machining order control

Optional NC functions		
<ul style="list-style-type: none"> Memory expansion (Approx. 500 Mbytes) High accuracy mode BII (look-ahead 200 blocks, smooth path offset) Spindle override 	<ul style="list-style-type: none"> (NC) Submicron command *2 Interrupt type macro 	

*1 Measuring instrument needs to be prepared by users. *2 When the submicron command is used, changing to the conversation program is disabled.
* Functions listed under (NC) and (Conversation) are available only for NC programs and conversation programs respectively.



Brother has persisted with their original NC unit to drive machine performance to the fullest. The CNC-C00 has advanced further, achieving overwhelmingly high productivity and excellent usability.

BROTHER INDUSTRIES, LTD.
MACHINERY & SOLUTION COMPANY

1-5, Kitajizoyama, Noda-cho, Kariya-shi,
Aichi-ken 448-0803, Japan
PHONE: 81-566-95-0075
FAX : 81-566-25-3721

<http://www.brother.com>

Black face

High-class presentation of operation panel

12.1-inch color display

User-friendly display size

Shortcut keys

Quickly open the desired screen

Key design

Easily visible, easy-to-push keys



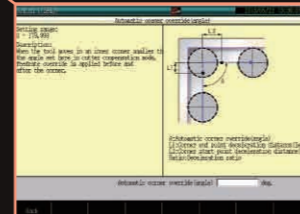
Large-capacity memory

Standard : 100 Mbytes
Optional : 500 Mbytes

Drawing function



Help display



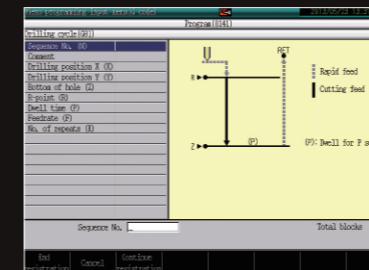
Override switch

Fine tuning possible

Operability

Functions with excellent usability are fully utilized, leading to improvement in work efficiency at production sites.

Menu programming function



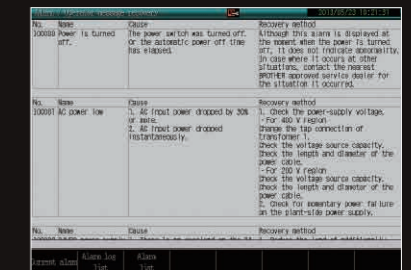
Programs can be created by entering the required items while viewing the graphical display.

Tool length range setting function



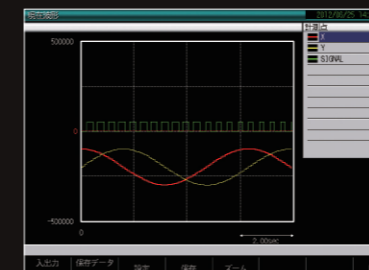
The measurement range for the tool length is preset to prevent a numerical value not within the range being entered.

Alarm details display



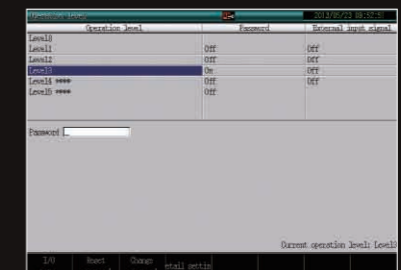
Alarm details and solutions, the same as those provided in the instruction manual, are available on the machine screen.

Waveform display function



Represents the load during machining as a waveform and displays it on the screen in real time.

Operation level setting function



Allows you to set the range of operation permitted according to the level of personnel involved in operation.

Tap return function



Allows the operator to easily release any tap caught in the workpiece due to power failure etc.

Machining support

The CNC-C00 series is equipped with various functions useful in a wide variety of machining.

High accuracy mode B

High-speed and highly accurate three-dimensional machining is achieved by Brother's original "high accuracy mode B" with look-ahead function and smooth path offset function.

Look-ahead function

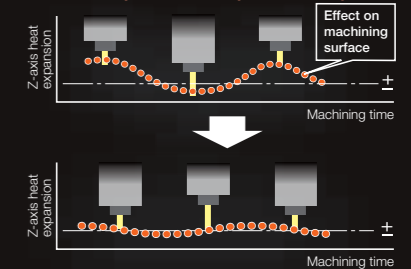
(Standard) 30 blocks*1
(Optional) 200 blocks*2

Smooth path offset*2

*1 When using high accuracy mode B1.
*2 Available when using a high accuracy mode BII as an option.



Heat expansion compensation system



Predicts heat expansion based on the operation status of each axis without using sensors, and compensates for it.*3

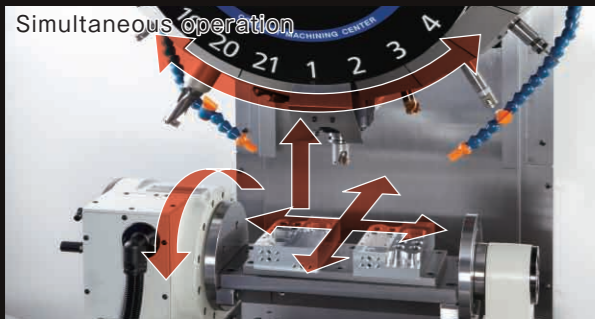
*3 External factors, such as coolant temperature or ambient temperature, are not considered. Accuracy may be affected depending on the conditions.

High productivity

Equipped with various functions to achieve outstandingly high productivity

G100 Tool change canned cycle (nonstop ATC)

A spindle with a shorter start/stop time is used, enabling the Z-axis to rise to the tool change position without stopping halfway. Waste time is reduced by simultaneously positioning the X/Y and additional axes while changing tools.



General program
01 M6T1
02 G90G54G00X0.Y-20.0
03 G49H1Z100.0M3S2000

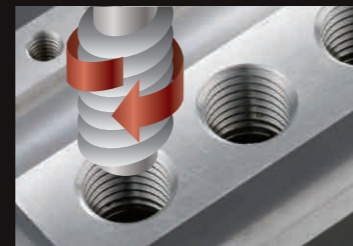
G100 program
01 G100T1G90G54G00X0.Y-20.G43H1Z100.M3S2000

G77 Tapping cycle (synchronizing mode)

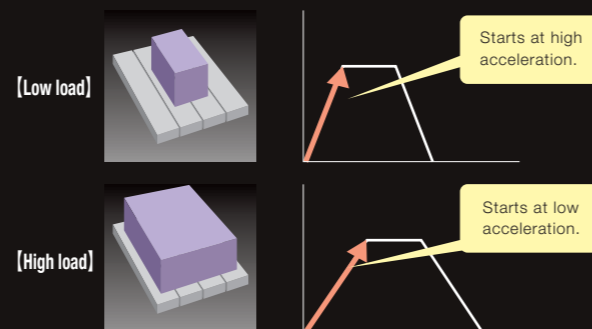
Equipped with Brother's original high-speed synchronized tapping control, a peripheral velocity 377 m/min is possible, the fastest in the world.

Peripheral velocity: 377 m/min

Tapping : M20
Spindle speed : S6000
Material : Aluminum



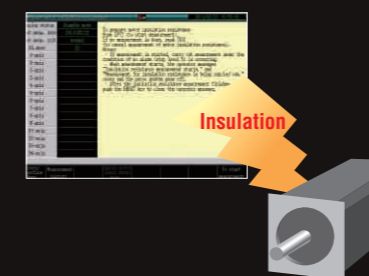
Optimal acceleration setting according to loading capacity
The X/Y-axes optimal acceleration can be set according to the table loading capacity.



Maintenance performance

Various maintenance functions are provided to minimize machine down time.

Motor insulation resistance measurement



Measures the motor insulation resistance to detect any sign of motor failure and issues an alarm.

Maintenance notice function



Issues a maintenance notice in advance.

Operation log



Stores the key operation history. This is helpful for investigation of the causes of machine failure etc.