

Anodized Aluminum Image Analysis Report 204

Sample Description

Sample of anodized aluminum.

Purpose of Analysis

Demonstrate the ability of the image analyzer to discriminate all grains in the field of view and to produce an ASTM E 112 rating.

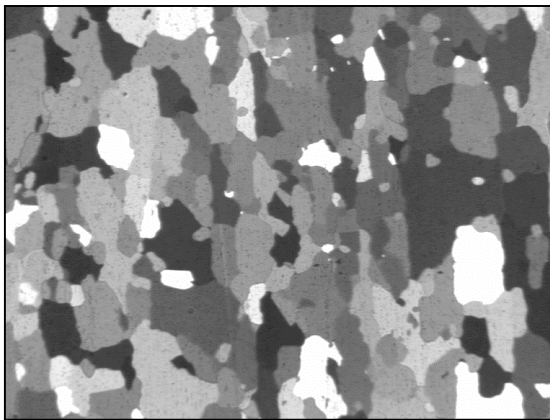


Figure 1: Original image.

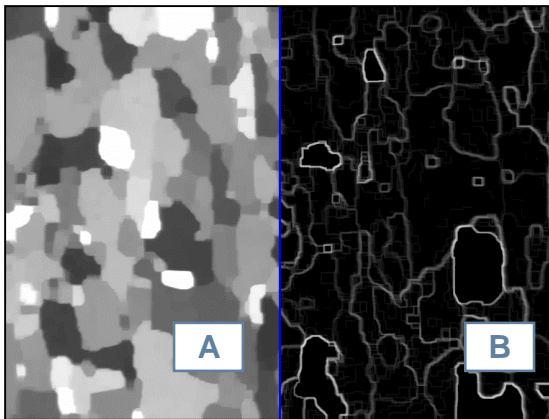


Figure 2: a) Gray levels were spread removing internal dots (Gray Closing and Opening).
b) A Gray Transformation allowed the system to isolate the grain network (Gray Gradient).

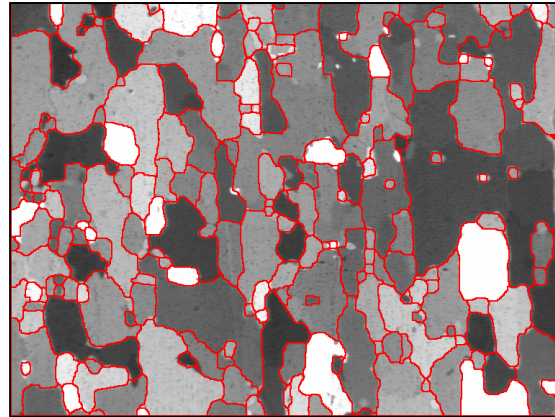


Figure 3: A Gray/Binary Transformation binarized the gray image to outline the grain network (Watershed). Artifacts were removed prior to measurements (Chord Size).

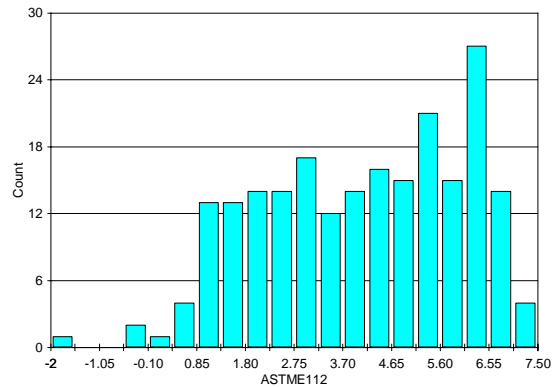


Figure 4: ASTM E 112 distribution.

Results Summary

	ASTM E 112
Minimum	-1.72
Maximum	7.26
Rating #	3.38

Equipment

Image Analysis

System: Clemex Vision PE
Camera: Sony XC-75 CE
Objective: Nikon 4x