

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

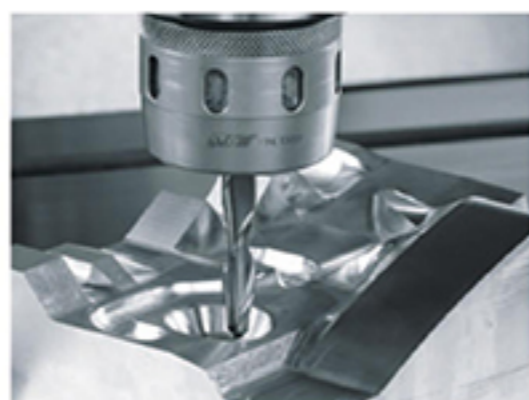
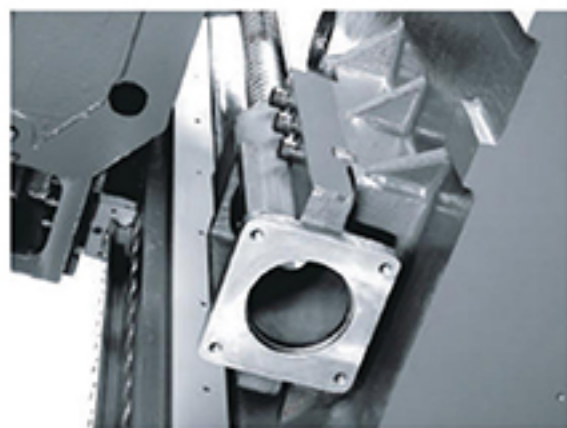
Established in 1996, Maxmill has leveraged its technical experience, gained since 1960, to design and manufacture the best machine tool possible. Since it's establishment, the philosophy of Maxmill has been to provide the best machine possible for achieving increased productivity, accuracy and reliability. 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.





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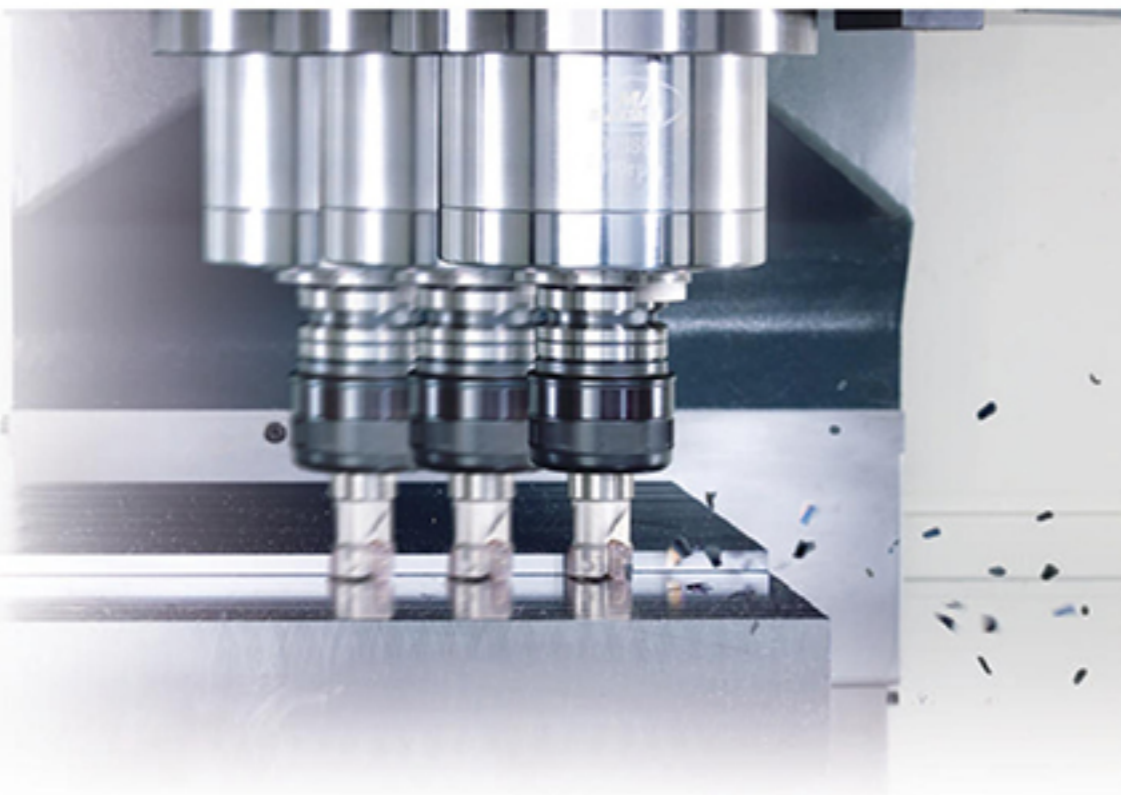
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CRUISER is the only name you need to remember to take your business to the next level of productivity.

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 / NVM-1166
 VMC-1270 / 1470



VMC-966



NVM-1166



Machine Specifications:

| Model | VMC-966 | NVM-1166 |
|----------------|--|---|
| X x Y x Z axis | 900 x 650 x 600 mm 35.4" x 25.6" x 23.7" | 1,150 x 670 x 600 mm 45.3" x 26.4" x 23.7" |
| TRAVEL | Spindle nose to table 120~720 mm 4.8"~28.4" | 100~700 mm 4.0"~27.6" |
| | Spindle center to solid column surface 701 mm 27.6" | 720 mm 28.3" |
| TABLE | Working area 1,100 x 600 mm 43.3" x 23.7" | 1,300 x 600 mm 51.2" x 23.7" |
| | 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 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 reliability.
- 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" |



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



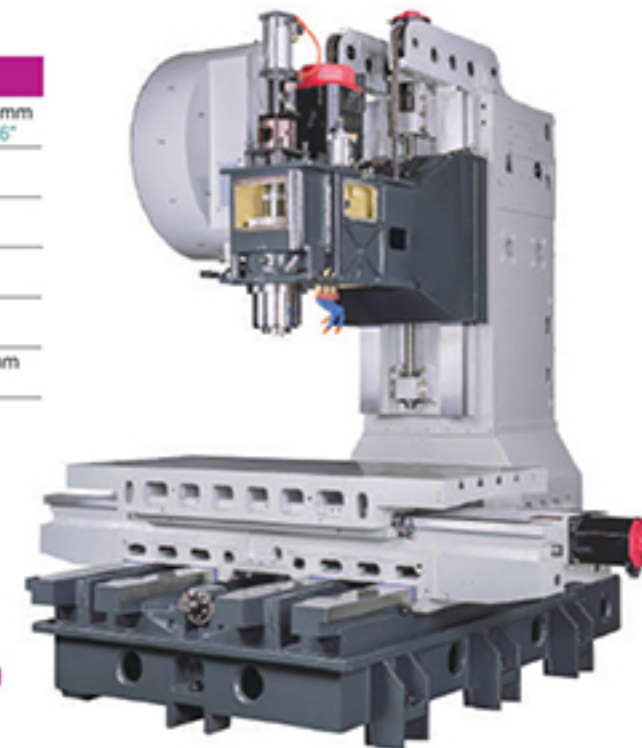
CRONOS series

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 CRONOS series to make heavy duty machining the easiest ever.

■ VMC-1490 / 1690
VMC-1890 / 2090

Machine Specifications:

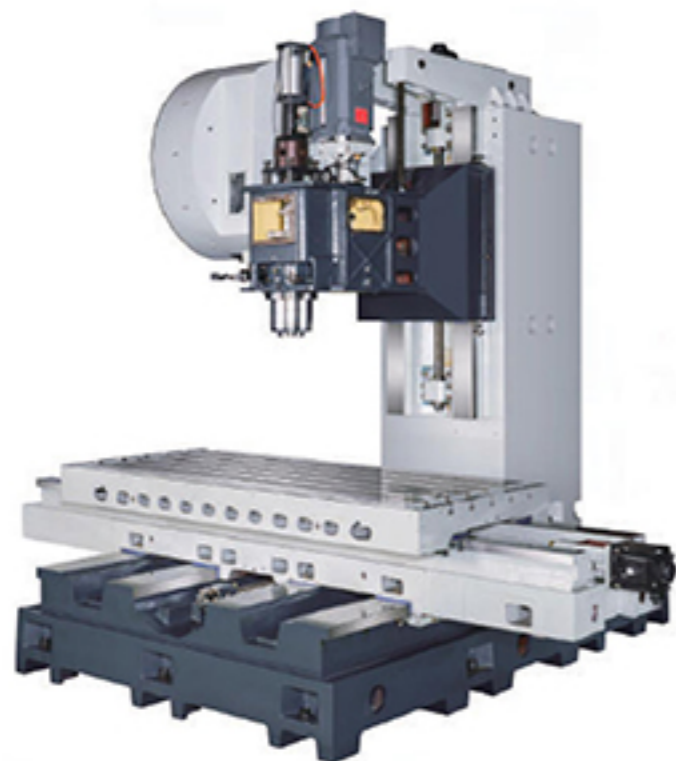
| Model | VMC-1490 | VMC-1690 | |
|----------------|---|---|---------------------------------------|
| X x Y x Z axis | 1,400 x 900 x 700 mm 55.2" x 35.5" x 27.6" | 1,600 x 900 x 700 mm 63.0" x 35.5" x 27.6" | |
| TRAVEL | Spindle nose to table | 200-900 mm 7.8"-35.5" | 200-900 mm 7.8"-35.5" |
| | Spindle center to solid column surface | 990 mm 39.0" | 990 mm 39.0" |
| TABLE | Working area | 1,700 x 850 mm 67.0" x 33.5" | 1,900 x 850 mm 74.8" x 33.5" |
| | 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" |



VMC-1490 / 1690

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 reliability. 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:

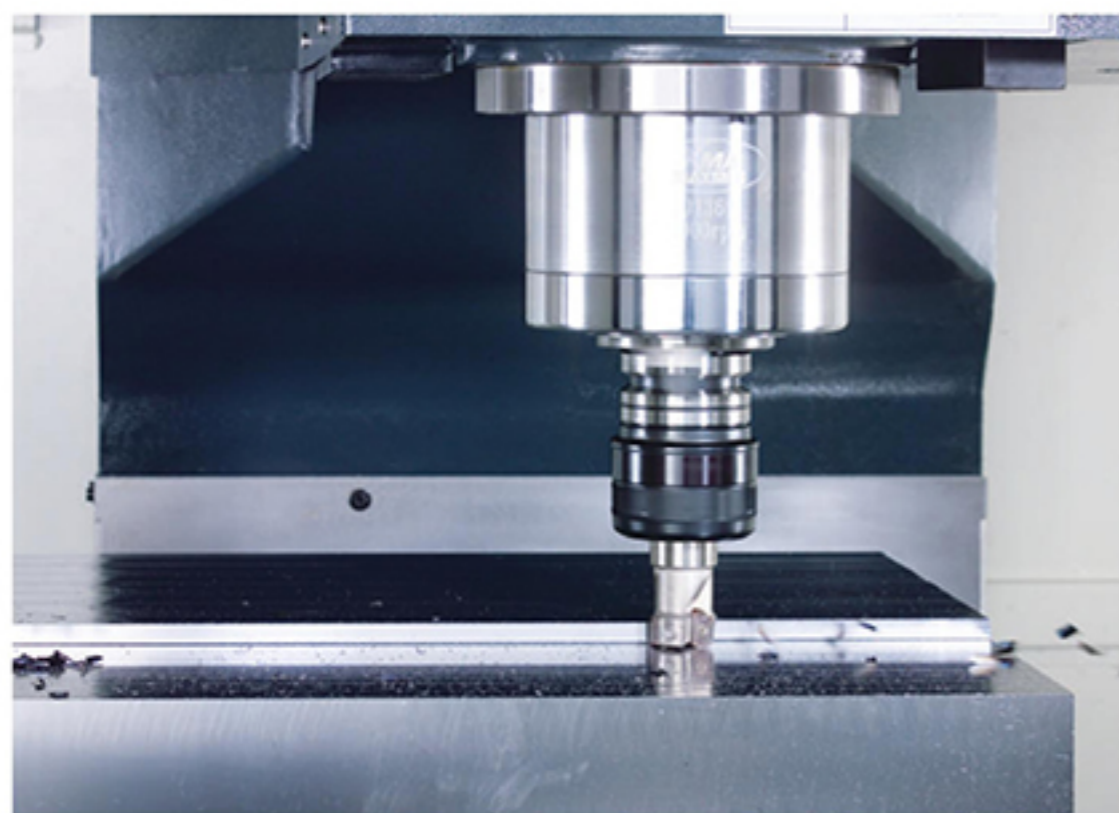
| Model | VMC-1890 | VMC-2090 |
|--------|--|---|
| TRAVEL | X x Y x Z axis 1,800 x 900 x 700 mm 70.9" x 35.5" x 27.6" | 2,000 x 900 x 700 mm 78.8" x 35.5" x 27.6" |
| | Spindle nose to table 250~950 mm 9.9"~37.4" | 250~950 mm 9.9"~37.4" |
| | Spindle center to solid column surface 990 mm 39.0" | 990 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 Chromolybedenum alloy steel, carburized and precision ground to class 0 of JIS standards.

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



MASTARR 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-500
QMC-600 / 850 / 1050
HQM-1060 / 1260
HQM-1480 / 1680



QMC-600

Machine Specifications:

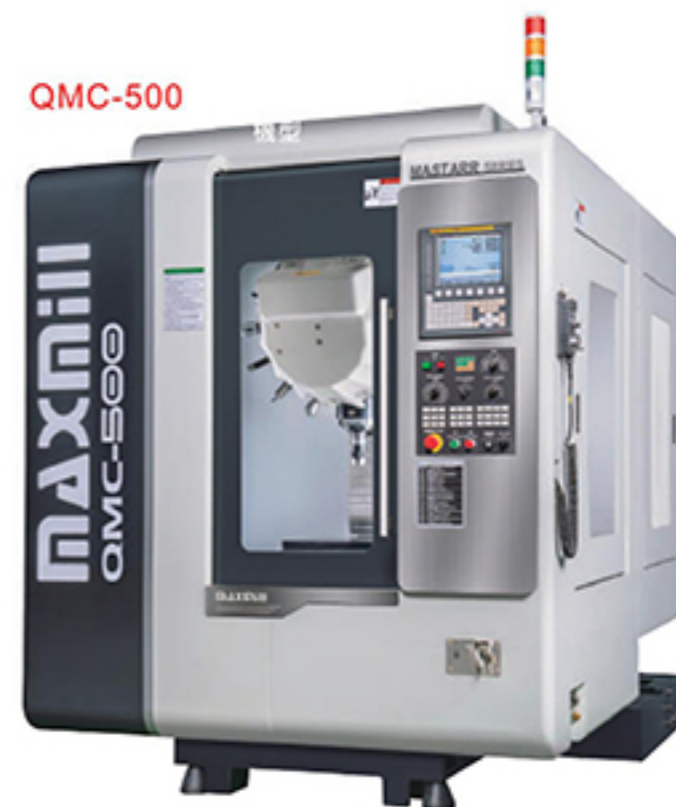
| Model | QMC-600 | |
|--------|--|---|
| TRAVEL | X x Y x Z axis | 610 x 410 x 530 mm 24.1" x 16.2" x 20.8" |
| | Spindle nose to table | 100-630 mm 4.0"-24.8" |
| | Spindle center to solid column surface | 495 mm 19.5" |
| TABLE | Working area | 710 x 410 mm 27.9" x 16.2" |
| | Max. loading | 300 kg |
| | T-Slots (No. x Width x Pitch) | 3 x 18 mm x 125 mm 4 x 0.7" x 5.0" |

| Model | QMC-500 | |
|--------|--|---|
| TRAVEL | X x Y x Z axis | 510 x 400 x 320 mm 20.0" x 15.7" x 12.5" |
| | Spindle nose to table | 150-470 mm 5.9"-18.5" |
| | Spindle center to solid column surface | 474 mm 18.6" |
| TABLE | Working area | 660 x 400 mm 25.9" x 15.7" |
| | Max. loading | 250 kg |
| | T-Slots (No. x Width x Pitch) | 3 x 14 mm x 125 mm 3 x 0.5" x 4.9" |

QMC-500



QMC-500



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" | 120-680 mm 4.8"-26.8" |
| | Spindle center to solid column surface 600 mm 23.7" | 600 mm 23.7" |
| Working area | 950 x 500 mm 37.4" x 19.7" | 1,150 x 500 mm 45.3" x 19.7" |
| TABLE | Max. loading 500 kg | 700 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-1060/1260

Machine Specifications:

| Model | HQM-1060 | HQM-1260 |
|----------------|--|---|
| X x Y x Z axis | 1,060 x 650 x 630 mm 41.7" x 25.6" x 24.8" | 1,200 x 650 x 630 mm 47.3" x 25.6" x 24.8" |
| TRAVEL | Spindle nose to table 100-730 mm 4.0" - 28.8" | 100-730 mm 4.0"-28.8" |
| | Spindle center to solid column surface 700 mm 27.6" | 700 mm 27.6" |
| Working area | 1,350 x 600 mm 53.2" x 23.7" | 1,350 x 600 mm 53.2" x 23.7" |
| TABLE | Max. loading 880 kg | 880 kg |
| | T-Slots (No. x Width x Pitch) 4 x 18 mm x 130 mm 4 x 0.7" x 5.2" | 4 x 18 mm x 130 mm 4 x 0.7" x 5.2" |

| Model | HQM-1480 | HQM-1680 |
|----------------|--|---|
| X x Y x Z axis | 1400 x 800 x 750 mm 55.2" x 31.5" x 29.6" | 1,600 x 800 x 750 mm 63" x 31.5" x 29.6" |
| TRAVEL | Spindle nose to table 75-825(BT40) mm 3.0"-32.5" opt: 40-790(BT50) mm 1.6"-31.1" | 75-825(BT40) mm 3.0"-32.5" opt: 40-790(BT50) mm 1.6"-31.1" |
| | Spindle center to solid column surface 863 mm 34.0" | 863 mm 34.0" |
| Working area | 1550 x 700 mm 61.1" x 27.6" | 1750 x 700 mm 68.9" x 27.6" |
| TABLE | Max. loading 1000 kg | 1200 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" |



HQM-1480 / 1680



KOLOSSO series

BMC-2217 / 2220

BMC-3217 / 3220

BMC-4217 / 4220



» Full splash guards (with top roof-opt.)



Oversized Ball Screws

The X and Y-axes ball screws are $\text{Ø}63\text{mm}$ resulting in enhanced rigidity.



Control Pendant

The ergonomic design of the control pendant provides added convenience of operation.



Powerful Gear Drive Spindle

The spindle is driven by a powerful gearbox with 30mm thick gear (conventional gear thickness is 20-25 mm) resulting in heavy cutting capability.



Coolant Through Ball Screw (opt.)

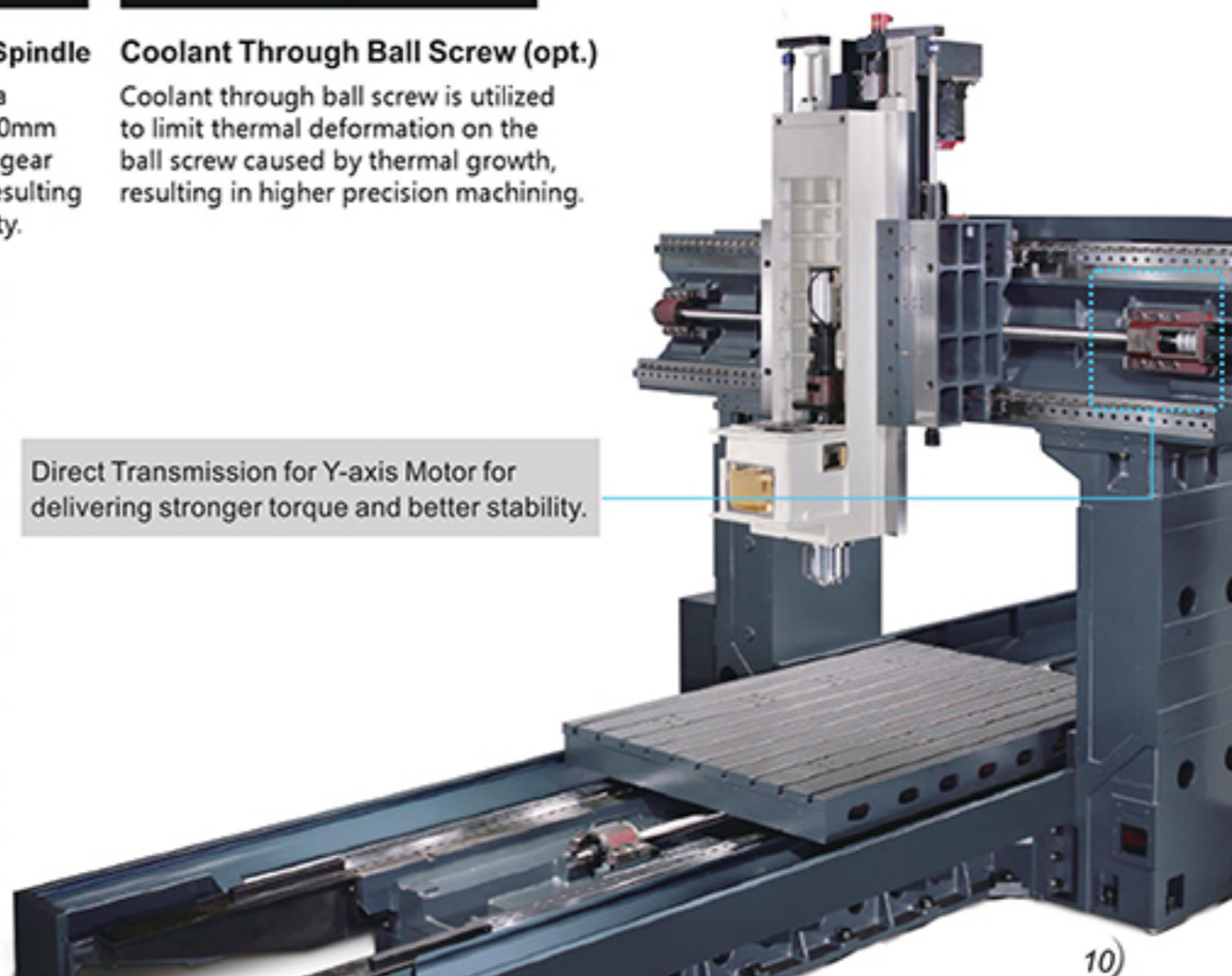
Coolant through ball screw is utilized to limit thermal deformation on the ball screw caused by thermal growth, resulting in higher precision machining.

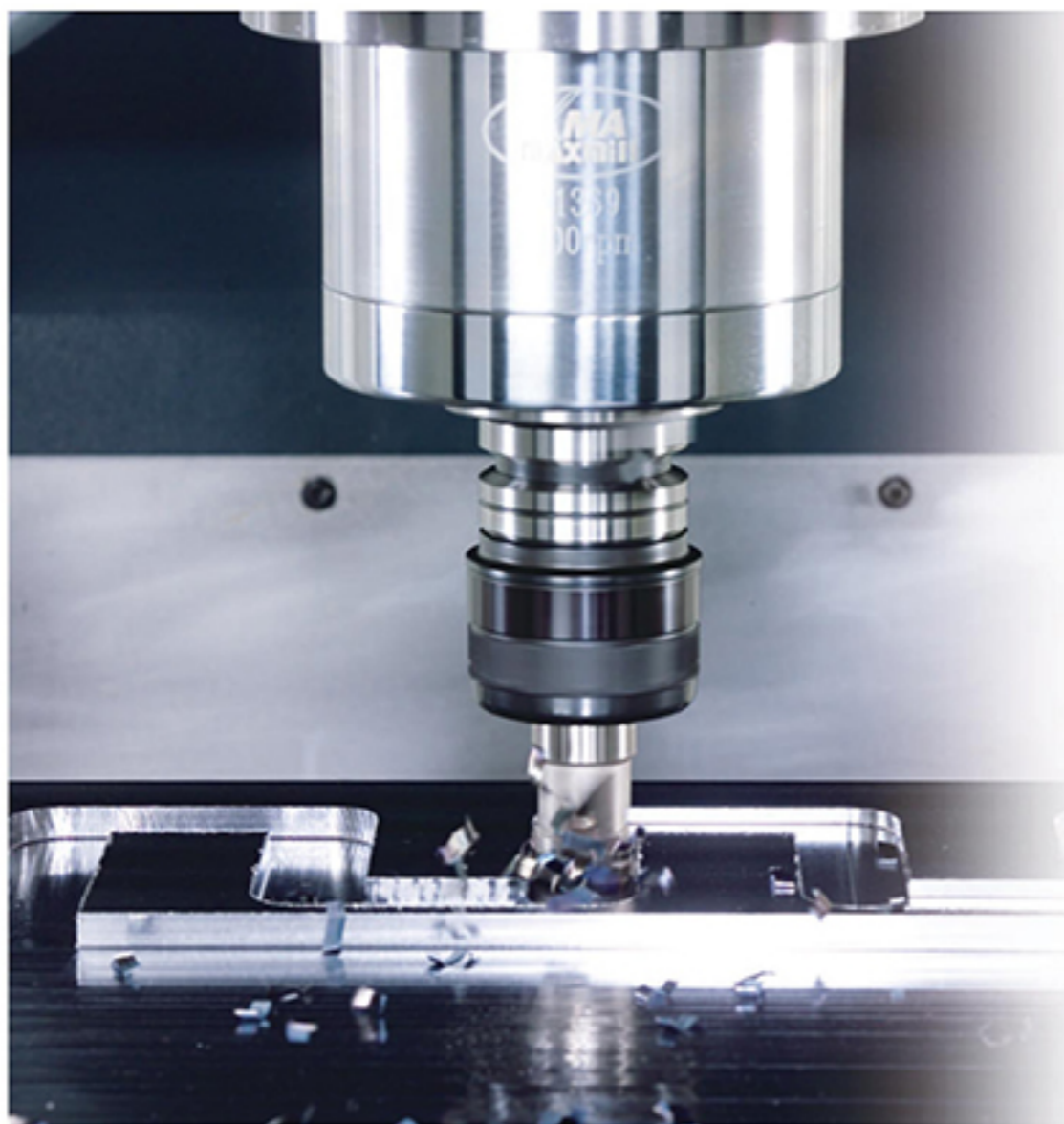
Machine Specifications:

| Model | BMC-2217 | BMC-2220 | BMC-3217 | |
|--------|-------------------------------|---|---|--|
| TRAVEL | 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") |
| | 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") |
| | Distance between columns | 1700 mm 66.9" | 2000 mm 78.7" | 1700 mm 66.9" |
| TABLE | 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" |
| | Max. loading | 8,000 kg | 8,000 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" |

| Model | BMC-3220 | BMC-4217 | BMC-4220 | |
|--------|-------------------------------|--|--|--|
| TRAVEL | X x Y x Z axis | 3,200 x 2,350 x 850 (1,050) mm 126.0" x 92.5" x 33.5" (41.3") | 4,200 x 2,050 x 850 (1,050) mm 165.4" x 80.7" x 33.5" (41.3") | 4,200 x 2,350 x 850 (1,050) mm 165.4" x 92.5" x 33.5" (41.3") |
| | 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") |
| | Distance between columns | 2000 mm 78.7" | 1700 mm 66.9" | 2000 mm 78.7" |
| TABLE | Working area | 3,200 x 1,800 mm 126.0" x 70.9" | 4,200 x 1,500 mm 165.4" x 59.1" | 4,200 x 1,800 mm 165.4" x 70.9" |
| | Max. loading | 10,000 kg | 12,000 kg | 12,000 kg |
| | T-Slots (No. x Width x Pitch) | 12 x 22 mm x 150 mm 12 x 0.9" x 6.0" | 10 x 22 mm x 150 mm 10 x 0.7" x 6.0" | 12 x 22 mm x 150 mm 12 x 0.7" x 6.0" |

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





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 chain type ATC.
- Extra wide of side 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") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 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") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 200~1,120 (200~1,300) mm 7.9"~44.1" (7.9"~51.2") | 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" |

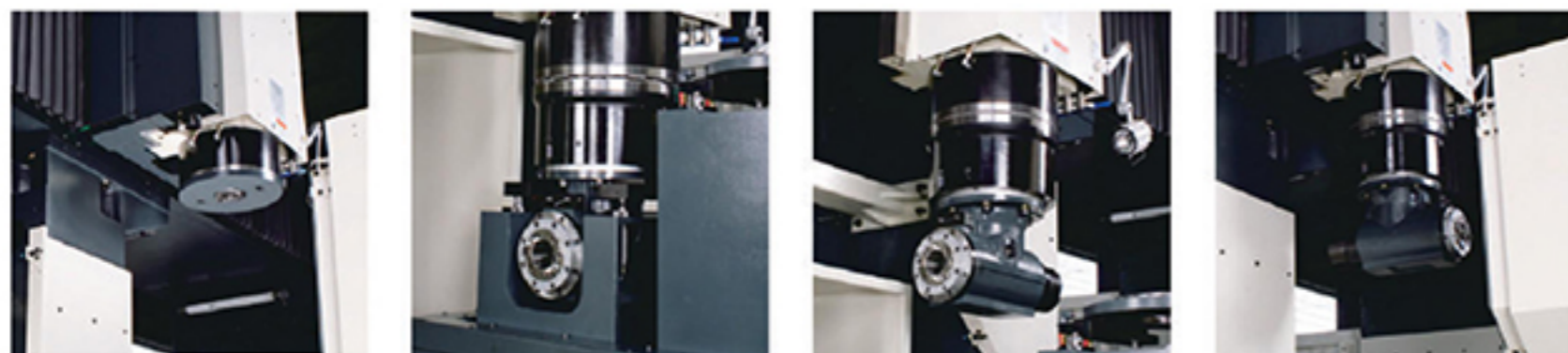
Rugged and Robust Structure

*The Very Basis of
Ultimate Accuracy*

SPARQ-5F series

BMC-5F-3224 BMC-5F-3227 BMC-5F-3230 BMC-5F-3233
BMC-5F-4224 BMC-5F-4227 BMC-5F-4230 BMC-5F-4233
BMC-5F-5224 BMC-5F-5227 BMC-5F-5230 BMC-5F-5233
BMC-5F-6224 BMC-5F-6227 BMC-5F-6230 BMC-5F-6233





The stock case can be flexibly designed and customized made.
A sophisticated design eliminates any unexpected damage to the attachment head.



- Maximum tool length 400mm
- Tool weight imbalance 80kg
- Vertical/Horizontal ATC
- Hydraulic motor



Machine Specifications:

| Model | BMC-SF-3224 | BMC-SF-4224 | BMC-SF-5224 | BMC-SF-6224 | BMC-SF-3227 | BMC-SF-4227 | BMC-SF-5227 | BMC-SF-6227 | |
|--------|-----------------------|---|---|---|---|---|---|---|---|
| TRAVEL | X x Y x Z axis | 3,200x2,700x1,100 (126.0x106.3x43.3) | 4,200x2,700x1,100 (165.4x106.3x43.3) | 5,200x2,700x1,100 (204.7x106.3x43.3) | 6,200x2,700x1,100 (244.1x106.3x43.3) | 3,200x3,000x1,100 (126.0x118.2x43.3) | 4,200x3,000x1,100 (165.4x118.2x43.3) | 5,200x3,000x1,100 (204.7x118.2x43.3) | 6,200x3,000x1,100 (244.1x118.2x43.3) |
| | Spindle nose to table | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) |
| TABLE | Working area | 3,200x2,100(126.0x82.7) | 4,200x2,100(165.4x82.7) | 5,200x2,100(204.7x82.7) | 6,200x2,100(244.1x82.7) | 3,200x2,400(126.0x94.5) | 4,200x2,400(165.4x94.5) | 5,200x2,400(204.7x94.5) | 6,200x2,400(244.1x94.5) |

| Model | BMC-SF-3230 | BMC-SF-4230 | BMC-SF-5230 | BMC-SF-6230 | BMC-SF-3233 | BMC-SF-4233 | BMC-SF-5233 | BMC-SF-6233 | |
|--------|-----------------------|---|---|---|---|---|---|---|---|
| TRAVEL | X x Y x Z axis | 3,200x3,300x1,100 (126.0x130.0x43.3) | 4,200x3,300x1,100 (165.4x130.0x43.3) | 5,200x3,300x1,100 (204.7x130.0x43.3) | 6,200x3,300x1,100 (244.1x130.0x43.3) | 3,200x3,600x1,100 (126.0x141.8x43.3) | 4,200x3,600x1,100 (165.4x141.8x43.3) | 5,200x3,600x1,100 (204.7x141.8x43.3) | 6,200x3,600x1,100 (244.1x141.8x43.3) |
| | Spindle nose to table | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) |
| TABLE | Working area | 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) |

CRUISER series Machine specifications:

| Model | | Unit | VMC-855 | VMC-966 | NVM-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) | 1,150 x 670 x 600 (45.3 x 26.4 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) | 100-700 (4.0-27.6) | 130-730(5.2-28.7)(BT-40) 130-760(5.2-30.0)(BT-50) | 130-730(5.2-28.7)(BT-40) 130-760(5.2-30.0)(BT-50) |
| | Spindle center to solid column surface | mm(inch) | 550(21.7) | 701(27.6) | 720(28.3) | 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 | 10,000(8,000) | 10,000(8,000) |
| | Transmission | - | Belt Drive | Belt Drive | Belt Drive | Belt Drive | 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 (MITSUBISHI) | kw(HP) | 7.5(10) | 11(15) | 11(15) | 15(20) | 15(20) |
| | Spindle motor max rating (FANUC) | kw(HP) | 11(15) / 15(20) | 11(15) / 15(20) | 11(15) / 15(20) | 15(20) | 15(20) |
| | Axis motor max rating (MITSUBISHI) | kw | 1.5 / 2.2 / 3.0 | 2.0 / 3.5 / 3.5 | 2.0 / 3.5 / 3.5 | 3.5 / 3.5 / 3.5 | 3.5 / 3.5 / 3.5 |
| Axis motor max rating (FANUC) | kw | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 4.0 / 4.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 4.0 / 4.0 / 4.0 (OPT) | |
| 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 | 24arm | 24arm | 24arm | 24arm | 24arm |
| | 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) | 76(3.0)arm | 76(3.0)arm | 76(3.0)arm | 76(3.0)arm | 76(3.0)arm |
| | Max tool weight | kg | 7 | 7 | 7 | 7(BT-40)/15(BT-50) | 7(BT-40)/15(BT-50) |
| | Max tool length | mm(inch) | 300(11.8)arm | 300(11.8)arm | 300(11.8)arm | 300(11.8)arm | 300(11.8)arm |
| 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) |
| | Air source required | kg/cm ² | 6up | 6up | 6up | 6up | 6up |
| ACCURACY | Positioning | VDE 3341 mm(inch) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) |
| | Repeatability | VDE 3341 mm(inch) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) |
| DIMENSION | Machine weight(Net) | kg | 5,400arm | 6,700arm | 7,000arm | 9,600arm | 10,000arm |
| | Power source required | KVA | 15 | 15 | 15 | 30 | 30 |
| | Floor space (LxWxH) | mm(inch) | 2,508 x 2,745 x 2,720 (98.8 x 108.1 x 107.1) | 2,795 x 2,875 x 2,700 (110.1 x 113.2 x 106.3) | 3,140 x 2,880 x 2,850 (123.7 x 113.4 x 112.2) | 3,418 x 3,380 x 2,920(BT-40) (134.5 x 133 x 115.0) | 3,858 x 3,380 x 2,920(BT-40) (151.8 x 133 x 115.0) |
| | Shipment advice | - | 1 x 40'HQ(3 sets) | 1 x 40'HQ(2 sets) | 1 x 40'HQ(2 sets) | 1 x 40'HQ(1 sets) | 1 x 40'HQ(1 sets) |

STANDARD ACCESSORIES

- Mitsubishi M80 controller
- Spindle speed 8,000 / 10,000 rpm (depend on machine model)
- Automatic tool changer
- Full splash guard
- Heat exchanger for electric cabinet
- Automatic lubricating system
- Spindle oil cooler
- Spindle air blast system (M code)

- Spindle air curtain
- Spindle orientation
- Coolant gun and air socket
- Leveling kits
- Removable manual & pulse generator (M.P.G.)
- LED light
- Rigid tapping
- Coolant system and tank

- Cycle finish indicator and alarm lights
- RS-232C interface with cable (10 m) (M/F)
- Tool Box
- Operational and maintenance manual
- Transformer (M/F)

⊗(M/F)=(Mitsubishi/Fanuc Controller)

OPTIONAL ACCESSORIES:

- Controller (FANUC / SIEMENS / HEIDENHAIN / FAGOR)
- Spindle speed 12,000 rpm (Belt type)-(#40taper)
- Spindle speed 12,000/15,000 rpm (Direct type)
- Coolant through spindle (CTS)
- Spindle coolant ring (M code)
- German ZF gear box
- Automatic tool length measuring device
- Automatic work piece measurement system
- CNC rotary table and tailstock
- Oil skimmer
- Link/Screw type chip conveyor with chip bucket
- Linear scales (X/Y/Z axis)
- Coolant through tool holder

CRONOS series Machine specifications:

| Model | | Unit | VMC-1490 | VMC-1690 | NVM-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(7.8-35.5) | 200-900(7.8-35.5) | 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(67.0x33.5) | 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 |
| | 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(MITSUBISHI) | kw(HP) | 15(20) | 15(20) | 18.5(25) | 18.5(25) |
| | Spindle motor max.rating(FANUC) | kw(HP) | 18.5(25) | 18.5(25) | 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) | kw | 3.0 / 3.0 / 3.0 (STD) 7.0 / 7.0 / 7.0 (OPT) | 3.0 / 3.0 / 3.0 (STD) 7.0 / 7.0 / 7.0 (OPT) | 3.0 / 3.0 / 3.0 (STD) 7.0 / 7.0 / 7.0 (OPT) | 3.0 / 3.0 / 3.0 (STD) 7.0 / 7.0 / 7.0 (OPT) |
| 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 | 32arm | 32arm |
| | 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 |
| AVG.CHANGING TIME(ARM) | Max.tool length | mm(inch) | 300(11.8) | 300(11.8) | 300(11.8) | 300(11.8) |
| | Tool to tool | sec. | 3.8 | 3.8 | 3.8 | 3.8 |
| ACCURACY | Air source required | kg/cm ² | 6up | 6up | 6up | 6up |
| | Positioning VDI 3341 | mm(inch) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) |
| DIMENSION | Repeatability VDI 3341 | mm(inch) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) |
| | Machine weight(Net) | kg | 13,800 | 14,800 | 19,500 | 20,500 |
| DIMENSION | Power source required | KVA | 30 | 35 | 35 | 35 |
| | Floor space (LxWxH) | mm(inch) | 3,420 x 3,675 x 3,280 (135.7 x 144.6 x 129.2) | 4,030 x 3,675 x 3,280 (158.7 x 144.6 x 129.2) | 5,360 x 4,170 x 3,500 (211.3 x 164.1 x 137.8) | 5,620 x 4,170 x 3,500 (221.3 x 164.1 x 137.8) |
| | Shipment advice | - | 1 x 20'FR(1 sets) | 1 x 20'FR(1 sets) | 1 x 20'FR(1 sets) | 1 x 20'FR(1 sets) |

STANDARD ACCESSORIES

- Mitsubishi M80 controller
- Spindle speed 6,000 rpm (Gear)
- Automatic tool changer
- YZ-axis slant cover protection chip auger (Work table rear)
- Full splash guard
- Heat exchanger for electric cabinet
- Automatic lubricating system
- Spindle oil cooler

- Spindle air blast system (M code)
- Spindle air curtain
- Spindle orientation
- Coolant gun and air socket
- Leveling kits
- Removable manual & pulse generator (M.P.G.)
- LED light
- Rigid tapping
- Oil skimmer

- Coolant system and tank
- Cycle finish indicator and alarm lights
- RS-232C interface with cable (10 m) (M/F)
- Tool Box
- Operational and maintenance manual
- Transformer (M/F)

Ⓜ(M/F)=(Mitsubishi/Fanuc Controller)

OPTIONAL ACCESSORIES:

- Controller (FANUC / SIEMENS / HEIDENHAIN / FAGOR)
- Spindle speed 8,000rpm-Belt type(VMC-1490/1690)
- Spindle speed 10,000rpm-Direct type
- Coolant through spindle (CTS)
- Spindle coolant ring (M code)
- Automatic tool length measuring device
- Automatic work piece measurement system
- CNC rotary table and tail stock
- Link type chip conveyor with chip bucket
- Linear scales (X/Y/Z axis)
- Coolant through tool holder

MASTARR series Machine specifications:

| Model | | Unit | QMC-500 | QMC-600 | QMC-850 | QMC-1050 | HQM-1060 | HQM-1260 | HQM-1480 | HQM-1680 | |
|-------------------------------|--|--------------------|--|--|--|--|---|--|--|--|-------------------------------|
| TRAVEL | X x Y x Z axis | mm(inch) | 510 x 400 x 320 (20.0 x 15.7 x 12.5) | 610 x 410 x 530 (24.1 x 16.2 x 20.8) | 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) | 1,060(1,100opt) x 650 x 630 (41.7 x 25.6 x 24.8) | 1,200 x 650 x 630 (47.3 x 25.6 x 24.8) | 1,400 x 800 x 750 (55.2 x 31.5 x 29.6) | 1,600 x 800 x 750 (63.0 x 31.5 x 29.6) | |
| | Spindle nose to table | mm(inch) | 150-470(5.9-18.5) | 100-630(4.0-24.8) | 120-680(4.8-26.8) | 120-680(4.8-26.8) | 100-730(4.0-28.8) | 100-730(4.0-28.8) | STD:75-825(3.0-32.5)(BT40) OPT:40-790(1.6-31.1)(BT50) | STD:75-825(3.0-32.5)(BT40) OPT:40-790(1.6-31.1)(BT50) | |
| | Spindle center to solid column surface | mm(inch) | 474(18.6) | 495(19.5) | 600(23.7) | 600(23.7) | 700(27.6) | 700(27.6) | 863(34.0) | 863(34.0) | |
| TABLE | Working area | mm(inch) | 660 x 400(25.9 x 15.7) | 710 x 410(27.9 x 16.1) | 950 x 500(37.4 x 19.7) | 1,150 x 500(45.3 x 19.7) | 1,350 x 600(53.2 x 23.7) | 1,350 x 600(53.2 x 23.7) | 1,550 x 700(61.1 x 27.6) | 1,750 x 700(68.9 x 27.6) | |
| | Max loading | kg | 250 | 300 | 500 | 700 | 880 | 880 | 1000 | 1200 | |
| | T-Slots(No. x Width x Pitch) | mm(inch) | 3 x 14 x 125(3 x 0.5 x 4.9) | 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) | 4 x 18 x 130(4 x 0.7 x 5.2) | 4 x 18 x 130(4 x 0.7 x 5.2) | 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-30 | BT-40 | BT-40 | BT-40 | BT-40 | BT-40 | STD: BT-40 / OPT: BT-50 | STD: BT-40 / OPT: BT-50 | |
| | Speed | rpm | 20,000 | 12,000 | 10,000 | 10,000 | 10,000 | 10,000 | STD:10,000(BT-40) OPT:8,000(BT-50) | STD:10,000(BT-40) OPT:8,000(BT-50) | |
| | Transmission | - | Direct Drive | Direct Drive | Belt Drive | Belt Drive | Belt Drive | Belt Drive | Belt Drive | Belt Drive | |
| | Bearing lubrication | - | Grease | Grease | Grease | Grease | Grease | Grease | Grease | Grease | |
| | Cooling system | - | Oil cooled | Oil cooled | Oil cooled | Oil cooled | Oil cooled | Oil cooled | Oil cooled | Oil cooled | |
| | Spindle motor max rating (MITSUBISHI) | kw(HP) | 5.7(7.5) | 7.5(10) | 7.5(10) | 11(15) | 11(15) | 11(15) | 11(15) | BT-40:15(20) / BT-50:18.5(25) | BT-40:15(20) / BT-50:18.5(25) |
| | Spindle motor max rating (FANUC) | kw(HP) | 3.7(4.9) / 7.5(10) | 7.5(10) / 11(15) | 11(15) / 15(20) | 11(15) / 15(20) | 11(15) / 15(20) | 11(15) / 15(20) | 11(15) / 15(20) | BT-40:15(20) / BT-50:18.5(25) | BT-40:15(20) / BT-50:18.5(25) |
| | Axis motor max rating (MITSUBISHI) | kw | 1.5 / 1.5 / 3.0 | 1.5 / 2.2 / 3.0 | 1.5 / 2.2 / 3.0 | 2.0 / 3.5 / 3.5 | 2.0 / 3.5 / 3.5 | 2.0 / 3.5 / 3.5 | 3.5 / 3.5 / 3.5 | 3.5 / 3.5 / 3.5 | |
| Axis motor max rating (FANUC) | kw | 1.8 / 1.8 / 2.5 | 1.8 / 1.8 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 1.8 / 1.8 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 2.5 / 2.5 / 2.5 (STD) 3.0 / 3.0 / 4.0 (OPT) | 4.0 / 4.0 / 4.0 | 4.0 / 4.0 / 4.0 | | |
| FEED RATES | Rapids on X&Y&Z axis (linear guideway) | m/min | 48 / 48 / 48 | 48 / 48 / 48 | 36 / 36 / 25 | 36 / 36 / 25 | 40 / 40 / 30 | 40 / 40 / 30 | 30 / 30 / 25 | 30 / 30 / 25 | |
| | Max cutting feedrate | m/min | 10 | 10 | 10 | 10 | 15 | 15 | 10 | 10 | |
| TOOL MAGAZINE | Tool storage capacity | pcs | 16 turret | 20 arm | 24 arm | 24 arm | 24 arm | 24 arm | 24 arm | 24 arm | |
| | Type of tool (optional) | type | BT-30 turret type | BT-40(CAT-40) | BT-40(CAT-40) | BT-40(CAT-40) | BT-40(CAT-40) | BT-40(CAT-40) | STD: BT-40 (CAT-40) OPT: BT-50 (CAT-50) | STD: BT-40 (CAT-40) OPT: BT-50 (CAT-50) | |
| | Max tool diameter | mm(inch) | 60(2.3) turret | 76(3.0) arm | 76(3.0) arm | 76(3.0) arm | 76(3.0) arm | 76(3.0) arm | 76(3.0) arm | 76(3.0) arm | |
| | Max tool weight | kg | 3 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | Max tool length | mm(inch) | 200(7.8) turret | 250(9.8) arm | 300(11.8) arm | 300(11.8) arm | 300(11.8) arm | 300(11.8) arm | 300(11.8) arm | 300(11.8) arm | |
| AVG. CHANGING TIME(ARM) | Tool to tool | sec | 1.4 | 2.5 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7(BT-40) / 3.8(BT-50) | 2.7(BT-40) / 3.8(BT-50) | |
| | Air source required | kg/cm ² | 6up | 6up | 6up | 6up | 6up | 6up | 6up | 6up | |
| ACCURACY | Positioning | VDE 3341 | mm(inch) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | P0.01(0.0004) | |
| | Repeatability | VDE 3341 | mm(inch) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | Ps0.006(0.0003) | |
| DIMENSION | Machine weight (Net) | kg | 3,000 turret | 4,000 arm | 5,900 arm | 6,300 arm | 7,500 arm | 7,700 arm | 11,600 arm | 12,100 arm | |
| | Power source required | KVA | 15 | 15 | 15 | 15 | 20 | 20 | 30 | 30 | |
| | Floor space (L x W x H) | mm(inch) | 1,700 x 2,400 x 2,400 (66.9 x 94.5 x 94.5) | 1,900 x 2,260 x 2,600 (74.8 x 89.0 x 105.4) | 2,700 x 3,000 x 2,870 (106.3 x 118.2 x 113.0) | 2,850 x 3,000 x 2,870 (112.2 x 118.2 x 113.0) | 3,340 x 3,160 x 2,800 (131.5 x 124.4 x 110.2) | 3,640 x 3,100 x 2,850 (143.3 x 122.0 x 112.2) | 3,930 x 3,200 x 3,050 (157.7 x 125.9 x 120) | 4,330 x 3,200 x 3,050 (170.5 x 125.9 x 120) | |
| | Shipment advice | - | 1 x 40'HQ(4 sets) | 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) | 1 x 40'HQ(1 set) | 1 x 40'HQ(1 set) | |

STANDARD ACCESSORIES:

- Mitsubishi M80 controller
- Spindle speed 8,000 / 10,000 / 12,000 / 20,000 rpm (depend on machine model)
- Automatic tool changer
- Full splash guard
- Heat exchanger for electric cabinet
- Automatic lubricating system
- Spindle air blast system (M code)
- Spindle oil cooler
- Spindle air curtain
- Spindle orientation
- Coolant gun and air socket
- Leveling kits
- Removable manual & pulse generator (M.P.G.)
- LED light
- Rigid tapping

- Coolant system and tank
- Cycle finish indicator and alarm lights
- RS-232C interface with cable (10 m) (M/F)
- Tool Box
- Operational and maintenance manual
- Transformer (M/F)
- Twin-chip auger(rear-out)(HQM-1260)

*(M/F), means Mitsubishi & Fanuc controller

OPTIONAL ACCESSORIES:

- Spindle speed 12,000 rpm (Belt type)
- Spindle speed 12,000/15,000 rpm (Direct type)
- Coolant through spindle (CTS)
- Spindle coolant ring (M code)
- German ZF gear box
- Automatic tool length measuring device
- Automatic work piece measurement system
- Controller (FANUC / SIEMENS / HEIDENHAIN / FAGOR)
- CNC rotary table and tailstock
- Oil skimmer
- Link/Screw type chip conveyor with chip bucket
- Linear scales (X/Y/Z axis)
- Coolant through tool holder
- 20T armless type ATC (QMC-850/1050)

QMC-600 Optional Accessories:

- Spindle speed 15,000 rpm (Direct drive)
- Coolant through spindle (CTS)
- Work piece measurement system
- Auto tool length measuring device
- CNC rotary table and tail stock
- Oil skimmer
- Spindle coolant ring
- Coolant through tool holder
- Link type chip conveyor with chip bucket
- Table working area 900x410mm

KOLOSSO series Machine specifications:

| Model | Unit | BMC-2217 | BMC-2220 | BMC-3217 | BMC-3220 | BMC-4217 | BMC-4220 | |
|---------------|---|--------------------|---|---|--|--|--|--|
| 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.)) | 4,200 x 2,050 x 850(1050 opt.) (165.4 x 80.7 x 33.5(41.3 opt.)) | 4,200 x 2,350 x 850(1050 opt.) (165.4 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)) | 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) | 550(21.7) | 550(21.7) |
| | Distance between columns | mm(inch) | 1,700(66.9) | 2,000(78.7) | 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) | 4,200 x 1,500(165.4 x 59.1) | 4,200 x 1,800(165.4 x 70.9) |
| | Max. loading | kg | 8,000 | 8,000 | 10,000 | 10,000 | 12,000 | 12,000 |
| | T-Slots (No. x Width x Pitch) | mm(inch) | 10 x 22 x 150(10 x 0.8 x 6.0) | 12 x 22 x 150(12 x 0.8 x 6.0) | 10 x 22 x 150(10 x 0.8 x 6.0) | 12 x 22 x 150(12 x 0.8 x 6.0) | 10 x 22 x 150(10 x 0.8 x 6.0) | 12 x 22 x 150(12 x 0.8 x 6.0) |
| SPINDLE | 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.) | 18.5(26 opt.) | 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 | 7 / 7 / 7 | 7 / 7 / 7 |
| | Taper size | - | BT-50 | BT-50 | 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 | 20 / 20 / 15 | 20 / 20 / 15 |
| | Cutting feedrate | m/min | 10 | 10 | 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.) | 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) | 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 0.02(0.0008) | P 0.02(0.0008) | P 0.025(0.001) | P 0.025(0.001) | P 0.03(0.0012) | P 0.03(0.0012) |
| | 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) | Ps 0.025(0.0010) | Ps 0.025(0.0010) |
| DIMENSION | Air source required | kg/cm ² | 6 | 6 | 6 | 6 | 6 | 6 |
| | Machine weight (Net) | kg | 24,000 | 25,500 | 27,500 | 29,000 | 31,000 | 32,500 |
| | Power source required | KVA | 50 | 50 | 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) | 10,800 x 4,435 x 4,535 (425.2 x 174.6 x 178.5) | 10,800 x 4,735 x 4,535 (425.2 x 186.4 x 178.5) |

STANDARD ACCESSORIES

- Fanuc Oi-MF controller
- BT-50 / Spindle speed 6,000 rpm (Gear)
- 32 tools chain-type tool change
- Twin screw and one link chip conveyor with chip bucket
- Full splash guard (Without top roof)
- Heat exchanger for electric cabinet
- Foot switch for tool clamping / unclamping
- Twin hydraulic counter weight cylinders
- Cycling lubricating oil collector for 3 axes
- Automatic lubricating system
- Spindle oil cooler
- Spindle air blast system (M code)
- Spindle air curtain
- X,Y axes linear way (Roller Type) :
- Z axis: box way
- Coolant gun and air socket
- Foundation bolt kit
- Remote manual & pulse generator (M.P.G.)

- LED light
- Rigid tapping
- Coolant system and tank
- Cycle finish indicator and alarm lights
- RS-232 interface with cable (10m) (M/F)
- Tool Box
- Oil skimmer
- Operational and maintenance manual
- Transformer (M/F)

⊗(M/F)=(Mitsubishi/Fanuc Controller)

OPTIONAL ACCESSORIES:

- Z axis travel up to 1,050 mm
- ATC (24 / 40 / 60 tools)
- Spindle speed 10,000 rpm (Direct drive)
- 30 HP spindle motor upgrade
- Ball screw cooling system (X/Y/Z axis)
- Manual 90 degree head
- Manual universal head
- Controller (MITSUBISHI / SIEMENS / HEIDENHAIN / FAGOR)
- Automatic tool length measuring device
- Automatic work piece measurement system
- Coolant through spindle (CTS)
- Linear scales (X/Y/Z axis)
- CNC rotary table and tailstock
- Full splash guard (With top roof)

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) | 3,200x2,700x920(1,100opt.) (126.0x106.3x36.2(43.3opt.)) | 4,200x2,700x920(1,100opt.) (165.4x106.3x36.2(43.3opt.)) | 5,200x2,700x920(1,100opt.) (204.7x106.3x36.2(43.3opt.)) | 6,200x2,700x920(1,100opt.) (244.1x106.3x36.2(43.3opt.)) | 3,200x3,000x920(1,100opt.) (126.0x118.2x36.2(43.3opt.)) | 4,200x3,000x920(1,100opt.) (165.4x118.2x36.2(43.3opt.)) | 5,200x3,000x920(1,100opt.) (204.7x118.2x36.2(43.3opt.)) |
| | Spindle nose to table | mm(inch) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 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 | BT-50 |
| | Spindle speed | rpm | 50-6,000 | 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 | 26 |
| | Axis motor max. rating | kw | 7/7/7 | 9/7/7 | 9/7/7 | 9/7/7 | 7/7/7 | 9/7/7 | 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 | 12 / 12 / 12 |
| | Max. cutting feedrate | m/min | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| TOOL MAGAZINE | Tool storage capacity | pcs | 32(40 / 60 opt.) | 32(40 / 60 opt.) | 32(40 / 60 opt.) | 32(40 / 60 opt.) | 32(40 / 60 opt.) | 32(40 / 60 opt.) | 32(40 / 60 opt.) |
| | Type of tool | type | BT-50 | 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) | 127(5.0) |
| | Max. tool weight | kg | 15 | 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) | 300(11.8) |
| Tool to tool (change time) | sec. | 8 | 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 | 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 | 6 up | 6 up | 6 up | 6 up | 6 up | 6 up |
| | Shipment advice | - | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise |

STANDARD ACCESSORIES

- Fanuc 0i-MF controller
- Spindle 6,000 rpm(gear) / BT-50
- Automatic lubricating system
- Cycling lubricating oil collector for 3 axes
- Twin screw and one link chip conveyor with chip bucket
- Foot switch for tool clamping / unclamping
- Heat exchanger for electric cabinet
- 32 tools chain-type tool change

- Spindle oil cooler
- Full splash guard (no roof)
- Spindle air blast system (M code)
- X & Y linear guideway (roller type)
- Z axis box way
- Ball screw cooling system (X-axis)
- Foundation bolt kits
- LED light

- RS-232 interface (10 meters) / RJ45 (M/F)
- Oil skimmer
- Operational and maintenance manual
- Ladder for maintenance (5M, 6M only)
- Twin hydraulic counter weight cylinders
- Transformer (M/F)

※(M/F)=(Mitsubishi/Fanuc controller)

| 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)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 200~1,120(200~1,300) (7.9~44.1(7.9~51.2)) | 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 |
| 12x22x200(12x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) |
| BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | 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.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) | 32(40/60 opt.) |
| BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | 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 |
| 14,470x5,540x4,600 (569.7x218.2x181.2) | 8,470x5,840x4,600 (333.5x230.0x181.2) | 10,470x5,840x4,600 (412.2x230.0x181.2) | 12,470x5,840x4,600 (490.9x230.0x181.2) | 14,470x5,840x4,600 (569.7x230.0x181.2) | 8,470x6,140x4,600 (333.5x241.8x181.2) | 10,470x6,140x4,600 (412.2x241.8x181.2) | 12,470x6,140x4,600 (490.9x241.8x181.2) | 14,470x6,140x4,600 (569.7x241.8x181.2) |
| 6 up | 6 up | 6 up | 6 up | 6 up | 6 up | 6 up | 6 up | 6 up |
| Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise |

OPTIONAL ACCESSORIES:

- Contoller (Heidenhain, Seimens, Mitsubishi, Fagor)
- Direct Drive Spindle 8,000 / 10,000 rpm (for Linear Guide Way Only)(Linear way)
- 30/35HP spindle motor upgrade
- Z axis travel up to 1100mm
- Heighten column by 200 mm
- ATC (40, 60 tools)
- X-axis Linear guide roller type (Schneeberger)
- Y-axis linear guide roller type (Schneeberger)
- Z-axis Linear guide way
- Ball screw cooling system (Y / Z axis)
- Ladder for maintenance (OPT. for 3M, 4M)
- Manual 90 degree head
- Manual universal head
- Manual extended head with clamping / unclamping tool
- Coolant through spindle(CTS)
- Linear scales (X/Y/Z axis)
- CNC rotary table & tail stock
- Auto Workpiece Measurement Device
- Auto tool length measurement Device

SPARQ-5F series Machine specifications:

| Model | | Unit | BMC-5F-3224 | BMC-5F-4224 | BMC-5F-5224 | BMC-5F-6224 | BMC-5F-3227 | BMC-5F-4227 | BMC-5F-5227 | |
|---------------|---|--------------------|--|---|---|---|--|---|---|-----------------|
| TRAVEL | X x Y x Z axis | mm(inch) | 3,200x2,700x1,100 (126.0x106.3x43.3) | 4,200x2,700x1,100 (165.4x106.3x43.3) | 5,200x2,700x1,100 (204.7x106.3x43.3) | 6,200x2,700x1,100 (244.1x106.3x43.3) | 3,200x3,000x1,100 (126.0x118.2x43.3) | 4,200x3,000x1,100 (165.4x118.2x43.3) | 5,200x3,000x1,100 (204.7x118.2x43.3) | |
| | Spindle nose to table (Horizontal) | mm(inch) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | 160-1,202(6.3-47.3) | |
| | Spindle nose to table (Vertical) | mm(inch) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | 500-1,600(19.7-63.0) | |
| | 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) | 10x22x200(10x0.8x7.9) | 10x22x200(10x0.8x7.9) | 10x22x200(10x0.8x7.9) | 10x22x200(10x0.8x7.9) | 12x22x200(12x0.8x7.9) | 12x22x200(12x0.8x7.9) | 12x22x200(12x0.8x7.9) | |
| SPINDLE | Tool shank | - | BT-50 | 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 | 50-6,000 | |
| | Spindle motor max. rating | kw | 18.5(26 opt.) | 26 | 26 | 26 | 18.5(26 opt.) | 26 | 26 | |
| | Axis motor max. rating | kw | 7/7/7 | 9/7/7 | 9/7/7 | 9/7/7 | 7/7/7 | 9/7/7 | 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 | 12 / 12 / 12 | |
| | Max. cutting feedrate | m/min | 1-6,000 | 1-6,000 | 1-6,000 | 1-6,000 | 1-6,000 | 1-6,000 | 1-6,000 | |
| TOOL MAGAZINE | Tool storage capacity | pcs | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | 60(80 / 100 / 120 opt.) | |
| | Type of tool | type | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | |
| | Max. tool diameter | mm(inch) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | 125(4.9) / 250(9.8) | |
| | Max. tool weight | kg | 25 | 25 | 25 | 25 | 25 | 25 | 25 | |
| | Max. tool length | mm(inch) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | |
| | Tool change speed (ATC only) | sec. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | |
| | Tool chain divisional time | sec./pot | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 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 / 40,000 | 42,000 / 44,000 | 47,000 / 49,000 | 51,500 / 53,500 | 39,500 / 41,500 | 43,500 / 45,500 | 48,500 / 50,500 | |
| | Power source required (KVA.) | KVA | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| | Floor space (L x W x H) | mm(inch) | 8,470 x 6,765 x 5,510 (333.5 x 266.3 x 216.9) | 10,470 x 6,765 x 5,510 (412.2 x 266.3 x 216.9) | 12,470 x 6,765 x 5,510 (490.9 x 266.3 x 216.9) | 14,470 x 6,765 x 5,510 (569.7 x 266.3 x 216.9) | 8,470 x 7,065 x 5,510 (333.5 x 278.1 x 216.9) | 10,470 x 7,065 x 5,510 (412.2 x 278.1 x 216.9) | 12,470 x 7,065 x 5,510 (490.9 x 278.1 x 216.9) | |
| | Air source required | kg/cm ² | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | Shipment advice | - | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | |

STANDARD ACCESSORIES :

- Fanuc Oi-MF
- Spindle 6,000 rpm(gear) / BT-50
- Automatic lubricating system
- Automatic lubricating oil collector for 3 axes
- Spindle and gear transmission / temperature control
- Twin screw and one link chip conveyor with bucket
- Heat exchanger for electric cabinet
- Heat exchanger for electric cabinet
- Foot switch for tool clamping / unclamping
- V/H 60 Tools arm-type tool change
- Spindle oil cooler
- Full splash guard
- Air blow for chip (M code)
- X / Y linear guideway (roller type)
- Ball screw cooling system (X-axis)
- Coolant gun & air socket
- Foundation bolt kit
- Removable manual & pulse generator (MPG)
- Work light
- Rigid tapping
- Coolant system and tank
- Operation cycle finish and alarm lights
- RS-232 interface / RJ 45
- Tool box
- Oil skimmer
- Maintenance and operational manual
- Twin hydraulic counter weight cylinders
- Ladder for Maintenance

| BMC-5F-6227 | BMC-5F-3230 | BMC-5F-4230 | BMC-5F-5230 | BMC-5F-6230 | BMC-5F-3233 | BMC-5F-4233 | BMC-5F-5233 | BMC-5F-6233 |
|---|--|---|---|---|--|---|---|---|
| 6,200x3,000x1,100 (244.1x118.2x43.3) | 3,200x3,300x1,100 (126.0x130.0x43.3) | 4,200x3,300x1,100 (165.4x130.0x43.3) | 5,200x3,300x1,100 (204.7x130.0x43.3) | 6,200x3,300x1,100 (244.1x130.0x43.3) | 3,200x3,600x1,100 (126.0x141.8x43.3) | 4,200x3,600x1,100 (165.4x141.8x43.3) | 5,200x3,600x1,100 (204.7x141.8x43.3) | 6,200x3,600x1,100 (244.1x141.8x43.3) |
| 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) | 160~1,202(6.3~47.3) |
| 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) | 500~1,600(19.7~63.0) |
| 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 |
| 12x22x200(12x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) | 14x22x200(14x0.8x7.9) |
| BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | 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 |
| 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 | 1~6,000 |
| 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) | 60(80/100/120 opt.) |
| BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 | BT-50 |
| 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) | 125(4.9)/250(9.8) |
| 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) | 400(15.7) |
| 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| P0.05(0.0020) | P0.025(0.0010) | P0.03(0.0012) | P0.04(0.0015) | P0.05(0.0020) | P0.025(0.0010) | P0.03(0.0012) | P0.04(0.0015) | P0.05(0.0020) |
| Ps0.035(0.0014) | Ps0.02(0.0008) | Ps0.025(0.0010) | Ps0.03(0.0012) | Ps0.035(0.0014) | Ps0.02(0.0008) | Ps0.025(0.0010) | Ps0.03(0.0012) | Ps0.035(0.0014) |
| 53,500/55,500 | 41,000/43,000 | 45,000/47,000 | 50,000/52,000 | 55,000/57,000 | 41,000/43,000 | 45,000/47,000 | 50,000/52,000 | 55,000/57,000 |
| 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 14,470x7,065x5,510 (569.7x278.1x216.9) | 8,470x7,365x5,510 (333.5x289.9x216.9) | 10,470x7,365x5,510 (412.2x289.9x216.9) | 12,470x7,365x5,510 (490.9x289.9x216.9) | 14,470x7,365x5,510 (569.7x289.9x216.9) | 8,470x7,665x5,510 (333.5x301.7x216.9) | 10,470x7,665x5,510 (412.2x301.7x216.9) | 12,470x7,665x5,510 (490.9x301.7x216.9) | 14,470x7,665x5,510 (569.7x301.7x216.9) |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise | Will advise |

OPTIONAL ACCESSORIES :

- Controller(HEINDENHAIN,SEIMENS,MITSUBISHI,FAGOR)
- V/H 80 / 100 / 120 tools chain-type tool change
- 30 / 35HP spindle motor upgrade (FANUC; 32XX series only)
- Ball screw cooling system (Y / Z axis)
- Ladder for Maintenance
- X / Y-axis linear guide roller type (Schneeberger)
- Auto tool length measurement
- Auto workpiece measurement system
- Coolant through spindle
- Linear scales (HEINDENHAIN / FAGOR)
- CNC rotary table & tail stock
- The stock case for horizontal head can be customized made.

Controller

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



* MITSUBISHI:

M830S/M80-Economical solution that completes all part machining needs. The same operational method as M830S.

M830S-Great for part / mold / dye.

M830S-Advance new model which is ultra powerful in processing speed,operate with system.

*

* FANUC:

0i-MF-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.

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