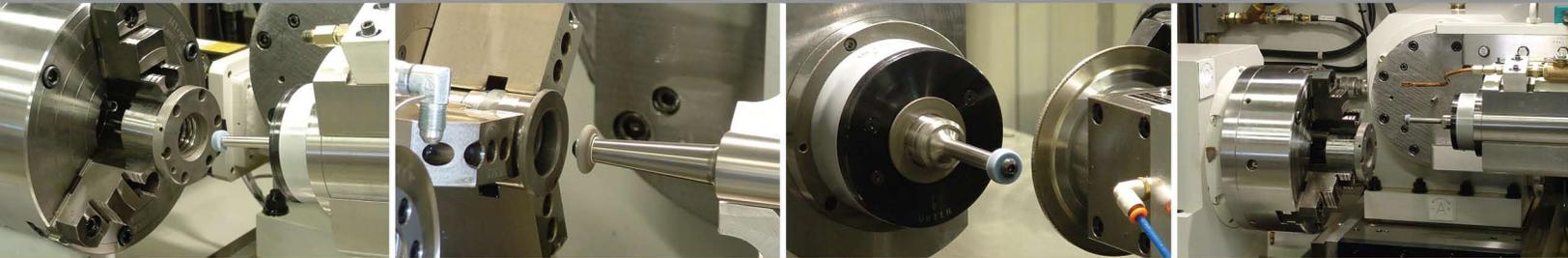


# Introducing ...

## DRAKE GS:TI-LM (Linear Motor)



With full 10° Power Helix

Internal Thread Grinder

Grind a wide range of internal threads, grooves, ball tracks and other forms on one machine!

**The best of Drake grinding technologies in one advanced grinder!**

What happens when you couple intelligent machine tool design with a scientific approach to grinding? A machine so advanced, so versatile, so simple to use – you can employ machine *operators* rather than journeyman machinists – and still ship good parts out the door from day one!



GS:TI-LM350

With the GS:TI-LM, Drake offers you a high value-added grinding machine to remain globally competitive for years to come.

**Drake advanced design and grinding technologies:**

- Linear motors on linear ways for maximum acceleration and contouring with fewer mechanical parts for low maintenance.
- High static and dynamic stiffness - use the latest superabrasives with confidence.
- Full  $\pm 10^\circ$  Power Helix.
- 0.05 micron scale feedback for world-class accuracy.
- Drake Smart Spindle™ technology providing automatic touch dressing, and part feature locating.

- Built-in Part Smart™ programming - run parts and change over jobs with menu-driven ease. *No programming knowledge required.*
- Drake Smart Form™ technology available automatically generates wheel forms for correcting helical path interference and off-helix grinding or upload your designer form from .dxf files.
- Mineral-filled cast polymer base with excellent thermal stability and vibration damping.
- State of the art Fanuc CNC system.
- A lean, clean, ergonomic design and compact footprint for easy operation in a cell environment.

Typical parts produced on the GS:TI-LM



**Drake**  
MANUFACTURING

# GS:TI-LM ...

advanced machine technology in a compact, versatile package.

Drake's new GS:TI-LM is the ideal grinder for ball screw nuts, thread gages and power steering components.

## PartSmart™ Menu-Driven Screens

The operator just fills in the values for each part. No programming knowledge needed!

Dressing software is available for contour dressing of 60°, Whitworth, ISO, Acme, Buttress, full radius, Gothic arch, and other thread forms. No cams, templates, or crushers are required to dress your thread form. For long-run production, use diamond form rolls for a fast, plunge dress.



GS:TI-LM200

## GS:TI-LM Dimensions – Standard Configuration

	GS:TI-LM200	GS:TI-LM350	GS:TI-LM650
Overall machine	1.7 m x 2.1 m	3 m x 2.2 m	3 m x 2.2 m
Coolant discharge height	500 mm	500 mm	500 mm
Part loading height	1 m	1 m	1 m
Approximate shipping weight	7000 kg	12,000 kg	12,500 kg

## GS:TI-LM Specifications

Axis	Description	GS:TI-LM200	GS:TI-LM350	GS:TI-LM650	Speed
X	Swing over table	200 mm	350 mm	650 mm	30 m/mm
Z	Grind Length	250 mm	250 mm	250 mm	30 m/mm
	Max Part Length	350 mm	350 mm	350 mm	30 m/mm
A	Wheel Lead Angle <sup>1</sup>	+/- 10°	+/- 10°	+/- 20°	30 rpm
C	Work Rotation <sup>2</sup>	300 rpm	300 rpm	100 rpm	

1. Actual lead angle obtainable in part depends on diameter and length of part, tooling, wheel and quill diameter and other setup parameters

2. High accuracy, direct drive work head available with 8-million count encoder

**Ask about a Universal Internal/External version of this machine.**

ISO 9001:2000 Certified Quality System



MANUFACTURING

**Better Parts Faster.™**

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