

High Precision Measurements and Measurement Statistics

VISION_x INC.

www.visionxinc.com

Powerful & Easy To Use

VisionGauge® is a powerful tool for non-contact visual measurements. It uses advanced edge-detection technology that produces sub-pixel accuracy, increases measurement repeatability and virtually eliminates operator-dependent measurement error.

VisionGauge® is very simple to use and supports a wide range of measurement tools: from simple point-to-point measurements, diameters, radii, angles and XY calipers to skew-corrected parallel hash-lines and powerful and flexible marker-to-marker measurements, as well as fully-automated measurement tools (e.g. line width).

Computing Measurement Statistics

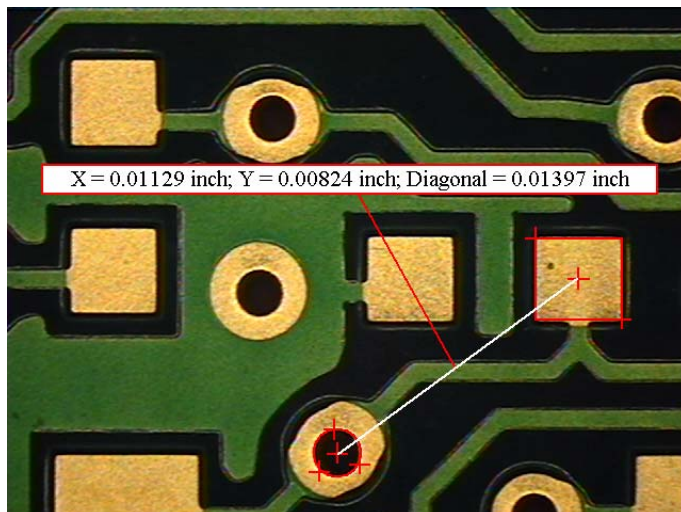
You can use VisionGauge® to compute measurement statistics, including sample mean, median, minimum and maximum, variance and standard deviation, as well as process capability statistics (i.e. C_p and C_{pk}).

With VisionGauge®, it is easy to manage all of your data (i.e. images, measurements and statistics):

- ▶ Link, store and recall all of your data with the easy-to-use integrated database and report generator
- ▶ Save the information to disk
- ▶ Print the information
- ▶ Seamlessly transfer the information to other application

Example

Here is an example of a simple marker-to-marker measurement. In this case, we are measuring from the center of the hole to the center of the pad. X, Y and "straight line" distances are shown:



Measurement Statistics:

Num.:	35
Min.:	0.01394 inch
Max.:	0.01399 inch
Mean:	0.01397 inch
Median:	0.01397 inch
Variance:	0.00000 inch ^2
Std. Dev.:	0.00001 inch

Process Capability:

Upper specification limit:	0.01410 inch
Lower specification limit:	0.01380 inch

C_p :	3.96458 inch
$C_{pk}(+)$:	3.49459 inch
$C_{pk}(-)$:	4.43457 inch