MARTENSITIC MICROSTRUCTURES GRAIN SIZE ANALYSIS

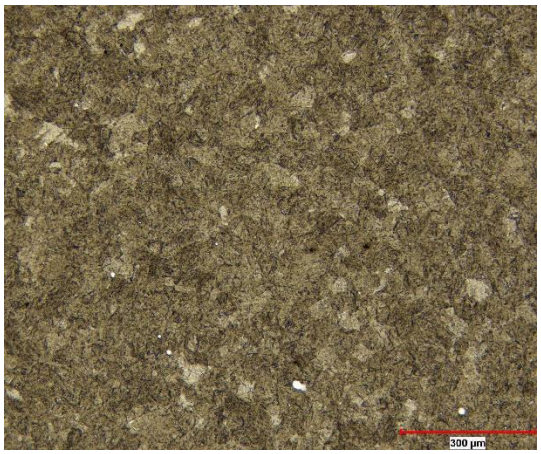

Figure 1: *Original image at 100X.*

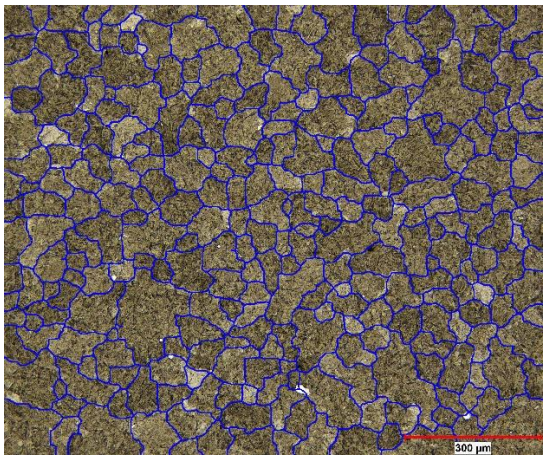

Figure 2: *Grain boundary detection*

Sample Description

One martensitic stainless-steel image is submitted for analysis.

Purpose of Analysis

Demonstrate the ability of **ClemexVision-AI powered** to measure martensitic grains via grain size analysis module

Procedure

Trained AI algorithm on martensitic microstructures with Studio software to detect martensitic grain boundary. From that, Vision AI can easily proceed with grain size measurement.

Equipment

Image Analysis System:	Clemex Vision AI
Magnification:	100X

Results

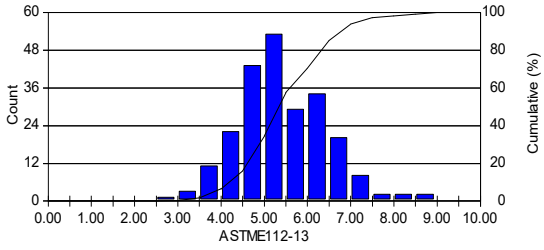

Figure 3: *ASTM E112 grain size distribution.*

ASTM E 112 grain size measurements are performed. Results are cumulated for automated statistics and graph generation. Final results can be printed directly from Clemex Vision. Raw data are linked to their respective objects and can be exported in Excel format.