

AMADA MACHINE TOOLS AMERICA, INC.



THE VISION OF PRECISION

PMH Series



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Amada Machine Tools America



With more than 70 years of industry experience, Amada Machine Tools America is committed to helping our customers deliver dependable service and top-quality work with exceptional milling solutions.

Whatever your plate milling requirements might be, we have the right solution for your specific needs.

Market-Leading Quality—We believe quality work begins with quality tools designed and built from the ground up to deliver outstanding performance, time after time.

Customer-Driven Innovation—Every feature, function and configuration we offer has been developed to address the needs of our customers.

Proven Accuracy—We help you take your work to the next level and exceed your customers' expectations.

Reliable Productivity—We understand productivity is the heart of your business, and we can help you optimize it in multiple ways.

A History of Cutting-Edge Manufacturing

Since we began building machine tools back in the 1930s, our goals have always been to provide our customers with increased accuracy and productivity. Throughout our history, we've maintained our time-honored tradition of hand-fitting our solutions to deliver the ultimate in quality and precision.

And, as technology has evolved, we've embraced CNC automation as a core strength, improving throughput and helping new operators become productive more quickly.

Today, we are uniquely positioned to help you expand your capabilities and grow your business.

Solutions Designed Around Customer Needs

No two manufacturing needs are exactly alike. Finding the right solution means thoroughly understanding your objectives and configuring a solution to match them precisely. Our engineers bring decades of industry experience to help you achieve your specified goals with a process that fits—and enhances—your workflow.

TECHNOLOGIES OF AMADA



GRINDING



MILLING



SAWING

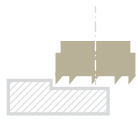
Amada Milling Technology



Amada is a leader in high-productivity duplex and plate milling machines. Machine shops the world over have trusted Amada's proven milling technology for years. For all their milling and machining needs, manufacturers of supply parts—and companies in the energy, transportation, automotive, and aerospace industries—rely on Amada quality to provide:

- Superior design
- Meticulous assembly practices
- High speed and efficiency
- Integrated automation
- Maximum accuracy

Whether you're performing standard plate milling or need special milling head technology, the advantages offered by the Amada THV and PMH Series of milling machines deliver the high angular accuracy, parallelism, and productivity you need to stay ahead in a rapidly changing industry.



MILLING TECHNOLOGY

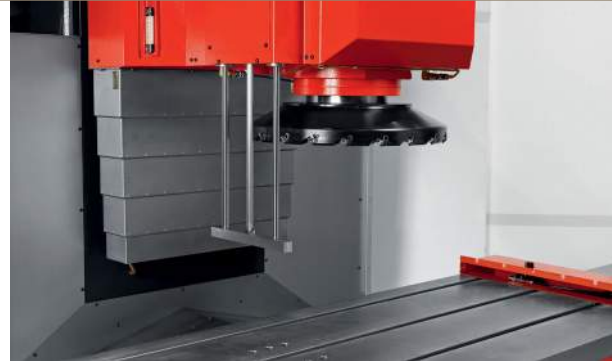
PMH Series

The PMH Series features specially designed vertical milling machines that can process the top and bottom surfaces of custom plates quickly and easily.

PMH Series



20.6" (525 mm) Milling Head



Automatic Measuring System

Features

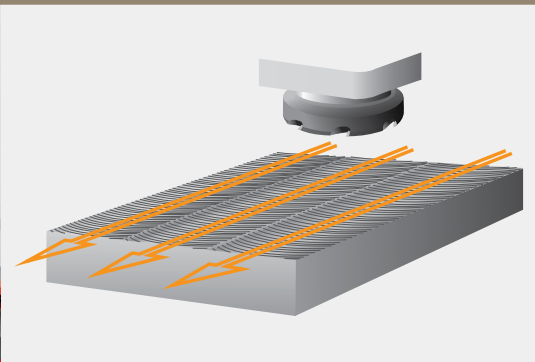
Special Milling Head Technology—When milling pieces using small milling heads, multiple milling processes are needed, which can cause steps in the surface and apply excess strain to the material. This type of work also requires an experienced operator and complex NC programming.

By contrast, the PMH series features a 20.67" (525 mm) milling head, allowing plates with a width of up to 19.68" (500 mm) to be milled

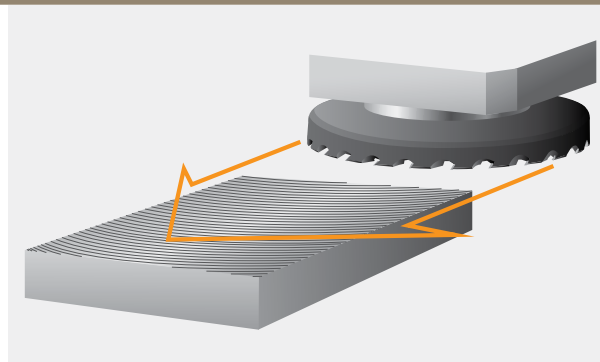
in a single pass, eliminating transitions and steps and dramatically reducing cycle times.

Larger Milling Head—The larger milling head also provides additional benefits when it comes to workpiece quality:

- No chatter marks
- Equally distributed thermal load
- Excellent surface finish



Conventional Small Cutter Head Increases Cycle Time



Cutting with Larger Cutter Head Reduces Cycle Time

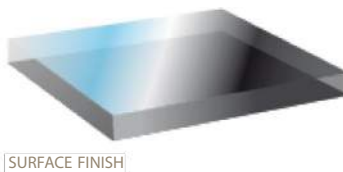
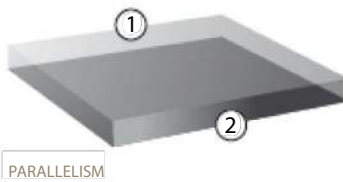
High Machining Quality

MEASURING POINT	MEASURING RESULT*
1	0.0005" (0.0137 mm)
2	0.0006" (0.0169 mm)

MEASURING POINT	MEASURING RESULT*
Upper to lower surface	0.0007" (0.0192 mm)

TYPE	SIZE*
Ra	0.40 m
Ry	2.87 m
Rz	2.10 m

*Material ST52 9.6" x 9.6" x 0.9" (245 x 245 x 23 mm)



PMH Series



PMH1308

The large milling head that comes standard with the PMH1308 significantly reduces cutting times by eliminating the need for the multiple cutting passes required by small-diameter cutters. The multiple passes of small-diameter cutters introduce steps, transitions and bumps between the cutting tracks and surfaces, which are also eliminated by the one-pass cutting capabilities of the PMH1308.

PMH1308



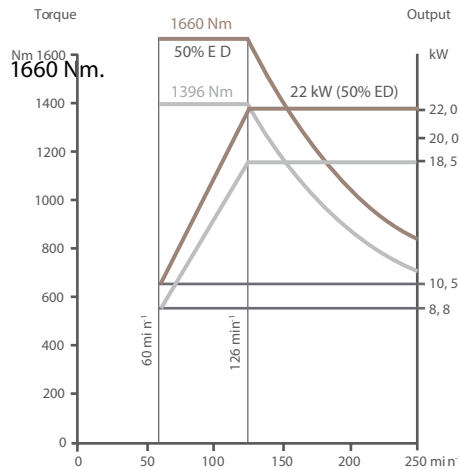
20.6" (525 mm) Milling Head



Automatic Measuring System

Features

The PMH1308 is equipped with a high-capacity spindle with a JIS No. 60 taper. On comparable conventional milling machines and machining centers, the spindle size corresponds to JIS No. 40 or JIS No. 50. A conventional milling machine with driving power of 30 HP and a No. 50 spindle generates a torque of 600 Nm, whereas the PMH1308—with the same power of 30 HP and a No. 60 spindle with a high-capacity gear unit—is able to generate a torque of



PMH1308 Machine Specifications

CUTTING CAPACITY (W X L X H)	51.1" x 31.4" x 11.8" (1300 x 800 x 300 mm)
WORK LOAD CAPACITY	7716 lb (3500 kg)
DIMENSIONS (W X L X H)	155.9" x 139.8" x 112.2" (3960 x 3550 x 2850 mm)

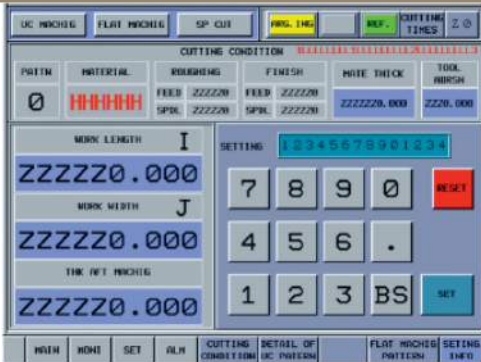
PMH Series



PMH3015 and PMH4020

For machining workpieces up to 157.5" x 78.4" x 13.8" (4000 x 2000 x 250 mm), the PMH3015 and PMH4020 deliver uncompromising performance and excellent parallelism, flatness, and finish.

PMH3015 and PMH4020



Input Screen

Features

The PMH3015 and PMH4020 have all the features, accuracy and efficiency of the PMH1308, but can cut workpieces up to five times the weight and about 3x the length and width.

With the impressive power of their 40 HP motor, you can be assured that the PMH3015 and PMH4020 are equipped to handle the really big jobs that smaller machines can't do.

PMH3015 Machine Specifications

CUTTING CAPACITY (W X L X H)	118.1" x 59" x 13.8" (3000 x 1500 x 350 mm)
WORK LOAD CAPACITY	28,660 lb (13,000 kg)
DIMENSIONS (W X L X H)	320.9" x 181.5" x 124.0" (8150 x 4610 x 3150 mm)

PMH4020 Machine Specifications

CUTTING CAPACITY (W X L X H)	157.5" x 78.4" x 13.8" (4000 x 2000 x 250 mm)
WORK LOAD CAPACITY	44,092 lb (20,000 kg)
DIMENSIONS (W X L X H)	407.9" x 205.9" x 129.9" (10,360 x 5230 x 3300 mm)

See Amada Mills at Work



The AMTA Technical Center was created to provide a unique atmosphere for visitors to experience the latest manufacturing technology in action. This stunning 40,000-square-foot facility houses the latest Amada technology in each product group. Much more than just an exhibit, every machine, automation accessory, and software program in the facility is fully operational and ready to empower customers to solve their most challenging manufacturing applications.

Specifications may change without notice at the sole discretion of Amada's Engineering Department.

There may be differences between the specifications described in this catalog and the Amada products actually shipped. Please ask our staff for more detail.

The products in the catalog may be subject to the provisions of foreign exchange and the Foreign Trade Law. When exporting cargo subject to such controls, permission pursuant to regulation is required. Please contact our business representative in advance when exporting products overseas.

When using our products, safety equipment is required depending on the operational task.

For safe and correct operation, ensure thorough reference to the Instruction Manual prior to operation.

The cutting performance data in this catalog may be affected by temperature, the cutting materials, tool materials, and cutting conditions, etc. Please note that such data are not guaranteed.

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