Image Processing for Image Analysis

VISIONx INC.

www.visionxinc.com

VisionGauge®

Computer software for visual inspection and high precision measurement

Powerful & Easy To Use

VisionGauge® has a broad set of powerful and easy-to-use image processing tools that allow you to "clean-up" images that cannot be properly dealt with by the image analysis tools and transform them into imagery that can be successfully & reliably analyzed.

For example, the images below illustrate the dramatic improvement obtained by proper image pre-processing using VisionGauge's® noise reduction and uneven illumination correction tools.

As can be seen in Image 2, it is impossible to apply a unique threshold value across the entire image to successfully extract the objects from the image background. However, Image 5 shows that - using VisionGauge's® Counting & Sizing tool - the objects can be separated easily & reliably from the image background after applying VisionGauge's® noise reduction & uneven illumination correction tools.
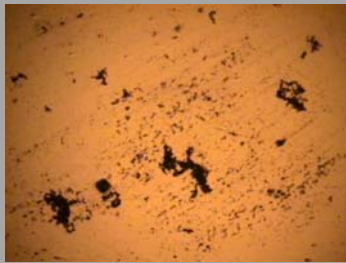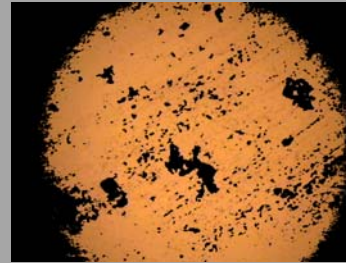

Image 1: Original image

Image 2: Original image after thresholding
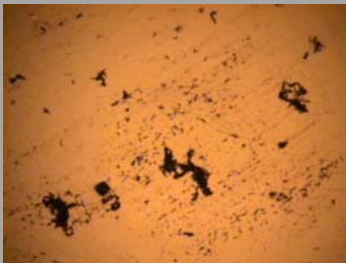

Image3: Original image after noise reduction

Image 4: Image 3 after uneven illumination correction

Image 5: Result of thresholding operation after noise reduction and uneven illumination correction