



SUMITOMO TOOLS

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Storm VMC Series

Vertical Machining Centres



Engineered for efficiency

Storm Vertical Machining Centres

Combining a high-speed spindle with precise linear guideways ensures that the STORM series gives outstanding efficiency, accuracy and value throughout its lifetime.

Outstanding versatility and rigidity are offered as standard with superior component finish, performed smoothly and easily.

Introducing a **new generation of CNC machining** quality with extra value, efficiency and accuracy.



Combining a high-speed spindle with precise linear guideways ensures that the STORM series gives outstanding efficiency, accuracy and value throughout its lifetime.

Outstanding versatility and rigidity are offered as standard with superior component finish, performed smoothly and easily.

A completely new, well-balanced, high-speed, high production machine, ideally suited for the moulding and metal cutting industries.

The STORM VMC range is manufactured with a highly-rigid cast iron trapezoidal base and column structure, adopting premium quality structural components throughout - ensuring the highest possible cutting strength and surface finish.

The STORM VMC range is built with power and precision for fast cycle times, with professionally mounted high-quality linear guideways, to guarantee superior feed accuracy and long service life.

STORM VMC have optional high speed (12,000 rpm / 15,000 rpm) ratings with high resolution accuracy. Low noise, minimum vibration and low thermal displacement are also outstanding features of the STORM range.

Models shown:
Storm 600
Storm 1050

Storm VMC's Vertical Machining Centres

All Storm Vertical Machining Centres have a larger Z-axis linear block design and a maximum span length compared to other competitive machining centres, which vastly enhances Z-axis machining stability.



| | Storm 500 |
|-----------------------|-----------|
| Table Size (mm) | 660 x 400 |
| Max Table Load (kgs) | 250 |
| Tool Storage Capacity | 16 turret |
| Spindle Power (kW) | 5.5 |
| Spindle Speed (rpm) | 20,000 |

| Storm 600 | Storm 850 | Storm 1050 | Storm 1260 | Storm 1480 | Storm 1680 |
|-----------|-----------|-------------|-------------|--------------------------|--------------------------|
| 710 x 410 | 950 x 500 | 1,150 x 500 | 1,500 x 700 | 1,550 x 700 | 1,750 x 700 |
| 300 | 500 | 700 | 880 | 1,000 | 1,200 |
| 20 arm | 24 arm | 24 arm | 24 arm | 24 arm | 24 arm |
| 7.5 | 7.5 | 11 | 11 | BT40: 15 (BT50: 18.5) | BT40: 15 (BT50: 18.5) |
| 12,000 | 10,000 | 10,000 | 10,000 | Std: 10,000 (8,000) | Std: 10,000 (8,000) |

Side Mounted ATC

Arm type ATC with 20 or 24 tool capacity provides reliable and fast tool changing times, maintaining shop-floor efficiency at all times.

Highly rigid roller type linear guideways

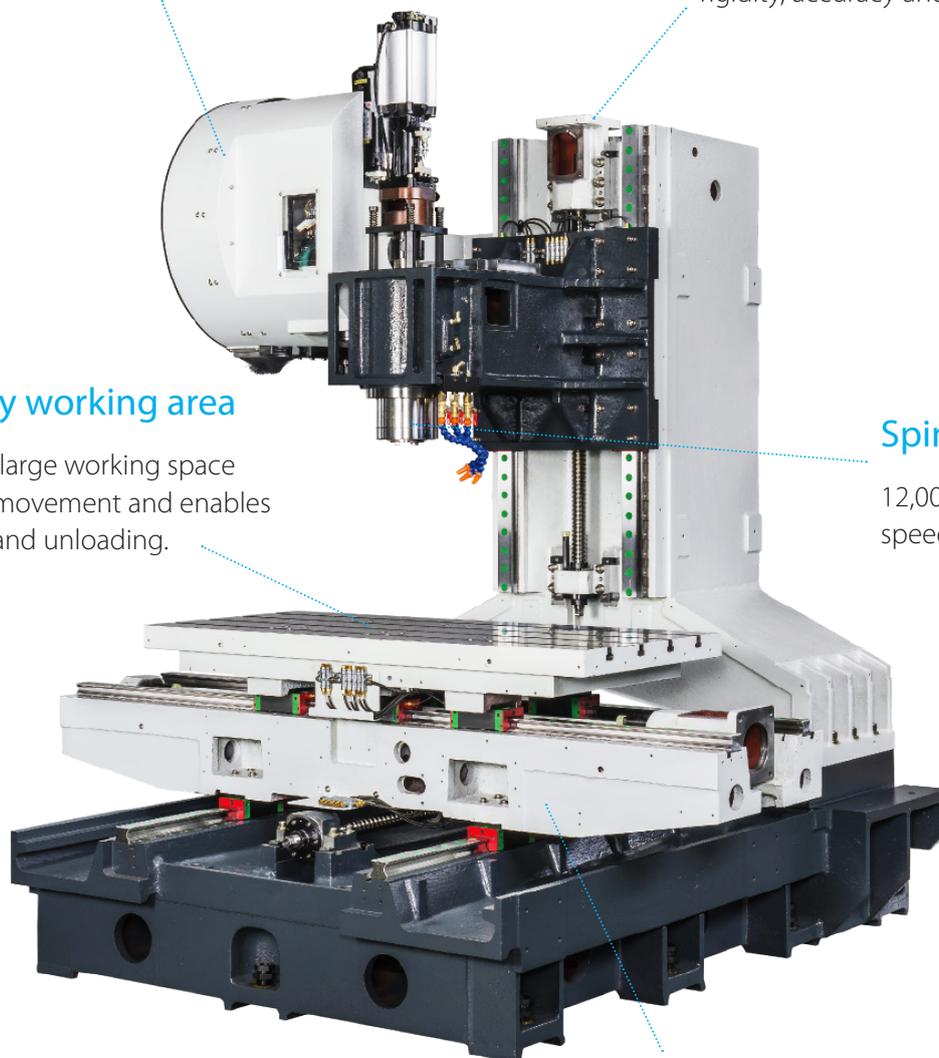
All axes are fitted with large diameter roller type linear guideways, ensuring rigidity, accuracy and high speed cutting.

Large capacity working area

The STORM VMC's large working space ensures plenty of movement and enables easy part loading and unloading.

Spindle

12,000 or 15,000 rpm high speed spindles available.



Highly rigid base construction

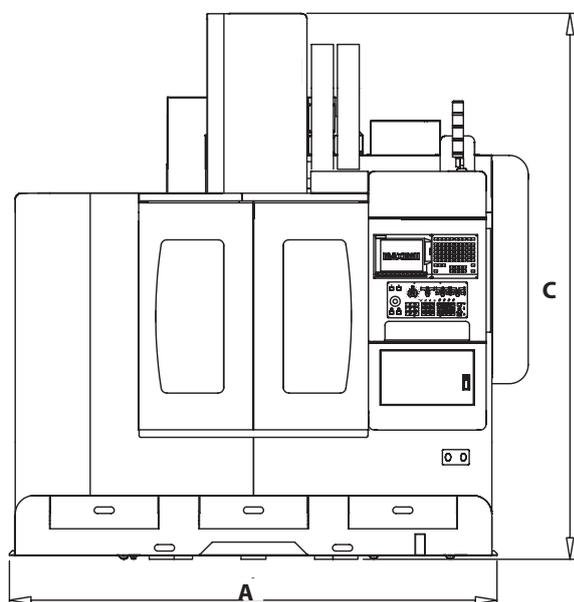
The Meehanite cast machine base gives high stability and accuracy, preventing vibration, which ensures maximum accuracy every time.

STORM VMC Floorplans & Dimensions Enhanced Performance

STORM VMC Specifications

| | | Storm 500 | Storm 600 | Storm 850 | Storm 1050 | Storm 1260 |
|---|-------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Controller | | Fanuc Oi-MF |
| Travel | | | | | | |
| X x Y x Z axis | mm | 510 x 400 x 320 | 610 x 410 x 530 | 850 x 550 x 560 | 1050 x 550 x 560 | 1200 x 650 x 630 |
| Spindle nose to table | mm | 150-470 | 100-630 | 120-680 | 120-680 | 100-730 |
| Spindle centre to solid column surface | mm | 474 | 495 | 600 | 600 | 700 |
| Table | | | | | | |
| Working Area | mm | 660 x 400 | 710 x 410 | 950 x 500 | 1150 x 500 | 1350 x 600 |
| Max. loading | kg | 250 | 300 | 500 | 700 | 880 |
| T-Slots (No. x Width x Pitch) | mm | 3 x 14 x 125 | 3 x 18 x 125 | 4 x 18 x 125 | 4 x 18 x 125 | 4 x 18 x 130 |
| Spindle | | | | | | |
| Speed | rpm | 20000 | 12000 | 10000 | 10000 | 10000 |
| Transmission | - | Direct Drive | Direct Drive | Belt Drive | Belt Drive | Belt Drive |
| Bearing lubrication | - | Grease | Grease | Grease | Grease | Grease |
| Cooling system | - | Oil cooled |
| Spindle motor max. rating | kW | 5.5 | 7.5 | 7.5 | 11 | 11 |
| Axis motor max. rating | kW | 1.8 / 1.8 / 2.5 | 1.8 / 1.8 / 2.5 | 2.5 / 2.5 / 2.5 | 2.5 / 2.5 / 2.5 | 2.0 / 3.5 / 3.5 |
| Feed Rates | | | | | | |
| Rapids (X / Y / Z) | m/min | 48 / 48 / 48 | 48 / 48 / 48 | 36 / 36 / 25 | 36 / 36 / 25 | 40 / 40 / 30 |
| Max. cutting feedrates | m/min | 10 | 10 | 10 | 10 | 15 |
| Tool Magazine | | | | | | |
| Tool storage capacity | pcs | 16 Turret | 20 arm | 24 arm | 24 arm | 24 arm |
| Type of tool (optional) | type | BT30 Turret Type | BT40 | BT40 | BT40 | BT40 |
| Max. tool diameter (adjacent pockets empty) | mm | 60 | 76 (150) | 76 (150) | 76 (150) | 76 (150) |
| Max. tool weight | kg | 3 | 5 | 7 | 7 | 7 |
| Max. tool length | mm | 200 arm | 250 arm | 300 arm | 300 arm | 300 arm |
| Average Changing Time (ARM) | | | | | | |
| Tool to tool | sec. | | 2.5 | 2.7 | 2.7 | 2.7 |
| Chip to chip (50% Z axis) | sec. | | 3.6 | 6.7 | 6.7 | 6.7 |
| Air source required | bar | | 6 | 6 | 6 | 6 |
| Accuracy | | | | | | |
| Positioning accuracy (VDI 3341) | mm | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Repeatability accuracy (VDI 341) | mm | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| Other | | | | | | |
| Power requirements | KVA | 15 | 15 | 15 | 15 | 20 |
| Machine size (L x W x H) | mm | 1700 x 2400 x 2400 | 1900 x 2240 x 2600 | 2700 x 3000 x 2870 | 2850 x 3000 x 2870 | 3640 x 3160 x 2800 |
| Machine weight | kg | 3000 | 4000 | 5900 | 6300 | 7700 |

STORM VMC Floorplans & Dimensions

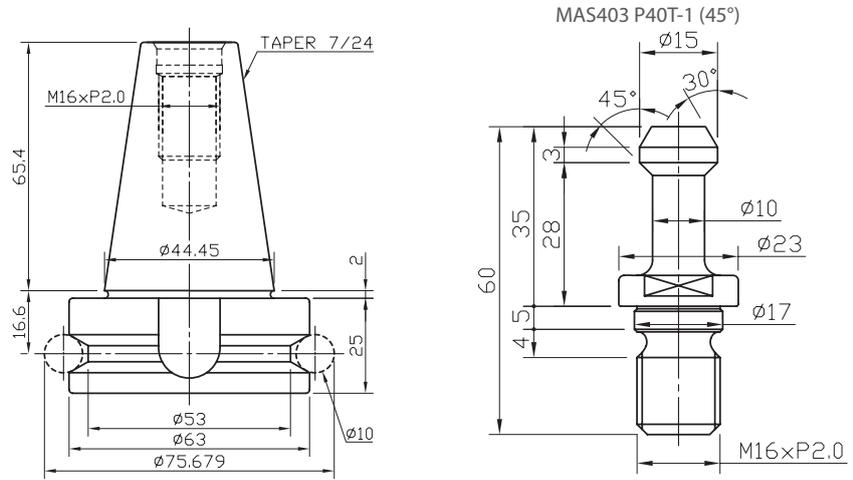


6 | Storm VMC Series | Vertical Machining Centres

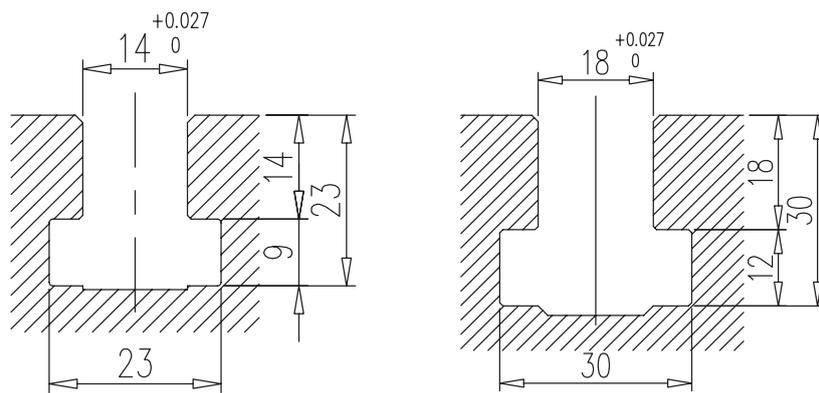
| Model | A | B | C |
|------------|--------|--------|--------|
| Storm 600 | 1900mm | 2260mm | 2600mm |
| Storm 850 | 2700mm | 3000mm | 2870mm |
| Storm 1050 | 2850mm | 3000mm | 2870mm |
| Storm 500 | 1700mm | 2400mm | 2400mm |
| Storm 1260 | 3640mm | 3100mm | 2850mm |
| Storm 1480 | 3930mm | 3200mm | 3050mm |
| Storm 1680 | 4330mm | 3200mm | 3050mm |

Toolholder & Pull Stud Specification (BT40)

| Storm 1480 | Storm 1680 |
|--------------------|--------------------|
| Fanuc Oi-MF | Fanuc Oi-MF |
| 1400 x 800 x 750 | 1600 x 800 x 750 |
| 75-825 | 75-825 |
| 863 | 863 |
| 1550 x 700 | 1750 x 700 |
| 1000 | 1200 |
| 5 x 18 x 125 | 5 x 18 x 125 |
| 10000 | 10000 |
| Belt Drive | Belt Drive |
| Grease | Grease |
| Oil cooled | Oil cooled |
| 15 | 15 |
| 3.5 / 3.5 / 3.5 | 3.5 / 3.5 / 3.5 |
| 30 / 30 / 25 | 30 / 30 / 25 |
| 10 | 10 |
| 24 arm | 24 arm |
| BT40 | BT40 |
| 76 (150) | 76 (150) |
| 7 | 7 |
| 300 arm | 300 arm |
| 2.7 | 2.7 |
| 6.7 | 6.7 |
| 6 | 6 |
| 0.01 | 0.01 |
| 0.006 | 0.006 |
| 30 | 30 |
| 3930 x 3200 x 3050 | 4330 x 3200 x 3050 |
| 11600 | 12100 |

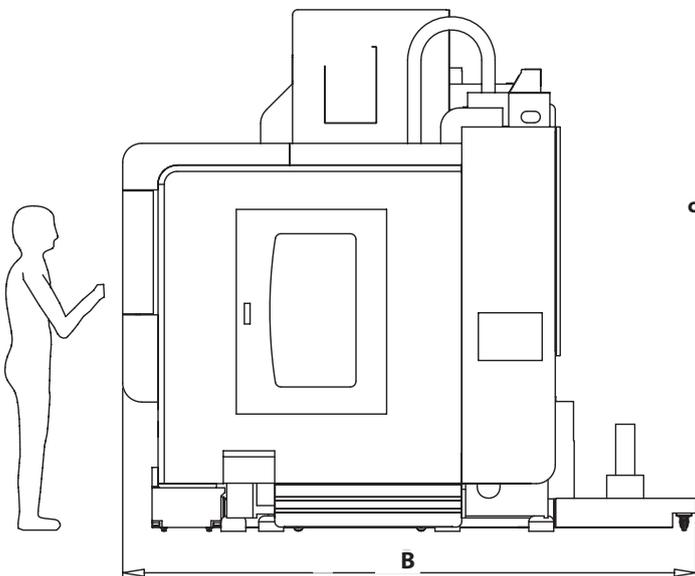


Size of T-Slots



Static accuracy inspection:

(Test depends on our standard operation and conditions)



| | Surface | Standard Value (μm / 300m) | Testing Value (μm / 300m) |
|---------------------------------------|-------------|---|--|
| Right angle | X-Y/Y-Z/Z-X | 0.015/0.015/0.015 | 0.007 / 0.010 / 0.011 |
| Roundness cutting accuracy | Surface | Standard value (μm) | Testing value (μm) |
| | X-Y | 0.015 | 0.01 |

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