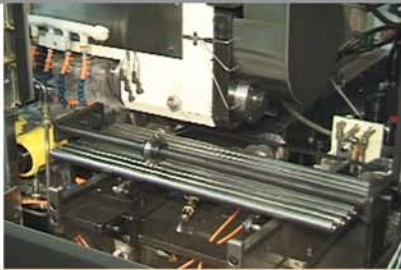


# Introducing ...

## DRAKE GS:RM



### Gear System

Drake's 4-axis CNC rack mill is designed and programmed for high speed manufacturing of power steering racks in a flexible cell environment.



### Rack Mill



#### Proven Performance

The Drake GS:RM is proving itself over the world, and has earned a perfect "10" customer satisfaction score from one of the world's largest auto parts makers.

In addition to high production, the machine gives a near grinder-like finish of 35 Ra on steering racks.

#### Stability and Accuracy

This totally integrated milling system is built for stable and accurate machining with a mineral filled cast polymer base, linear roller ways and a Fanuc CNC servo system.

#### Automated Production

The machine features a fully adjustable automatic loader with entrance and exit magazines that hold 10 parts each for part lengths from 500 to 750 mm and diameters from 25 to 35 mm.

#### Maximum Productivity

The 170x200 mm cutter mounts on a #50 taper arbor that is supported by heavy-duty front and outboard bearings. The 15 kW (20 HP) gear reduction spindle is rated at 80 m/min (260 SFM) allowing for aggressive metal removal rates with coated HSS or bridge material cutters. Ask about a carbide cutter option. Typical cycle time for 6° helix racks with 8 mm DOC is 35 seconds—floor-to-floor.

#### Running Multiple Part Families?

Drake will equip your mill with a CNC-controlled helix swivel (up to  $\pm 20^\circ$ ) and power table positioning with tenth-micron scale feedback for dialing in the center tooth position, helix, and over ball dimension.

#### Fast Setups

With PartSmart™ programming, your operator changes jobs with menu-driven ease. No programming knowledge required. Setup time between parts is under 10-minutes—including cutter change. Drake provides a quick-change arbor and cutter change jib crane to minimize tooling change downtime.

#### Automated or Manual Cell Operation

The GS:RM is a small compact machine that fits well in a flexible automated or manual cell environment. Machine width is only 2500 mm (98") with a 1000 mm (40") load height. Front access automatic loader/unloader easily ties into your automated cell conveyor system. Shuttle raw parts into the loader from a bar machine or gun drill operation and finished parts into a washer and on to hardening.

# DRAKE GS:RM ...

good parts out your door from day one!

## System Advantages

- **Complete Pre-Programming** of parameters specific to family of parts eliminates in-house programming
- **Process Development** uses customer parts before the machine leaves our floor—this Part Smart™ approach ensures 'Parts out your door from day one.'
- **Simplified Operator Control** of all process parameters through CNC menu entries
- **Cell Friendly** narrow, compact design with fork lift pockets and front load/unload allows for operation in an automated or manual cell environment.
- **Variable Cutter Speed & Work Feed** are programmable for greater versatility of the process
- **Improved Accuracy** through use of high-resolution servo motors and glass-scale feedback
- **Maintenance Simplified** with CNC diagnostics and mechanical systems designed for easy maintenance to help keep the machine producing parts



*The latest Fanuc controls and Drake Part Smart™ programming assure easy set-up.*



## Typical Menu Entries - Drake Part Smart™ Program

NUMBER OF TEETH	000	DIAMETRAL PITCH	00
FACE WIDTH	0.0000	MODULE	00
BLANK O.D.	0.0000	HELIX ANGLE	00.000
TOTAL DEPTH	0.0000	OVER BALL COMP	0.00000
CUTTER DIA.	00.00	TAPER COMP	0.00000
CUTTER SPEED m/min	00000	CENTER TOOTH POS COMP	0.00000
CUTTER FEED mm/min	000		

## Call Us

To discuss your steering manufacturing challenges.

ISO 9001:2000 Certified Quality System



MANUFACTURING  
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