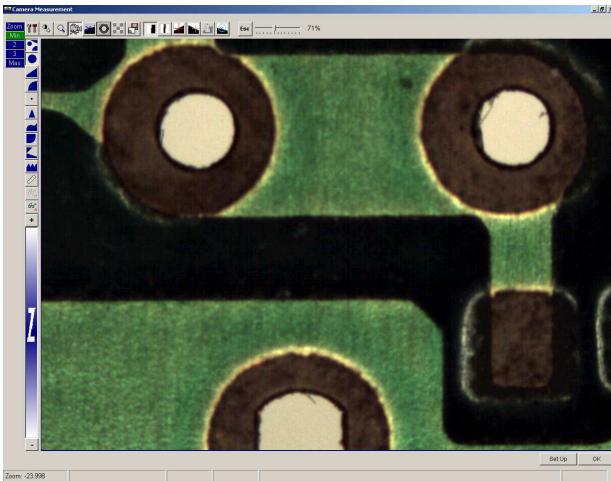
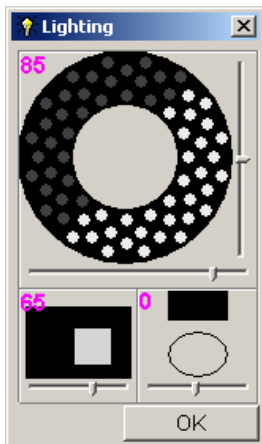


Powerful vision tools... yet so easy to use.

Aberlink's Vision Module allows the Aberlink 3D measurement software to be used not only on touch-trigger CMMs, but also with a camera system, to provide non-contact measurement under either manual or fully automatic CNC control. The camera icon will open an additional window showing the image of the camera.

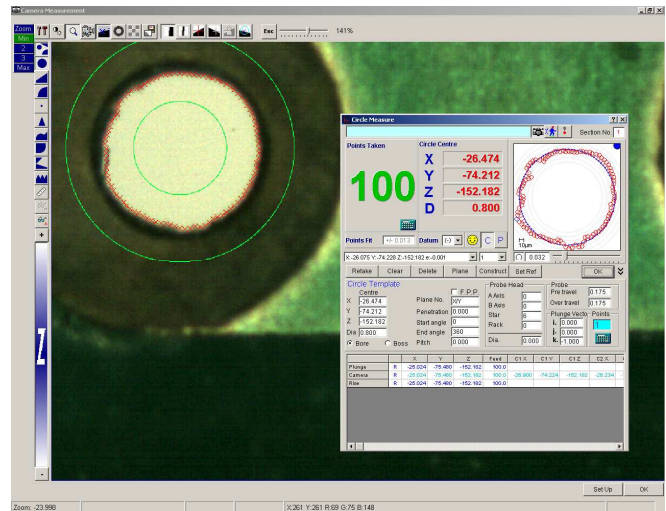


The lighting panel offers software control for surface illumination, back lighting and also TTL lighting, if available. As well as for intensity, the surface illumination tool also allows directional control of the lighting, which is fully automatic under CNC playback.



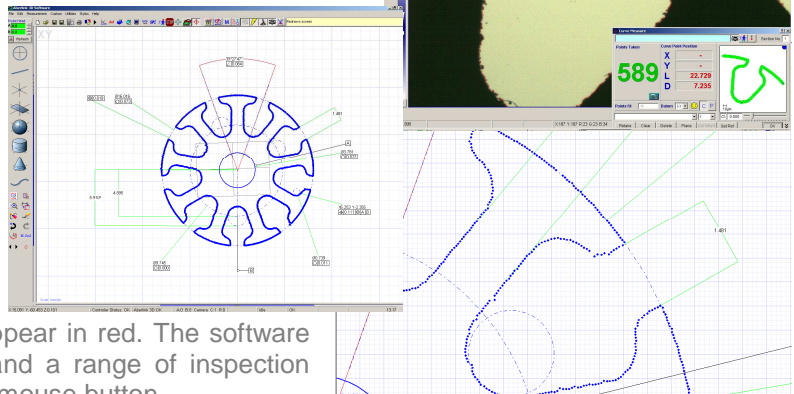
The curve tool also allows the software to trace around the profile of components. Dimensions can then either be called up directly on the measured data, or alternatively geometric features can be constructed through the points, or even a DXF file of the part can be imported and the data best-fitted to the file to view the actual measured shape. A surface profile tolerance can be applied to the DXF file, and where measured points are within the tolerance they will be displayed in green, whereas points falling outside of the tolerance band will be red. In this way a clear graphical representation of the entire shape can be viewed in one screen.

Measurements can then be performed using the camera image, including a full range of automatic edge detection tools, which will ensure fast and repeatable results without relying on the skill of the operator.



The Aberlink 3D software allows the user to dimension the measured features exactly as they would appear on a drawing.

Dimensions that are in tolerance appear in green, and out of tolerance appear in red. The software also allows full geometric tolerancing, and a range of inspection reports can be created with the click of a mouse button..

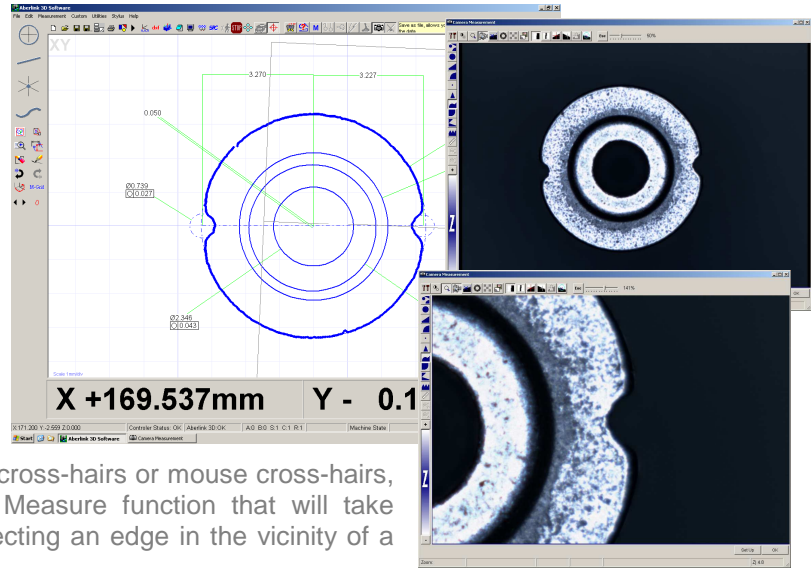


Aberlink 3D Vision

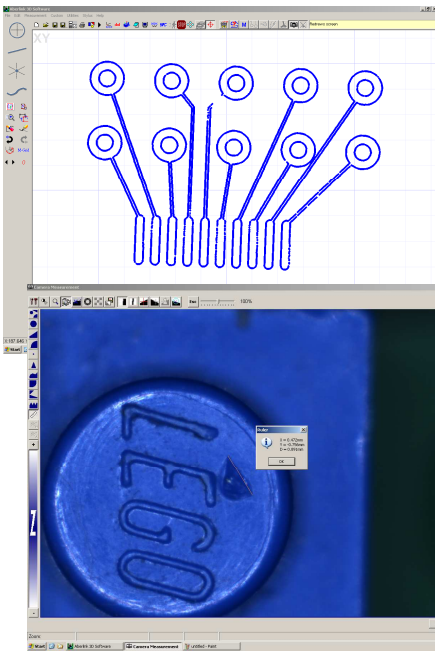
The digital zoom function allows you to zoom in on very fine features without the need for expensive optics (although control of both manual and CNC zoom lenses is available within the software).

Control of the Z axis and auto-focus is also available under software control.

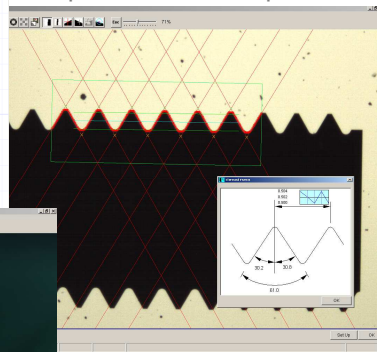
Other standard measurement tools include lines, arcs, circles, points, peak points and automatic shape recognition. Measurements can be performed using edge detection, or centre line detection, or by using full cross-hairs or mouse cross-hairs, and there is also a unique Smart Measure function that will take discrete measurement points by detecting an edge in the vicinity of a mouse click.



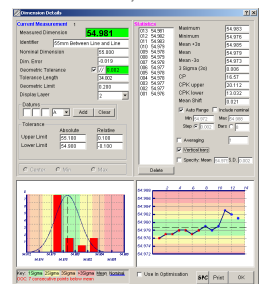
Some special tools include the 'All Edge Points' function, where every edge within the field of view will be grabbed with just a single mouse click. There is a 'Thread Measure' tool for analysing thread forms, and a 'Screen Ruler' function for when you just need a quick measurement between 2 points on the image.



All the edge detection controls are configurable by the user, such as step size between points, and filters etc. It is even possible to see how the tools affect the measurement points live on the screen before actually accepting them. There are also camera controls to adjust brightness, contrast, exposure, gain and colour control etc., or alternatively these can be automatically adjusted to suit the set up.



The Aberlink 3D software will also display SPC batch information. Results reported include maximum value in batch, minimum value, 3-sigma, CP value, CPK (Upper & Lower) mean shift and also plots two different customisable charts of the batch data. Various inspection reports can be printed in the form of fully dimensioned graphical representations, as created on the screen, or tabulated reports in several

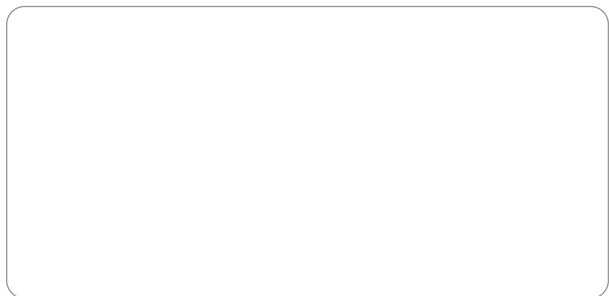


formats that can show nominals, tolerances, errors, pass/fails, geometric tolerances etc. These reports can also be outputted as an Excel spreadsheet.

For more information visit

www.aberlink.com

or contact your local
Aberlink representative.



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