

Automatic Measurements - An operator positions the laser stripe over the region of interest and releases the trigger. The surface within the field-of-view is analyzed and a mean surface line is calculated. Relative to this line, the maximum height and maximum depth of the contour is measured and displayed in the data table. The maximum range of variation, the average range and the standard deviation are also displayed in the data table.

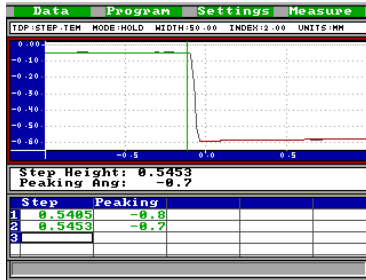
Advantages Realized

Immediate Data - Inspections can be done on the line, immediately after the production process. Out-of-tolerance events can be identified quickly and monitored to determine if corrective action is warranted.

Saves Time - Inspections can be performed at different lines throughout the day; samples do not have to be transported to a single inspection station.

Documented Results - Measurements are repeatable and the results are traceable.

Related Applications



HEIGHT - Many applications require the measurement of height of one feature or surface relative to another. This height difference is often called step or mismatch in panel fit-up or welding applications. The most important factor in measuring height is to determine the exact methodology to be used. In some instances, a line-fit of both surfaces is established and the perpendicular distance from the higher surface is used. Other applications demand different methodologies.

Sensor selection for a step measurement depends entirely on the range of height differences expected. An HS400 sensor with a 0.150" FOV may be necessary for expected ranges of 0.0" to 0.040", while an HS300 sensor with a 2.4" FOV may be required if the expected range is 0.0" to 1.0". A plotted view of the step is not necessary but it helps to insure that the feature is centered in sensor FOV. An LG1102 controller will provide this graphical feedback.

The surface profile can be captured and saved using either the LG1102 or LG4003. The ASCII type scan file can be retrieved to a PC and plotted using any common spreadsheet application. Data files are of similar type. Once saved and retrieved to a PC, they can be opened and viewed from any number of common application programs.

LASER GAUGE® One system, many applications.



Quality Gauging Systems Ltd, The Estate Office, Luton Hoo Estate, Luton, Beds. LU1 3TQ
Tel: +44 (0)870 143 3020 Fax: +44 (0)870 143 3021 Email: sales@qgs.co.uk
www.qgs.co.uk