

vision systems – 2D & 3D CNC multisensing

Video Edge Detection

Video edge detection (VED) ensures a repeatable result without relying on the skill of the operator. Hundreds of data points can be taken in an instant to calculate standard geometric features. Standard VED tools include circle, line point, focus and curve.

Profile Scanning

The curve tool automatically traces the profile of an undefined part. The resulting data-point cloud can then be compared to a DXF master for best fit analysis.

Once 'fitted' the data points appear red or green to indicate whether in tolerance. In addition to best fit, conventional dimensions can also be applied to the scan.

Dimensioned Part View

Measured results are displayed in the form of a fully dimensioned drawing. Dimensions within the specified tolerance are shown in green whilst dimensions out of tolerance are shown in red for immediate visual status of the measured part.

Geometric tolerances can also be displayed using standard drawing practice. The final dimensioned part view can then be printed as an engineering drawing with a traditional drawing frame containing company details, customer and part details, date and inspectors name.

SPC Included

Baty 3D software will also display SPC batch information for multiple components. Information given includes maximum value in batch, minimum value, 3-sigma, CPK value, mean shift and also plots two different charts of the batch data.

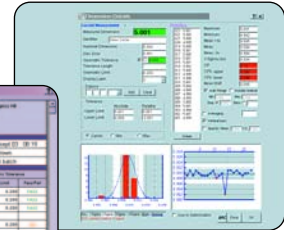
Easy Reporting

In addition to the graphical representation above, detailed reports can be instantly created showing the feature name, nominal dimension, actual, error, upper and lower limits and a green pass or red fail label for each measured dimension in tabulated format. Geometric tolerance details can also be displayed along with a thumbnail view of the part and batch/customer information.

The entire report can be duplicated as an Excel workbook for email.



Baty International											
Order No.	Order Date	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
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Standard system features include:

- High resolution 0.5 micron scales for increased accuracy
- 6.5:1 Zoom lens
- Programmable segmented LED lighting system
- Z axis dovetail slide mount for increased Z axis capacity
- High precision cross-roller stage
- Auto Video Edge Detection tools
- Fully dimensioned part view
- Auto programming
- CAD import / Export
- Profile scanning and best fit to CAD master
- Auto-focus
- SPC batch information including control charts
- Auto output to Excel

