MYCENTER®3020G designed to produce parts with optimum efficiency and precision

Simplify the Complex

World-class Japanese design and construction throughout; space-saving design; ease of use and operator convenience . . . the Mycenter®-3020G has it all.

Rock-solid Meehanite cast construction and premium grade components throughout make this machining center an investment that will pay dividends for years to come.

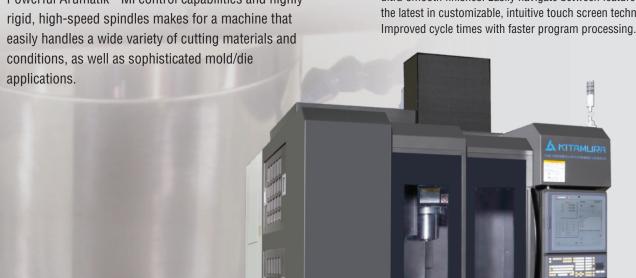
Powerful Arumatik®-Mi control capabilities and highly

Features that make the Mycenter®-3020G the preferred choice

Solid Induction Hardened Box Ways (X,Y-Axes) produced at our factory. Heavy-Duty Cross Roller Linear Ways (Z-Axis). Rigidity and speed to easily cut a wide variety of materials. Ideal for die/mold, aerospace, automotive, general machining and more.

Fastest rapids in its class

(X & Y: 50 m/min, 1,969ipm) (Z: 36m/min, 1,417ipm) State-of-the-art Arumatik®-Mi control transforms your machining flexibility, delivering super accurate parts and ultra-smooth finishes. Easily navigate between features with the latest in customizable, intuitive touch screen technology.

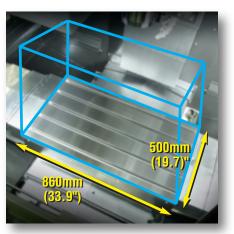


The Perfect Blend of Technology and Hands-On Craftsmanship

Kitamura certified technicians hand-scrape all mounted surfaces requiring assembly. This assures full surface contact and precise alignment that far surpasses the fit and finish of conventional machined mounting surfaces. This labor-intensive process guarantees long-term peak performance and the highest level of accuracy. Kitamura never uses geometry compensation in manufacture to adjust for squareness. parallelism or perpendicularity.

Hand-scraped surfaces assure absolute TGA (True Geometric Accuracy).

Ideal for Small to Medium Size Part Machining



The Mycenter®-3020G is the ideal machine for small to medium size workpieces. Its spacious work envelope and 500mm (19.7") x 860mm (33.9") table provide the flexibility to machine single or multiple fixtured components. There is ample space to easily expand machining capability with the addition of rotary tables to handle more complex 4 and 5-axis work. Add the powerful Arumatik®-Mi Control capabilities and highly rigid high-speed spindle and you truly have a machine that can handle a variety of cutting materials and conditions, as well as more sophisticated die/mold applications.

The Mycenter®-3020G features a high-efficiency chip management system with chip augers on both sides of the bed casting along with standard base wash coolant for a chip free machining environment that boosts productivity and machining accuracy.



Tool Handling Efficient tool handling slashes idle time to maximize machining profit. The Mycenter-3020G ATC uses a memory-random tool selection system for smooth idle-free tool changes. Its generous 30 tool ATC enhances machining capability.

Unrivaled Precision, Performance & Accuracy



Ballscrew temperature is precisely controlled by an internal ballscrew cooling system. This eliminates thermal growth and promotes rigidity assuring peak machining precision even under prolonged heavy cutting conditions.

Power and Speed that Endures

The Mycenter®-3020G Series Machining Centers offer versatility in the choice of spindle configurations available.

They are equipped with a standard high speed 15,000min⁻¹.

direct drive spindle offering outstanding super-fine finish

capability, eliminating the hand-polishing of work pieces

making it ideal for high-speed cutting of lighter materials.

Specify the available 20,000min⁻¹ 4-step gear driven spindle

to get the robust power necessary for heavy duty cutting of

Both configurations feature a dual contact design providing

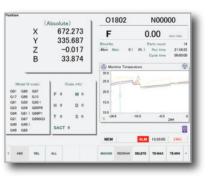
simultaneous taper and flange contact for optimum rigidity,

reduced vibration and extended cutting tool life.

molds and more exotic metals.



16mm fine pitch ballscrews in combination with 67 million pulse encoder technology provide a new degree of contouring accuracy - at least 4x smoother surface finishes are achieved as a result of this technology.



Our high efficiency Intelligent Advanced Control **System (IAC)** consists of a series of strategically located sensors and machine efficiency monitors that work to keep component growth due to machining heat build-up to less than ± 5 microns (± 0.0002 ").

lycenter-3020G Series 15.000 min^{.1} Spindle

Mycenter-3020G Series 20,000 min-1 Spindle

Arumatik-Mi Kitamura's original Arumatik®-Mi



Productivity Enhancing Features

Anywhere-Remote Email Status Updates

Automatically receive live machine production data anywhere, any time to desktop, smartphone and mobile devices – all based on customizable, pre-set variables. Anywhere-Remote TV offers visual flexibility in monitoring the status of up to 6 machines on one computer screen. (Additional machine monitoring suites are available ranging from plug and play to more customized based on application. MTConnet ready adaptor is also an available option for easy communication integration with existing monitoring systems.)



Renishaw Set and Inspect

Integration with Renishaw's Set and Inspect guides users through the process of creating a probing cycle, automatically generating the required machine code for the probing cycle and loads it to



The Ultra High Speed, High Precision SSS (Super Smooth Surface)

acceleration/deceleration times for each axis. This allows for shorter cutting

Control function improves high speed cutting and optimizes

times with a high degree of accuracy.

4.500 blocks/sec

Up to 8192 block look ahead

Up to 270m/min feed with 1mm/block,

Exceptional surface finish capabilities Ideal for die-mold/3D applications Smoother and faster machining

with High-Speed 180 degree Rotating Pallet Change System

Operators can safely load work while high-speed machining is in progress for optimum spindle utilization.

In addition, the Mycenter®-3020G Sparkchanger is configured to "cleanly" accommodate the "in-the-field" addition of 4th or 5th-axis rotary tables with no obstructive wiring or cabling. Both pallets can be outfitted with their own rotary tables.

Maximum Table Load	200kg (440 Lbs.) 125 to 635mm (4.9" to 25.0")	
Distance from Table Top to Spindle Nose		
Required Space (W x D)	3,897 x 3,963mm (153.4" x 156.0")	
Machine Height	3,075.4mm (121.1")	
Machine Net Weight	8,260 kg (18,172 lbs)	

Mycenter®-3020G Sparkchanger

When maximum production is paramount, the Mycenter®-3020G Sparkchanger delivers. The combination of its high-speed 180 degree rotating pallet changer, lightning-quick tool changer and generous tool capacity meets the most demanding high production requirements.

Specifications for Palletized Model

Maximum Table Load	200kg (440 Lbs.)	
Distance from Table Top to Spindle Nose	125 to 635mm (4.9" to 25.0")	
Required Space (W x D)	3,897 x 3,963mm (153.4" x 156.0	
Machine Height	3,075.4mm (121.1")	
Machine Net Weight	8,260 kg (18,172 lbs)	



Positioning Accuracy: ± 0.002 mm (± 0.000079 ") / Full Stroke Repeatability: ± 0.001 mm (± 0.000039 ")



SPECIFICATIONS MYCENTER 3020G

Table			
Table Size	500 x 860mm (19.7" x 33.9")		
T-Slot (Width x Quantity)	18mm (0.7") x 5		
Maximum Table Load	500kg (1,100 Lbs.)		
Travel			
X-Axis Travel	762mm (30.0")		
Y-Axis Travel	510mm (20.1")		
Z-Axis Travel	510mm (20.1")		
Distance from Table Top to Spindle Nose	100 to 610mm (3.9" to 24.0")		
Distance from Table Center to Column Slideway	285 to 795mm (11.2" to 31.3")		
Spindle			
Spindle Taper	#40 NST		
Spindle Speed	40 to 15,000min ⁻¹	20 to 20,000min ⁻¹	
Drive Method	Direct Drive	4-Step Gear Drive	
Spindle Motor	15kw (20 HP) AC/10 Min.	15kw (20 HP) AC/15 Min.	
	11kw (15 HP) AC/30 Min	
	7.5kw (10 HP) AC/Cont.		
Spindle Torque	95.5 N•m (70.4 ft.lbs) / 15 Min.	273 N•m (201.4 ft.lbs) / Peak	
Feed			
Rapid Feed X & Y Axes	50 m/min (1,969ipm)		
Rapid Feed Z	36 m/min (1,417ipm)		
Cutting Feed Rate X, Y	36 m/min (1,417ipm)		
ATC			
Tool Storage Capacity	30 Tools		
Tool Selection Method	Memory Random		
Tool Holder Style	BT / CT 40		
Max. Tool Diameter	Ø75mm (Ø3.0") / Ø150mm (Ø5.9") Adjacent Pots Empty		
Max. Tool Length	300mm (11.8")		
Max. Tool Weight	8kg (17.6 Lbs.)		
Tool to Tool	2.2 Seconds		
Chip to Chip	4.4 Seconds, Minimum		
Utilities			
Power Requirement	30 KVA 200v AC, 3 Phase		
Air Requirement	0.5MPa, 300L/min (90 psi, 11 cfm)		
Machine Dimensions			
Required Space (W x D)	2,300 x 3,134.6mm	, ,	
Machine Height	2,925.4mm (115.2")		
Machine Net Weight	5,910 kg (13,002 lbs)		
Control	A ruma.	tik: <mark>M</mark> i	

All specifications subject to change without notice.

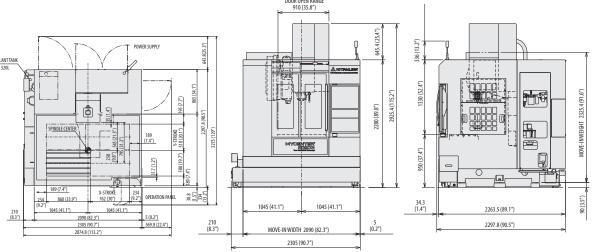


A	
	CONTROL SPECS
	ontrollable
19" Color	
	I/Decel after Interpolation
_	erpolation (G01)
_	Helical/Spline Interpolation (G02, G03)
	nterpolation (G02.1, G03.1) lar Interpolation (G02.4, G03.4)
	Cutting (G12, G13)
Dwell (G0	
	G50, G51)
	Workpiece Coordinate System (96 Sets)
_	rection Positioning (G60)
	te System Rotation (G68, G69)
Rigid Tap	
	e Tapping Cycle
Pecking 1	apping Cycle
Small-Dia	meter Deep-Hold Drilling Cycle
3-D Tool	Compensation (G40, G41, G42)
High Spe	ed, High Accuracy Control
NURBS I	nterpolation
	cision SSS Control 92 Block Look-Ahead)
67-Millio	n Pulse Encoder Feedback System
Backgrou	nd Editing
Corner Cl	namfering / Corner Rounding
Custom N	Macro B
Custom N	Macro Common Variables, 700Pcs
8GB Data	Server
DNC 1 In	terface
Ethernet	Interface
	Editing (Copy,Move,Change,Merge)
	ble Programs, 1,000 Sets
1280M M	•
	c Command
Inverse T	-
-	Screen Display
•	Block Skip
Playback	
Program RS232C I	
	Il Speed Constant Control Management, 400 Sets
	Management, 400 Sets et Memory C
	et Pairs, 200 Pairs
	act and Return
100111511	and Hotum

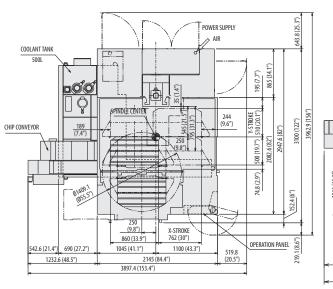
USB Memory Interface

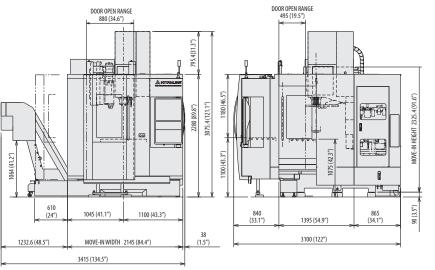
Backlash Compensation

FLOOR PLANS MYCENTER 3020G



MYCENTER 3020G Sparkchanger







Kitamura Machinery of U.S.A., Inc. 451 Kingston Court, Mt. Prospect, IL 60056 +1 847 520 7755 kitamura-machinery.com info@kitamura-machinery.com

Kitamura Machinery Co., Ltd. 1870-Toide, Takaoka-City, Toyama Pref., Japan +81 766 63 1100 kitamura-machinery.co.jp mycenter@kitamura-machinery.co.jp

Kitamura Machinery GmbH (Europe) Wahlerstrasse 39, 40472 Dusseldorf, Germany +49 211 657 9010 kitamura-machinery.eu sales@kitamura-machinery.eu PRINTED IN USA REV 2 06/22



MYCENTER 3020G

HIGH PRECISION V E R T I C A L MACHINING CENTER

