

Introducing ...

DRAKE GS:VTM-LM (Linear Motor)



With servo driven $\pm 5^\circ$ spindle helix

Vertical Thread Mill

A compact vertical thread mill for high production threading!

Drake's new Vertical Thread Mill is the ideal machine for production thread milling on families of similar parts.

Now you can thread internal and external diameters, right or left hand threads with single or multiple leads to full depth in production quantities with fast cycle times

Its compact layout minimizes floor space, and with simplified manual or automatic loading and unloading, the GS:VTM-LM is easily integrated into a lean manufacturing cell environment.



GS:VTM-LM

Typical part produced on the GS:VTM-LM.



Check out the GS:VTM-LM's advanced features:

- **Cut dry or with MQL to eliminate coolant costs and parts washers.**
- **Heavy, fabricated, extremely rigid polymer/mineral filled base** designed for vibration damping and cutting stability.
- **Drake PartSmart™ Programming.** No programming required. To run parts, all the operator does is enter part-specific variables, cutter description and process information into the menu screens and the control does the rest.
- **Cutter Radial In-Feed Slide (X-Axis).** Horizontal slide fitted with precision preloaded linear roller ways providing high stiffness and accurate positioning.
- **Workhead (C-Axis).** Vertical rotating workhead employs a synchronous A.C. torque motor drive with 8-million count encoder for 6 arc second positioning. Vertical chuck simplifies manual or automated loading/unloading and chip removal.
- **Spindle Slide (A-Axis).** Servo controlled spindle helix axis provides $\pm 5^\circ$ helix range.
- **Cutter Spindle.** Precision synchronous motor. Use both High Speed Steel or Carbide cutters. Has thru-coolant and automatic tool changer capabilities.
- **Feed Systems.** Ballscrew positioning on Z-Axis. Linear motor controlled X-Axis. Both X and Z-axes are equipped with glass scale feedback with 0.05-micron resolution for years of multi-shift size and lead accuracy.

Drake
MANUFACTURING

GS:VTM-LM ...

Drake Vertical Thread Mill – good parts out your door from day one!

The Drake Production Philosophy

From our inception, we realized that customers don't want *machines*; they want good parts out the door from day one. That's why we've taken the mystery out of producing good parts by identifying the part processing steps and providing a means to input them easily into the control. You don't need programmers to run Drake machines.

Your operator enters specific part, cutter and process information into pre-formatted screen menus. That's it! Then our PartSmart™ software converts that information into a part program that accurately and efficiently machines your part. Part changeovers can be accomplished in as little as 15 minutes!

GS:VTM-LM Specifications

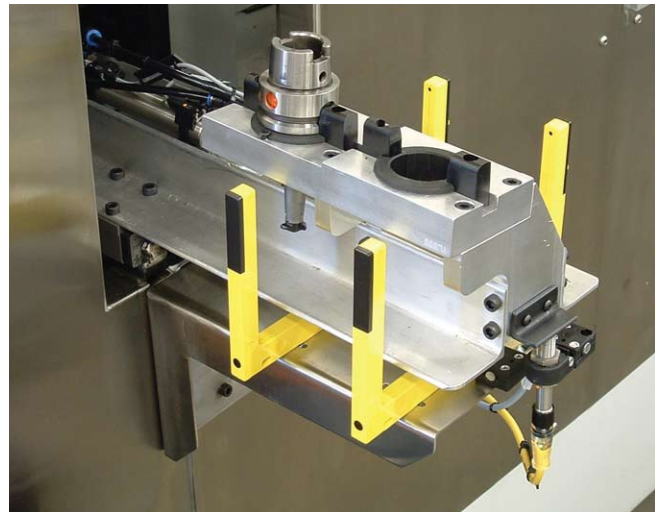
Axis	Description	Standard	Speed
C	Work Rotation	360°	50-500 rpm
X	Work Slide Travel	210 mm (8")	600 ipm
	Max Part Diameter	75 mm (3")	front to back
Z	Work Slide Travel	150 mm (6")	600 ipm
	Max Part Length	75 mm (3")	up and down
U	Helix	± 5°	Manual
	Spindle	6.5 kW	Up to 8,000 rpm

GS:VTM-LM Dimensions

Overall machine	1.4 m W x 2.5 m D (55" x 98")
Coolant discharge height	0.4 m (14" above bottom of base)
Approximate shipping weight	4,000 kg (8,800 lbs)



GS:VTM-LM



Automated tool changer system



GS:VTM-LM workzone

ISO 9001:2000 Certified Quality System



MANUFACTURING

Better Parts Faster.™

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