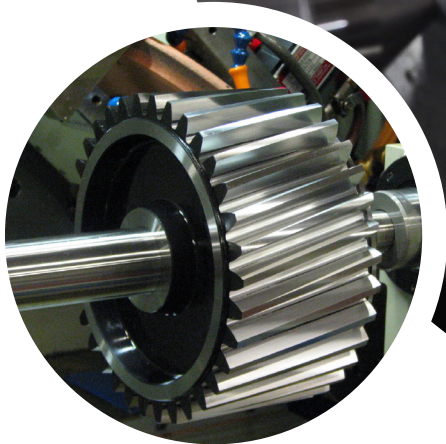
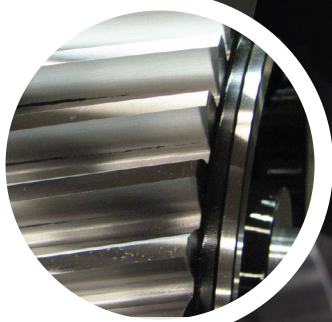




HOLROYD
MACHINE TOOLS



HOLROYD HG350-G GEAR GRINDING CENTRE

HG350-G GEAR GRINDING CENTRE

The new standard in helical gear manufacturing

Building on the successes of the PTG Holroyd GTG2 helical gear grinding centre, we are delighted to introduce the HG350-G - our latest technology for the production of gears and threads of up to 350 mm in diameter.

The first machine tool from PTG Holroyd to use Siemens' new Sinumerik ONE future-proof CNC, the HG350-G offers greater levels of flexibility for manufacturers of precision spur gears, helical gears, worms, screws and rotors.

To better meet the needs of today's busy production environments, the HG350-G also features an extended machine bed to accommodate screws and worm shafts of up to one metre in length.

A self-contained production cell, the HG350-G combines the high power required for deep grinding operations, with uncompromising levels of precision finish.

www.holroyd.com



HG350-G key features

- Developed for prototyping, batch and volume production
- Machining process compensates for helical twist
- Extended machine bed for greater manufacturing capability
- Integrated profile management system
- Fully automatic programmable cycles
- Automatic grinding wheel balancing system
- 'On machine' component inspection
- Advanced in-process wheel dressing system

Control

- Siemens' Sinumerik ONE CNC + Holroyd's intuitive HMI
- Advanced 24" multi-touch-screen interface
- On-screen display of component & grinding wheel profiles
- Program storage: HDD, Ethernet, LAN and USB
- Remote machine diagnostics and software updates
- Industry 4.0-ready
- Profile input and measurement in transverse plane
- Component data and program files for fast set-up of repeat processes

Programming

- Fast tooth detection sensor for wheel-to-tooth centralisation
- Full measurement of tooth form and lead, with deviation feedback
- Component indexing at left-hand, right-hand or both ends of grinding stroke
- Grind tooth flanks only or flanks & root
- Gear crowning cycles for modified tooth forms
- Lead modification by bob crowning, adjusting the lead or by a combination of both
- Topological modifications to tooth flank



Programmable cycles include:

- Gear tooth grinding, with optional probing and form measurement
- Dressing with full compensation on dressing disk wear via optional probing system
- Repeat cycles with nesting up to 99 times

HG350-G grinding cycles

Grinding cycles are included for:

- Spur gears
- Helical gears
- Crowned helical and spur gears with root or tip relief
- Worm gears of the form ZK, ZI, ZN and ZA
- Dual lead (duplex) worm gears
- Splines

| HG350-G GEAR GRINDING CENTRE TECHNICAL SPECIFICATIONS | | |
|-------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Tailstock | Tailstock centre | No. 4MT |
| | Distance from retracted tailstock to work spindle face | 1050 mm |
| Workpiece | Minimum diameter | Zero |
| | Maximum diameter | 350 mm |
| | Metric module | 0.5 to 12 mm |
| | Profile depth | 30 mm |
| | Maximum component weight | 200 kgs |
| | Maximum grinding length | Dependent on lead angle, root diameter and wheel diameter |
| | Maximum table traverse | 1300 mm |
| | Grinding head angle range | 180° (+55° to -125°) |
| | Maximum table traverse speed | 16 m/min |
| Workhead | Workpiece speed range | 0 to 100 RPM |
| Grinding Head | Wheel spindle power | 15Kw (S1 duty) direct drive spindle |
| | Maximum wheel diameter | 406 mm |
| | Maximum profile depth | 35 mm |
| | Maximum wheel width on spindle | 30 mm |
| | Maximum spindle speed @ 15Kw | 5000 RPM |
| Other | Measuring probe | Optional touch probe can be fitted to measure basic gear dimensions of tooth width and pitch |

As we are committed to continuous improvement, machine specifications are subject to change.



FM 09259

PTG operate a quality management system which complies with the requirements of BS EN ISO 9001:2015

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