

For release: IMMEDIATELY

## CMM MANUFACTURER LAUNCHES PORTABLE MEASURING ARMS

---

LK Metrology ([www.LKmetrology.com](http://www.LKmetrology.com)), which has been manufacturing static co-ordinate measuring machines (CMMs) in the UK since 1963, has for the first time diversified into the supply of 3D articulating arm metrology systems, otherwise known as portable arms, with the launch of a range of 24 machines called FREEDOM™ arm.

There is a 6-axis model for touch probing and a 7-axis version for multi-sensor metrology including laser scanning. Both are available in two accuracy levels and the four products come in six sizes with a reach of up to five metres. International sales and support is through the company's offices in the UK, North America, Belgium, France, Germany, Italy and China as well as via a worldwide distributor network.

Marketing manager Dave Robinson, who is based at the firm's CMM factory near Derby, England commented, "The solutions we can offer customers is greatly expanded by the new range of arms. Their portability especially well suits them to line-side measuring and inspection in factories, while their compactness makes them ideal for use on machine tools for in-process quality control.

"The platform is also particularly appropriate for reverse engineering applications, virtual assembly design environments and 3D modelling. Moreover if very high precision tolerances do not have to be measured, a portable arm is a cost-effective way to progress from manual to CNC metrology."

The two 6-axis arms for tactile inspection are named FREEDOM classic and FREEDOM select, the former being the entry-level model and the latter the enhanced accuracy version, which is supplied with a calibration bar. Addition of an extra degree of freedom provides infinite movement and enables laser scanning with a Nikon Metrology ModelMaker™ H120, MMDx100 or MMDx200. These 7-axis arms, again in two accuracy versions, are called FREEDOM classic scan and FREEDOM select scan. The touch probing accuracy of all FREEDOM arms is certified to ISO 10360-12 before delivery and may be supplied with a variety of aluminium and carbon fibre probe kits, styli, mounting rings including some with a magnetic or vacuum base, tripods, rolling stands, and carts with a granite top.

Carbon fibre tubular construction ensures stability under challenging conditions. Infinite rotation and a proprietary counter balance makes manual movements light, which promotes ease of use even when trying to access awkward areas of a component. Wi-Fi connectivity and battery power allow completely portable wireless touch probing for maximum flexibility. The arm can be stowed and locked in place between measurements and when it is being relocated. Even the largest FREEDOM arm model weighs less than 11 kilograms, making set-up and repositioning quick and easy.

A notable feature of the arms is the inclusion of absolute rather than incremental rotary encoders to feed back the angular position of every joint to the control software. The equipment may therefore be used immediately on start-up, avoiding the need to calibrate the probe before use every time. This raises productivity, as does the highly repeatable probe connection that allows them to be swapped quickly without interrupting the measuring process to recalibrate. Contributing also to efficiency and convenience is an LCD display with a



## PRESS INFORMATION

quick-access menu on the probe wrist, putting the most useful information directly in the hands of the operator during measurement.

A strong line-up of third party inspection software can be supplied by LK Metrology with its new FREEDOM arms, including InnovMetric's PolyWorks Inspector™ that has the ability to swap programs seamlessly between portable and static CMM platforms. ArcoCAD™ metrology software from Metrostaff is also available, as is Nikon Metrology's Focus Inspection™ for data acquisition and analysis, while the latter's CMM Manager™ inspection package may be used for touch probing only.

Freedom™ trademark of LK Metrology.

ModelMaker™, Focus Inspection™ and CMM Manager™ trademarks of Nikon Metrology NV

PolyWorks Inspector™ trademark of InnovMetric Software.

---

### About LK Metrology

LK Metrology is renowned for innovative CMM hardware and software solutions. The company's metrology products are used worldwide to control and improve the quality of manufactured components. Its precision technology underpins the process chain from design, development, production and assembly through to quality assurance in global industries such as automotive, aerospace, defence, motorsport, energy, medical and contract inspection.

Established in England in 1963, LK Metrology has an impressive heritage in metrology dating back to the birth of CMM technology. Founded by CMM pioneer Norman Key and his father-in-law Jim Lowther, LK Metrology is credited with many of the CMM industry's firsts including the first bridge-type design, first OEM to integrate computers, first to use a touch trigger probe, first to develop inspection software, first to use all air bearings and granite guideways, first to use carbon fibre composite spindles, first to use microprocessor-controlled drive systems, first to produce a truly thermally stable CMM and first to produce a high-accuracy horizontal-spindle CMM.

In 2018, LK Metrology was relaunched as an independent CMM manufacturer after several years as a division of Nikon Metrology. Headquartered in the UK, LK's CMM development and production are at the company's facility in Castle Donington. Sales and support offices are located in the UK, North America, Belgium, France, Germany, Italy and China, supplemented by a worldwide distributor network.

### Captions for images:

1. LK FREEDOM classic scan portable measuring arm.
2. LK FREEDOM arm in action with H120 laser scanner.
3. LK FREEDOM portable measuring arm in its case.

On behalf of: LK Metrology Ltd,  
Argosy Road, East Midlands Airport,  
Castle Donington, Derby, DE74 2SA,  
United Kingdom.  
Tel: +44 (0)1332 811138  
Contact: Dave Robinson  
Email: [marketing@LKmetrology.com](mailto:marketing@LKmetrology.com)  
Website: [www.LKmetrology.com](http://www.LKmetrology.com)



## PRESS INFORMATION

Issued by: The Right Image Ltd,  
PO Box 42, Twickenham, TW1 1BQ,  
United Kingdom.  
Tel: +44 (0)20 8891 0603  
Contact: Chris Wright  
Email: [chris@therightimage.net](mailto:chris@therightimage.net)  
Website: [www.therightimage.net](http://www.therightimage.net)

Release No.: 1012(PR)