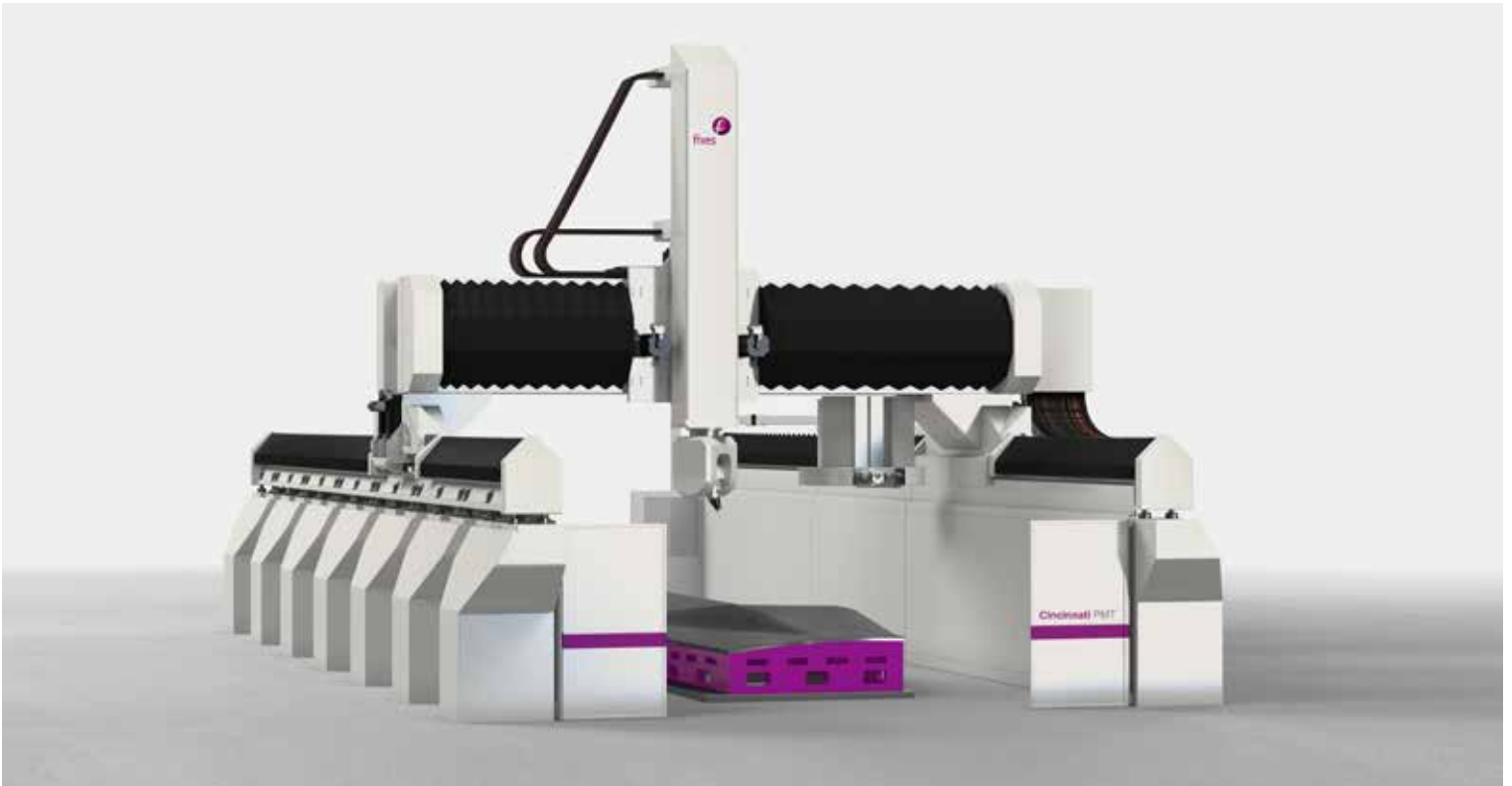


Cincinnati PMT Gantry Mill

Large Part Manufacturing Solution



The Cincinnati PMT high-speed vertical gantry mill goes to any length for high-accuracy, large-part manufacturing

The Cincinnati PMT (Precision Mill & Trim) offers precision performance and speed in a robust, 5-axis machine tool design.

- Process extremely large and complex parts
- Balance performance with affordability
- Produce precise parts in minimal time
- Dynamic stiffness provides cutter path accuracy at high feed rates
- Modular design offers a variety of ranges, spindles, and options

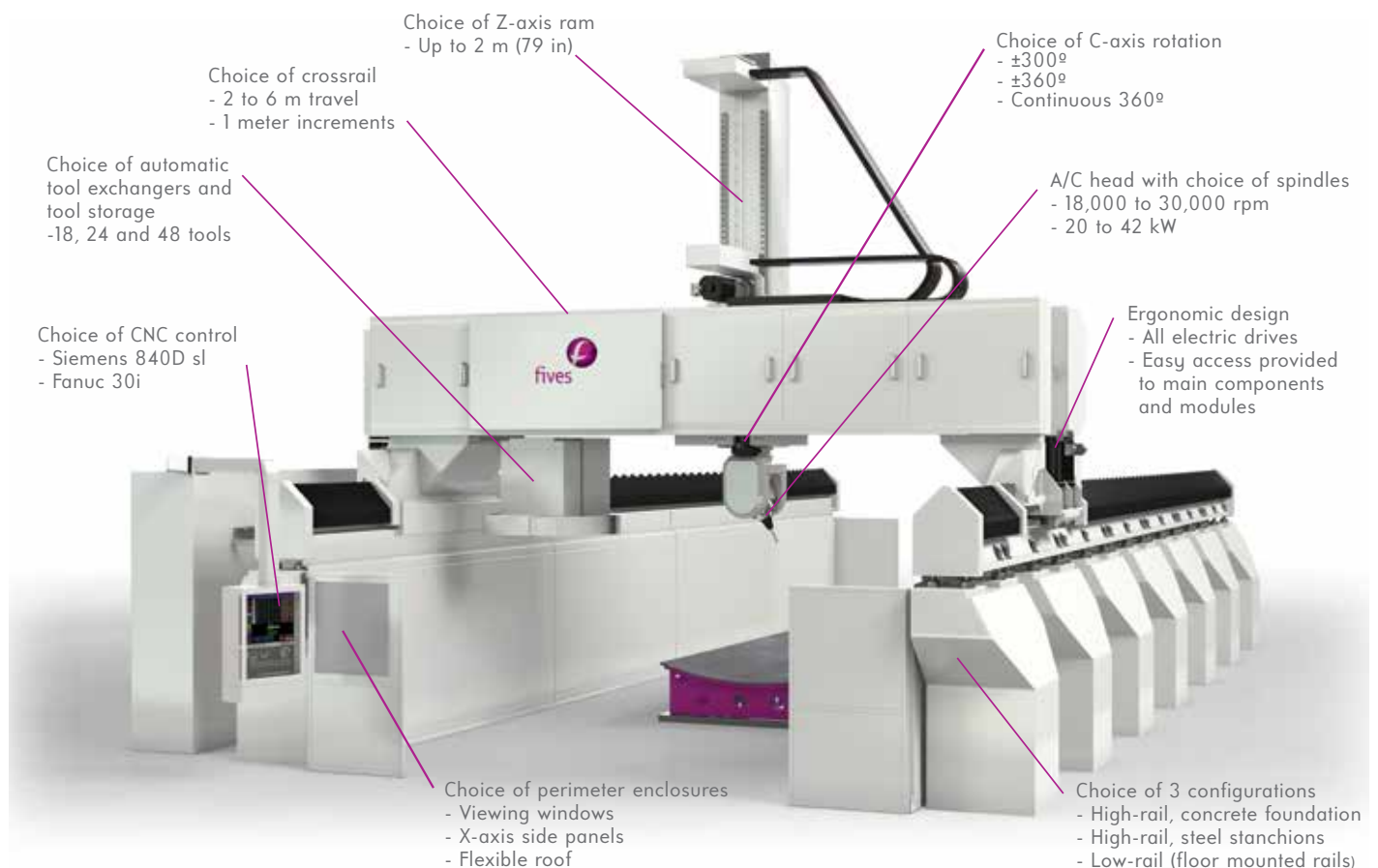
Cincinnati PMT (Precision Mill and Trim)

The Cincinnati PMT offers versatility, speed, accuracy and performance to manufacturers producing large parts from fiberglass, graphite composites, aluminum, and non-ferrous alloys. Whether applied to machine components for aircraft, wind power, mold, pattern, watercraft, or light rail industries, the PMT provides high performance in an affordable modular package. Built upon a rugged rail-type vertical spindle gantry platform, the PMT offers up to 60 m/min traverse speed to perform precision 5-axis and 5-sided maneuvering for milling, trimming, drilling and cutout operations.

The PMT is a highly configurable manufacturing solution that can be customized to support a variety of special heads, such as waterjet, specialty coating and other finishing tools. The PMT is perfect for manufacturers wanting to increase productivity, improve quality and reduce manual labor costs.

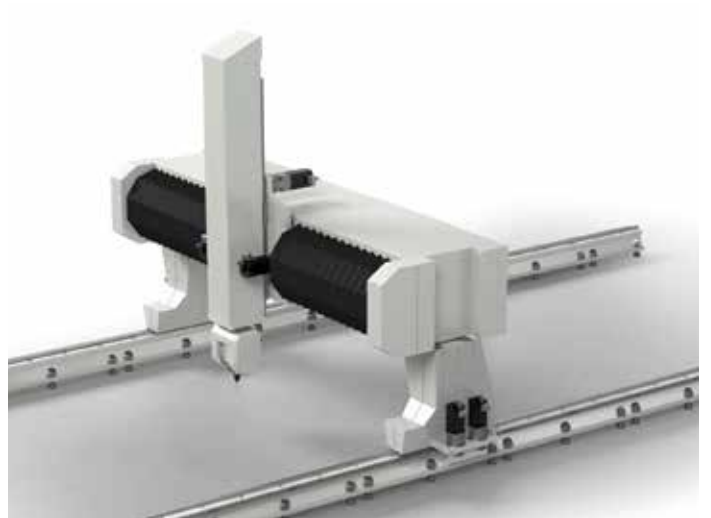
Machine Highlights

- Large capacity and range to process extremely long, wide, or tall parts
- 5-axis and 5-sided flexibility to process complex parts
- Precision machining accuracy
- Modular engineering; custom "build to order" configurations
 - Z-axis travels: up to 2 m (6.6 ft)
 - Y-axis travels: up to 6 m (19.7 ft)
 - X-axis travel: Unlimited, 1 m (3.2 ft) increments
- Spindle options up to 30,000 rpm and 42 kW (56.3 hp)
- Automated pressure foot option for precision drilling and countersinking
- High efficiency spindle dust/chip vacuum system option
- Choice of automatic tool exchangers / storage options
- Coolant containment, supply and disposal systems option
- Ergonomically friendly design provides reduced maintenance and lower operating costs





A variety of workholding options are available, including programmable tooling systems and automated pallet systems.



The PMT is available in both high-rail and low-rail configurations.

Cincinnati PMT Technical Data

		Metric	Inch
Range			
X-axis	m/in	Unlimited - 1 m increments	Unlimited - 39 inch increments
Y-axis	m/in	2, 3, 4, 5, 6	78, 118, 158, 197, 236
Z-axis	m/in	1, 1.5, 2	39, 59, 79
Spindle Heads (SI ratings)			
24,000 rpm - Std.	power / torque	20 kW / 22 Nm	26.8 hp / 16 lb-ft
Opt 1 - 24,000 rpm	power / torque	34 kW / 39 Nm	45.6 hp / 28.8 lb-ft
Opt 2 - 24,000 rpm	power / torque	42 kW / 23 Nm	56.3 hp / 16.9 lb-ft
Opt 3 - 30,000 rpm	power / torque	34 kW / 39 Nm	45.6 hp / 28.8 lb-ft
Opt 4 - 30,000 rpm	power / torque	42 kW / 23 Nm	56.3 hp / 16.9 lb-ft
Opt 5 - 18,000 rpm	power / torque	20 kW / 30 Nm	26.8 hp / 22.2 lb-ft
Spindle Features			
Tool interface	std / opt	HSK A63	HSK A63
A-axis tilt	deg	±110 (220)	±110 (220)
C-axis rotation - Std.	deg	±300 (600)	±300 (600)
C-axis rotation - Opt.	deg	±360 (720)	±360 (720)
C-axis rotation - Opt.	deg	360, Continuous	360, Continuous
Tool Changer			
Disk-type	pockets	18, 24, 48	18, 24, 48
Rack-type	pockets	5-pocket modules	5-pocket modules
Tool weight	kg / lbs	10	22
Length x Dia	mm / in	225 or 300 long x 100 dia	8.9 or 11.8 long x 3.9 dia
Feedrates			
X- and Y-axis	m/min in/min	40 or 60	1575 or 2364
Z-axis	m/min in/min	40	575
A-axis and C-axis	dpm / rpm	18,000 / 50	18,000 / 50
CNC Control System		Siemens 840 sl, Fanuc 30i	Siemens 840 sl, Fanuc 30i

* Specifications are subject to change without notice.

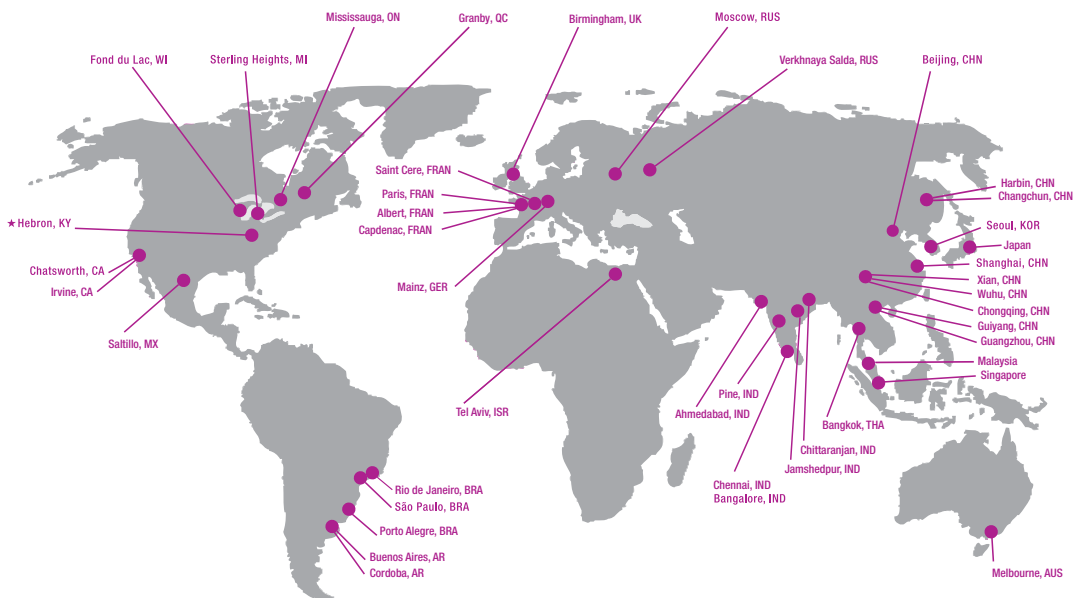


As an industrial engineering group, Fives designs and supplies process equipment, production lines and turnkey plants for the world's largest industrial groups in various sectors. Located in over 30 countries and with nearly 8,000 employees, Fives is known for its technological expertise and ability to execute large-scale international projects.

Fives' markets are without boundaries and the Group executes projects everywhere in the world to the highest global standards. Its pioneering and enterprising spirit enables Fives to design ultimate solutions that anticipate its clients' needs in terms of profitability, safety and environmental standards.

Within Fives, the Metal Cutting & Composites businesses design and supply machine tool and complete manufacturing solutions. With a strong foundation based upon renowned brands such as Cincinnati, Cinetic, Giddings & Lewis, Forest-Liné, Liné Machines and Rouchaud, Fives is recognized as the preeminent provider of outstanding manufacturing solutions which are at the heart of its customers' performance.

Key industrial markets served include aerospace, automotive and truck, heavy equipment, oil and gas, rail, wind energy and general machining. With manufacturing and support operations strategically located worldwide, Fives and its Metal Cutting & Composites businesses offer comprehensive lines of equipment and technologies including automated assembly, laser welding and cutting, turning, milling, automotive powertrain production, composites processing, software and the associated support and services: maintenance, spares, retrofit, overhauling and upgrading.



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