

Extol

The next generation of shop floor hardened non-cartesian CMM

True to Aberlink's heritage for innovation, the Extol is the world's first CMM to utilise a delta mechanism.

Designed for robustness and reliability, the Extol CMM will run around the clock making it ideal whether it is positioned next to a machine tool, in a manufacturing cell, or used in a dedicated inspection area.

Five temperature sensors monitoring both the machine and ambient temperature ensure that the Extol is capable operating in uncontrolled environments and reporting measurements as though they had been taken at 20°C. The software will also produce a warning should the temperature be changing at a rate that is not conducive with reasonable metrology practice.

The Automatic Tool Offset Correction available with the Aberlink 3D software compliments the attributes of the Extol perfectly allowing utilisation as part of a fully automated production process in the midst of a manufacturing environment.

The ergonomics of the Extol have also been a significant design factor. It is not only quick and easy to perform one-off inspections, but also has ample access for either batch inspection or to facilitate automatic loading. With a larger measuring volume and smaller overall footprint than its predecessor, the Xtreme, the Extol can be positioned exactly where the measurement is needed.

Robust, accurate and reliable, the Extol CMM is the perfect solution to automatically verify part quality for critical components.

Key Features

- Fully sealed recirculating bearings proven in the machine tool market significantly improve smoothness and dirt immunity.
- A directly coupled belt-drive system eliminates the need for a gearbox and any associated backlash issues.
- Swiss-made DC motors and a new Deva motion control system provide exactly the reliability that is needed for shop floor CMM inspection.
- The super-smooth belt-drives and linear bearings also enable long styli to be used without suffering false triggering due to vibration.
- Automatic Tool Offset Correction and Automation options allow integration into fully automated manufacturing cells.
- Automatic temperature compensation allows the Extol to operate in uncontrolled environments and ensures that measurement results are reported as if they had been measured at 20°C
- The Extol can support the TP200B probe which uses strain gauge technology, so it does not exhibit lobing characteristics making it ideal for high accuracy applications. In addition, the TP200 probe has a longer life expectancy compared to the TP20, also making it ideal for automated and high-volume applications.

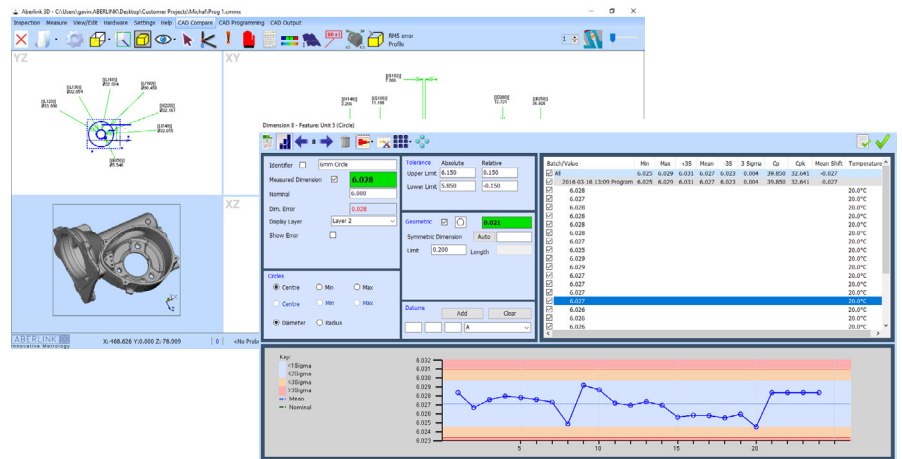
Extol powered by Aberlink 3D - making measurement easy

The Whole philosophy for Aberlink is to make measurement easy. Aberlink 3D software has been written by engineers for engineers and sets the industry standard for simple-to-use software. As a component is measured a representation of it is built up on the screen. The user simply clicks on the measured features to call up dimensions exactly as they would appear on a drawing.

However, Aberlink 3D is not only easy to use but also has the depth of functionality to make it the choice for either occasional users or full-time inspection professionals. The software incorporates GD & T dimensioning, RPS alignment, SPC data analysis and further modules are also available for off-line programming of parts from a CAD model and also for comparing measured results to the CAD.

Inspection reports can be in the form of fully dimensioned graphical representations as created on the screen, or tabulated reports in various formats that can show nominals, tolerances, errors, pass/fails, geometric tolerances etc. These reports can all be output as an Excel spreadsheet.

Popular throughout the world, Aberlink's measurement software provides the user with a powerful, yet easy-to-use interface. This substantially increases component through-put and vastly reduces the learning period for new users.



Specification

Measuring Volume XY Dia. 370mm
Z 270mm

Overall Size X 730mm
(without monitor arm) Y 715mm
Z 2000mm

Table Solid Granite Plate

Table Load Capacity 200kg

Volumetric Accuracy (2.6 + 0.4L/100) μm

Scale Resolution 0.1μm

Operational Temp. Range 5 - 45°C

Max. Acceleration Vector 750mm/sec²

Max. Velocity Vector 500mm/sec

Required Air Pressure Not required

