

2000

Machine controllers form an important part of the measuring system. The advent of continuous contact probing led LK to **introduce the LK4000 controller**. Controlling up to 9 axis, the LK4000 supported a new range of analogue probes from Renishaw.

LK 4000
Controller
and SP600
Probe



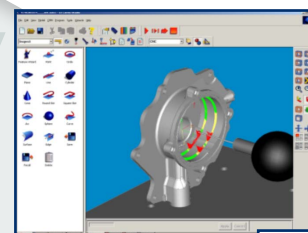
2001

LK now have **machines installed in over 40 countries** around the globe including:

Algeria - Argentina - Australia - Belgium - Brazil - Canada - China - Columbia - Czech. Rep. Denmark - Egypt - France - Germany - Greece - Holland - Hungary - Hong Kong - India Iran - Ireland - Israel - Italy - Japan - Korea - Luxembourg - Malaysia - Mexico New Zealand - Norway - Pakistan - Poland - Portugal - Romania - South Africa - Spain Sweden - Switzerland - Syria - Taiwan - Thailand - Turkey - UAE - UK - USA

2002

After 5 years of continuous growth in the CAMIO software, a **new product CAMIO Studio-Inspect** introduced a new user-friendly interface with enhanced programming capability. This software paved the way for future-proofing the inspection software from LK.



LK CAMIO
Studio-Inspect

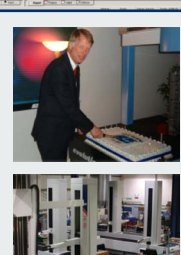
2003

LK celebrated 40 years of metrology expertise. Incorporating all this knowledge into the machine design saw the bridge range of machines improved and the Evolution and Integra machines were born, both offering an unprecedented 10 year structural guarantee.

LK received what is believed to be the UK's largest single order for CMM's worth £2.8M. **Land Rover placed an order for 14 car body machines** for the quality control of the new Discovery.



LK Integra



LK Evolution

John Baker (then Chief Executive) cutting the birthday cake at the LK factory

2004

LK formed a **joint venture with Chinese company SMTC to produce CMM machines in China.** Shanghai Measuring and Cutting Tool Works begin to produce the LK G-90C range and also the new granite based LK Ascent.



LK Ascent



LK PT Scan

2005

LK entered the automotive powertrain market to compete against Zeiss and the fixed probe. Primarily designed for the USA market, the PT Scan machine was an evolution of the Ultra offering high-speed analogue scanning, but with volumetric accuracy as low as 1.4+L/500

This year saw the **introduction of the latest Renishaw scanning probe, the SP25M** which was seen as the ideal replacement for a fixed probe head because of its flexibility for indexing and stylus change capability.



2006

LK was acquired by Metris in a deal reported to be worth £27,000,000. LK CMM's were added to the Metris portfolio of non-contact inspection solutions in order to provide a full CMM laser scanning solution, including service and support, to complement the existing range of Metris scanners.



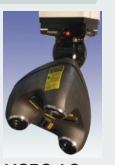
LC15



LC50



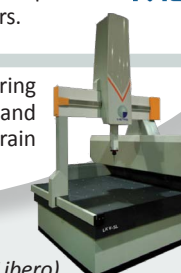
XC50



XC50-LS

2007

LK Libero replaced the PT Scan offering improved accuracy, repeatability and speed performance for powertrain measurement.



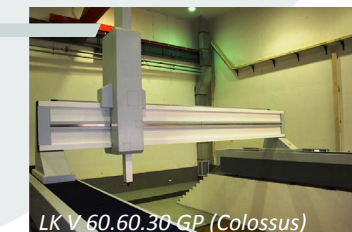
LK V SL (Libero)

LK was joined at Metris by **Coord3**. To expand the range of CMM machines on offer from Metris across all price and accuracy markets, **Metris also acquired Italian CMM manufacturer Coord3**.



2008

LK supplied, what is still thought to be at 6m, the widest CMM ever manufactured. With a working volume of 6m x 6m x 3m, this massive CMM still manages to achieve accuracies of less than 5 microns due entirely to the design and ceramic material technology that has been the trademark of LK for over 20 years.



LK V 60.60.30-GP (Colossus)

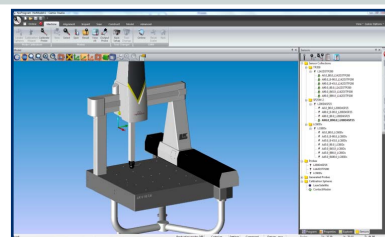
2009

Metris was acquired by Japanese giant, Nikon Corporation. The LK CMM entered into its next new era after the acquisition of Metris by Nikon Corporation, Japan. Nikon wanted to diversify its Instruments Division into full 3D measurement with an emphasis on non-contact metrology.



2010

LK CAMIO software entered into its 7th generation of development. With full simulation, collision detection and multi-sensor support, CAMIO is proving to be the forerunner in multi-sensor DMIS programming.



LK CAMIO
Studio v7.0

2012

The **LK Altera** replaced the small volume Integra model. With a major re-design incorporating improved performance, productivity and reliability, the Altera is the **first fully Nikon branded CMM**.



Nikon LK Altera S 7.5.5 and
Nikon LK Altera S 12.10.8

2013

The LK brand reached **50 years of age**.



After 50 years of development, the LK CMM has come a long way since the early days of fixed probe and solid granite construction.

2014

LK controllers updated to the latest electronics with the **introduction of the NMC300 and the NMC100**.



NMC100 3-axis desktop
mounted controller and
NCH10 hand-box

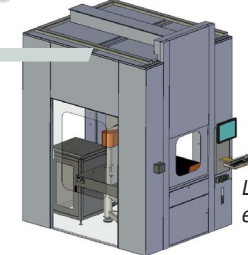


NMC300
multi-sensor
controller
and SOLO
hand-box

2015

LK Altera CMM machines were selected by American aircraft engine manufacturer **for turbine blade inspection**.

In total, 40 CMM's of volume 600mm x 500mm x 500mm, fully enclosed and utilising both SP25 analogue scanning and LC15Dx laser scanning technology are purchased.



LK Altera 6.5.5 in
environmental enclosure

2016

LK designed and developed a twin-probe solution for >1.2m deep bore measurement using SP80 and PH10M probe heads **for laser/touch probe measurement**.



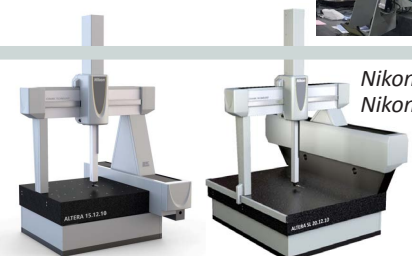
Twin probe solution
on LK Ultima 60.15.10



Nikon LK Altera M 15.12.10 and
Nikon LK Altera SL 20.12.10

2017

The **LK Altera M** replaced the **Evolution and Libero** models. The Evolution and Libero also got a re-design incorporating many of the successful innovations from the Altera S, and continue to showcase LK as a world-competing CMM brand.



2018

LK was bought by the Italian company, ASF Metrology. After Nikon decided to concentrate on non-contact technology, ASF owner Angelo Muscarella seized the opportunity to purchase the CMM division from Nikon and lead the newly created LK Metrology into its next exciting chapter...



2019

LK introduces Scantek 5, with Renishaw Revo-2 scanning system and multi-sensor technology to offer 5-axis solution.



Altera Scantek 5-axis
multi-sensor CMM

LK launches the Altera C, which is the first of three sizes of budget CMM planned.



Altera C 10.7.5

- LK China new tech centre in Shanghai
- LK Europe new office in Turin, Italy
- LK US relocation of the North American Headquarters to New Hudson, Michigan



56 years and counting...

1963 1964 1965 1966 1967
1968 1969 1970 1971 1972
1973 1974 1975 1976 1977
1978 1979 1980 1981
1982 1983 1984 1985
1986 1987 1988 1989
1990 1991 1992 1993
1994 1995 1996 1997
1998 1999 2000 2001
2002 2003 2004
2005 2006 2007
2008 2009 2010
2011 2012 2013
2014 2015 2016
2017 2018 2019

...we are metrology


www.LKmetrology.com

56 years and counting... EN 1119 - Copyright © 2019 LK Metrology. All rights reserved. The information in this document is subject to change without prior notice and is intended as general information only.

1963

Founded by Norman Key, a former Rolls-Royce engineer, LK (or LK Tool as it was first named) were a supplier of granite inspection tooling and inspection components to the engineering industry.

The name LK was formed by using the initials of Jim Lowther, his father-in-law and owner of Notsa Engineering, and Normans surname, Key.

Norman Key, company founder



1969

The first LK Maxi-Check manual CMM was supplied to Rolls-Royce Bristol.



LK Maxi-Check

1971

LK continued to expand the size of co-ordinate measuring machines and became the first manufacturer to offer a system complete with mini-computer and in-house written inspection software.

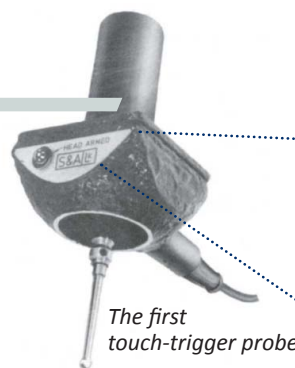


DEC PDP-11/20

1972

LK worked in partnership with Rolls-Royce developing the now industry standard Renishaw touch-trigger probe.

Norman Key worked with the Chairman of Renishaw, Dave McMurtry and ordered the first 10 probes to fit to the Maxi-Check CMM replacing the original solid probes. Notice how these first probes carried the LK logo.



The first touch-trigger probe



1974

As business continued to grow, in June 1974 LK moved to a new Sales and Marketing facility at East Midlands Airport. LK expanded further by purchasing the company Control Systems from Rolls-Royce in Derby.



The first motorised or CNC Maxi-Check machine was supplied to LK's first overseas customer in Sweden.



1975

LK manufactured the worlds largest moving bridge co-ordinate measuring machine to inspect Mini Metro bodies at Rover Longbridge, England. Interestingly, this machine is still used to inspect car bodies to this day after many upgrades.



LK designed and developed the worlds first horizontal spindled CMM named the Metre 4. This machine incorporated a granite spindle. The first machine was sold to Rolls-Royce Hucknall in Nottinghamshire, England.



LK Metre 4

1976

The 'little brother' to the LK Metre 4, the LK Micro 4 was introduced. The first machine was infact manufactured by Leicester based, British United Shoe Machine Co. Ltd.

LK CMES inspection software was introduced running on DEC mini-computers.



LK Granite 80



LK Micro Four

1977

LK manufactured the world's first bridge machine incorporating all granite slideways. Replacing the Maxi-Check, the Granite 80 (or G80 as it was called) stayed in manufacture until it was superseded by firstly the 'G80HA' and then the 'Axiom' range some 12 years later.



LK Maxi-Check

1979

LK further increased it's international presence by entering the Chinese market.



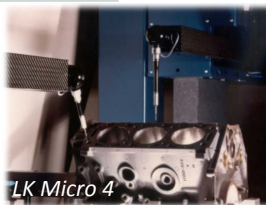
1980

A large all granite bridge style CMM was sold to I.U.G in Romania with a measuring volume of 9m x 3m x 2m. This granite table was so large, two individual tables had to be mated and epoxy bonded together using a special LK developed process.



Twin table G80 90.30.20

LK introduced another world first, the Carbon Fibre spindled Micro 4. This high accuracy horizontal arm machine was ideal for automotive engine component measurement.



LK Micro 4

1981

The Micro 4 was redesigned incorporating all granite slideways and all air-bearing construction.



LK Micro 4

The manufacturing division of LK was relocated from Ascot Drive in Derby, England to join the Sales and Marketing division at East Midlands Airport.

1982

LK moved into the American market with the formation of LK Tool USA Inc. initially based in Chicago, and then moving on to Phoenix.

A second USA location was opened in 1983 in Flint, Michigan to service the Automotive Industry.

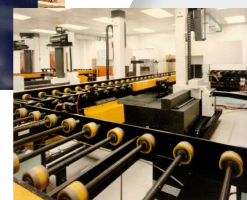


1984

The Ford Motor Company ordered two high speed 'Twin Column' Micro 4 CMM's with automated part loading systems. These machines were used to inspect 6 cylinder engine blocks at the Cleveland Engine Plant.

Following 21 years as a private company, LK was bought out by the machine tool manufacturer Cincinnati Milacron. Cincinnati wanted to incorporate measurement into their FMS along with their machine tools.

Already a global company, machines have, to this point, been installed in 15 countries around the world.



1985

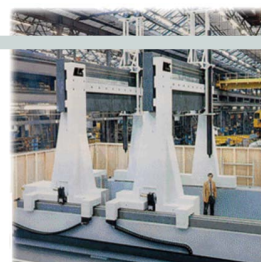
LK was chosen as a preferred supplier of co-ordinate measuring machines for General Motors. Over 50 machines were supplied between 1984 and 1987.



LK Metre 4's in manufacture at East Midlands Airport

1986

Boeing ordered the worlds largest twin-bridge machine for the measurement of 747 wing structures. This machine, being too large for manufacture in-house, was built at the British Rail Engineering workshops in Derby.



LK twin bridge machine with a measuring envelope of 11 x 4 x 3.5 m.

1988

Following continuing success in the world market, LK was awarded the Queens award for Export.

Dave Sawyers (MD), Norman Key and Steve Higgins (Prod. Mgr) pictured outside Buckingham Palace, London.



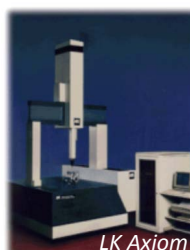
1989

Again, LK was leading the world with it's use of materials technology and the Axiom range of ceramic spindle machines were introduced.

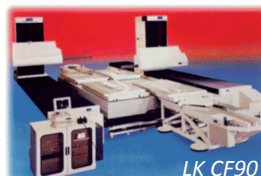
The advent of IBM PC's had arrived and LK delivered it's CMES inspection software for the PC.

Another first for LK, the CF90 machine range was introduced. This machine was designed as a truly thermally stable machine utilising Ceramic, Invar and Carbon Fibre in its construction.

The first two machines were sold to GM in Buick City and Hamtrack in the USA. This machine was designed and developed to meet the GM specification for speed, accuracy and shop-floor use.



LK Axiom



LK CF90

1991

With the Aerospace Industry using more carbon fibre components, LK introduced the Ultrasonic NDT inspection machines to test for de-lamination.

CMM sales to Algeria and Egypt in this year bring the total countries having LK machines installed to 30.



LK Ultrasonic Inspection Machine



1992

LK was bought by a Birmingham based group of companies, TransTec, led by the local MP and businessman Geoffrey Robinson.

The LK Tool USA Inc were relocated in a new facility in Brighton, Michigan.



1993

The re-designed Micro/Metre 4 horizontal arm machines, re-named the HC90, was introduced with a four column machine installed at Rover Longbridge in Birmingham, England.

The Axiom range of bridge machines were re-designed with ceramic beam and spindle components and introduced as the G-90C range.



LK G-90C 6.5.4

1994

A royal visit to LK by the Duke of Kent.

John Beckett (then Sales Director) explains measurement to the Duke of Kent



1995

Another first for LK, the G90K was redesigned using an 'H' section ceramic beam and ceramic spindle.

The manufacturing process for the bridge utilised specialist bonding technology for the assembly of the beam.

The first machine was supplied to Argentina (Fric Rot Automotive) and now LK's global presence covers 37 countries.

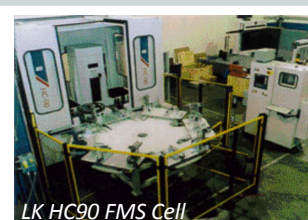


LK G90K and G-90C

1996

Automation reached new heights with the installation of five fully integrated FMS CMM's in CDC.

LK world support continued to grow with the opening of the LK Hong Kong office.



LK HC90 FMS Cell

1997

CMM programming was revolutionised with the use of CAD data. LK introduced the first release of the now world famous CAMIO software incorporating full DMIS support.



LK CAMIO Software

Based upon Spatial Technologies ACIS solid modelling kernel, CAMIO software offered both on-line and off-line programming capability.



LK Ultra Precision

1998

Increasing the machine portfolio, LK introduced the Ultra range of high accuracy bridge machines. Competing with Lietz and Zeiss, the Ultra offered standards room accuracy at a reduced cost.

1999

Introducing yet another machine range, the LY90S Layout style of horizontal arm machines was released.

The ownership of LK changed. Schroder's, one of the worlds largest investment brokers, bought the company from TransTec in a deal nearing £28m.



LK LY90S