

CanCam Z540

Vertical machining center, VMC Machine, VMC Canada



Starting from \$50,000 CAD. The CanCam Z540, is a robust and versatile Vertical machining center that's transforming the manufacturing landscape. Uncover its features, performance, and applications, and find out why it's the top choice for CNC enthusiasts and professionals alike. Unleash your creativity and productivity with the VMC machine in Canada. The VMC machine is a state-of-the-art Vertical Machining Center (VMC) designed for precision machining and optimal productivity. With its advanced features and cutting-edge technology, the CanCam Z540 is a powerful addition to any machine shop, catering to a wide range of manufacturing requirements.

Description

Uncover the cutting-edge features of the CanCam Z540 CNC machine, designed to elevate your precision machining to new heights. From its robust build to high-speed capabilities, we delve into how these features enhance productivity and quality. Some of the VMC machines advanced technology we would like to bring attention to is the PMI precision ballscrew and linearguideway coupled with an NSK bearing and rigid build ensure flawless results for even the most intricate machining tasks.

The controller of choice is an industry leader Fanuc 0i MF Plus, the ATC mechanism is a Sanjet servo driven radial magazine with 21 tool locations.

Streamline your production processes and optimize efficiency with the CanCam Z540 CNC machine. Unlock faster turnaround times, reduce costs, and boost output with this advanced machining solution. Explore the path to enhanced productivity now.

Equipped with a BT30 inline CELLS 5.5kw spindle, providing a seamless coolant supply to enhance cutting performance and extend tool life. The machine's capability enables efficient chip evacuation and minimizes heat build-up during machining, ensuring optimal tool performance and surface finish. Should you require the CNC as a single phase cnc milling machine it would be equipped with a CELLS 3.7Kw spindle.

The CanCam Z540 delivers exceptional performance and versatility in machining operations. The machine's robust construction ensures stability and precision, allowing for high-speed machining while maintaining superior accuracy. Whether it's milling, drilling, or contouring, the CanCam Z540 is engineered to handle a diverse range of machining tasks with ease.

The CanCam Z540 VMC comes ready with a high precision tool setter system and a infrared touch probe.

Furthermore, the CanCam Z540 features an intuitive and user-friendly pendant control interface, streamlining operation and facilitating ease of use. With tool changes at 1.8s and a servo driven radial magazine ATC holder boasts a 21 tool bank capacity to ensure speed and productivity.

With its high-quality components and precise engineering, the CanCam Z540 VMC promises reliable and consistent results, making it an ideal choice for various industries and machining applications. Whether you're a seasoned CNC professional or just starting in the world of machining, the CanCam Z540 offers a seamless and efficient machining experience.

the VMC is ideally configured for high-speed rigid tapping applications, capable of achieving spindle speeds of up to 5000 RPM. This characteristic can be attributed to its well-engineered spindle design and is recognized for contributing significantly to the efficient execution of high-precision machining operations.

This CNC machine is also available as a single phase cnc milling machine, the CanCam Z540 is built to meet the demands of modern manufacturing, providing a perfect blend of performance, efficiency, and reliability. Invest in the CanCam Z540 VMC to elevate your machining capabilities and achieve outstanding results for your projects.

Product Feature



Single phase or 3 phase power

This can be outfitted as a Single phase VMC or a 3 Phase VMC



Durable Casting And Components

The cutting-edge design of casting employs meticulous annealing processes in harmony with conventional aging techniques for each casting. This intricate blend of methodologies fosters exceptional vibration damping, while simultaneously ensuring long-term stability, thereby promising the consistent delivery of quality outcomes. Such an approach reflects the growing adoption of advanced manufacturing procedures, which prioritize the mitigation of adverse vibrations and promote the longevity of machine components. It's this rigorous adherence to precision and quality that sets our casting process apart, transforming the landscape of the industry with innovation and strategic application of proven methodologies.



Cast Iron Bed

Our meticulously machined cast iron bed features an integrated design with three T-slot tracks, providing a robust platform for versatile workholding solutions. This sophisticated equipment is designed with precision in mind, offering an unparalleled basis for operations that necessitate reliable and accurate workholding. The inclusion of the T-slot tracks provides users with the flexibility to secure workpieces of various shapes and sizes effectively, enhancing the overall productivity and efficiency of their operations. Moreover, the combination of cast iron's inherent strength with precision grounding ensures the bed's longevity, making it an invaluable asset to your production line.



Tool Changer

The state of the art, 21-tool Servo Driven Radial Magazine guarantees a smooth and rapid tool change process. This sophisticated piece of machinery demonstrates a remarkable tool change time of just 1.8 seconds per transition, a testament to its efficient design and engineering prowess.

The radial magazine is driven by a high-precision, low-backlash reducer coupled with a rear-mount servo motor drive. This combination ensures a balanced distribution of gravity and facilitates convenient motor replacement.

Furthermore, the Servo Driven Radial Magazine benefits from its unique tool pot design which mitigates pot tilting stroke and enhances the product's lifespan.



Tool Setter

Our 3D Touch Trigger Tool Setter is designed to expedite the measuring process and enhance the performance of your machining centers. It focuses on delivering rapid measurements of tool length and diameter, thereby streamlining your operations and significantly cutting down setup times. You can expect an impressive repeatability of $1.00\text{ }\mu\text{m } 2\sigma$, ensuring precise measurements every time.



Touch Probe

The probe is designed to improve machine tool manufacturing efficiency, reduce machine downtime awaiting first-off inspection results, and mitigate the impact of fixture and incoming material errors.

This touch probe uses the kinematic resistive principle, a proven technology for stable, long-term operation. It provides highly precise measurements.



Wash down nozzles

The machine reservoir is designed with six strategically placed nozzles to facilitate the effective expulsion of metal shavings into the designated chip disposal compartments. This configuration allows for the efficient management of metal waste, thereby ensuring a smooth operational process that minimizes downtime.



Coolant nozzles

The numerous coolant nozzles in our design offer notable enhancements to machining efficiency, including superior surface finish, optimized chip evacuation, and improved cooling of the tool.



Electrical Cabinet

The electronic components of the machine, which are conveniently accessible, are sourced exclusively from industry-leading manufacturers. These include but are not limited to Lovato, Schneider, Fanuc, and Delta, thereby ensuring high performance and reliability.



Leveling Feet

Our robust and industrially engineered leveling feet provide a precise means of adjusting machine alignment, ensuring optimal operational performance and stability.

Leveling feet play a crucial role in stabilizing machinery, especially on uneven surfaces. Misalignment can lead to sliding, excessive wear, and even serious safety issues for operator

Physical Features

Specification	MM	INCH
Machining Bed Width/Length	600mm x 400mm	24in x 16in
X Axis Travel	500 mm	19.685 In
Y Axis Travel	400mm	15.748 In
Max. Table load	250kg	250kg
Spindle nose to table	155 - 455mm	6.102 - 17.913 In
Spindle center to column	465mm	18.307 In
X/ Y/ Z axis Rapid Traverse	48 m/min	1890 in/min
Table Top	T - Slot Cast Iron	T - Slot Cast Iron
Tool Capacity	21	21
Centralized Lubrication	Included	Included
Leveling Feet	Included	Included
Touch Probe	Infrared Touch Probe	Infrared Touch Probe
Auto Tool Touch off-Fixed Position	Included	Included
Machine Footprint	1800×2230×2300mm	70.866×87.795×90.551in
Net Weight	5730 lbs/2600 kg	5730 lbs/2600 kg
Gross Weight	6170 lbs/2800 kg	6170 lbs/2800 kg

Power

Specification	MM	INCH
Sinlge Phase Voltage	14.2Kw 220V Single phase (3.7Kw Spindle)	14.2Kw 220V Single phase (3.7Kw Spindle)
3 Phase Voltage	16Kw 208v 3 phase / 16Kw 380v 3 phase	16Kw 208v 3 phase / 16Kw 380v 3 phase

Controller

Specification	MM	INCH
Interface	Fanuc 0i MF Plus (3 phase) / GSK GSK218MC-V (Single phase)	Fanuc 0i MF Plus (3 phase) / GSK GSK218MC-V (Single phase)
Type	Industrial	Industrial
Screen Size	381 mm LED	15 inch LED
Operating System	Dedicated	Dedicated
Inputs	USB / CF Card	USB / CF Card
MPG Handwheel	Included	Included
Ethernet	Included	Included
Controller Upgrade Option	N/A	N/A

Standard Spindle

Specification	MM	INCH
Model	CELLS	CELLS
Power	5.5 Kw / 7.4 HP (3 phase) / 3.7Kw / 4.96 HP (Single phase)	5.5 Kw / 7.4 HP (3 phase) / 3.7Kw / 4.96 HP (Single phase)
Max Speed	12000 RPM (3 phase) / 10000 RPM (Single phase)	12000 RPM (3 phase) / 10000 RPM (Single phase)
Tool Holder	BT30	BT30
Cooling System	Oil Cooled	Oil Cooled
Tool Change Type	Automatic	Automatic
Tool Holder Positions	21	21

Drive System

Specification	MM	INCH
Motor	Fanuc Absolute Servos (3 phase) / GSK Absolute Servos (Single phase)	Fanuc Absolute Servos (3 phase) / GSK Absolute Servos (Single phase)
Transmission	X Y Z axis - PMI ballscrews and linear guides	X Y Z axis - PMI ballscrews and linear guides

Speed

Specification	MM	INCH
Rapid Speed XY	1890 IPM	1890 IPM
Rapid Speed Z	1890 IPM (1260 IPM for single phase)	1890 IPM (1260 IPM for single phase)
Max Cutting Speed	550 IPM	550 IPM

Tool Calibrator

Specification	MM	INCH
Fixed Position	Included	Included
Touch Probe	Included	Included

Accuracy

Specification	MM	INCH
Positioning	0.006 mm	0.00023 in
Repositioning	0.002 mm	0.00078 in