

# XCal-View data analysis software



**Renishaw's NEW laser data analysis software offers customers new and improved features for analysing data captured using a Renishaw laser**

Both new and existing users can benefit from using XCal-View:

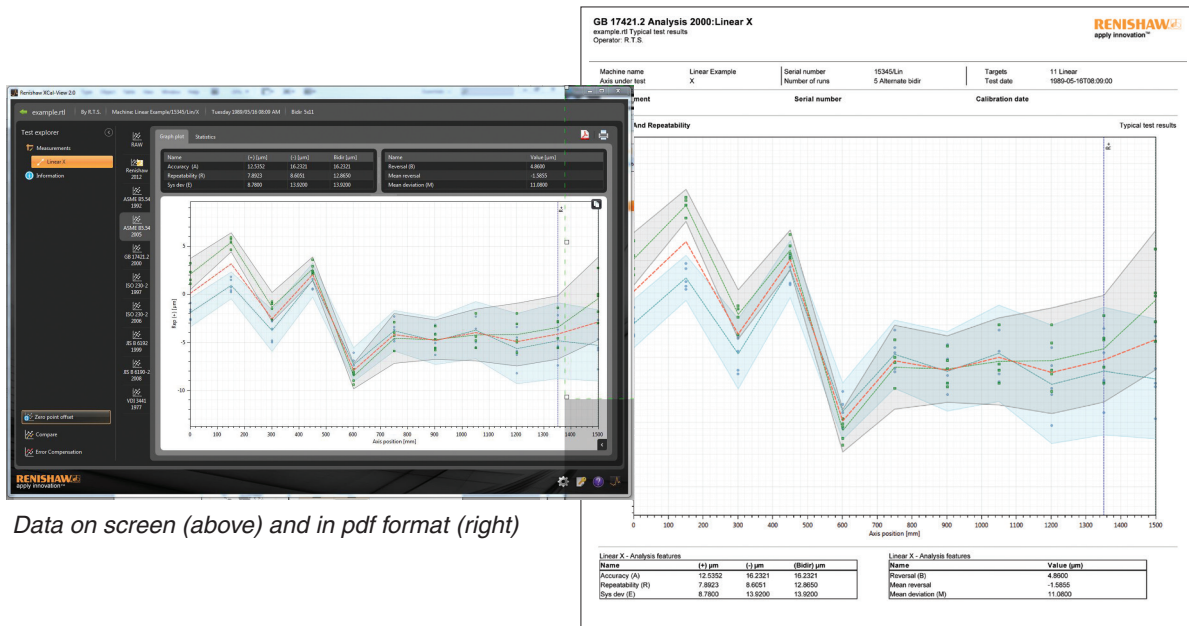
- Greatly improved user experience – With an all new GUI and layout. XCal-View offers users a simple but powerful tool for data analysis.
- User Customisation – An emphasis on flexibility means that data can be selected and quickly formatted, then saved and distributed as required.
- Error Compensation – Significantly re-worked error compensation functionality allows for the assessment of machine errors and production of linear compensation files, all in one simple to use program.
- Works with XL-80 or ML10 captured data files

**Upgrade to XCal-View NOW**

## Key innovations and improvements – XCal-View

XCal-View is a totally new software program for the analysis of data captured using a Renishaw laser device.

Renishaw's all new software gives users greater options and control in their analysis of data. This is achieved through significant new functionality combining simple data selection and manipulation with far greater flexibility in the way that this data can be compared, displayed, formatted and viewed than ever before.



Data on screen (above) and in pdf format (right)

## NEW FEATURES:

- Zoom and data manipulation** - Analysis data can be displayed and viewed in a number of ways to best suit the user, with flexible views and multiple graph formats that are easily tailored to the user's requirements.
- Zero point offset** - Zero point offset enables the user to offset the data so that the displayed and effective '0' position is different from that set at the time of data capture. This is an essential addition for users carrying out error compensation of rotary axes.
- Compare functionality** - XCal-View allows users to overlay multiple data sets on the same screen. Individual test runs can then be selected and deselected and the scales manipulated to aid comparison. This is useful for looking at the effect of mechanical and servo adjustments or comparing different types of data sets (e.g. linear against yaw errors).
- Simple and quick copying and sharing of data** - Graphs, statistics and data can all be quickly and simply copied from XCal-View into many popular programs, including Microsoft® Excel and email programs making sharing of analyses easier than ever before.
- PDF reporting and printing** - As well as the simple copy functionality to external programs that XCal-View offers, PDF reports can easily be generated from within the XCal-View software application.
- ISO 230-2 (2006) analysis** - Also analysis for numerous other current standards.
- Generic error compensation** - A new generic compensation function. A simple, single 'profile' entry screen enables quick generation of the data values and a graphical view of the expected compensated performance, overlaid on the original test data view for simple comparison.

## XCal-View specification

| Analysis measurement types |
|----------------------------|
| Linear                     |
| Angular (including rotary) |
| Straightness               |
| Squareness                 |
| Linear parallelism         |
| Angular parallelism        |

Not all measurement types are currently supported in XCal-View. However the software will detect if an 'unsupported' file type is selected and open the previous analysis module where appropriate (new users can download the 'Renishaw analysis' module for free from the Renishaw website if they require this option).

| Analysis standards*     |
|-------------------------|
| ISO 230-2 (1997)        |
| ISO 230-2 (2006)*       |
| ASME 5.54 (1997 & 2005) |
| VDI 3441 (1977)         |
| GB/T 17421 (1998)       |
| GB/T 17421.2 (2000)     |
| JIS B 6190-2: 2008      |
| JIS B 6192 (1999)       |
| Renishaw (generic)      |

Producing measurement results to national and international standards is, of course, a requirement but with the new XCal-View software and Renishaw report format you can also easily explore the data with ad-hoc tests and investigations to really understand your machine's performance . . . and then report on it.

| Computer         | PC - desktop or laptop   |
|------------------|--|
| Processor        | 1 GHz Pentium, 512 MB RAM  |
| Operating system | Windows® 7 and Windows® 8 fully supported. The above support 64 bit systems. Note: Also tested with Windows XP SP3 and Windows Vista SP2 but ongoing compatibility cannot be guaranteed. |
| Drives           | CD-ROM for software installation   |
| Screen           | 1024 x 768 pixels resolution minimum, SVGA   |
| Hard disk        | 100 MB drive space needed for software installation  |
| Peripherals      | Keyboard and Microsoft mouse or compatible pointing device   |

## XCal-View availability

XCal-View replaces the analysis module within earlier Laser XL, Rotary XL and Laser10 software. It is supplied on a separate CD in new software 'kits' supplied with new laser systems and is also available as a standalone product for existing users. When installing please note that the software requires activation (online or via email) using a code supplied with the software. Standard options allow for 2 or 10 installations.

## XCal-View development

XCal-View is the first element of a suite of new software to support Renishaw lasers and related measurement devices. This will include revised modules for data capture and error compensation (including volumetric compensation). Renishaw is also committed to expanding the capability of XCal-View with enhanced functionality and expanded reporting functions.

\* Supported reporting standards are as shown above. Users can access older standards by using the optional 'Renishaw analysis'.

**Renishaw plc**

New Mills, Wotton-under-Edge,  
Gloucestershire GL12 8JR  
United Kingdom

**T** +44 (0) 1453 524524**F** +44 (0) 1453 524901**E** [uk@renishaw.com](mailto:uk@renishaw.com)[www.renishaw.com](http://www.renishaw.com)**RENISHAW**   
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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, vacuum casting, and injection moulding technologies for design, prototyping, and production applications
- Advanced material technologies with a variety of applications in multiple fields
- Dental CAD/CAM scanning and milling 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, please visit our main website at [www.renishaw.com/contact](http://www.renishaw.com/contact)



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L - 9925 - 0108 - 01 - A

Issued: 0913 Part no. L-9925-0108-01-A