

# PRIMO™ LTS (Length Tool Setter)



**Fast and accurate**  
on-machine tool setting and  
broken tool detection



**Exceptional**  
ease of use



**Outstanding**  
performance for less scrap  
and higher profits



# PRIMO™ LTS – innovative process control

## Tackle process variation at source, and reap the rewards

The higher the degree of human involvement in the manufacturing process, the higher the risk of error. Automated in-process measurement using Renishaw machine tool probes can help **eliminate the risk**. The Renishaw Primo™ LTS (Length Tool Setter) can facilitate the following measures for enhanced management of your production leading to an **increase in your profits**.



Productive Process Pyramid™

## Process setting

Automated on-machine tool setting eliminates manual setting operations.

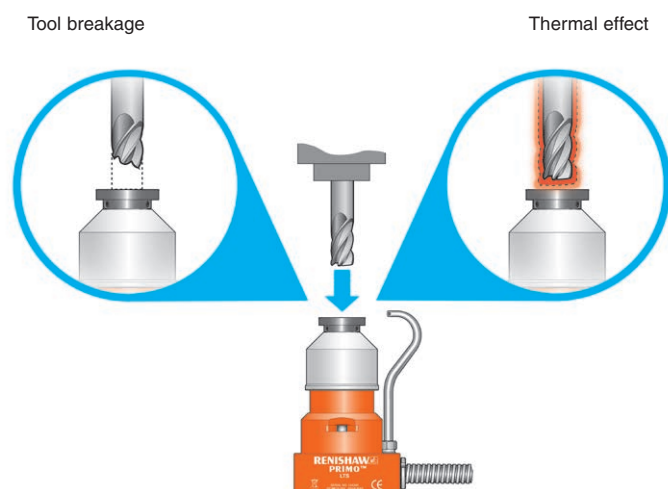
- Accurately establish tool length
- Eliminate manual setting errors and data entry
- Set up faster, improve quality and reduce scrap



## In-process control

Automated tool condition monitoring.

- Improve process capability and traceability
- Compensate for environmental and machine conditions
- Detect broken tools in-process
- Reduce non-productive time and scrap
- Increase productivity and profits



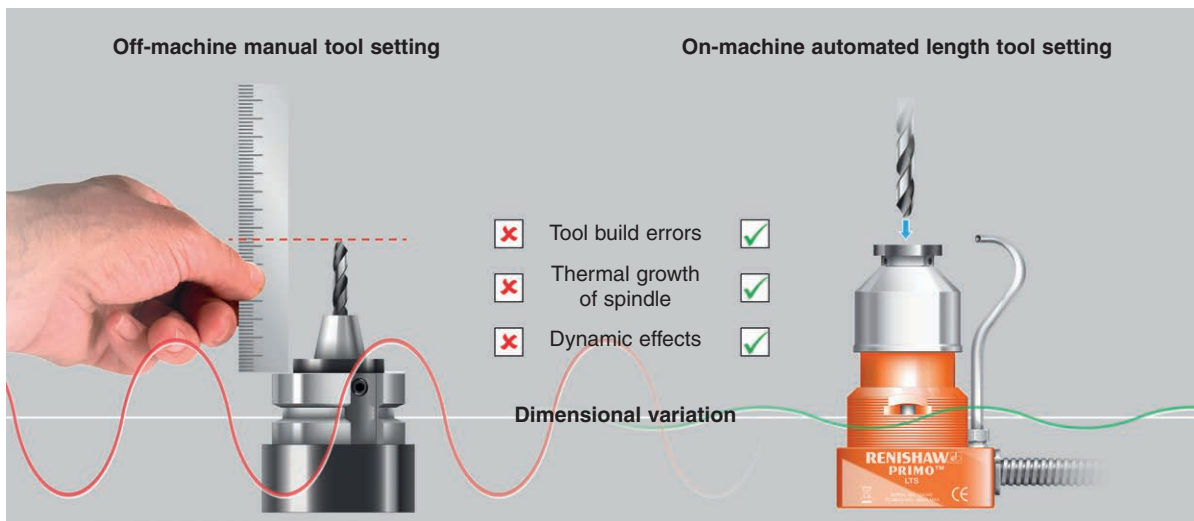
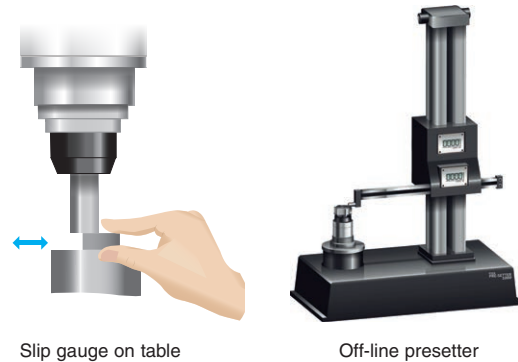
For further details regarding the benefits of all levels of process controls within the Productive Process Pyramid, please refer to *Metrology solutions for productive process control* (Renishaw part no. H-3000-3038) or visit [www.renishaw.com/processcontrol](http://www.renishaw.com/processcontrol)

# PRIMO™ LTS – more than just tool setting

When setting cutting tools on your machine tool using manual processes, you run the risks associated with some common problems:

- Non-productive time – most machine users take more than five minutes to set each tool
- Operator error and subsequent variation
- Manual calculation and transfer of data is prone to errors

**All of which lead to reduced profits.**



During machining processes, dimensional accuracy is dependent upon a number of variables, including tool length deviation and tool breakage. The Primo LTS detects these variables automatically, creating significant benefits to the whole machining process.

## With Primo LTS you can:

- Compensate for variation during the machining process
- Update the tool offset automatically to account for actual effects, e.g. tool wear
- Automatically stop the process when broken tools are detected
- Reduce rework, concessions and scrap

**All of which increase productivity, improve quality and increase profits.**



## PRIMO™ system – get the measure of your money

The Primo LTS (length tool setter) forms part of the Primo family of products. Also available is the Primo system which enables the user to quickly realise the benefits of automated part and tool setting, with a low initial investment.

### Primo Radio Part Setter (part setter)

Automatically sets the workpiece datum prior to cutting and takes in-process measurements of the roughed or finished dimensions of the workpiece.



### Primo Radio 3D Tool Setter (tool setter)

Automatically sets the length and diameter of a tool. It can also perform in-process broken tool detection.



### Primo Interface (interface)

Communicates between the part setter, tool setter and the machine tool controller using Renishaw's highly reliable frequency hopping spread spectrum (FHSS) radio transmission.



### Primo Credit Token (credit token)

Enables system operation. Each Primo kit comes with the first 6-month token included. \*



### GoProbe software and training kit

Probing cycles for part setting and tool setting, plus everything you need to learn them easily.

\*The Primo LTS works independently from the Primo credit system.

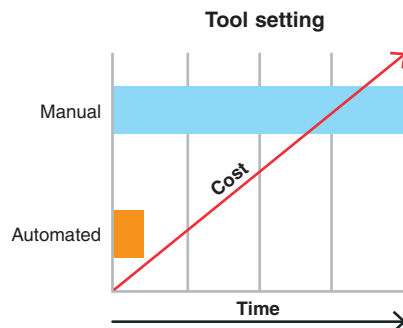
Primo is available in many different kits, so you can choose the one that best suits your needs. To find out more, visit the Primo website at [www.renishaw.com/primosystem](http://www.renishaw.com/primosystem)

## Tool setting pays ...

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



Automated tool setting with Renishaw's Primo LTS is up to ten times faster than using manual methods, which means immediate and **significant cost savings.**



Scrap and rework reduce productivity and profits. The Primo LTS tool setting probe helps guarantee "right first time" parts which means **reduced waste and increased profits.**

### Primo LTS system key features

- Rapid measurement of tool length on a variety of machine tools
- Reliable broken tool detection
- Air blast for effective swarf removal
- Fully integrated interface for simple set-up
- Robust design for the harshest of conditions

### ... 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

*"Since we started using Renishaw probes and software ... there has been a reduction of 66% in set-up time and we have stopped talking about component rejections and manual errors."*

**Associated Tools (United Kingdom)**

## About Renishaw

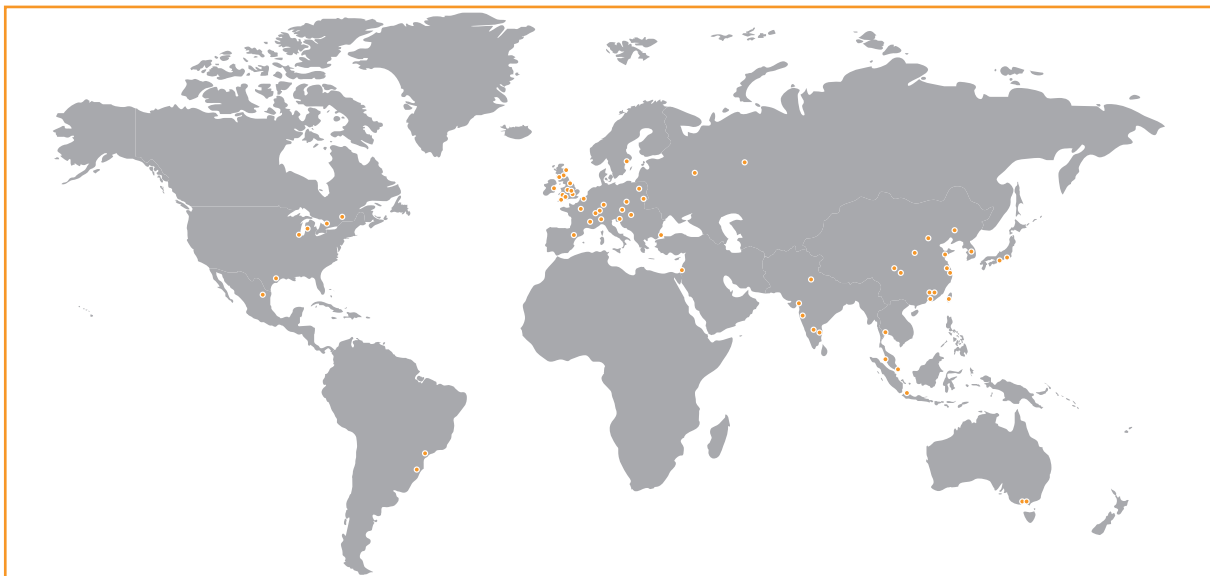
Renishaw is an established world leader in engineering technologies, with a strong history of innovation in product development and manufacturing. Since its formation in 1973, the company has supplied leading-edge products that increase process productivity, improve product quality and deliver cost-effective 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](http://www.renishaw.com/contact)



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