

GV40 with Tilt/Rotary Table

TRAVEL		FEED	
X, Y, Z axes	mm [inch]	Rapid feed (X/Y/Z)	mm/min. [ipm]
Spindle nose to table top	mm [inch]	Cutting feed (X/Y/Z)	mm/min. [ipm]
Table top height (from the floor)	mm [inch]	MOTOR	
TILT/ROTARY TABLE (Option)		Spindle motor	kW [hp]
Table size	mm [inch]	Feed axes motors (X/Y/Z/A/C)	kW [hp]
Max. workpiece size	as shown in the drawing below.	Lubrication pump motor	W [hp]
Max. load	kg [lbs]	Coolant pumps	W [hp]
Tilting angle	degrees	Hydraulic pump	kW [hp]
Rotational speed - Tilting part	min ⁻¹	SUPPLY	
Rotational speed - Table part	min ⁻¹	Electric voltage	V
AUTOMATIC TOOL CHANGER		Electric power supply	KVA
Type of tool shank	BT40/CAT40	Air pressure	MPa [psi]
Type of pull-stud	JIS	Air volume	liters [gal]/min
Number of tools	20	LUBRICATION	
Max. tool diameter (Adjacent pots full/empty)	mm [inch]	Spindle	Grease
Max. tool length	mm [inch]	Ballscrews and Roller guides	Grease (Automatically supplied)
Max. tool weight	kg [lbs]	TANK	
Tool selection system	Fixed tool pot	Hydraulic unit tank	liters [gal]
Chip to chip	sec.	Grease cartridge	liters [gal]
SPINDLE		SIZE	
Spindle speed	min ⁻¹	Floor space	mm [inch]
Spindle rated torque	Nm	Machine height	mm [inch]
Spindle taper	ISO 7/24 Taper NT No.40	Machine weight	kg [lbs]

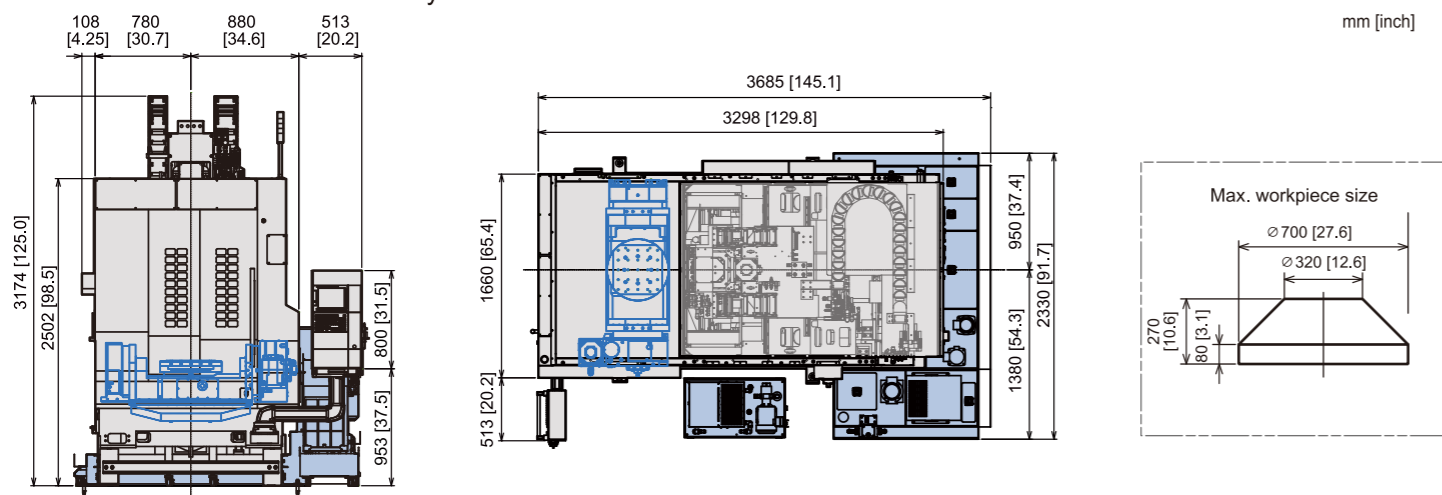
FANUC 0i-MF (Package 1) ● Standard Features □ Options

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ● Controlled axes 3 (OP. Max 5) ● Max. simultaneously controlled axes: 3 (OP. Max.4) ● Spindle override 50-150% (each 10%) ● Cutting feed override 0-200% (each 10%) ● Rapid traverse override 1,2,4,8,15,25,50,100% ● Rapid traverse bell-shaped acceleration/deceleration ● Manual handle feed 1 unit ● Thread cutting, synchronous cutting ● Workpiece coordinate system ● Addition of workpiece coordinate system 48 sets ● Programmable data input G10 | <ul style="list-style-type: none"> ● Custom macro ● Canned cycles for drilling ● Scaling ● Rigid tapping ● Tool offset: 400pcs ● Tool radius/Tool nose radius compensation ● Stored pitch error compensation ● Part program storage: 512KB ● Number of registrable programs: 400pcs ● Run hour and parts count display ● Single direction positioning | <ul style="list-style-type: none"> ● Cylindrical interpolation ● Helical interpolation ● AI advanced preview control (20 look-ahead blocks) ● Optional chamfering/corner R ● Programmable mirror image ● Coordinate system rotation ● Tool offset memory C ● Tool life management □ AI contour control (40 look-ahead blocks) □ AI contour control II (200 look-ahead blocks) □ Optional block skip |
|---|--|--|

MACHINE OPTIONS

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> ● Hydraulic/Pneumatic ports on the table (up to 8 ports) ● C-axis 360-degree continuous rotation (10 min⁻¹, 100 min⁻¹) ● Coolant processing system ● Coolant cooling system ● Through spindle coolant system (1.5/4.0/7.0 MPa) | <ul style="list-style-type: none"> ● External spindle air blow ● Automatic tool length measurement system ● Spindle probe ● Scale feedback system ● Mist collector ● Stainless steel inside cover | <ul style="list-style-type: none"> ● Automatic power off ● Work light ● Program end signal light (1 / 3 colors) ● Machine special color ● Interface for safety measures ● FANUC 31i control |
|--|---|---|

MACHINE SIZE with Tilt/Rotary Table



【Front View】

【Top View】

■ Coolant Tank/Chip Conveyor

Specifications and dimensions are subject to change without notice.

KIWA Japan

GV40

Vertical Machining Center

Specialized for Glass/Ceramic Cutting



5-axis Machine (Option)

KIWA MACHINERY CO., LTD.

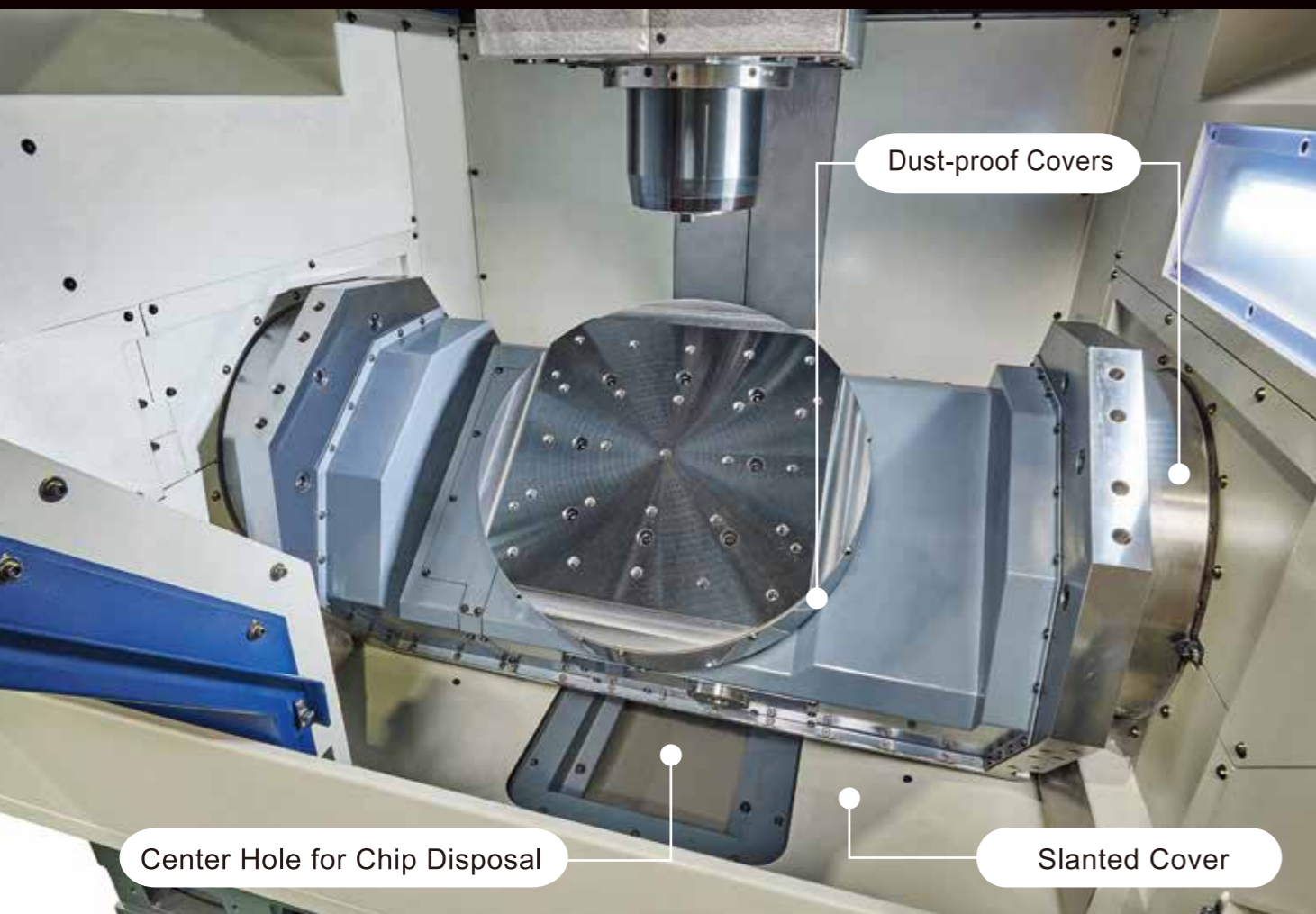
522-51 Harade Kuramochi-cho,
Nabari, MIE 518-0752, JAPAN
TEL : 0595-64-4758 FAX : 0595-64-7529
WEB : <https://www.kiwa-mc.co.jp/en/>
E-mail : overseas@kiwa-mc.co.jp

2020.11E

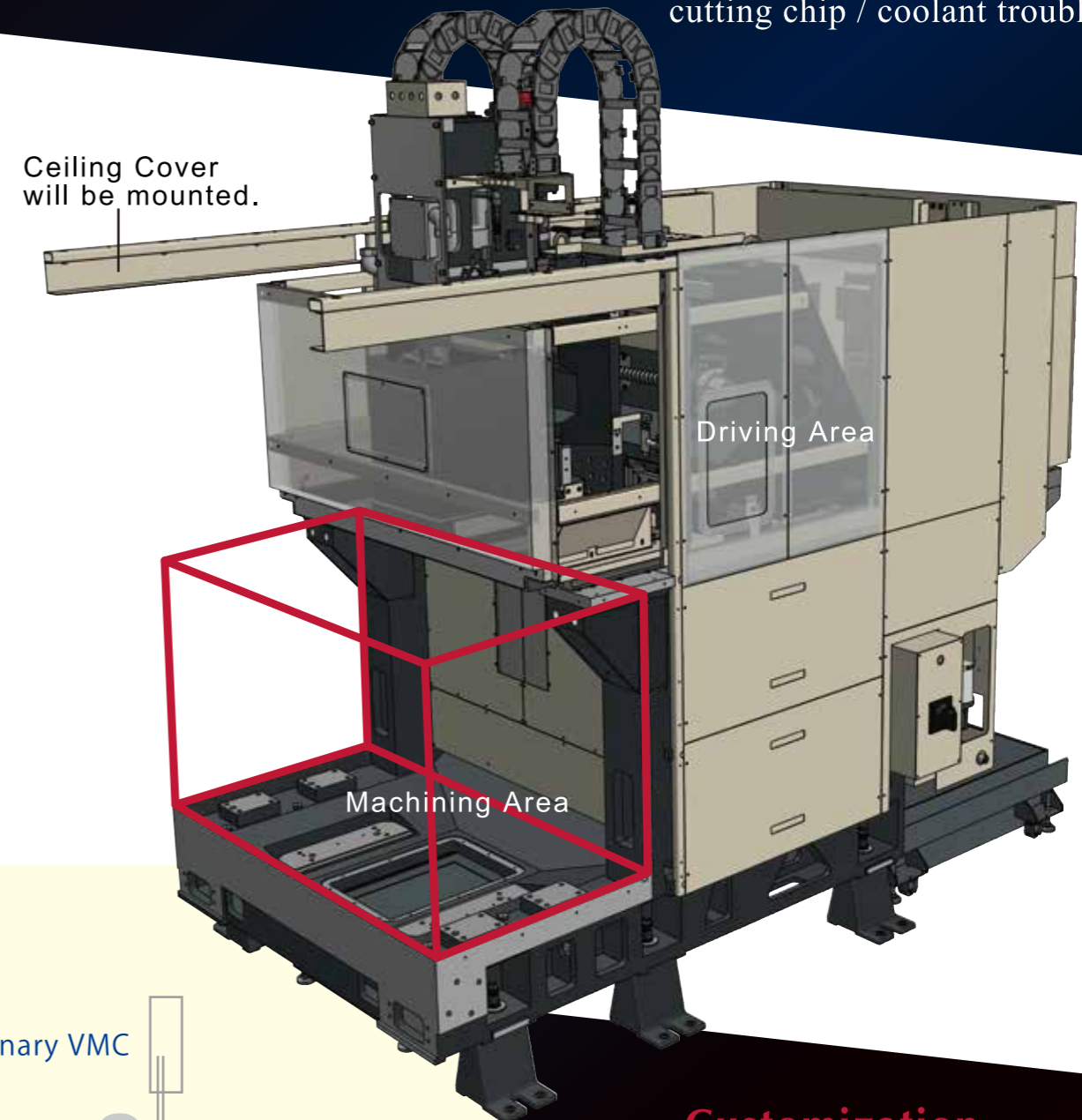
KIWA MACHINERY CO., LTD.

Separation of Machining Area and Driving Area

Machining area and Driving area are completely separated. This minimizes cutting chip / coolant troubles.



Equipped with Dust-proof covers for Driving Area on Tilt/Rotary Table



Thermal Displacement Prevention

- In addition to the spindle jacket cooling and ballscrew cooling systems, the GV40 is equipped with another cooling system for both spindle motor flange and Z-axis servo motor flange. The heat generating components have almost no effect on the machine.
- The spindle and Z-axis roller guides are laid out so that their distance (in Y-axis direction) can be as short as possible. This minimizes thermal displacement of the spindle head.
- The casting surface of the bed is covered with sheet metal in the machining area to prevent coolant from flowing on the casting directly. This minimizes displacement of the casting by coolant.

Lubrication

Kiwa adopts an automatic grease lubrication system for the ballscrews and roller guides, and a grease-packed spindle. It keeps coolant clean longer than oil lubricated machines.

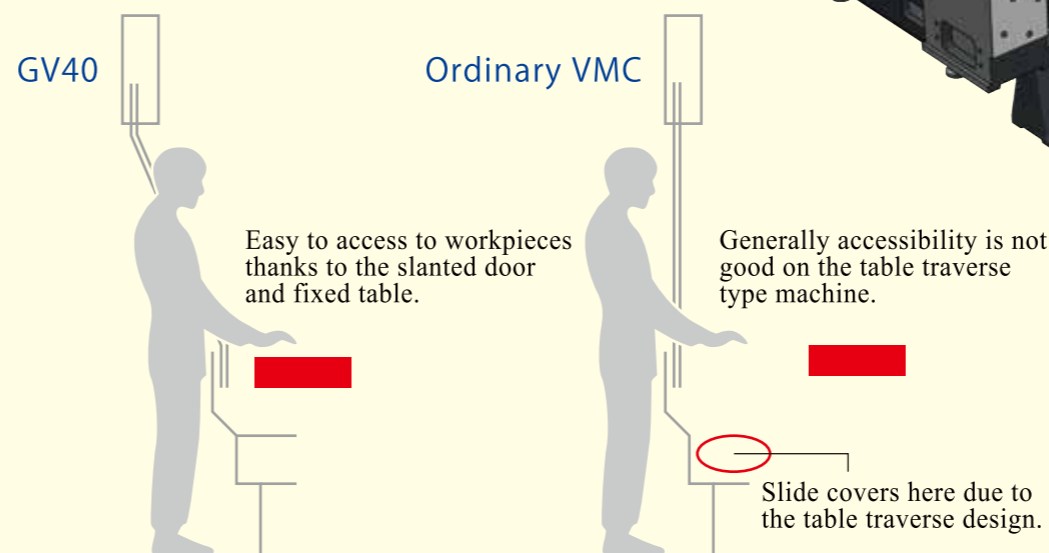
Coolant Management

The bed has a large center hole to discharge cutting chips/powders and coolant out of the machining area. Slant designed covers around the center hole help removal of cutting chips/ powders washed by coolant.

Rigidity

Kiwa adopts #45 size roller guides (rail width of 45mm) for all of the X/Y/Z axes and a box structural spindle head. These realize stable cutting.

Excellent Accessibility



Customization

Options for Various Applications including Glass/Ceramic Cutting

- C-axis Rotary Table
- A-axis Rotary Table
- Tilt / Rotary Table
- Non-lift 2APC
- Automatic Transfer System
- X-axis Slide Unit for Long Parts
- T-slotted Table
- C-axis 360-degree continuous rotation (10min⁻¹, 100min⁻¹)