

maxmill

Extreme Machining Ability

 **Outillage
Industriel
Québec Itée** 
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Maxmill Machinery Co., Ltd.

Quality Machines Do Make a Difference. Maxmill Help You Stay Competitive.

- Sing Lung Trading Co., Ltd., was established in 1960 as a cooperation with the Japanese Mitutoyo and Sumitomo as their exclusive representative in Taiwan.
- 1988, the company Lien Sheng Electrical Co. Ltd was established. They specialized in the Manufacture of EDM and Wire EDM cutting machinery.
- 1996, the company Maxmill Machinery Co. Ltd. Was established. Through research, designing, building and final testing, Maxmill produced a complete line of quality Vertical Machining Centers based on the many years of technical experience garnered from their team of dedicated employee's.
- 2003, saw the introduction to the Maxmill line of machining centers, a Bridge-Type machining center.

CREATING THROUGH ADVANCED THINKING

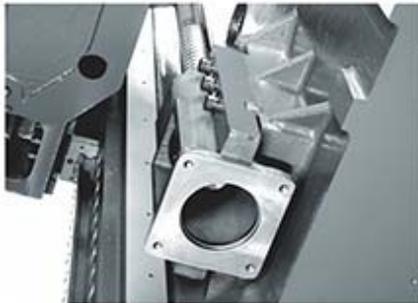
Established in 1996, Maxmill has leveraged its technical experience, gained since 1960, to design and manufacture the best machine tool possible. Since it's establishment, the philosophy of Maxmill has been to provide the best machine possible for achieving increased productivity, accuracy and reliability. Each and every one of Maxmill machine tools is highly dependable, being manufactured in the tradition that is Maxmill quality and Maxmill reliability. On top of Maxmill's superior design and manufacturing capabilities, Maxmill implements rigorous quality control protocols in each or the manufacturing processes to ensure that only the best machine tool is delivered to our customers. This is why Maxmill can fully satisfy each and everyone of their domestic and international customers.

EXCEPTIONAL R&D CAPABILITIES

Maxmill commitment to their customers keeps us constantly focused on researching new technologies to improve our machines performance. Maxmill full staff of exceptional R&D engineers with 20 plus years of experience, utilizing the most advanced design and computer analysis technology, are constantly improving the machines we build. The main reason for Maxmill's quality are the innovations and improvements found in all our machine tools. For us at Maxmill, this is our philosophy, this is the Maxmill tradition.

QUALITY ASSURANCE

Quality is the goal of all maxmill employees. Maxmill employs a rigorous quality assurance protocol through each and every step of the manufacturing process. Utilizing the latest inspection tools (Ball-bar testing, laser instruments) Maxmill ensures the optimum performance and accuracy of their machine tools. As well, Maxmill adheres to the protocols of machine inspection using established international quality assurance programs, such as ISO9001, JIS, DIN, UL, CSA and CE. Through our efforts of quality ensurance, we have gained the loyalty and trust of our customers.





INDEX

01

CRUISER series

VMC-855
VMC-966 / 1166
VMC-1270 / 1470

02

CONQUEST series

VMC-1490 / 1690
VMC-1890 / 2090

03

THRUST series

QMC-600 / 850 / 1050
HQM-1050 / 1260

04

TREX series

BMC-2217 / 2220
BMC-3217 / 3220

05

SPARQ series

BMC-3224 / 4224
BMC-5224 / 6224
BMC-3227 / 4227
BMC-5227 / 6227
BMC-3230 / 4230
BMC-5230 / 6230
BMC-3233 / 4233
BMC-5233 / 6233



CRUISER is the only name you need to remember to take your business to the next level of productivity.

The **CRUISER** series delivers performance in the most difficult of tasks with ease and efficiency far beyond your expectation.



CRUISER series

- Box ways are hardened, ground and utilize non-metallic liners, and all guideway mating surfaces are precision scraped and coated with turcite B as well as anti-friction lining material.
- The series features innovative design concepts at very competitive prices.
- The VMC-1270 and VMC-1470 are constructed of a massive casting utilizing four large box-ways providing superior cutting performance and reliability.

■ VMC-855
 VMC-966 / 1166
 VMC-1270 / 1470

Extreme Machining Ability

VMC-966 / 1166



Machine Specifications:

Model	VMC-966	VMC-1166	
X x Y x Z axis	900 x 650 x 600 mm 35.4" x 25.6" x 23.7"	1,100 x 650 x 600 mm 43.3" x 25.6" x 23.7"	
TRAVEL	Spindle nose to table	120-720 mm 4.8"-28.4"	
	Spindle center to solid column surface	701 mm 27.6"	
	Working area	1,100 x 600 mm 43.3" x 23.7"	1,300 x 600 mm 51.2" x 23.7"
TABLE	Max. loading	1,000 kg	1,200 kg
	T-Slots (No. x Width x Pitch)	5 x 18 mm x 100 mm 5 x 0.7" x 4.0"	5 x 18 mm x 100 mm 5 x 0.7" x 4.0"

VMC-855



Machine Specifications:

Model		VMC-855
TRAVEL	X x Y x Z axis	800 x 500 x 520 mm 31.5" x 19.7" x 20.5"
	Spindle nose to table	100-620 mm 4.0"~24.5"
	Spindle center to solid column surface	550 mm 21.7"
TABLE	Working area	950 x 460 mm 37.5" x 18.2"
	Max. loading	500 kg
	T-Slots (No. x Width x Pitch)	4 x 18 mm x 100 mm 4 x 0.7" x 4.0"



OUTSTANDING FEATURES:

- The pyramid machine construction features a perfect structural ratio. The major cast parts are scientifically rib reinforced. This machine construction effectively extends service life and features stable thermal effect and added dampening effect.
- When installing 3 axes ball screws, ball-bar testing and laser equipment are employed for parameter adjustment to achieve the best possible accuracy.
- All slideways are hardened and precision ground and then coated with high quality, low friction Turcite-B for maximum wear resistance. The mating surfaces are precision treated for long term accuracy.
- Optimized machine construction. The major machine parts, such as base, column and saddle, etc., are manufactured from high quality alloy cast iron. It features maximum material stability, minimum deformation and lifetime accuracy.
- 4 square slideways (for VMC-1270 / 1470) on the Y-axis ensuring outstanding stability and accuracy for longitudinal and cross movements.



VMC-1270 / 1470

Machine Specifications:

Model		VMC-1270	VMC-1470
TRAVEL	X x Y x Z axis	1,200 x 700 x 600 mm (BT-40) 1,200 x 700 x 630 mm (BT-50) 47.3" x 27.6" x 23.7" (BT-40) 47.3" x 27.6" x 24.8" (BT-50)	1,400 x 700 x 600 mm (BT-40) 1,400 x 700 x 630 mm (BT-50) 55.2" x 27.6" x 23.7" (BT-40) 55.2" x 27.6" x 24.8" (BT-50)
	Spindle nose to table	130-730 mm (BT-40) 130-760 mm (BT-50) 5.2"~28.7" (BT-40) 5.2"~30.0" (BT-50)	130-730 mm (BT-40) 130-760 mm (BT-50) 5.2"~28.7" (BT-40) 5.2"~30.0" (BT-50)
	Spindle center to solid column surface	780 mm 30.7"	780 mm 30.7"
TABLE	Working area	1,350 x 650 mm 53.2" x 25.6"	1,550 x 650 mm 61.0" x 25.6"
	Max. loading	1,200 kg	1,400 kg
	T-Slots (No. x Width x Pitch)	5 x 18 mm x 125 mm 5 x 0.7" x 5.0"	5 x 18 mm x 125 mm 5 x 0.7" x 5.0"



MAXMILL

With CONQUEST's powerful capabilities, conquering extremely heavy duty workloads will never be a problem for you.



CONQUEST series

■ VMC-1490 / 1690
■ VMC-1890 / 2090

Rigid, box-type slideways on 3 axes, high chip removal rate, rugged construction throughout, a massive machining bed and high torque spindle are all present on the CONQUEST series to make heavy duty machining the easiest ever.

Extreme Machining Ability

VMC-1490 / 1690



Machine Specifications:

Model	VMC-1490	VMC-1690	
X x Y x Z axis	1,400 x 900 x 700 mm 55.2" x 35.5" x 27.6"	1,600 x 900 x 700 mm 63.0" x 35.5" x 27.6"	
TRAVEL	Spindle nose to table	200-900 mm 7.9"-35.5"	200-900 mm 7.9"-35.5"
	Spindle center to solid column surface	990 mm 39.0"	990 mm 39.0"
	Working area	1,700 x 850 mm 67.0" x 33.5"	1,900 x 850 mm 74.8" x 33.5"
TABLE	Max. loading	1,600 kg	2,000 kg
	T-Slots (No. x Width x Pitch)	5 x 22 mm x 150 mm 5 x 0.9" x 6.0"	5 x 22 mm x 150 mm 5 x 0.9" x 6.0"



OUTSTANDING FEATURES:

- The pyramid machine construction features a perfect structural ratio. The major cast parts are scientifically rib reinforced, ensuring high accuracy for various machining applications. The outstanding machine construction effectively extends service life and features stable thermal effect and added dampening effect.
- All three axes are subjected to a rigorous inspection routine utilizing Ball-bar testing and laser pitch measurement to achieve the highest accuracy possible.
- X, Y, Z axes are rigid box type slideways. The machine is constructed from high quality alloyed cast iron which ensures maximum machine stability, with minimal base distortion and extended lifetime accuracy. All axis slide-ways feature low friction turcite coverings for improved accuracy and life.
- Head stock gears are manufactured from Japanese imported CHROME MOLYBDENUM steel, heat treated then precision ground to class 0 tolerances (JIS standards.)

VMC-1890 / 2090

Machine Specifications:

Model		VMC-1890	VMC-2090
TRAVEL	X x Y x Z axis	1,800 x 900 x 700 mm 70.9" x 35.5" x 27.6"	2,000 x 900 x 700 mm 78.8" x 35.5" x 27.6"
	Spindle nose to table	250-950 mm 9.9"-37.4"	250-950 mm 9.9"-37.4"
	Spindle center to solid column surface	990 mm 39.0"	990 mm 39.0"
TABLE	Working area	2,100 x 970 mm 82.7" x 38.2"	2,300 x 970 mm 90.6" x 38.2"
	Max. loading	2,500 kg	2,800 kg
	T-Slots (No. x Width x Pitch)	5 x 22 mm x 150 mm 5 x 0.9" x 6.0"	5 x 22 mm x 150 mm 5 x 0.9" x 6.0"

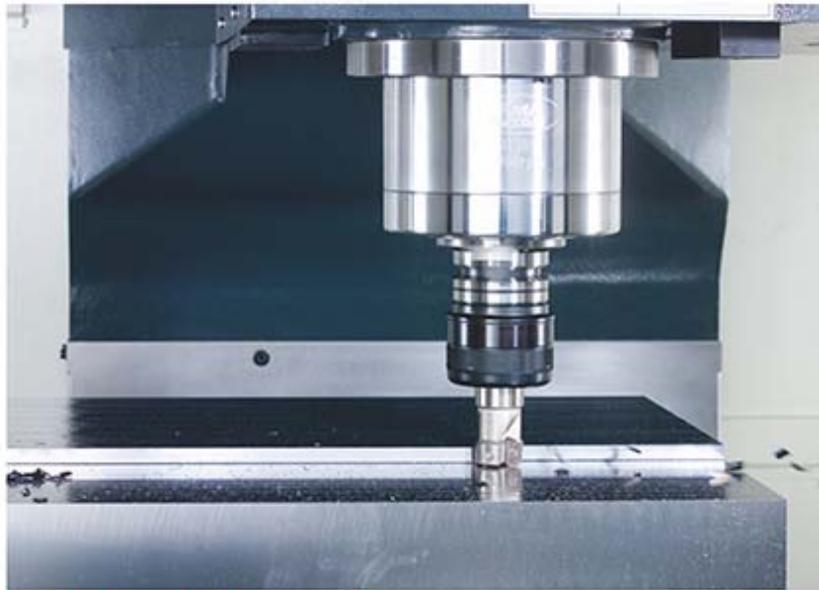


Gear Accuracy Meets JIS Class 0 Standards.

The speed gears in spindle stock are manufactured from Japan-imported Chromolybdenum alloy steel, carburized and precision ground to class 0 of JIS standards.

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Producing the next Generation of Machine tool providing exceptional quality, extra value and superior accuracy. The THRUST series, using a combination of high speed spindle and precise linear guide-way is defined by its superior efficiency and accuracy.



THRUST series

- Linear guide-ways are expertly mounted and adjusted to ensure superior feed rates and accuracy with an exceptional service life.
- High speed machining technology with the most advanced servo systems along with optional direct drive spindle technology.
- Superior versatility with superior rigidity is provided at the most competitive of prices.
- Utilizing a box structure for the base and trapezoid structure for the column provides an exceptionally rigid machine frame.

■ QMC-600 / 850 / 1050
HQM-1050 / 1260

Extreme Machining Ability

QMC-600



Machine Specifications:

Model	QMC-600
TRAVEL	X x Y x Z axis 23.6" x 15.7" x 17.7"
	Spindle nose to table 6.7"~24.4"
	Spindle center to solid column surface 482 mm 19.0"
TABLE	Working area 700 x 420 mm 27.6" x 16.5"
	Max. loading 300 kg
T-Slots (No. x Width x Pitch) 4 x 0.7" x 4.9"	

QMC-850 / 1050



HQM-1050



HQM-1260



QMC-850 / 1050

Machine Specifications:

Model	QMC-850	QMC-1050
X x Y x Z axis	850 x 550 x 560 mm 33.5" x 21.7" x 22.1"	1,050 x 550 x 560 mm 41.4" x 21.7" x 22.1"
TRAVEL	Spindle nose to table	120-680 mm 4.8"-26.8"
	Spindle center to solid column surface	600 mm 23.7"
TABLE	Working area	950 x 500 mm 37.4" x 19.7"
	Max. loading	500 kg
T-Slots (No. x Width x Pitch)	4 x 18 mm x 125 mm 4 x 0.7" x 5.0"	4 x 18 mm x 125 mm 4 x 0.7" x 5.0"



HQM-1260

Machine Specifications:

Model	HQM-1260	
X x Y x Z axis	1,200 x 650 x 630 mm 43.3" x 25.6" x 24.8"	
TRAVEL	Spindle nose to table	100-730 mm 4.0-28.8"
	Spindle center to solid column surface	700 mm 27.6"
TABLE	Working area	1,350 x 600 mm 53.2" x 23.7"
	Max. loading	880 kg
T-Slots (No. x Width x Pitch)	4 x 18 mm x 130 mm 4 x 0.7" x 5.2"	



HQM-1050

Machine Specifications:

Model	HQM-1050	
X x Y x Z axis	1,050 x 550 x 600 mm 41.4" x 21.7" x 23.7"	
TRAVEL	Spindle nose to table	120-720 mm 4.8"-24.5"
	Spindle center to solid column surface	600 mm 23.7"
TABLE	Working area	1,150 x 550 mm 45.3" x 21.7"
	Max. loading	880 kg
T-Slots (No. x Width x Pitch)	4 x 18 mm x 130 mm 4 x 0.7" x 5.2"	



TREX series

BMC-2217 / 2220
BMC-3217 / 3220





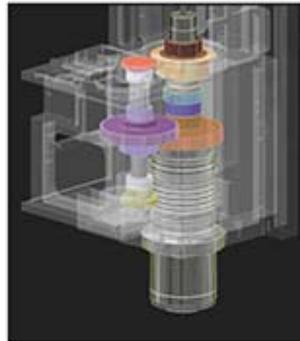
Oversized Ball Screws

The X and Y axes are transmitted through Ø 63 mm oversized ball screws to achieve the highest transmission rigidity.



Operation Box

The ergonomic design of the operation box provides added convenience of operation.



Powerful Gear-drive Head

The spindle head is driven by a powerful gearbox with 30 mm thick gear (competitor's gear thickness is 20-25 mm) that aids heavy cutting capability.



Coolant Through Ball Screw (opt.)

The ball screws on the three axes are cooled by a coolant through ball screw device. This avoids thermal deformation on the ball screw caused by thermal growth, making the machine suitable for high precision machining.

Direct Transmission for Y-axis Motor for stronger torque and better stability

Machine Specifications:

Model	BMC-2217	BMC-2220	BMC-3217	BMC-3220
X x Y x Z axis	2,200 x 2,050 x 850 (1,050) mm 86.6" x 80.7" x 33.5" (41.3")	2,200 x 2,350 x 850 (1,050) mm 86.6" x 92.5" x 33.5" (41.3")	3,200 x 2,050 x 850 (1,050) mm 126.0" x 80.7" x 33.5" (41.3")	3,200 x 2,350 x 850 (1,050) mm 126.0" x 92.5" x 33.5" (41.3")
TRAVEL				
Spindle nose to table	200~1,050 (200~1,250) mm 7.9"~41.3" (7.9"~49.2")	200~1,050 (200~1,250) mm 7.9"~41.3" (7.9"~49.2")	200~1,050 (200~1,250) mm 7.9"~41.3" (7.9"~49.2")	200~1,050 (200~1,250) mm 7.9"~41.3" (7.9"~49.2")
Spindle center to solid column surface	550 mm 21.7"	550 mm 21.7"	550 mm 21.7"	550 mm 21.7"
Working area	2,200 x 1,500 mm 86.6" x 59.1"	2,200 x 1,800 mm 86.6" x 70.9"	3,200 x 1,500 mm 126.0" x 59.1"	3,200 x 1,800 mm 126.0" x 70.9"
TABLE				
Max. loading	8,000 kg	8,000 kg	10,000 kg	10,000 kg
T-Slots (No. x Width x Pitch)	10 x 22 mm x 150 mm 10 x 0.9" x 6.0"	12 x 22 mm x 150 mm 12 x 0.9" x 6.0"	10 x 22 mm x 150 mm 10 x 0.9" x 6.0"	12 x 22 mm x 150 mm 12 x 0.9" x 6.0"



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Extreme Machining Ability



Look to the Maxmill **SPARQ series** for better ideas in heavy and precision cutting



SPARQ series

BMC-3224	BMC-3227	BMC-3230	BMC-3233
BMC-4224	BMC-4227	BMC-4230	BMC-4233
BMC-5224	BMC-5227	BMC-5230	BMC-5233
BMC-6224	BMC-6227	BMC-6230	BMC-6233

- The column and bridge are annealed and stress relieved to ensure structural stability.
- The entire machine structure has been analyzed and designed by PE and CAD for superior rigidity and accuracy.
- Linear guideways on X and Y axes, box ways on Z axis.
- High precision pre-loaded linear guideways feature low frictional co-efficient, low stick-slip and high thrust force sensitivity ensuring dynamic movement accuracy.
- 6,000 rpm gear-driven spindle is standard.
- 32-tool arm-type ATC.
- Extra wide door for easy loading and unloading of workpieces.
- Ideal for: Automobile forming dies, plastic injection molds, machine parts machining, aerospace parts machining.



Machine Specifications:

Model	BMC-3224	BMC-4224	BMC-5224	BMC-6224	BMC-3227	BMC-4227	BMC-5227	BMC-6227	
TRAVEL	X x Y x Z axis	3,200 x 2,700 x 920 (1,100) mm 126.0" x 106.3" x 36.2" (43.3")	4,200 x 2,700 x 920 (1,100) mm 165.4" x 106.3" x 36.2" (43.3")	5,200 x 2,700 x 920 (1,100) mm 204.7" x 106.3" x 36.2" (43.3")	6,200 x 2,700 x 920 (1,100) mm 244.1" x 106.3" x 36.2" (43.3")	3,200 x 3,000 x 920 (1,100) mm 126.0" x 118.2" x 36.2" (43.3")	4,200 x 3,000 x 920 (1,100) mm 165.4" x 118.2" x 36.2" (43.3")	5,200 x 3,000 x 920 (1,100) mm 204.7" x 118.2" x 36.2" (43.3")	6,200 x 3,000 x 920 (1,100) mm 244.1" x 118.2" x 36.2" (43.3")
	Spindle nose to table	200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2")							
TABLE	Working area	3,200 x 2,100 mm 126.0" x 82.7"	4,200 x 2,100 mm 165.4" x 82.7"	5,200 x 2,100 mm 204.7" x 82.7"	6,200 x 2,100 mm 244.1" x 82.7"	3,200 x 2,400 mm 126.0" x 94.5"	4,200 x 2,400 mm 165.4" x 94.5"	5,200 x 2,400 mm 204.7" x 94.5"	6,200 x 2,400 mm 244.1" x 94.5"

Model	BMC-3230	BMC-4230	BMC-5230	BMC-6230	BMC-3233	BMC-4233	BMC-5233	BMC-6233	
TRAVEL	X x Y x Z axis	3,200 x 3,300 x 920 (1,100) mm 126.0" x 130.0" x 36.2" (43.3")	4,200 x 3,300 x 920 (1,100) mm 165.4" x 130.0" x 36.2" (43.3")	5,200 x 3,300 x 920 (1,100) mm 204.7" x 130.0" x 36.2" (43.3")	6,200 x 3,300 x 920 (1,100) mm 244.1" x 130.0" x 36.2" (43.3")	3,200 x 3,600 x 920 (1,100) mm 126.0" x 141.8" x 36.2" (43.3")	4,200 x 3,600 x 920 (1,100) mm 165.4" x 141.8" x 36.2" (43.3")	5,200 x 3,600 x 920 (1,100) mm 204.7" x 141.8" x 36.2" (43.3")	6,200 x 3,600 x 920 (1,100) mm 244.1" x 141.8" x 36.2" (43.3")
	Spindle nose to table	200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2")							
TABLE	Working area	3,200 x 2,700 mm 126.0" x 106.3"	4,200 x 2,700 mm 165.4" x 106.3"	5,200 x 2,700 mm 204.7" x 106.3"	6,200 x 2,700 mm 244.1" x 106.3"	3,200 x 2,700 mm 126.0" x 106.3"	4,200 x 2,700 mm 165.4" x 106.3"	5,200 x 2,700 mm 204.7" x 106.3"	6,200 x 2,700 mm 244.1" x 106.3"

CRUISER series Machine specifications:

Model	Unit	VMC-855	VMC-966	VMC-1166	VMC-1270	VMC-1470	
TRAVEL	X x Y x Z axis	mm (inch)	800 x 500 x 520 (31.5 x 19.7 x 20.5)	900 x 650 x 600 (35.4 x 25.6 x 23.7)	1,100 x 650 x 600 (35.4 x 25.6 x 23.7)	1,200 x 700 x 600 (BT-40) / 630 (BT-50) (47.3 x 27.6 x 23.7 (BT-40) / 24.8 (BT-50))	1,400 x 700 x 600 (BT-40) / 630 (BT-50) (55.2 x 27.6 x 23.7 (BT-40) / 24.8 (BT-50))
	Spindle nose to table	mm (inch)	100-620 (4.0-24.5)	120-720 (4.8-28.4)	120-720 (4.8-28.4)	130-730 (BT-40) / 130-760 (BT-50) (5.2-28.7 (BT-40) / 5.2-30.0 (BT-50))	130-730 (BT-40) / 130-760 (BT-50) (5.2-28.7 (BT-40) / 5.2-30.0 (BT-50))
	Spindle center to solid column surface	mm (inch)	550 (21.7)	701 (27.6)	701 (27.6)	780 (30.7)	780 (30.7)
TABLE	Working area	mm (inch)	950 x 460 (37.5 x 18.2)	1,100 x 600 (43.3 x 23.7)	1,300 x 600 (51.2 x 23.7)	1,350 x 650 (53.2 x 25.6)	1,550 x 650 (61.0 x 25.6)
	Max. loading	kg	500	1,000	1,200	1,200	1,400
	T-Slots (No. x Width x Pitch)	mm (inch)	4 x 18 x 100 (4 x 0.7 x 4.0)	5 x 18 x 100 (5 x 0.7 x 4.0)	5 x 18 x 100 (5 x 0.7 x 4.0)	5 x 18 x 125 (5 x 0.7 x 5.0)	5 x 18 x 125 (5 x 0.7 x 5.0)
SPINDLE	Tool shank	-	BT-40	BT-40	BT-40	BT-40 (BT-50)	BT-40 (BT-50)
	Speed	rpm	10,000	10,000	10,000	8,000 (6,000)	8,000 (6,000)
	Transmission	-	Direct-Speed Belt Drive	Direct-Speed Belt Drive	Direct-Speed Belt Drive	Direct-Speed Belt Drive	Direct-Speed Belt Drive
	Bearing lubrication	-	Grease	Grease	Grease	Grease	Grease
	Cooling system	-	Oil cooled	Oil cooled	Oil cooled	Oil cooled	Oil cooled
	Spindle motor max. rating	kw (HP)	7.5 (10)	11 (15)	11 (15)	15 (20)	15 (20)
	Axis motor max. rating (MITSUBISHI)	kw	1.5 / 2.0 / 1.5	2.0 / 3.5 / 2.0	2.0 / 3.5 / 2.0	3.5 / 3.5 / 3.5	3.5 / 3.5 / 3.5
Axis motor max. rating (FANUC α)	kw	1.6 / 1.6 / 1.6	3.0 / 3.0 / 3.0	3.0 / 3.0 / 3.0	4.0 / 4.0 / 4.0	4.0 / 4.0 / 4.0	
FEED RATES	Rapids on X & Y & Z axis	m/min	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20
	Max. cutting feedrate	m/min	10	10	10	10	10
TOOL MAGAZINE	Tool storage capacity	pcs	20 armless / 24 arm	20 armless / 24 arm	20 armless / 24 arm	20 armless / 24 arm	20 armless / 24 arm
	Type of tool (optional)	type	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40) / BT-50 (CAT-50)	BT-40 (CAT-40) / BT-50 (CAT-50)
	Max. tool diameter	mm (inch)	100 (4.0) armless / 76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm
	Max. tool weight	kg	7	7	7	7 (BT-40) / 15 (BT-50)	7 (BT-40) / 15 (BT-50)
AVG. CHANGING TIME (ARM)	Tool to tool	sec.	2.7	2.7	2.7	2.7 (BT-40) / 3.8 (BT-50)	2.7 (BT-40) / 3.8 (BT-50)
	Chip to chip (50% Z axis)	sec.	6.7	6.7	6.7	6.7 (BT-40) / 11 (BT-50)	6.7 (BT-40) / 11 (BT-50)
	Air source required	kg/cm ²	6 up	6 up	6 up	6 up	6 up
ACCURACY	Positioning VDI 3341	mm (inch)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)
	Repeatability VDI 3341	mm (inch)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)
DIMENSION	Machine weight (Net)	kg	4,800 armless / 5,150 arm	5,600 armless / 6,000 arm	5,600 armless / 6,000 arm	8,000	8,400
	Power source required (KVA.)	KVA	15	15	15	30	30
	Floor space (L x W x H)	mm (inch)	2,340 x 2,465 x 2,600 (91.2 x 97.1 x 100.4)	2,600 x 2,600 x 2,700 (100.4 x 100.4 x 106.3)	3,170 x 2,600 x 2,700 (124.8 x 100.4 x 106.3)	3,400 x 3,800 x 2,920 (BT-40) (133.8 x 149.6 x 115.0 (BT-40)) 3,400 x 3,800 x 3,030 (BT-40) (133.8 x 149.6 x 119.3 (BT-50))	3,840 x 3,800 x 2,920 (BT-40) (151.2 x 149.6 x 115.0 (BT-40)) 3,840 x 3,800 x 3,030 (BT-40) (151.2 x 149.6 x 119.3 (BT-50))
	Shipment advice	-	1 x 40' HQ (4 sets)	1 x 40' HQ (3 sets)	1 x 40' HQ (3 sets)	1 x 40' HQ (1 set)	1 x 40' HQ (1 set)

STANDARD ACCESSORIES:

- Spindle speed 8,000 / 10,000rpm (depend on machine model)
- Operation manual
- Spindle air blast (M code)
- Controller (MITSUBISHI M70)
- Cycle finish indicator and alarm
- Heat exchange for electric box
- Tool box
- Spindle air blow system
- Auto lubricating system
- Fully splash guard
- Remote handwheel
- Spindle orientation
- Coolant equipment
- Auto tool changer (Armless) 16T(BT-50) / 20T (BT-40)
- Twin-chip auger (rear-out) (VMC-1270 / 1470)
- Rigid tapping
- Manual pulse generator
- RS 232C port (10M)
- Leveling kits
- LED lamp 2 pcs
- Transformer
- Spindle oil cooler
- Coolant gun
- Air socket

OPTIONAL ACCESSORIES:

- Spindle speed 10,000 / 12,000rpm (belt)
- Coolant through spindle (CTS)
- Controller (FANUC / SIEMENS / HEIDENHAIN)
- German ZF gear box
- Work piece measurement system
- Auto tool length measuring device
- CNC rotary table
- Oil skimmer
- Link or screw type chip conveyor with tank (Screw type may be standard on some machine model)
- Linear scales (VMC-1270 / 1470 only)
- Direct-Drive 12,000 / 15,000 rpm
- Spindle coolant ring
- Coolant through tool holder
- Vacuum package
- Quick tool change (2 sec.)

CONQUEST series Machine specifications:

Model	Unit	VMC-1490	VMC-1690	VMC-1890	VMC-2090
TRAVEL	X x Y x Z axis	mm (inch) 1,400 x 900 x 700 (55.2 x 35.5 x 27.6)	1,600 x 900 x 700 (63.0 x 35.5 x 27.6)	1,800 x 900 x 700 (70.9 x 35.5 x 27.6)	2,000 x 900 x 700 (78.8 x 35.5 x 27.6)
	Spindle nose to table	mm (inch) 200~900 (7.9~35.5)	200~900 (7.9~35.5)	250~950 (9.9~37.4)	250~950 (9.9~37.4)
	Spindle center to solid column surface	mm (inch) 990 (39.0)	990 (39.0)	990 (39.0)	990 (39.0)
TABLE	Working area	mm (inch) 1,700 x 850 (67.0 x 33.5)	1,900 x 850 (74.8 x 33.5)	2,100 x 970 (82.7 x 38.2)	2,300 x 970 (90.6 x 38.2)
	Max. loading	kg 1,600	2,000	2,500	2,800 kg
	T-Slots (No. x Width x Pitch)	mm (inch) 5 x 22 x 150 (5 x 0.9 x 6.0)	5 x 22 x 150 (5 x 0.9 x 6.0)	5 x 22 x 150 (5 x 0.9 x 6.0)	5 x 22 x 150 (5 x 0.9 x 6.0)
SPINDLE	Tool shank	BT-50	BT-50	BT-50	BT-50
	Speed	rpm 6,000	6,000	6,000	6,000
	Transmission	2-Speed Geared Head	2-Speed Geared Head	2-Speed Geared Head	2-Speed Geared Head
	Bearing lubrication	Grease	Grease	Grease	Grease
	Cooling system	Oil cooled	Oil cooled	Oil cooled	Oil cooled
	Spindle motor max. rating	kw (HP) 15 (20)	15 (20)	18.5 (25)	18.5 (25)
	Axis motor max. rating (MITSUBISHI)	kw 3.5 / 3.5 / 3.5	3.5 / 4.5 / 3.5	4.5 / 7.0 / 4.5	4.5 / 7.0 / 4.5
	Axis motor max. rating (FANUC α)	kw 4.0 / 4.0 / 4.0	7.0 / 7.0 / 7.0	7.0 / 7.0 / 7.0	7.0 / 7.0 / 7.0
FEED RATES	Rapids on X & Y & Z axis	m/min 15 / 15 / 15	15 / 15 / 15	10 / 10 / 10	10 / 10 / 10
	Max. cutting feedrate	m/min 12	12	10	10
TOOL MAGAZINE	Tool storage capacity	pcs 24 / 32 arm	24 / 32 arm	32 arm	32 arm
	Type of tool (optional)	type BT-50 (CAT-50)	BT-50 (CAT-50)	BT-50 (CAT-50)	BT-50 (CAT-50)
	Max. tool diameter	mm (inch) 110 (4.3)	110 (4.3)	110 (4.3)	110 (4.3)
	Max. tool weight	kg 15	15	15	15
	Max. tool length	mm (inch) 300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)
AVG. CHANGING TIME (ARM)	Tool to tool	sec. 3.8	3.8	3.8	3.8
	Chip to chip (50% Z axis)	sec. 11	11	11	11
	Air source required	kg/cm ² 6 up	6 up	6 up	6 up
ACCURACY	Positioning VDI 3341	mm (inch) P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)
	Repeatability VDI 3341	mm (inch) Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)
DIMENSION	Machine weight (Net)	kg 11,800	12,800	17,500	18,500
	Power source required (KVA)	KVA 30	35	35	35
	Floor space (L x W x H)	mm (inch) 3,420 x 3,530 x 3,280 (135.7 x 139.0 x 129.2)	4,030 x 3,530 x 3,280 (158.7 x 139.0 x 129.2)	5,280 x 4,150 x 3,500 (207.9 x 163.4 x 137.8)	5,620 x 4,150 x 3,500 (221.3 x 163.4 x 137.8)
	Shipment advice	1 x 20' FR (1 set)	1 x 20' FR (1 set)	1 x 20' FR (1 set)	1 x 20' FR (1 set)

STANDARD ACCESSORIES:

- Spindle speed 6,000 rpm (Gear)
- Operation manual
- Spindle air blast (M code)
- Controller (MITSUBISHI M70)
- Cycle finish indicator and alarm
- Heat exchange for electric box
- Tool box
- Spindle air blow system
- Auto lubricating system
- Oil skimmer
- Fully splash guard (VMC-1490 / 1690)
- Semi splash guard (VMC-1890 / 2090)
- Spindle orientation
- Coolant equipment
- Auto tool changer (Armless: 24T)
- Rigid tapping
- RS 232C port (10M)
- Leveling kits
- LED lamp 2 pcs (VMC-1490 / 1690)
- Quartz working lamp (VMC-1890 / 2090)
- Screw type chip conveyor (Y axis rear only)

OPTIONAL ACCESSORIES:

- Coolant through spindle (CTS)
- Controller (FANUC / SIEMENS / HEIDENHAIN)
- Work piece measurement system
- Auto tool length measuring device
- CNC rotary table
- Link type chip conveyor with tank
- Linear scales
- Full splash guard
- Vacuum package
- Direct-drive 8,000 / 10,000 rpm
- Spindle speed 8,000 / 10,000 rpm (belt)

THRUST series Machine specifications:

Model	Unit	HQM-1050	HQM-1260	QMC-600	QMC-850	QMC-1050	
TRAVEL	X x Y x Z axis	mm (inch)	1,050 x 550 x 600 (41.4 x 21.7 x 23.7)	1,200 x 650 x 630 (47.3 x 25.6 x 24.8)	600 x 400 x 450 (23.6 x 15.7 x 17.7)	850 x 550 x 560 (33.5 x 21.7 x 22.1)	1,050 x 550 x 560 (41.4 x 21.7 x 22.1)
	Spindle nose to table	mm (inch)	120-720 (4.8-28.3)	100-730 (4.0-28.8)	170-620 (6.7-24.4)	120-680 (4.8-26.8)	120-680 (4.8-26.8)
	Spindle center to solid column surface	mm (inch)	600 (23.7)	700 (27.6)	480 (19.0)	600 (23.7)	600 (23.7)
TABLE	Working area	mm (inch)	1,150 x 550 (45.3 x 21.7)	1,350 x 600 (53.2 x 23.7)	700 x 420 (27.6 x 16.5)	950 x 500 (37.4 x 19.7)	1,150 x 500 (45.3 x 19.7)
	Max loading	kg	880	880	300	500	700
	T-Slots (No. x Width x Pitch)	mm (inch)	4 x 18 x 130 (4 x 0.7 x 5.2)	4 x 18 x 130 (4 x 0.7 x 5.2)	3 x 18 x 125 (3 x 0.7 x 5.0)	4 x 18 x 125 (4 x 0.7 x 5.0)	4 x 18 x 125 (4 x 0.7 x 5.0)
SPINDLE	Tool shank	-	BT-40	BT-40	BT-40	BT-40	BT-40
	Speed	rpm	10,000	10,000	10,000	10,000	10,000
	Transmission	-	Direct-Speed Belt Drive	Direct-Speed Belt Drive	High Speed Direct Drive	Direct-Speed Belt Drive	Direct-Speed Belt Drive
	Bearing lubrication	-	Grease	Grease	Grease	Grease	Grease
	Cooling system	-	Oil cooled	Oil cooled	Oil cooled	Oil cooled	Oil cooled
	Spindle motor max. rating	kw (HP)	11 (15)	11 (15)	5.5 (7.5)	7.5 (10)	11 (15)
	Axis motor max. rating (MITSUBISHI)	kw	2.0 / 3.5 / 2.0 (3.5)	2.0 / 3.5 / 3.5	1.5 / 1.5 / 3.0	1.5 / 2.0 / 1.5 (3.5)	2.0 / 3.5 / 2.0 (3.5)
	Axis motor max. rating (FANUC α)	kw	3.0 / 3.0 / 3.0 (4.0)	3.0 / 3.0 / 4.0	1.2 / 1.2 / 1.8	3.0 / 3.0 / 3.0 (4.0)	3.0 / 3.0 / 3.0 (4.0)
FEED RATES	Rapids on X & Y & Z axis (box way)	m/min	36 / 36 / 20	-	-	36 / 36 / 20	36 / 36 / 20
	Rapids on X & Y & Z axis (linear guideway)	m/min	36 / 36 / 25	40 / 40 / 30	48 / 48 / 48	36 / 36 / 25	36 / 36 / 25
	Max. cutting feedrate	m/min	15	15	10	10	10
TOOL MAGAZINE	Tool storage capacity	pcs	20 armless / 24 arm	24	20	20 armless / 24 arm	20 armless / 24 arm
	Type of tool (optional)	type	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)
	Max. tool diameter	mm (inch)	100 (4.0) armless / 76 (3.0) arm	76 (3.0) arm	76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm	100 (4.0) armless / 76 (3.0) arm
	Max. tool weight	kg	7	7	7	7	7
	Max. tool length	mm (inch)	250 (9.8) armless / 300 (11.8) arm	300 (11.8)	250 (9.8)	250 (9.8) armless / 300 (11.8) arm	250 (9.8) armless / 300 (11.8) arm
AVG. CHANGING TIME (ARM)	Tool to tool	sec.	2.7	2.7	3	2.7	2.7
	Chip to chip (50% Z axis)	sec.	6.7	6.7	7	6.7	6.7
	Air source required	kg/cm ²	6 up	6 up	6 up	6 up	6 up
ACCURACY	Positioning VDI 3341	mm (inch)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)	P 0.01 (0.0004)
	Repeatability VDI 3341	mm (inch)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)	Ps 0.006 (0.0003)
DIMENSION	Machine weight (Net)	kg	7,000 armless / 7,400 arm	7,450 arm	3,520 arm	5,000 armless / 5,400 arm	5,600 armless / 6,000 arm
	Power source required (KVA.)	KVA	20	20	15	15	15
	Floor space (L x W x H)	mm (inch)	3,300 x 3,250 x 2,800 (130.0 x 128.0 x 110.3)	3,260 x 3,986 x 2,847 (128.4 x 156.9 x 112.1)	1,850 x 2,263 x 2,605 (72.8 x 89.1 x 102.6)	2,754 x 2,720 x 2,863 (108.4 x 107.1 x 112.7)	3,054 x 2,720 x 2,863 (120.2 x 107.1 x 112.7)
	Shipment advice	-	1 x 40' HQ (3 sets)	1 x 40' HQ (1 set)	1 x 40' HQ (4 sets)	1 x 40' HQ (4 sets)	1 x 40' HQ (3 sets)

STANDARD ACCESSORIES:

- Spindle speed 10,000 rpm
- Operation manual
- Spindle air blast (M code)
- Controller (MITSUBISHI M70)
- Cycle finish indicator and alarm
- Heat exchange for electric box
- Tool box
- Spindle air blow system
- Auto lubricating system
- Fully splash guard
- Coolant gun
- Remote handwheel
- Spindle orientation
- Coolant equipment
- Auto tool changer
- Rigid tapping
- RS 232C port (10M)
- Leveling kits
- LED lamp 2 pcs
- Transformer
- Spindle oil cooler
- Air socket
- Twin-chip auger (rear-out) (HQM-1260)

OPTIONAL ACCESSORIES: (Does NOT apply to QMC-600)

- Spindle speed 12,000 (belt)
- Coolant through spindle (CTS)
- Controller (FANUC / SIEMENS / HEIDENHAIN)
- German ZF gear box
- Work piece measurement system
- Auto tool length measuring device
- Link or Screw type chip conveyor with tank (Screw type may be standard on some machine model)
- CNC rotary table
- Oil skimmer
- Linear scales
- Direct-drive 12,000 / 15,000 rpm
- Spindle coolant ring
- Coolant through tool holder
- Vacuum package
- Quick tool change (2 sec.)

TREX series Machine specifications:

Model	Unit	BMC-2217	BMC-2220	BMC-3217	BMC-3220
TRAVEL	X x Y x Z axis	mm (inch) 2,200 x 2,050 x 850 (1050 opt.) (86.6 x 80.7 x 33.5 (41.3 opt.))	2,200 x 2,350 x 850 (1050 opt.) (86.6 x 92.5 x 33.5 (41.3 opt.))	3,200 x 2,050 x 850 (1050 opt.) (126.0 x 80.7 x 33.5 (41.3 opt.))	3,200 x 2,350 x 850 (1050 opt.) (126.0 x 92.5 x 33.5 (41.3 opt.))
	Spindle nose to table	mm (inch) 200-1,050 (200-1,250) (7.9-41.3 (7.9-49.2))	200-1,050 (200-1,250) (7.9-41.3 (7.9-49.2))	200-1,050 (200-1,250) (7.9-41.3 (7.9-49.2))	200-1,050 (200-1,250) (7.9-41.3 (7.9-49.2))
	Distance between spindle center to bridge	mm (inch) 550 (21.7)	550 (21.7)	550 (21.7)	550 (21.7)
	Door width	mm (inch) 1,700 (66.9)	2,000 (78.7)	1,700 (66.9)	2,000 (78.7)
TABLE	Working area	mm (inch) 2,200 x 1,500 (86.6 x 59.1)	2,200 x 1,800 (86.6 x 70.9)	3,200 x 1,500 (126.0 x 59.1)	3,200 x 1,800 (126.0 x 70.9)
	Max. loading	kg 8,000	8,000	10,000	10,000
	T-Slots (No. x Width x Pitch)	mm (inch) 10 x 22 x 150 (10 x 0.7 x 6.0)	12 x 22 x 150 (12 x 0.7 x 6.0)	10 x 22 x 150 (10 x 0.7 x 6.0)	12 x 22 x 150 (12 x 0.7 x 6.0)
SPINDLE	Spindle speed	rpm 50-6,000	50-6,000	50-6,000	50-6,000
	Spindle motor max. rating	kw 18.5 (26 opt.)	18.5 (26 opt.)	18.5 (26 opt.)	18.5 (26 opt.)
	Motor for 3 axes	kw 7 / 7 / 7	7 / 7 / 7	7 / 7 / 7	7 / 7 / 7
	Taper size	- BT-50	BT-50	BT-50	BT-50
FEED RATES	Rapid on X / Y / Z axis	m/min 20 / 20 / 15	20 / 20 / 15	20 / 20 / 15	20 / 20 / 15
	Cutting feedrate	m/min 10	10	10	10
TOOL MAGAZINE	Tool number	pcs 32 (40 / 60 opt.)	32 (40 / 60 opt.)	32 (40 / 60 opt.)	32 (40 / 60 opt.)
	Max. tool diameter	mm (inch) 127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)
	Max. tool weight	kg 15	15	15	15
	Max. tool length	mm (inch) 300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)
	Tool to tool (change time)	sec. 8	8	8	8
ACCURACY	Positioning VDI 3341	mm (inch) P 0.02 (0.0008)	P 0.02 (0.0008)	P 0.025 (0.001)	P 0.025 (0.001)
	Repeatability VDI 3341	mm (inch) Ps 0.015 (0.0006)	Ps 0.015 (0.0006)	Ps 0.02 (0.0008)	Ps 0.02 (0.0008)
DIMENSION	Air source required	kg/cm ² 6	6	6	6
	Machine weight (Net)	kg 24,000	25,500	27,500	29,000
	Power source required	KVA 50	50	50	50
	Floor space (L x W x H)	mm (inch) 6,800 x 4,435 x 4,535 (267.7 x 174.6 x 178.5)	6,800 x 4,735 x 4,535 (267.7 x 186.4 x 178.5)	8,800 x 4,435 x 4,535 (346.5 x 174.6 x 178.5)	8,800 x 4,735 x 4,535 (346.5 x 186.4 x 178.5)

STANDARD ACCESSORIES:

- Fanuc 0i-MD controller
- Spindle speed 6,000 rpm (gear)
- Auto lubricating system
- Twin screw and one link chip conveyor with tank
- Heat exchanger for electric cabinet
- Foot switch for tool clamping / unclamping
- 32 tools arm-type tool change
- Spindle oil cooler
- Full splash guard
- Air blow for chip (M code)
- X / Y linear guideway (roller type)
- Coolant gun & air socket
- Foundation bolt kit
- Manual & pulse generator (MPG)
- Work light
- Rigid tapping
- Coolant system and alarm lights
- RS-232 interface
- Tool box
- Oil skimmer
- Maintenance and operational manual
- Twin hydraulic counter weight cylinders

OPTIONAL ACCESSORIES:

- Controller (FANUC / SIEMENS / HEIDENHAIN)
- Z axis travel up to 1,050 mm
- ATC (24 / 40 / 60 tools)
- Spindle 8,000 / 10,000 (direct-drive)
- 26 kw spindle motor upgrade (for FANUC)
- Ball screw cooling system (X / Y / Z axis)
- Manual 90° angular head
- Manual universal head
- Auto tool length measurement
- Auto workpiece measurement system
- Coolant through spindle
- Linear scales (HEIDENHAIN / FAGOR)
- CNC rotary table & tail stock
- Data server

SPARQ series Machine specifications:

Model	Unit	BMC-3224	BMC-4224	BMC-5224	BMC-6224	BMC-3227	BMC-4227	BMC-5227	
TRAVEL	X x Y x Z axis	mm (inch)	3,200 x 2,700 x 920 (1,100 opt.) (126.0 x 106.3 x 36.2 (43.3 opt.))	4,200 x 2,700 x 920 (1,100 opt.) (165.4 x 106.3 x 36.2 (43.3 opt.))	5,200 x 2,700 x 920 (1,100 opt.) (204.7 x 106.3 x 36.2 (43.3 opt.))	6,200 x 2,700 x 920 (1,100 opt.) (244.1 x 106.3 x 36.2 (43.3 opt.))	3,200 x 3,000 x 920 (1,100 opt.) (126.0 x 118.2 x 36.2 (43.3 opt.))	4,200 x 3,000 x 920 (1,100 opt.) (165.4 x 118.2 x 36.2 (43.3 opt.))	5,200 x 3,000 x 920 (1,100 opt.) (204.7 x 118.2 x 36.2 (43.3 opt.))
	Spindle nose to table	mm (inch)	200-1,120 (200-1,300) (7.9-44.1 (7.9-51.2))						
	Distance between spindle center to bridge	mm (inch)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)
	Distance between columns	mm (inch)	2,350 (92.5)	2,350 (92.5)	2,350 (92.5)	2,350 (92.5)	2,650 (104.4)	2,650 (104.4)	2,650 (104.4)
TABLE	Working area	mm (inch)	3,200 x 2,100 (126.0 x 82.7)	4,200 x 2,100 (165.4 x 82.7)	5,200 x 2,100 (204.7 x 82.7)	6,200 x 2,100 (244.1 x 82.7)	3,200 x 2,400 (126.0 x 94.5)	4,200 x 2,400 (165.4 x 94.5)	5,200 x 2,400 (204.7 x 94.5)
	Max. loading	kg	15,000	17,000	20,000	22,000	16,000	18,000	21,000
	T-Slots (No. x Width x Pitch)	mm (inch)	10 x 22 x 200 (10 x 0.8 x 7.9)	10 x 22 x 200 (10 x 0.8 x 7.9)	10 x 22 x 200 (10 x 0.8 x 7.9)	10 x 22 x 200 (10 x 0.8 x 7.9)	12 x 22 x 200 (12 x 0.8 x 7.9)	12 x 22 x 200 (12 x 0.8 x 7.9)	12 x 22 x 200 (12 x 0.8 x 7.9)
SPINDLE	Tool shank	-	BT-50	BT-50	BT-50	BT-50	BT-50	BT-50	
	Spindle speed	rpm	50-6,000	50-6,000	50-6,000	50-6,000	50-6,000	50-6,000	
	Spindle motor max. rating	kw	18.5 (26 opt.)	26	26	26	18.5 (26 opt.)	26	
	Axis motor max. rating	kw	7 / 7 / 7	9 / 7 / 7	9 / 7 / 7	9 / 7 / 7	7 / 7 / 7	9 / 7 / 7	
FEED RATES	Rapid on X / Y / Z axis	m/min	15 / 12 / 12	12 / 12 / 12	12 / 12 / 12	12 / 12 / 12	15 / 12 / 12	12 / 12 / 12	
	Max. cutting feedrate	m/min	6	6	6	6	6	6	
TOOL MAGAZINE	Tool storage capacity	pcs	32 (40 / 60 opt.)						
	Type of tool	type	BT-50	BT-50	BT-50	BT-50	BT-50	BT-50	
	Max. tool diameter	mm (inch)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	
	Max. tool weight	kg	15	15	15	15	15	15	
	Max. tool length	mm (inch)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	
	Tool to tool (change time)	sec.	8	8	8	8	8	8	
ACCURACY	Positioning VDI 3341	mm (inch)	P 0.025 (0.0010)	P 0.03 (0.0012)	P 0.04 (0.0015)	P 0.05 (0.0020)	P 0.025 (0.0010)	P 0.03 (0.0012)	P 0.04 (0.0015)
	Repeatability VDI 3341	mm (inch)	Ps 0.02 (0.0008)	Ps 0.025 (0.0010)	Ps 0.03 (0.0012)	Ps 0.035 (0.0014)	Ps 0.02 (0.0008)	Ps 0.025 (0.0010)	Ps 0.03 (0.0012)
DIMENSION	Machine weight (Net)	kg	38,000	42,000	47,000	51,500	39,500	43,500	48,500
	Power source required (KVA.)	KVA	50	50	50	50	50	50	
	Floor space (L x W x H)	mm (inch)	8,470 x 5,240 x 4,600 (333.5 x 206.3 x 181.2)	10,470 x 5,240 x 4,600 (412.2 x 206.3 x 181.2)	12,470 x 5,240 x 4,600 (490.9 x 206.3 x 181.2)	14,470 x 5,240 x 4,600 (569.7 x 206.3 x 181.2)	8,470 x 5,540 x 4,600 (333.5 x 218.2 x 181.2)	10,470 x 5,540 x 4,600 (412.2 x 218.2 x 181.2)	12,470 x 5,540 x 4,600 (490.9 x 218.2 x 181.2)
	Air source required	kg/cm ²	6 up						
	Shipment advice	-	Will advise						

STANDARD ACCESSORIES:

- FANUC 0i-MD controller
- Spindle 6,000 rpm (gear)
- Automatic lubricating system
- Automatic lubricating oil collector for 3 axes
- Spindle and gear transmission / temperature control
- Twin screw and one link chip conveyor with tank
- Foot switch for tool clamping / unclamping
- Heat exchanger for electric cabinet
- 32 tools arm-type tool change
- Spindle oil cooler
- Fully splash guard
- Air blow for chip (M code)
- X & Y linear guideway (roller type)
- Ball screw cooling system (X-axis)
- Foundation bolt kit
- Work light
- RS-232 interface (10 meters) / RJ45
- Oil skimmer
- Maintenance and operational manual
- Ladder for maintenance (5m, 6m only)
- Twin hydraulic counter weight cylinders
- Transformer

BMC-6227	BMC-3230	BMC-4230	BMC-5230	BMC-6230	BMC-3233	BMC-4233	BMC-5233	BMC-6233
6,200x3,000x920 (1,100 opt.) (244.1x118.2x36.2(43.3 opt.))	3,200x3,300x920 (1,100 opt.) (126.0x130.0x36.2(43.3 opt.))	4,200x3,300x920 (1,100 opt.) (165.4x130.0x36.2(43.3 opt.))	5,200x3,300x920 (1,100 opt.) (204.7x130.0x36.2(43.3 opt.))	6,200x3,300x920 (1,100 opt.) (244.1x130.0x36.2(43.3 opt.))	3,200x3,600x920 (1,100 opt.) (126.0x141.8x36.2(43.3 opt.))	4,200x3,600x920 (1,100 opt.) (165.4x141.8x36.2(43.3 opt.))	5,200x3,600x920 (1,100 opt.) (204.7x141.8x36.2(43.3 opt.))	6,200x3,600x920 (1,100 opt.) (244.1x141.8x36.2(43.3 opt.))
200~1,120 (200~1,300) (7.9~44.1 (7.9~51.2))								
475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)
2,650 (104.4)	2,950 (116.2)	2,950 (116.2)	2,950 (116.2)	2,950 (116.2)	3,250 (128.0)	3,250 (128.0)	3,250 (128.0)	3,250 (128.0)
6,200x2,400 (244.1x94.5)	3,200x2,700 (126.0x106.3)	4,200x2,700 (165.4x106.3)	5,200x2,700 (204.7x106.3)	6,200x2,700 (244.1x106.3)	3,200x2,700 (126.0x106.3)	4,200x2,700 (165.4x106.3)	5,200x2,700 (204.7x106.3)	6,200x2,700 (244.1x106.3)
23,000	17,000	19,000	22,000	24,000	17,000	19,000	22,000	24,000
12 x 22 x 200 (12 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)	14 x 22 x 200 (14 x 0.8 x 7.9)
BT-50								
50~6,000	50~6,000	50~6,000	50~6,000	50~6,000	50~6,000	50~6,000	50~6,000	50~6,000
26	18.5 (26 opt.)	26	26	26	18.5 (26 opt.)	26	26	26
9/7/7	7/7/7	9/7/7	9/7/7	9/7/7	7/7/7	9/7/7	9/7/7	9/7/7
12/12/12	15/12/12	12/12/12	12/12/12	12/12/12	15/12/12	12/12/12	12/12/12	12/12/12
6	6	6	6	6	6	6	6	6
32 (40/60 opt.)								
BT-50								
127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)	127 (5.0)
15	15	15	15	15	15	15	15	15
300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)
8	8	8	8	8	8	8	8	8
P 0.05 (0.0020)	P 0.025 (0.0010)	P 0.03 (0.0012)	P 0.04 (0.0015)	P 0.05 (0.0020)	P 0.025 (0.0010)	P 0.03 (0.0012)	P 0.04 (0.0015)	P 0.05 (0.0020)
Ps 0.035 (0.0014)	Ps 0.02 (0.0008)	Ps 0.025 (0.0010)	Ps 0.03 (0.0012)	Ps 0.035 (0.0014)	Ps 0.02 (0.0008)	Ps 0.025 (0.0010)	Ps 0.03 (0.0012)	Ps 0.035 (0.0014)
53,500	41,000	45,000	50,000	55,000	42,000	49,000	53,000	58,000
50	50	50	50	50	50	50	50	50
14,470 x 5,540 x 4,600 (569.7 x 218.2 x 181.2)	8,470 x 5,840 x 4,600 (333.5 x 230.0 x 181.2)	10,470 x 5,840 x 4,600 (412.2 x 230.0 x 181.2)	12,470 x 5,840 x 4,600 (490.9 x 230.0 x 181.2)	14,470 x 5,840 x 4,600 (569.7 x 230.0 x 181.2)	8,470 x 6,140 x 4,600 (333.5 x 241.8 x 181.2)	10,470 x 6,140 x 4,600 (412.2 x 241.8 x 181.2)	12,470 x 6,140 x 4,600 (490.9 x 241.8 x 181.2)	14,470 x 6,140 x 4,600 (569.7 x 241.8 x 181.2)
6 up								
Will advise								

OPTIONAL ACCESSORIES:

- Controller ((MITSUBISHI / SIEMENS / HEIDENHAIN)
- Z-axis travel up to 1,100 mm
- Z-axis travel up to 1,500 mm
(for direct drive W/Z-axis linear guide way only)
- Heighten column by 200 mm
- ATC (40, 60 tools)
- Spindle 8000 rpm (belt)
- 30 / 35 HP spindle motor upgrade
(FANUC; 32XX series only)
- Ball screw cooling system (Y / Z axis)
- Ladder for maintenance (opt. for 3m, 4m M/C)
- X-axis Linear guide roller type (schneeberger)
- Z-axis Linear guide way
- Direct drive spindle 8,000 or 10,000 rpm
(for Linear guide way only)
- Y-axis linear guide roller type (schneeberger)
- 90° angular head
- Manual universal head
- Extended head with clamping / unclamping tool
- Auto tool length measurement
- Coolant through spindle
- Linear scales feedback (HEIDENHAIN / FAGOR)
- CNC rotary table & tail stock
- Auto workpiece measurement device



Controller

A controller is the brain inside every machine. Maxmill provides complete choices for your varied preferences.

Extreme Machining Ability





mitsubishi:

M70-Economical solution that completes all part machining needs. The same operational method as M720 / M730.

M720-Great for part / mold / dye.

M730-Advance new model which is ultra powerful in processing speed, operate with window system.

Options:

- CF card (front slot) - Standard in M70, M720 and M730
- USB outlet-Standard in M720 and M730
- Data server/Ethernet-Large memory for program (standard for M70, M720, M730)
- Navi mill-User-friendly helpful interface, swiftly takes you step through the complexity of operation menu. (Standard for M70, M720, M730)
- G61.1/G08P1-High accuracy control, avoid over cutting.
- G05.1Q1-High speed high accuracy control : Mode 1, the performance of simultaneous 3 axes and 1mm-length fine-segment as 16.8m / min for M70, 33.7m / min for M730 avoid over-cutting.
- G05P10000-High speed high accuracy control : Mode 2, the performance of simultaneous 3 axes and 1mm-length fine-segment as 33.7m / min for M70, 67m / min for M720, 135m / min for M730 avoid over-cutting.
- SSS-Super smooth surface (for M720 and M730)



HEINDENHAIN:

iTNC-530 - Powerful functions, high processing speed controller, superior controlling interface, great for part / mold / dye in any field.

Features a new, more powerful processor architecture in order to enable jobs in the workshop to be finished quicker than ever. It has a sophisticated closed-loop control methods and short block processing times, a fast editor allowing speedy editing and optimized graphic buildup enabling users to quickly verify even the most complex of programs.



FANUC:

0i-MD- can be applied to the parts and mold in general working.

Standard accessories: PCMCIA card

31i-MB- can be applied to the parts and mold working of high-speed and high-accuracy

Standard accessories: PCMCIA card and USB interface

Options:

0i-MD

- AIAPC (Standard)
- AICC I : Pre-read 40 blocks (Option)
- AICC II : Pre-read 200 blocks (Option)

31i-MB

- AICC I : Pre-read 40 blocks (Option)
- AICC II : Pre-read 200 blocks (Option)
- AICC II High Speed Processing I : Pre-read 600 blocks (Option)
- AICC II High Speed Processing II : Pre-read 1000 blocks (Option)

Quality & Inspection



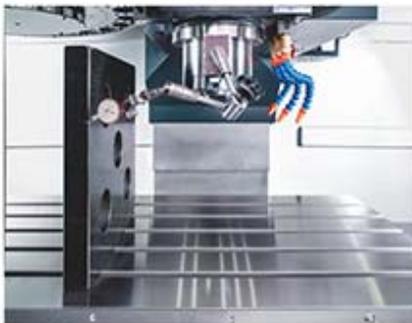
Measurement of accuracy



Measurement by Laser



Measurement by Ball-bar



Measurement of accuracy



Measurement of accuracy



Measurement of parallelism and concentricity



Measurement of inspection by 2D coordinate 2D



Measurement of inspection for hardness

Direct Driven Spindle (optional)



Gear Box (optional)



Spindle bearing and gear-box using the strong enforced auto-cooling-lubricated system, continuous circulation of cooling and lubrication which greatly minimizes heat deformation and extends machine-life.

Chip Conveyor (optional)

- ❖ Link Type Chip Conveyor
- ❖ Screw Type Chip Conveyor
- ❖ Scraper Type Chip Conveyor
- ❖ Vanes Type Chip Conveyor

During machining, chips are flushed into the chip auger, then delivered to chip tray. This ensures a cleaner working area at all time.

Please choose the most suitable chip conveyor accordance to your machining chip scenario

Chip type \ Conveyor type	Curly Iron Chip	Metallic Chip	Non-Curly Chip	Curly Aluminum Chip	Aluminum Chip	Non-Metallic Chip
	Link type	●	●	●	○	
Screw type		○	○		○	○
Scraper type			○	●	●	●
Vanes type		○	○		○	○

● Best efficiency ○ Above average efficiency ○ Other possible choices

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