

Boxway type Horizontal machining center

GBH SERIES

630H · 800H



SUZHOU GUDWAY CNC EQUIPMENT CO.,LTD

Add: No. 21 Xiexin Road, New District, Suzhou City, Jiangsu Province, China.

Tel: +86-0512-65580060
Email: info@gudwaycnc.com
Web: http://www.gudwaycnc.com



#50 All hard rail heavy cutting high rigidity horizontal machining center

GBH SERIES

The GBH series provides high rigidity and strong cutting capability to meet the various needs of customers for heavy cutting. Allhard rail integrated bed for high-stability, powerful cutting of components. The servo tool changing structure and the table switching device greatly reduce the non-cutting time and achieve high productivity.





1 High rigidity structure

The integrated bed structure and the wide hard rail with high rigidity realize the stability during heavy cutting and ensure the high precision during machining.

2 Efficiency

The servo-driven ATC and pallet automatic exchange reduce non-cutting time while significantly increasing production efficiency.



3 Automated convenience

The standard FANUC system provides convenience for customers with efficient automated production lines, and can also be equipped with multiple pallet systems and linear pallet systems according to production needs and plant structure to achieve intelligent production needs.





High stability and high rigidity bed structure

The most stable one-piece bed structure bed

High stability of the bed structure

GBH series is analyzed by finite element method (FEM) to analyze the distribution of the force support points of the whole integrated bed, so that the whole bed can be stressed evenly during processing and improve the processing stability. After the analysis of the mechanical software, the bed structure of this series is divided into upper M-type and lower W-type structures with high stability.





High rigidity of travel shaft

The installation of wide hard rails on all axes optimizes the dynamic rigidity of the main sliding module, further improving the power cutting capability. Equipped with high rigidity ball screw, with 3 row bearing coupling, can maintain the high precision and rigidity of each shaft. The ball screw is equipped with nut cooling to ensure stability when moving.



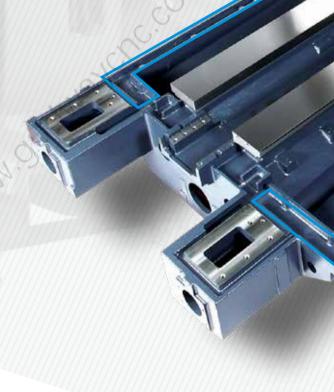
X/Y/Z travel 1050/850/1000 mm

Max fast

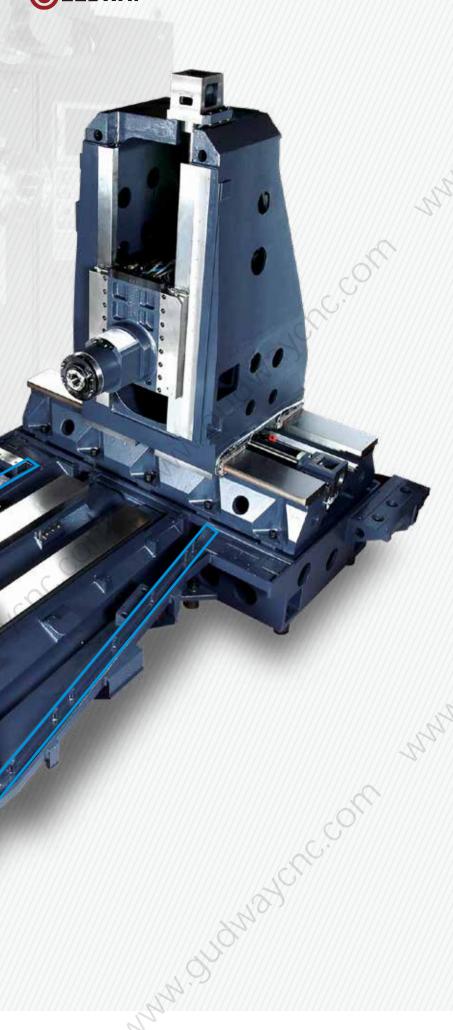
feed speed 30/30/30 m/min GBH 630H

Distance between spindle end face and table center 100 mm

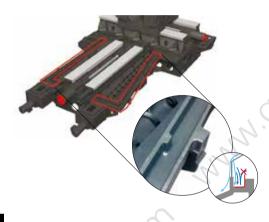
GBH 630H



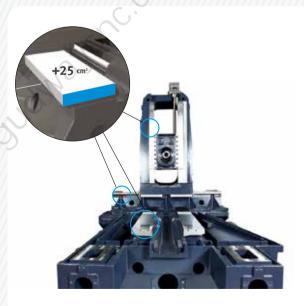




The integrated bed structure adopts double wall structure design on both sides, which effectively prevents the leakage of cutting oil during the machining process. The design also makes maintenance easier.



One-piece bed structure



Wide hard rail for more stable processing



Machining spindle suitable for heavy cutting

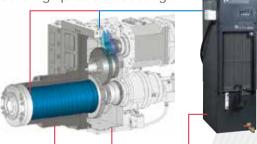
1 Geared main shaft

Gear driven spindle speed, rigid enough to meet the output requirements of large torque. The optimized geared spindle minimizes vibration and thermal errors while enabling faster acceleration and deceleration for superior machining performance.

	\ / /	
	GBH 630H	GBH 800H
Max spindle speed (r/min)	6000	6000
Motor power (kW)	18.5/30	22/35
Max spindle torque (N·m)	1238	1444

2 Spindle cooling system

ST configuration spindle oil cooling device, to ensure a long time of high-speed spindle continuous operation. The cooled oil is circulated to the main shaft bearing and the built-in motor to minimize thermal error and ensure high precision cutting.



3 Double-sided tool clamping system

Tool rigidity is improved by clamping the spindle tightly, while tool life cycle and cutting surface roughness are improved by reducing vibration with

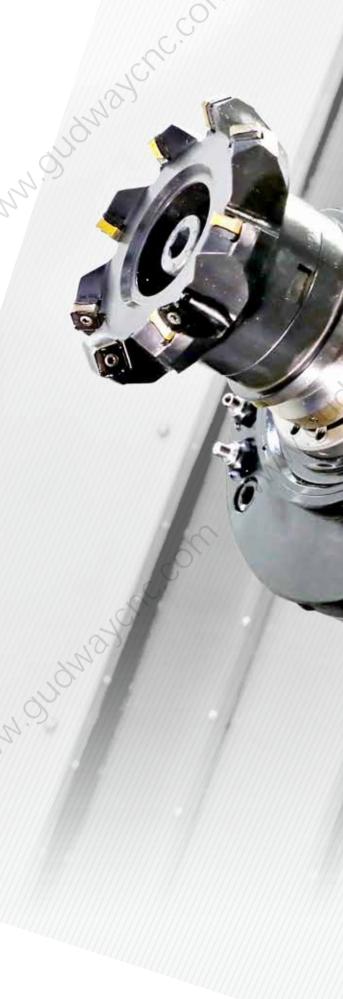
conical

contact

vibration with double-sided locking.



Flange contact







Tool magazine

1 High efficiency servo-driven ATC

Only one clamping, you can efficiently complete a variety of processes. A wide variety of tool libraries combined with servo-driven ATC greatly improves production efficiency.

Specifications (Tool Max diameter x tool Max length)

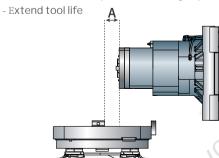
Model	GBH 630H	GBH 800H
BT/CT/DIN	320 x 630	320 x 630
HSK	320 x 700	320 x 700

Tool change tin	ne (tool weight	less than 12KG)
Model	GBH 630H	GBH 800H
Tool - Tool	2	S
Cutting - Cutting	8	S

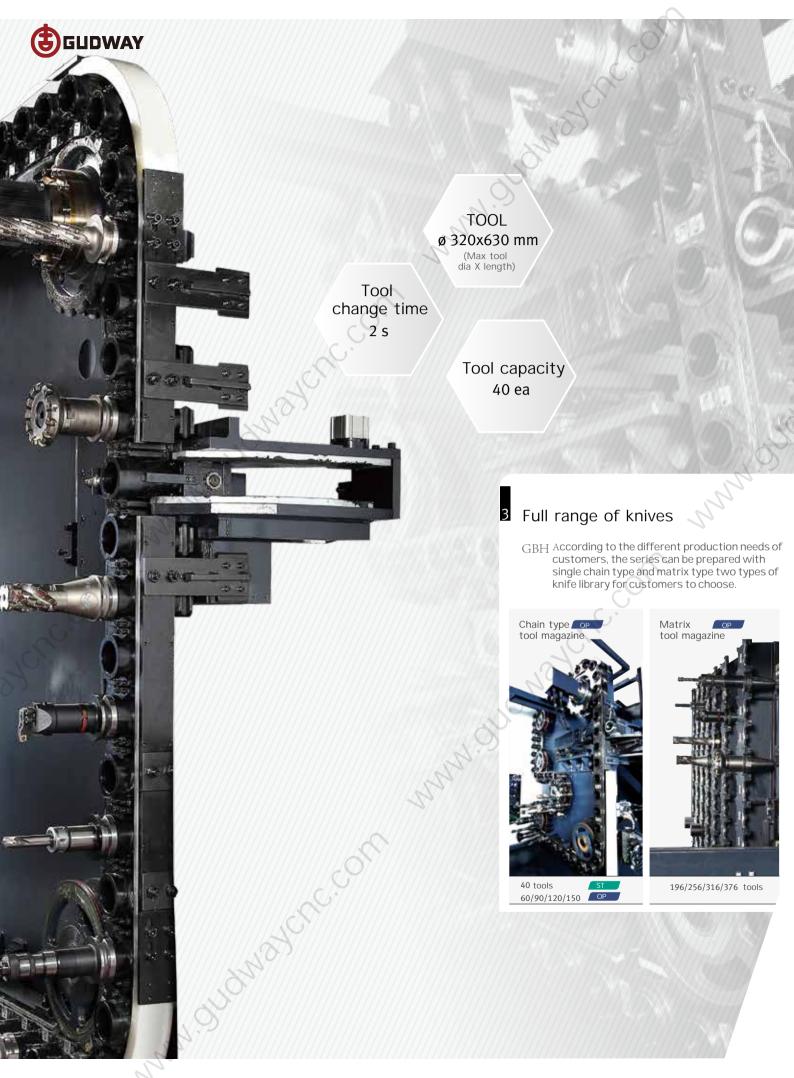
2 More convenient short tool machining

The distance between spindle and the center of the pallet has been reduced to facilitate heavy cutting with shorter tools.

- Tool diameter increases, rigidity increases
- Innovative improvements in repeatability of ATC (Automatic Tool changer)
- Minimize Z-axis displacement at high speeds









Automatic pallet exchange device

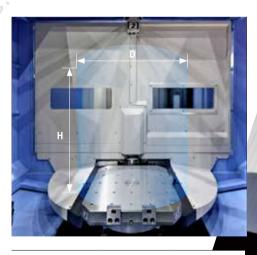
1 Servo drive APC

The APC (Automatic Pallet Exchange Unit) system increases productivity with fast and precise pallet exchange. In addition to superior reliability, the improved APC (Automatic Pallet Exchange Unit) offers greater scope for operator convenience.

	GBH 630H	GBH 800H
Exchange time	12 s	16 s

2 Max size

The GBH series has ample space to process heavier and larger parts.



Max size		
Parameter	GBH 630H	GBH 800H
D mm	Ø1050	Ø1450
H mm	1350	1550







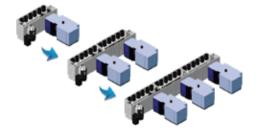
Pallet automation system

Linear Pallet System [LPSII]

The LPSII linear pallet system is designed and produced by GUDWAY to provide users with an optimized system that offers excellent flexibility , including system expansion and layout changes.

- Up to 7 devices

Number of trays: up to 72 ea



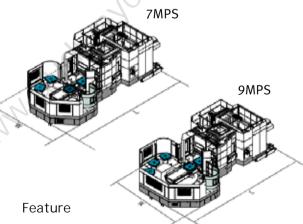
Feature

Facilitate the implementation of system expansion station equipment through modular storage racks Up to 7 machines and 72 pallets
Efficient workpiece loading space

- Automated operation control via PC-based OS Easy to retrofit into an old horizontal machining center 2 Multi-pallet Automation System (MPS)

In contrast to ST dual pallet machines, MPS uses the job scheduling function to enable long unmanned operation and flexible production of various workpieces. The system can be easily retrofitted to existing machines on site.

- Number of trays: 7&9 ea



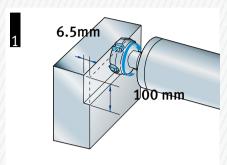
- Long time unmanned operation
- Bracket type servo drive, high reliability
- Simple installation and easy maintenance
- Convenient for field modification
- Priority of pallet and planned operation

my.



Excellent processing performance

(Motor power: 45/25 kW)

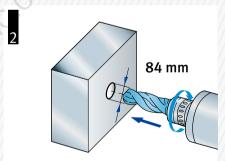


GBH 630H

Surface Milling carbon steel (SM4)	5C)
Tool	ø125mm face milling cutter (8Z)
Cutting per minute	880 cm ³ /min
Spindle speed	564 r/min
Feedrate	1354 mm/min

GBH 800H

Surface Milling carbon steel (SM4	5C)
Tool	ø125mm face milling cutter (8Z)
Cutting per minute	1173 cm ³ /min
Spindle speed	564 r/min
Feedrate	1805 mm/min



GBH 630H

Face milling carbon steel (SM45C)	10,	
Tool	10.)	ø84mm U-bit (2Z)
Cutting per minute	772	580 cm ³ /min
Spindle speed		674 r/min
Feedrate		105 mm/min
1 111111111111111111111111111111111111	91111111111111	//////////////////////////////////////

GBH 800H

Face milling carbon steel (SM45	5C)
Tool	ø84mm U-bit (2Z)
Cutting per minute	914 cm³/min
Spindle speed	674 r/min
Feedrate	165 mm/min
\$	



Ease of use

Easy to operate panel

MIN STATE OF THE S To improve usability, the operation panel has been redesigned and integrated. Additional, custom function switches (OP) are available for maximum operator convenience.



Clamp lock/release buttons, counters, timers and other special OP buttons can be installed.

Partition button to prevent misoperation

PCMCIA Card

USB Port



Rotary operating panel

The operation panel can be rotated 90° and displays various alarm information and controller errors for the machine, which is more convenient for the operator.



PCMCIA CARD

PCMCIA card can upload and download NC program, NC parameters, tool information and ladder program, in addition to support DNC operation.

USB PORT

Allows the use of USB drive to upload/download NC software programs, NC parameters, tool information and ladder programs, but does not support DNC operation.

PORTABLE MPG

The portable MPG makes it easier for users to set up workpieces.



Note: The appearance is subject to the actual design and specifications. Subject to change without prior notice.



EOP FUNCTION

The Easy Operation Package (EOP) provides users with tool monitoring, management and help, operation and tray library.

Tool management









ATC/APC panel

Tool management I

Tool magazine control Display tool status Fastems tool add/remove function

Tool management II

Tool magazine control Tool life management Tool life prediction Tool magazine status control Balluff tool ID function

Tool load monitor

Tool damage detection ATC manual Anomaly detection during operation • APC manual No load blank cut detection

HELP









Simple NC parameters

Main parameter help Display parameter Settings

Calculator

Calculator capabilities 4 arithmetic operations Support for math functions

M code list

List of master M codes

G Code list

List of main G codes

Operations





Pallet storage



Running speed

Measuring various machine speed 3 shift operations are supported Calculate and store the operating speed for 30 days

Displays data for a specified date

PMC switch

Operation Panel function (OP) Replacement switch NC software OP

Multi-tray station

Control MPS operation Displays MPS PMG information

Set processing progress Automatic call function

Manual operation and coordinate setting functions



• 2 tray APC operation screen

APC Settings



Fixture system

Select hydraulic and pneumatic fixtures according to customer requirements.

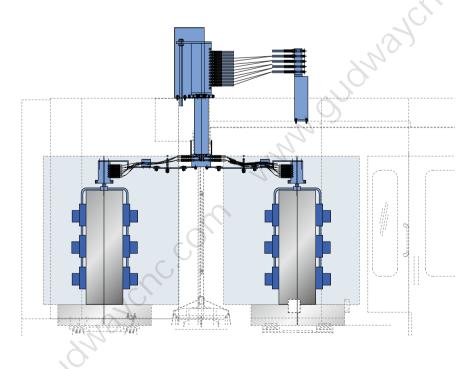
Workpiece holding fixture system (hydraulic/pneumatic) Hydraulic/pneumatic fixture sleeve OP

- A/B wire: 2, 4, 6, 8 pairs (including solenoid valve)
- P/T wire: 2, 4, 6, 8 pairs (excluding solenoid valve)

Hydraulic motor for fixed fixture

- •2.2 kW / 7MPa
- •3.7 kW / 15MPa
- •5.5 kW / 21MPa







Chip enclosure



Drum filter OP



Measuring system



Auto tool breakage detection device I (BK9)



OP

Auto tool breakage detection device II (OMRON)



Automatic tool (TS 27R) OP measuring device

Chip handling system



Flush coolant



Coolant spray gun on top of spindle



Spray coolant OP



Cooling gun OP



Mainshaft flush coolant



Spindle center discharge



MQL system oil mist device



Environmental protection device



Oil skimmer



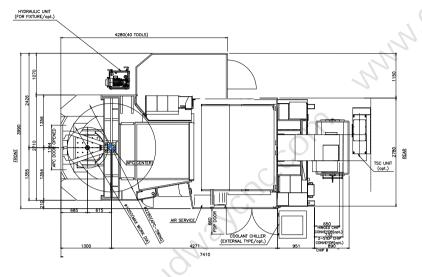
Oil mist collector OP

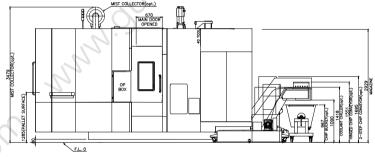




Dimensions

GBH630H UNIT: mm





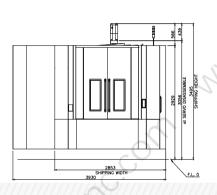


Table size

GBH 630H UNIT: mm

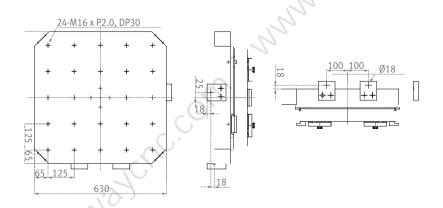




Table size

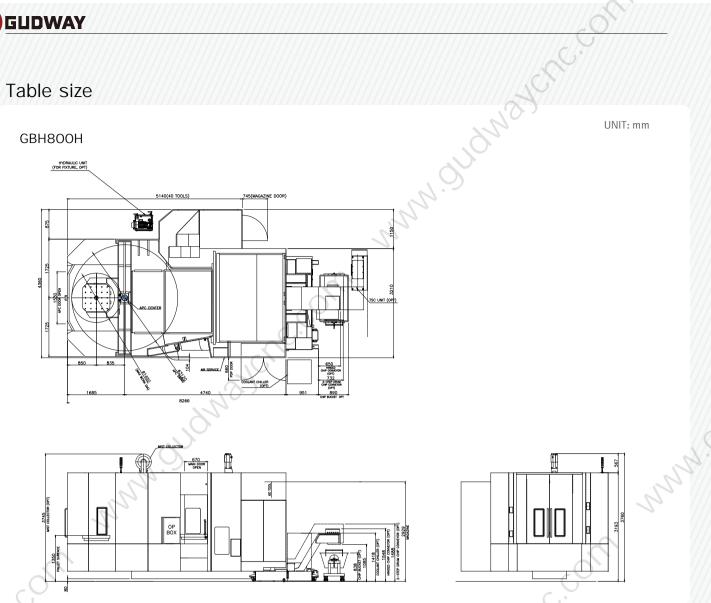
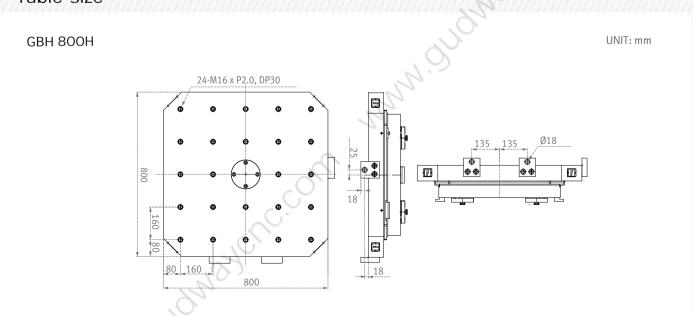


Table size





PARAMETER

PARAMETE	R	Item	UNIT	GBH 630H	GBH 800H
		Feed distance (X/Y/Z)	mm	1050/850/1000	1400/1050/1200
	Processing	Distance from spindle front to bench c	enter mm	100~1100	150~1350
	capacity ·	Distance from spindle center to table s	urface mm	75~925	75~1125
		Pallet type		24-M16×P2.0	24-M16×P2.0
	-	Indexing Angle	deg	1 {0.001}	1 {0.001}
	Tray	Maximum admissible load	kg	1200	2000
	-	Maximum dimensions of workpiece	e mm	Ø1050x1350	Ø1450x1550
	-	Size of Rocking Plate	mm	2-630X630	2-800X800
		Maximum spindle speed	r/min	6000 {8000}	6000 {8000}
	Spindle	Taper specification		ISO #50, 7/24 TAPER	ISO #50, 7/24 TAPER
	-	Maximum spindle torque	N∙m	1238 {1444/1732/1991}	1444 {1444/1732/1991}
		Fast moving speed (X/Y/Z)	m/min	30/30/30	24/24/24
	Feedrate ·	Cutting feed speed	mm/min	1~15000	1~12000
	Auto	Pallet quantity	ea.	2	2
	pallet exchange	Pallet exchange time	S	12	16
	device	APC rotary indexing Angle	deg	90	90
		Shank type		BT50 {CAT50/D	N50/HSK-A100}
		Tool storage capacity	ea	40 {60/90/120/150	/196/256/316/367}
	1,9	Maximum tool diameter	mm	320 (CONTINOUS.), 100	(ADJACENT POTS EMPTY)
	Auto	Maximum tool length	mm	630 (24.8) (BT / CA	T / DIN), 700 (HSK)
	tool	Maximum tool weight	kg	3	0
2	changer -	Tool change time (tool-tool, less t	han 8kg) s		2
	-	Tool change time (cut-cut, less th	ian 8kg) s		8
	Motor	Maximum spindle motor power	kW	18.5/30	22/35
		Power supplies	kVA	7	0
	Power -	Air pressure	MPa	0.	54
-().		Cooling tank capacity	L	9	25
	Box capacity	Lubricating oil pot capacity	L	10 7	.2
uc.com		Height	mm	3495	3760
	Size	Machine area (L X W)	mm	6410 x 3990	7376 x 4360
	-	Weight	kg	20500	27000

• {}OP

Standard

Fully enclosed splash proof sheet metal Coolant tank&ST Cooling System&Skimmer

Working light (fluorescent)

Spiral chip extractor

Condition light (red, yellow, green)

Install parts Spare parts

oug to Install & debug tools

Optional

Chip-conveyor Spray cooling system Chip pickup truck Automate Scanning

Spindle center water Auto tool length measurement

Prepare spindle center water outlet Water gun system

Automatic Power Off

Hydraulic pipeline preparation (for hydraulic jig)



NC Specification

FANUC i Plus Series

_			
Shaft		-RS-232C interface	
· Number of control axes 4(X, Y.ZR		·USB connection	
- Also control the number of axes	Interpolation (G01):4 axe	·· / Jump male pass conversion	G20/G21
	rpolation (G02,G03):2 axe		±99999.999mm(±9999.9999 inch)
- Control shaft removed		· Number of programs that can be	
Reverse gap compensation - Emergency Stop/overshoot		· Select segment Skip	Mod
-HR V controls HRV		Select Stop Part program storage length	M01 2 m
- Location tracking		One-program protection	. 10
- Increment system 0.001/0.0001 mm/inch		Program number	O4 digits
- Minimum input increment 0.001/0.0001 mm/inch - Increment system C ISXC		- Sequential bean Inversion function	N5 digit
- The machine locks all axes/z-axes		Program stops/ends	M00,MO2,M30
		· Programmable data entry	Pass Type tool compensation
- Mirror each axis		()	Crown and workpiece
		Rigid tapping	G1011 compensation G84,G74
- Storage Trip Check 1		· Subroutine calls	10 layers of nesting
- Position switch		· Paper tape code	EIA RS422/ISO840
- Absolute pulse encoder		Thread cutting Local/machine coordinate syste	m G52/G53
Interpolation and feed function		.Program restart	III G52/G53
- Return to second reference point G30		system groups is added	G54.1P1-48 (48 pairs)
3/4 Reference	C02 C02	Workpiece coordinate system Other functions (operation setting)	G54-G59
- Arc interpolation - Nanointerpolation	G02,G03	Other functions (operation, setting Alarm display	g and display, etc.)
- Inversely proportional time back feed			
Cylindrical interpolation	G07.1		
- Polar coordinate interpolation - Feed pause	G15,G16	Automatic corner multiplier Clock display	G62
. 550 pauso	G04	1	
Sure stop 1 stop mode	G09,G61	3	
Feed speed multiplier (10%UNT)	O-200%	PMC alarm information display Empty operation	
- Screw interpolation		and the first state of the stat	Embaddad Eth
The bell type has been salted before the pre-read i	nsertion	Real speed display/	
- Smooth reverse gap compensation	0.0000	· Memory card-based DNC opera	ition
-JOG rate10%(UNIT)	0-200%	-2	
- Automatic corner magnification	G62	· Multilingual display	
		Co	
white - Cutting feed speed pliers		-Cs profile control	
- Fast bell		RS232 interface (for 2ch)	
	1,000	· Polar coordinates command	G15,G16
· Manual feed per turn	G01	.Programmable mirror	G50.1, G51.1
	01/0.01/0001 mn	· Mode data input	
		FS10/11T format	
Magnification Cancel	49M48/M49	· Graphic display · Help function	
Manual handwheel interrupt	ONLY GBH	Tielp failetion	
- Fast feed multiplier E0/fine		· High-speed skip feature	
FO(fine	teed) 25/50/100%		
ro/ilite	e feed),25/50/100%	Load table display	10.4 "color I CD/MDI
- Return to reference point	G27,G28,G29	Load table display Display unit	10.4 "color LCD/MDI
ro/ilite	G27,G28,G29	Load table display Display unit Advance control	10.4 "color LCD/MDI G08
Return to reference point pass.	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface	
- Return to reference point pass Feed per minute -AICC II	G27,G28,G29 G31	Load table display Display unit Advance control Memory card interface Operating features	
Return to reference point pass.	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R	G08
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display	
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R	G08 ONLY GBH
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input	G08 ONLY GBH display
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo	G08 ONLY GBH display G50,G51
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Speed control	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff	G08 ONLY GBH display
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Speed control	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation	G08 ONLY GBH display G50,G51 G68,G69
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Speed control	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo	G08 ONLY GBH display G50,G51 G68,G69 Sequence
- Return to reference point pass. - Feed per minute - AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Speed control - Spindle and M code function	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function	G08 ONLY GBH display G50,G51 G68,G69
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Servo setting screen	G08 ONLY GBH display G50,G51 G68,G69 Sequence
- Return to reference point pass. - Feed per minute - AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth Speed control Spindle and M code function -M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Servo setting screen Single step operation	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 digits - Spindle output switching	G27,G28,G29 G31 mm/min	Load table display Display unit Advance control Memory card interface Operating features Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning	G08 ONLY GBH display G50,G51 G68,G69 Sequence
- Return to reference point pass. - Feed per minute - AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth Speed control Spindle and M code function -M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits Spindle output switching - Rigid tap return - Rigid tap return	G27,G28,G29 G31 mm/min 200BLO CK	Load table display Display unit Advance control Memory card interface Operating features Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return	G27,G28,G29 G31 mm/min 200BLO CK	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Undifrectional positioning Check 2 Automatic data backup	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number
- Return to reference point pass. - Feed per minute - AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth Speed control Spindle and M code function -M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits Spindle output switching - Rigid tap return - Rigid tap return	G27,G28,G29 G31 mm/min 200BLO CK	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 "C	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits - Spindle orientation - Rigid tap return - Rigid tap preturn - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C	G27,G28,G29 G31 mm/min 200BLO CK	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Undifrectional positioning Check 2 Automatic data backup	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Rigid tap return - Rigid tap return - Rigid tap peing - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 "Cc Machining quality level adjustmer	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60
- Return to reference point pass. - Feed per minute - AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle output switching - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjust re- EOP(Easy to Handle Package)	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Rigid tap return - Rigid tap return - Rigid tap peing - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmet EOP(Easy to Handle Package) Tool load monitoring function	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool Life Management - Tool length compensation	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function - Rigid tap ping - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool length compensation - J with length measurement	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 "C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth Speed control Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle speed function 55 digits Spindle output switching - Rigid tap return - Rigid tapping Spindle speed multiplier Tool function - Tool empty compensation C Radius compensation - Number of tool offset - Tool life management extension Tool Life Management - Tool length compensation	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Dynamic graphic display (10.4 °C Machining quality level adjustmer ECO/(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 midle speed multiplier - Rigid tap preturn - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life Management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation quide i Operation lead oi Word carving	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool Life Management - Tool length compensation - J with length measurement - With work length measurement - With work length measurement - With work length measurement - Laste - Tool function	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving Off card (2GB)	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy compensation - taste - Tool function	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation quide i Operation lead oi Word carving	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy compensation - taste - Tool function	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Dynamic graphic display (10.4 °C Machining quality level adjustmer ECOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving -GF card (2GB) -PROFIBUS-DP -PROFINET CGAINK	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 ollor TFTLCD) tt function 5 axes in total
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 might spindle speed function - Rigid tap pring - Rigid tap pring - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool life Management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste - Tool function - open - month Compensation storage - H/D code, Ge	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustret EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving CF card (2GB) PROFIBUS-DP PROFIBUS-DP PROFINET CGAINK Number of login programs	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function 5 axes in total
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool Life Management - Tool length compensation - J with length measurement - With work length and energy - Compensation - taste - Tool function - open - month Compensation storage - H/D code.Gr - Tool length measurement	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer ECOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation lead oi Word carving OF card (2GB) PROFIBUS-DP PROFIBET CGAINK Number of login programs The number of work coordinate s'	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 might spindle speed multiplier - Rigid tap ping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Tool life management - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste - Tool length measurement - Tool coordinate system Settings	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 "Cr Machining quality level adjustre EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving CF card (2GB) PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBUS-D Incline plane indexing Giinstruction Gistruction Giinstruction Giinstruction Giinstruction Giinstruction Giinstruction Giinstruction Gorard indexing Giinstruction Giinstruction Gorardine gide Giinstruction Gorardine Giinstruction Giinstruction Gorardine Giinstruction Giinstruction Gorardine Giinstruction Giinstruction Gorardine Giinstruction Giinstruction Giinstruction Gorardine Giinstruction Giinst	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function 5 axes in total ystem G54.1P1X300(300 pairs) 58.2.Guidance screens is not shown on 8.4*LCD.
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - Mode function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Rigid tap return - Rigid tap return - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool Life Management - Tool length compensation - J with length measurement - With work length and energy - Compensation - Laste - Tool function - open - month Compensation storage - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing)	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Memory card interface Operating features Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation lead oi Word carving CF card (2GB) PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBET CGAINK Number of login programs The number of work coordinate s' Incline plane indexing Giinstruction Titt plane indexing command	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4*LCD. G68.2 TWP command on
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 digits - Spindle speed function 55 digits - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management extension - Tool Life Management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste - Tool function - open - month Compensation storage - Tool function - Open - Month Compensation storage - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing) - Machining recycle G73, G74, G76, G80-G89, G99	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48	Load table display Display unit Advance control Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation guide i Operation guide i Operation lead oi Word carving CFC card (ZGB) PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP Incline Indexing Giinstruction Titl plane indexing Giinstruction Titl plane indexing Giinstruction	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) at function 5 axes in total ystem G54.1P1X300(300 pairs) 58.2.Guidance screens is not shown on 8.4°LCD.
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - Mode function M3 digits - Spindle arial output - Spindle serial output - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle output switching - Rigid tap return - Rigid tap return - Rigid tap pring - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy - Compensation - taste - Tool function - open - month Compensation storage - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing) - Machining recycle G73, G74, G76, G80-G89, G99 - R programming arc interpolation - User macros	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48 eometry //Wear memory	Load table display Display unit Advance control Memory card interface Operating features Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation guide i Operation guide i Operation lead oi Word carving -CF card (2GB) -PROFIBUS-DP -PROFIBUS-DP -PROFIBUS-DP -PROFIBUS-T CGAINK Number of login programs - The number of work coordinate s' - incline plane indexing instruction Tilt plane indexing command function Multi-spindle control Data service(1GB PCMCIA card)	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4*LCD. G68.2 TWP command on
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 digits - Spindle speed function 55 digits - Rigid tap return - Rigid tap preturn - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy compensation - taste - Tool function - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing) - Machining recycle G73, G74, G76, G80-G89, G99 - R programming arc interpolation - User macros - User macros	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48 eometry //Wear memory	Load table display Display unit Advance control Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number - Retreat Operation guide i Operation guide i Operation guide i Operation guide i Operation function To CGAINK Number of login programs - The number of work coordinate s' Incline plane indexing Giinstruction Tilt plane indexing Giinstruction Multi-spindle control Data service(1GB PCMCIA card) Fast Ethernet Board	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total 1000 ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4"LCD. G68.2 TWP command on guidance window
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 gigits - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Tool life management extension - Tool life Management - Tool life management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste - Tool function - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing) - Machining recycle G73, G74, G76, G80-G89, G99 - R programming arc interpolation - User macros - User macros - User macros public variables append #100-#199, #500-	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48 eometry //Wear memory	Load table display Display unit Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 "Cr Machining quality level adjustroer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving CF card (2GB) PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFIBUS-DP PROFINET CGAINK Number of login programs The number of work coordinate s' Indine plane indexing Girinstruction Multi-spindle control Data service(1GB PCMCIA card) Fast Ethernet Board 3D coordinate conversion	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4"LCD. G68.2 TWP command on
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle and M code function - Spindle serial output - Spindle serial output - Spindle speed function 55 digits - Spindle speed function 55 digits - Spindle speed function 55 digits - Rigid tap return - Rigid tap preturn - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life management - Tool life management - Tool life management - Tool length compensation - J with length measurement - With work length and energy compensation - taste - Tool function - Tool length measurement - Programming and editing functions - Absolute/incremental programming G90/G91 - Dynamic coordinate system Settings - Background editing (background editing) - Machining recycle G73, G74, G76, G80-G89, G99 - R programming arc interpolation - User macros - User macros	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48 eometry //Wear memory	Load table display Display unit Advance control Advance control Memory card interface Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer EOP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number - Retreat Operation guide i Operation guide i Operation guide i Operation guide i Operation function To CGAINK Number of login programs - The number of work coordinate s' Incline plane indexing Giinstruction Tilt plane indexing Giinstruction Multi-spindle control Data service(1GB PCMCIA card) Fast Ethernet Board	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total 1000 ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4"LCD. G68.2 TWP command on guidance window
- Return to reference point pass. - Feed per minute -AICC II - Selection of processing conditions - High speed and high precision processing package - Interpolation type pitch error compensation - Nanosmooth - Nanosmooth - Nanosmooth - Spindle and M code function - M code function M3 digits - Spindle orientation - Spindle speed function 55 digits - Spindle speed function 55 digits - Spindle speed function 55 digits - Rigid tap return - Rigid tapping - Spindle speed multiplier - Tool function - Tool empty compensation C - Radius compensation - Number of tool offset - Tool life Management extension - Tool Life Management - Tool length compensation - J with length measurement - With work length and energy - compensation - taste - Tool function - Open - Tool length measurement - Tool lengt	G27,G28,G29 G31 mm/min 200BLO CK G84,G74 50-150% G40,G41,G42 G40,G41,G42 400 pairs G43,G44,G49 18 digits G45XG48 eometry //Wear memory	Load table display Display unit Advance control Memory card interface Operating features Operating features Operation resume display Arbitrary chamfer/corner R Programmable data input Run time and component count Handoff Ergo Coordinate system rotation Search function Self-diagnostic function Servo setting screen Single step operation Unidirectional positioning Check 2 Automatic data backup Dynamic graphic display (10.4 °C Machining quality level adjustmer ECP(Easy to Handle Package) Tool load monitoring function Option Specifications Additional control shaft number Retreat Operation guide i Operation lead oi Word carving -CF card (2GB) -PROFIBUS-DP -PROFIBUS-DP -PROFIBUS-DP -PROFIBUS-T CGAINK Number of login programs -The number of work coordinate s' Incline plane indexing instruction Tilt plane indexing command function Multi-spindle control Data service(1GB PCMCIA card) Fast Ethernet Board 3D coordinate conversion Graphic copy	G08 ONLY GBH display G50,G51 G68,G69 Sequence number/program number G60 olor TFTLCD) It function 5 axes in total 1000 ystem G54.1P1X300(300 pairs) 38.2,Guidance screens is not shown on 8.4"LCD. G68.2 TWP command on guidance window



GBH SERIES



Fast moving speed (X/Y/Z) m/min 30/30/30 24/24/24 Travel (X/Y/Z) mm 1050/850/1000 1400/1050/1200 Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Fast moving speed (X/Y/Z) m/min 30/30/30 24/24/24 Travel (X/Y/Z) mm 1050/850/1000 1400/1050/1200 Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Item	UNIT	GBH 630H	GBH 800H
Travel (X/Y/Z) mm 1050/850/1000 1400/1050/1200 Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Travel (X/Y/Z) mm 1050/850/1000 1400/1050/1200 Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}			110,0	
Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Pallet dimension mm 2-630 x 630 2-800 x 800 Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}			. 0	
Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N-m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Max spindle speed r/min 6000 {8000} 6000 {8000} Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}				
Max spindle motor power kW 18.5/30 22/35 Max spindle torque N-m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Max spindle motor power kW 18.5/30 22/35 Max spindle torque N·m 1238 {1444/1732/1991} 1444 {1444/1732/1991} Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}		1/1/2		
Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Pallet quantity ea. 2 2 Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}		kW		
Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}	Tool magazine capacity ea. 40 {60/90/120/150/196/256/316/367} Shank type BT50 {CAT50/DIN50/HSK-A100}		N∙m	1238 {1444/1732/1991}	1444 {1444/1732/1991}
Shank type BT50 {CAT50/DIN50/HSK-A100}	Shank type BT50 {CAT50/DIN50/HSK-A100}	Pallet quantity	ea.	2	2
		Tool magazine capacity	ea.	40 {60/90/120/150	/196/256/316/367}
		Shank type		BT50 {CAT50/D	IN50/HSK-A100}
. I W					

SUZHOU GUDWAY CNC EQUIPMENT CO.,LTD