

## Machine Standard Specifications

( ):inch

Item		Unit	Mycenter-2	Mycenter-3X	
Table	Table size	mm	410×900(16.1"×35.4")	410×900(16.1"×35.4")	
	T-solt(Width×Quantity)	mm	18×3(0.7"×3)	18×3(0.7"×3)	
	Table load capacity	kg	300(662 lbs)	500(1,100 lbs)	
Travel	Longitudinal travel (X-axis)	mm	585(23")	760(30")	
	Cross travel(Y-axis)	mm	430(16.9")	455(17.9")	
	Vertical travel(Z-axis)	mm	460(18.1")	460(18.1")	
	Distance from table surface to spindle nose	mm	125~585(4.9"~23")	125~585(4.9"~23")	
	Distance from column slide way to table center line	mm	215~645(8.5"~25.4")	215~670(8.5"~25.4")	
Spindle	Spindle taper		NT.No40	NT.No40	
	Spindle motor	kw(HP)	AC7.5(10)	AC 11 (15)	
	Max. cutting torque	Nm(ft.lbs)	205(151)	191(141)	
	Spindle speed	Option	r.p.m.	150~10,000	20~15,000
		Standard	r.p.m.	20~7,000	20~10,000
Variable steps speed			2-step gear drive	2-step gear drive	
Feed	Rapid feed(X,Y-axes)	m/min	30(1,182 IPM)	30(1,182 IPM)	
	Rapid feed(Z-axes)	m/min	24(944.91 IPM)	24(944.91 IPM)	
	Cutting feed	mm/min	0~15,000(0~590 IPM)	0~15,000(0~590 IPM)	
ATC	Tool storage capacity		20(24,30: Option)	20(24,30: Option)	
	Tool selection method		Random, Tool identified at magazine	Random, Tool identified at magazine	
	Tool holder		MAS.BT.No40(CAT.No40)	MAS.BT.No40(CAT.No40)	
	Max. tool diameter	mm	80(3.1")	80(3.1")	
	(In case adjacent tool pots are empty)	mm	125(4.9")	125(4.9")	
	Max. tool length	mm	300(11.8")	300(11.8")	
	Max. tool weight	kg	8(17.6 lbs)	8(17.6 lbs)	
Dimensions	Floor space(W×L,With Guarding)	mm	2,300×2,685(90.6"×105.7")	2,430×2,685(95.7"×105.7")	
	Machine height	mm	2,938(115.7")	2,938(115.7")	
	Machine weight(With NC)	kg	4,600(10,143 lbs)	4,800(10,584 lbs)	
Power requirement(AC200V,3-phase)		kVA	15	20	

## Machine Standard Accessories

① Installation parts kit
② Standard spare parts
③ leveling bolts and plates
④ Spindle orientation
⑤ Spindle nose air blow
⑥ Coolant device
⑦ Coolant tank(220ℓ)
⑧ Automatic way lubricator
⑨ Spindle speed meter
⑩ Spindle load meter
⑪ fully enclosed splash guard
⑫ Spindle oil cooler (Oil Chiller)
⑬ Work light
⑭ Cycle finish indication lamp
⑮ High precision tapping function
⑯ M function 4 sets

## Machine Optional Accessories

① Tool holder & pull stud ※
② Foundation bolts
③ Warming up timer
④ 3-step programmable coolant
⑤ Additional M-function
⑥ Oil mist coolant
⑦ Chip management system
(1) Chip conveyor
(2) Chip bucket
(3) Over head shower coolant
(4) Wash coolant
(5) Separated type coolant tank(500ℓ)
⑧ One-shot tap lubrication
⑨ Oil hole interface
⑩ Automatic power off device
⑪ High-speed spindle 10,000r.p.m.※
⑫ Tool storage(24/30 tools)
⑬ 2 station pallet changer
⑭ Automatic tool offset compensation
⑮ Automatic work coordinate system
⑯ Door interlock
⑰ Kitamura monitoring system
⑱ Ω80/Ω320 IC card data file system
⑲ α 3200 intelligent on line system
⑳ Σ 7500 programming back-up system
㉑ ATC(Automatic compensation for thermal displacement of the spindle head)

Remarks ※ :Option for Mycenter-2

## Control Specifications KITAMURA YASNAC i80M/KITAMURA FANUC OMC

For a complete list of accessories contact kitamura  
 O1, \*1 are not including external sensor.

Item	Specification	i80M	OMC	Item	Specification	i80M	OMC
Controlled axes	3axes	○	○	Additional tool offset pairs	299/1199(i80); 200(OMC)	○	○
Simultaneous controllable axes	3axes	○	○	Manual return to reference point		○	○
Additional 4th axis control		※	※	Automatic return to reference point	G28	○	○
Least input increment	0.001mm or 0.0001 inch	○	○	Reference point return check	G27	○	○
Least command increment	0.001mm or 0.0001 inch	○	○	Return from reference point	G29	○	○
Maximum programmable dimension	±9 digits(i80) ±8 digits(OMC)	○	○	2nd Reference point return	G30	○	○
Absolute/incremental command	G90/G91	○	○	Coordinate system setting	G92	○	○
EIA/ISO Automatic recognition		○	○	Automatic coordinate system setting		○	○
Inch/metric conversion		○	○	Local coordinate system	G52	※	—
Multi-active register		※	—	Work coordinate system	G54~G59	○	○
Positioning	G00	○	○	Rotation of work coordinate system		※1	—
Linear interpolation	G01	○	○	Extension of number of work coordinate system(Option)	i80(54sets○/162 sets ※)	○	—
Circular interpolation	G02/G03	○	○	Label skip		○	○
Helical interpolation	G02/G03	○	○	Single block		○	○
Cutting feedrate		○	○	Optional stop		○	○
Dwell	G04/Per sec.	○	○	Optional block skip		○	○
Remote puls generator		※	※	Dry run		○	○
Manual handle feed		○	○	Inter lock		○	○
Rapid traverse override		○	○	Machine lock		○	○
Cutting feedrate override		○	○	Auxiliary function lock		○	○
Feed rate	G94 Feedrate per minute	○	○	Mirror image		○	○
Automatic acceleration deceleration		○	○	Programmable mirror image	M57/M58/M59	○	○
Jog override	0~150%(10% Incremental)	○	○	Manual absolute ON/OFF		○	○
Override cancel	M48/M49	○	○	Z axis command cancel		○	○
Manual continuous feed	Jog . Rapid	○	○	Tool length measurement function (with automatic offset and coordinate shifts)		○1	—
F1 digid feed		※	※	Tool length measurement function		—	○1
Part program storage	160m (i80) 40m (OMC)	○	○	Program restart		※	※
Part program storage	Total 160,320,640,1280,2560,5120m	※	—	Radius designation on arc		○	○
Part program storage	Total 80,120,320m	—	※	Canned cycle		○	○
Registered programs	299(i80), 63(OMC)	○	○	Canned cycle B	Two-step drilling cycle	※	—
Registered programs	999	※	—	Hole pattern cycles		※	—
Registered programs	125,200	—	※	Sub-program		○	○
Program editing		○	○	Exact stop	G09, G61/G61, G64	○	○
Extended part program editing		※	※	Programmable data input	G10	○	○
Program number search		○	○	Scaling function	G50, G51	※	※
Sequence number search		○	○	Coordinate rotation	G68, G69	※	※
Background editing		○	※	Automatic corner override		※	※
Multi-window		※	—	Playback function		※	※
Control panel 9" monochrome full key		○	○	Macro-program		○	○
MDI function/Operation		○	○	Custom macro B		—	○
Uptime display		○	—	Complete circle cutting	G12, G13	○	—
Run hour and parts count display		—	※	Rigid tapping		○	○
Graphic display		※	※	Polar coordinate command	G15, G16	—	※
Clock function		○	※	Optional angle chamfering/corner R		—	※
RS-232C interface		○	○	F10/11 tape format		—	○
Tape reader without reels		※	○	Backlash compensation		○	○
Remote buffer		—	※	Stored pitch error compensation		○	○
Computer communication function		※	—	Single direction positioning		○	※
Spindle function(S function)		○	○	Skip function	Manual or G31	○	○
Tool function(T function)		○	○	High-speed skip signal input		—	※
Miscellaneous function(M function)		○	○	Tool life management function		※	※
Miscellaneous function lock		○	○	Emergency stop		○	○
Spindle speed override		○	○	Stored stroke check 1		○	○
Tool length offset	G43, G44, G49	○	○	Self-diagnosis functions		○	○
Tool radius offset C	G40, G41, G42	○	○	Reset		○	○
Tool function	Identify T-code	○	○	Program protect key		○	○
Tool offset	G45~G48	○	※	Pocket calculator type decimal point input		○	○
Tool offset memory B		—	※	Decimal point input		○	○
Tool of fset H/D seperation		※	※	Cutter compensation C		—	○
Tool offset memory	99sets 1±6 digits	○	○	Sequence number comparison and stop		○	○

Design and specifications are subject to change without notice.

○:Standard ※:Option

# Features of KITAMURA High-speed Pallet Changing System(option)

## Mycenter-2·APC/3X·APC



The above includes options.



### ■ High-speed Automatic Pallet Changer (Option/Patented in U.S.A.)

Kitamura's originally designed High-speed pallet changer facilitates high speed pallet feed for pallet changing(40m/min.,131 fpm). Owing to this newly designed system, the Mycenter-2 and Mycenter-3X/APC can achieve a very quick pallet change time(7.8sec/Mycenter-2). with this new feature idle time is reduced drastically when compared to that of conventional stand-alone vertical machining centers. Naturally, this leads to increased running time and production.

### ■ High Accuracy

A Rigidly constructed and precisely positioned pallet clamp system accomplishes a highly accurate pallet repeatability of  $\pm 0.003\text{mm}(\pm 0.00012\text{'})$ .

### ■ Space Saving Design

The APC is designed for easy access to the load and unload station. Also, with this design, the APC uses a small amount of floor space.

### ■ High Rigidity

Wide pallet space(410×820mm;16.1"×33.3"/Mycenter-3X) and sufficiently designed table load capacity enable you to complete various material machinings, from light to heavy alloys. In order to enable sufficient heavy duty cutting, the high power clamping force of the pallet(2,200kg/4,800lbs) and the powerful spindle motor/head construction(spindle torque 205n-m/151ft-lbs) are facilitated.

### ■ Safety Guarding System(option)

The Mycenter-2/3X employs a safety splash guarding system, but also features an automatic door opening system on the quadding between the loading / unloading station. This protects the operator from any unexpected accidents.

### ■ Specifications on Palletized Model

( )=inch

Item	Unit	Mycenter-2	Mycenter-3X
Pallet size	mm	390×600(15"×23.6")	410×820(16.1"×32.3")
Table load capacity	kg	150(330 lbs)	200(440 lbs)
Distance from table surface to spindle nose	mm	145-605 (5.7"-23.8")	145-605 (5.7"-23.8")
Floor space(W×L)	mm	2,110×2,665(7'-7")	3,135×2,685(7'-7")
Machine height	mm	3,088(121.6")	3,088(121.6")
Machine weight	kg	5,700(12,540 lbs)	6,500(14,300 lbs)