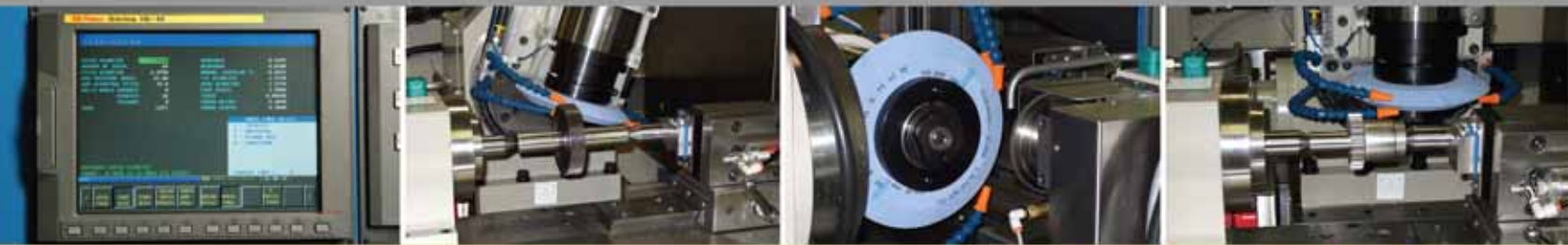


Introducing ...

DRAKE GS:G²-LM



Linear Motor Profile Gear Grinder

A multi-role grinder
that can *switch*
gears as fast as you!

The Drake GS:G²-LM is a perfect blend of precision, power and price. It's equally at home in job shops, manufacturing cells, high volume grinding – even prototype work. If you've wanted to move to precision ground gears but balked at the cost—the G² is the machine for you.

High value – minimal capital outlay

Now you can source near net-shaped or hobbled gears from low-cost suppliers and still control the final product quality. You can supply a quieter, more precise product and remain globally competitive.

Special tooth forms

With on-machine contour wheel dressing, grind modified forms on pre-cut gears without investing in special hobs.

No need to carry expensive special hobbing tool inventory or wait for plated wheels with special forms.

- Quick changeovers – new parts running in 15 min. or less.
- GearSmart™ programming – operator only needs to enter specific part and process information prompted by menu-driven screens.

Typical parts produced on the GS:G²-LM



Drake
MANUFACTURING

4-Axis Gear Grinder



- Direct drive synchronous torque motor C-axis positioning with 8-million count encoder provides feedback resolution of 0.2 arc seconds.
- Constant surface speed as the wheels wear.
- SmartForm™ CNC diamond roll dressing – for wheel profiling and conditioning. Dressing software allows involute profile modifications for prototype or custom gear teeth.
- SmartSpindle™ acoustical emissions monitoring allows fully automated gear tooth location and stock division to equalize grind stock.
- Linear axis positioning with 0.05µm resolution linear scale feedback for world-class accuracy.

GS:G²-LM ...

Good parts out your door from day one!

GearSmart™ Menu-Driven Screens

Drake takes the mystery out of gear grinding. Our machines are programmed at our plant for your specific parts.

Dressing forms, grind paths, spindle and work rpm are all pre-calculated and stored in memory. Menu entries are based on your terminology. No programming knowledge is required!

Typical Menu Entries - Drake GearSmart™ Program

NUMBER OF TEETH	000	DIAMETRAL PITCH	00
		MODULE	00
FACE WIDTH	0.0000	HELICAL ANGLE	00.000
BLANK O.D.	0.0000	TIP MOD	0.00000
TOTAL DEPTH	0.0000	CROWN	0.00000
WHEEL DIA	00.00	FIN STOCK	0.0000
RUF PASSES	00	FIN PASSES	00
RUF WHEEL SFM	00000	FIN WHEEL SFM	00000
RUF WORK SFM	000	FIN WORK SFM	00
DRESS COUNT	00	DRESS WHL SFM	0000
DRESS AMOUNT	0.0000	DRESS FEED IPM	00

GS:G²-LM Machine Specifications

	G ² -LM 200	G ² -LM 350
Maximum workpiece diameter	200 mm	350 mm
Minimum workpiece diameter	25 mm	25 mm
Minimum number of teeth	1	1
Maximum pitch	8 Mod	8 Mod
Minimum pitch	.5 Mod	.5 Mod
Maximum helix angle	± 45°	± 45°

Capacities

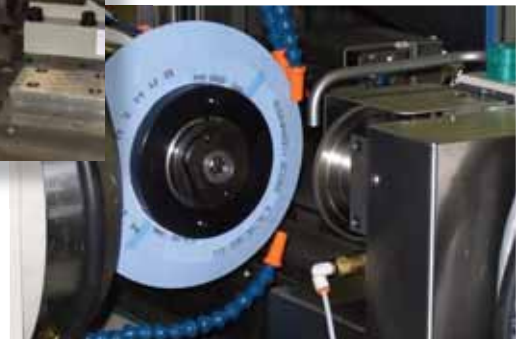
Stroke of workpiece slide	300 mm	650 mm
Grinding length	250 mm	600 mm
Maximum between centers	300 mm	750 mm

Wheel

Maximum diameter	225 mm	225 mm
Minimum diameter	150 mm	150 mm
Width (maximum wheel pack)	30 mm	30 mm
Bore	76 mm	76 mm
Max. speed of grinding wheel	10,000 rpm	10,000 rpm
Spindle power	18 kW @ 10,000 rpm	

Worm grinding option available.

Other machine capacities available, please contact us.



*SmartForm™ CNC
Contour Diamond Roll
Dresser gives you
completely automated
production capability.*

ISO 9001:2000 Certified Quality System



MANUFACTURING

Better Gears Faster.™

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