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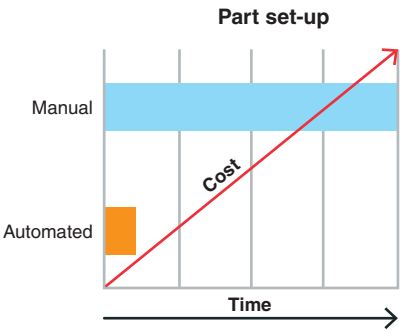
GoProbe – probing made simple

GoProbe – probing pays ...

Machine tools that are optimised to cut metal more reliably and more accurately will quickly ***maximise productivity, profits and your competitive edge***.

Automated part setting with a Renishaw probe system is up to ten times faster than manual methods, which means immediate and ***significant cost savings***.



Scrap and rework reduce productivity and profits. Renishaw probe systems help guarantee "right first time" parts, which means ***reduced waste and increased profits***.

GoProbe helps deliver these benefits ...
... in the simplest way possible

- No probing experience necessary
- Self study training kit comprising: training part, pocket guide, quick-reference tool and e-learning course
- Intuitive GoProbe smartphone app
- Simple one line commands eliminate the need for multiple lines of machine code
- Compatible with all Renishaw part setting probes

... the Renishaw way

Renishaw, an established world leader in metrology solutions invented the touch-trigger probe in the 1970s.

Decades of customer focus and investment in development, coupled with our own manufacturing experience enables us to provide ***innovative*** and ***exceptional products*** that are unmatched for technical excellence and performance.

Customer comment

"Our engineers had never used a machine tool probing system before, but they were quickly able to start using our new Renishaw probing system thanks to the GoProbe software and self study training materials."

R&R (United States)

"*The GoProbe software has been developed in such a way that it is very easy to understand. The use of single-line commands enabled us to get up and running with our new probing system quickly and easily."*

Unimac (Pune, India)

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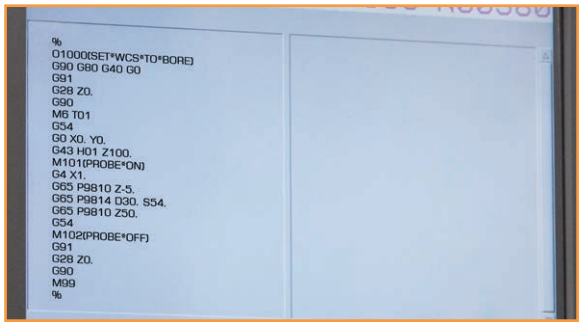
Gain maximum benefit from your machine tool probing system

From our many years of experience as the market leader in machine tool probing, we understand that it is sometimes perceived as a complex operation, requiring a specific and advanced skill set, not always available in the modern manufacturing environment.



Multiple lines of code typically used for probing

GoProbe simplifies the probing process

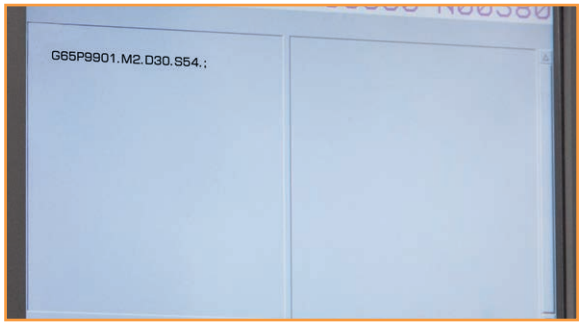
GoProbe is a ***unique combination of software, training materials and user reference tools***. Designed to make using your Renishaw machine tool probe simple, GoProbe supports part setting, tool setting and probe set-up cycles.

Using ***GoProbe requires no previous probing experience***. The self study GoProbe training kit, which includes an e-learning course and a training part to practice on, helps to rapidly build knowledge and confidence, so that processes can be optimised as soon as possible.


GoProbe quick-reference tool

Requiring only simple single-line commands, GoProbe ***eliminates the need for extensive knowledge of G-codes***. The user-friendly commands are easy to understand and use, even for those new to probing.

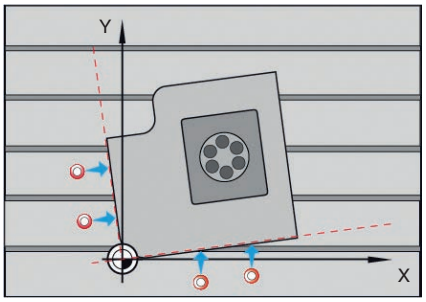
Moving between ***manual and automated cycles*** within a machining process has also been simplified. This is now possible in one software package, and the consistent single-line commands make progressing from basic manual cycles to more complex automated cycles easier than ever.



New single-line of code using GoProbe

With GoProbe, users can:

- Dramatically reduce setting time
- Reduce data entry errors
- Respond quickly to process changes
- Significantly improve process efficiency
- Reduce the need for operator training



On-machine measurement of component position and alignment

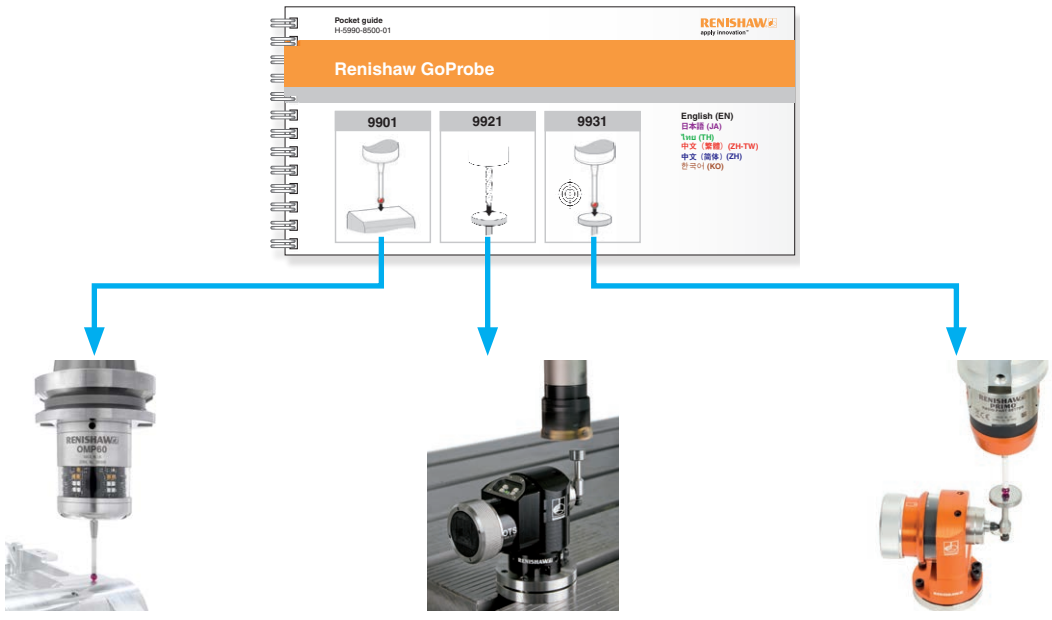
GoProbe makes probing simple

New to probing? Start working with your probe in minutes using GoProbe!
Existing probe user? Revitalise your current probing system to gain maximum benefit.

A unique all-in-one probing solution

GoProbe is an all-in-one solution, combining user-friendly probing software with a self study training kit, designed to make using your Renishaw machine tool probe simple.

- Quick and easy to use
- No probing experience necessary
- Easy to learn using the comprehensive GoProbe training package
- Compatible with a wide range of Renishaw machine tool hardware and software



Part setting

Tool setting

Probe-on-probe calibration
(Primo hardware only)

Compatible and flexible

GoProbe is compatible with Renishaw's range of touch-trigger probes and with a variety of its macro software including Inspection Plus. You can combine easy to use software with Renishaw's state-of-the-art technology, improving process reliability and capability.

Novices and experienced probe users alike can profit from the many benefits the GoProbe package offers.

GoProbe is available for a range of machine tool controllers, including Fanuc, Mazak, Meldas and Siemens.

User-friendly training kit

Using the GoProbe training kit provided, you can be ***up and running with your probe in minutes.*** This flexible kit can be used for self study or classroom-based teaching, and allows you to choose the training and reference tools that are best suited to your knowledge and experience.

For an up-to-date list of compatible machine tool controllers, please visit **www.renishaw.com/goprobe**
A full list of compatible Renishaw machine tool hardware and software is available at **www.renishaw.com/goprobe**

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GoProbe makes probing simple

GoProbe supports part setting, tool setting and probe set-up cycles. Each cycle corresponds to a feature or function common to machine tool probing and consists of a simple single-line command.

The single-line commands are easy to learn and use, reduce manual data entry errors and save process time.

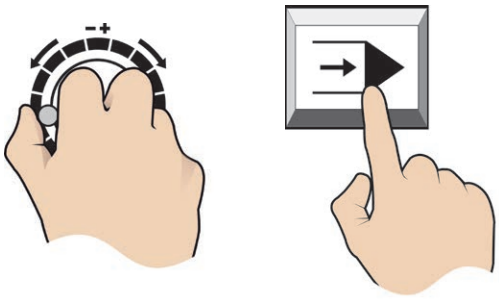
With GoProbe single-line commands you can set parts and measure tools proficiently, and progress to more advanced measurement and in-process cycles effortlessly.

Manual and automated modes

GoProbe offers you the choice of running cycles in either manual (JOG/MDI) or automated mode.

If you are new to probing, you can opt to jog the probe into position in manual mode, a safe and simple method for helping to build user confidence.

If you have some experience of probing, you can progress quickly to automated mode. Both methods are explained in detail in the GoProbe training kit.

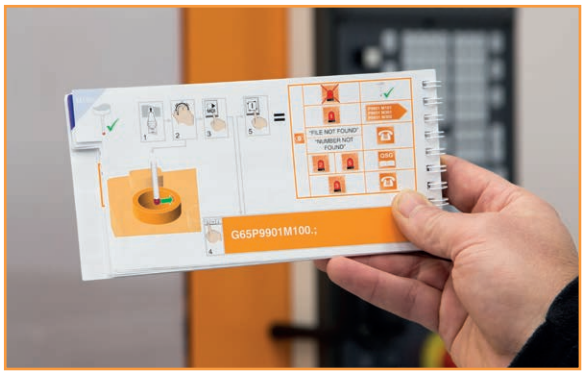


Simple and consistent steps

GoProbe cycles operate with a series of easy-to-follow steps. Consistent for all part setting and tool setting functions, these steps allow you to develop familiarity and confidence within a simple and easily memorable routine.

Probe with confidence

GoProbe includes a spindle probe check and a tool setter check. These cycles work efficiently to ensure that the probe or tool setter is ready to use, providing added reassurance and confidence before running any part or tool setting cycles.



Quick and easy probe calibration

GoProbe also offers a range of easy-to-use calibration cycles for Renishaw spindle probes and contact tool setters. These cycles simplify the calibration process and reduce the time taken to calibrate the probes, whilst maintaining Renishaw's proven accuracy.

The GoProbe training part includes a calibration artefact (pin) suitable for calibrating a Renishaw spindle probe. This removes the need to source an external calibration artefact such as a ring gauge or sphere.

Available for Primo™ system hardware only is a 'probe-on-probe' calibration cycle, this cycle calibrates both the spindle probe and contact tool setter is one cycle.

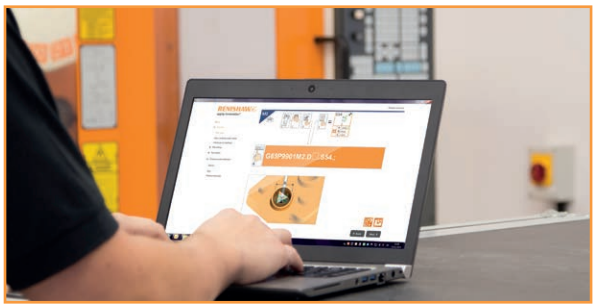
GoProbe – introducing innovative training solutions

The **GoProbe training kit,** exclusive to Renishaw, contains a range of tools and resources to assist in learning to use GoProbe cycles and apply them to your process.

Interactive e-learning course

GoProbe offers a revolutionary new training method for probe users. The GoProbe e-learning course is a consistent and comprehensive self study package designed to offer a detailed explanation of all the GoProbe cycles.

Everything, from part setting and tool setting to probe set-up, is covered in this fully interactive PC-based course and the on-machine practical exercises.



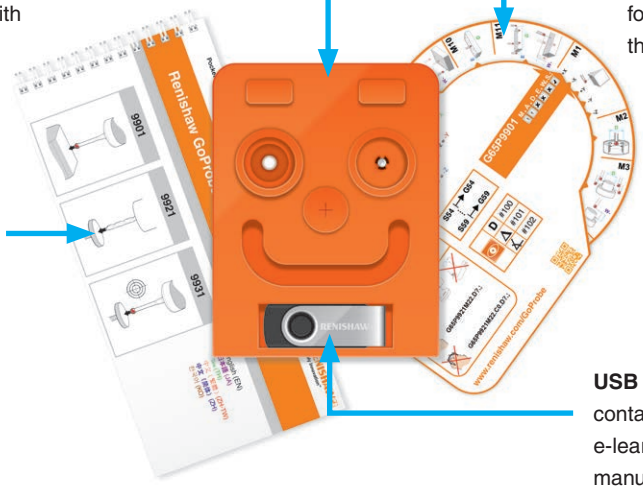
Your own personal reference tool

The GoProbe app for iPhone and Android™ smartphones provides an additional, very convenient, way of producing a single-line command.

Simply select the probing cycle from the menu, complete the input data fields, and the app will generate the single-line command.

GoProbe training part
contains many features common to part setting, allowing you to practice on-machine with confidence.

GoProbe pocket guide
guides you through the GoProbe cycles and five steps of probing. Perfect for initial training and everyday reference.



GoProbe quick-reference tool
a simple on-machine reference tool for the single-line commands. Ideal for when you are more familiar with the GoProbe cycles.

USB flash drive
contains a self study PC-based e-learning course, the programming manual and other reference material.

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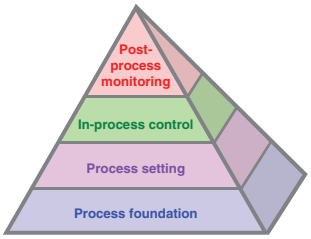
GoProbe – innovative process control

Introduce automated workpiece setting and tool setting to your machine shop and reap the benefits

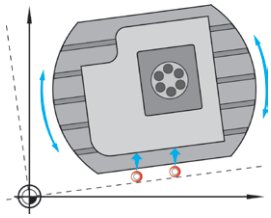
The higher the degree of human involvement in the manufacturing process, the higher the risk of error. In process measurement, using Renishaw probes helps to **eliminate this risk.**



Productive Process Pyramid™

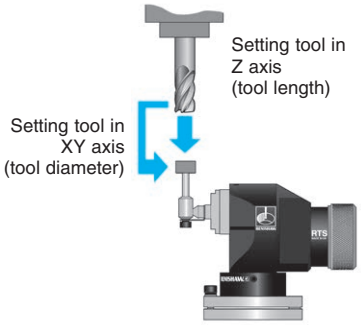
Process setting

Probe setting ensures reliability and accuracy
Datum a probe to enable accurate on-machine measurement. Probe calibration is a regular control that ensures other measurements on the machine remain reliable.



Part setting reduces fixture costs and eliminates operator intervention
Locate and orientate the component to which machining can be aligned. Touch-trigger probes are used to find datum positions and work co-ordinates are updated automatically.

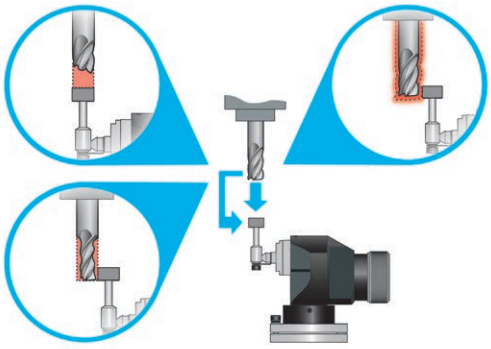
Tool setting eliminates manual 'cut and measure' activities and reduces operator errors
Establish the length and diameter of a tool. This is automatically stored in the machine's controller.



- Eliminate costly fixtures and manual setting errors
- Introduce new processes quickly and respond to new customer needs
- Set up faster, improve quality and reduce scrap

In-process control

Tackle the inherent sources of variation in all machining processes (tool wear, impact of temperature and heat flows).
On-machine probing is the only cost-effective way of monitoring the in-process condition of the tool and component.



- Improve process capability and traceability
- Compensate for environmental/machine conditions

All of which increase productivity, improve quality and boost profits – GoProbe helps make these benefits easier to achieve.

For further details regarding the benefits of all levels of process controls within the Productive Process Pyramid™, please refer to *H-3000-3038 Metrology solutions for productive process control* or visit **www.renishaw.com/processcontrol**

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About Renishaw

Renishaw is an established world leader in engineering technologies, with a strong history of innovation in product development and manufacturing. Since its formation in 1973, the company has supplied leading-edge products that increase process productivity, improve product quality and deliver cost-effective automation solutions.

A worldwide network of subsidiary companies and distributors provides exceptional service and support for its customers.

Products include:

- Additive manufacturing and vacuum casting technologies for design, prototyping, and production applications
- Dental CAD/CAM scanning systems and supply of dental structures
- Encoder systems for high accuracy linear, angle and rotary position feedback
- Fixturing for CMMs (co-ordinate measuring machines) and gauging systems
- Gauging systems for comparative measurement of machined parts
- High speed laser measurement and surveying systems for use in extreme environments
- Laser and ballbar systems for performance measurement and calibration of machines
- Medical devices for neurosurgical applications
- Probe systems and software for job set-up, tool setting and inspection on CNC machine tools
- Raman spectroscopy systems for non-destructive material analysis
- Sensor systems and software for measurement on CMMs
- Styli for CMM and machine tool probe applications

For worldwide contact details, visit www.renishaw.com/contact

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