

Particle Analysis in Aluminum Image Analysis Report 226

Sample Description

Two images of aluminum samples in BMP format.

Purpose of Analysis

Demonstrate the ability of the Clemex image analyzer to discriminate, measure and classify all particles in the field of view.

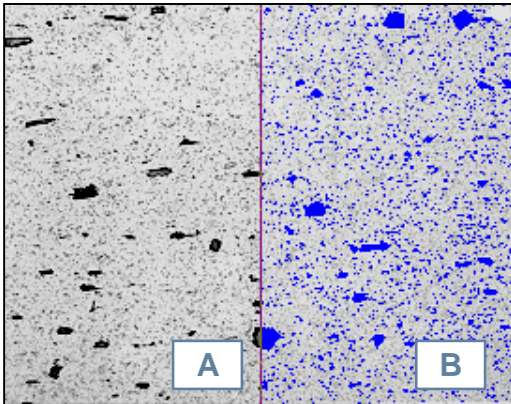


Figure 1: a) Original image at 500x (# opt3879a). b) All particles were binarized into the blue bitplane (Gray Thresholding).

Procedure

After binarization, artifacts were removed from the blue bitplane (*Trap, Chord Size*). The biggest particles were transferred into the red bitplane using an *Object Transfer* based on area. The elongated objects were transferred into the green bitplane using an *Object Transfer* based on length. The smallest objects were left in blue.

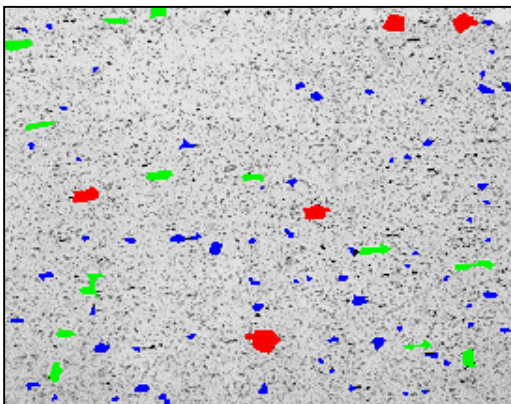


Figure 2: The largest particles are in red, the elongated particles are in green and the smallest particles are in blue.

Results Summary

	Area Perc. (%) #opt3879a	Area Perc. (%) #opt3879I
Largest:	0.85	0.29
Elongated:	1.09	1.12
Smallest:	1.47	1.48

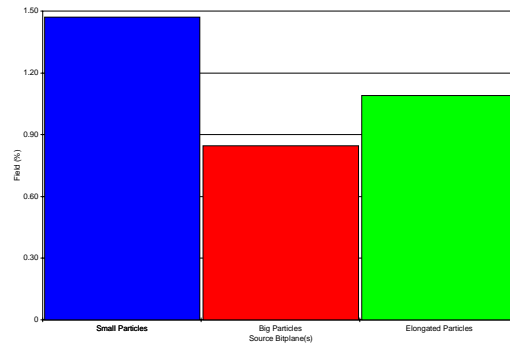


Figure 3: Area percentage of each class of particles compared to the field of view.

Equipment

Image Analysis
System:

Clemex Vision SE