

# The most complete image analysis solution



## CLEMEX VISION PE

### Standard and custom application examples

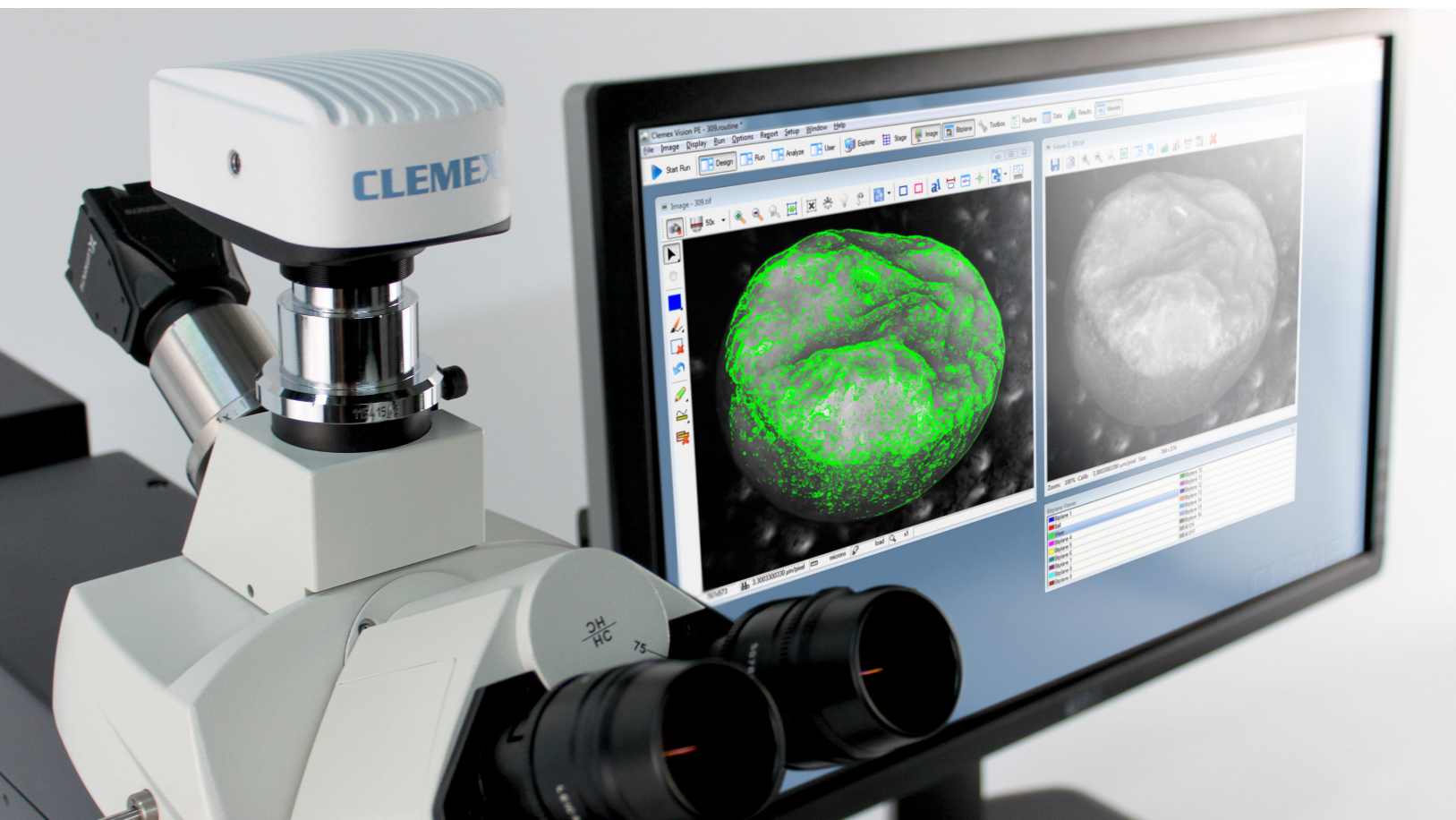
#### Difficult applications made simple

Simplify the image analysis procedure with Clemex Vision PE's advanced toolset and obtain accurate measurement of features in challenging applications.

#### Customized to meet your needs

Our staff's technical expertise and our software's unique detection methods make Clemex Vision PE the most flexible image analysis system on the market.





## Understanding your challenges

### A high throughput environment

Robust enough to work all night on a batch of samples, Clemex systems allow you to leave the lab worry-free and come back to a set of perfectly clear reports and high-resolution images.

### Perform a variety of applications

Clemex Vision PE is very flexible so you can use it for any number of completely distinct applications including DAS, layer thickness, grain size, graphite particles, surface roughness, phase percentage and unlimited custom analyses.

### Adaptable to future requirements

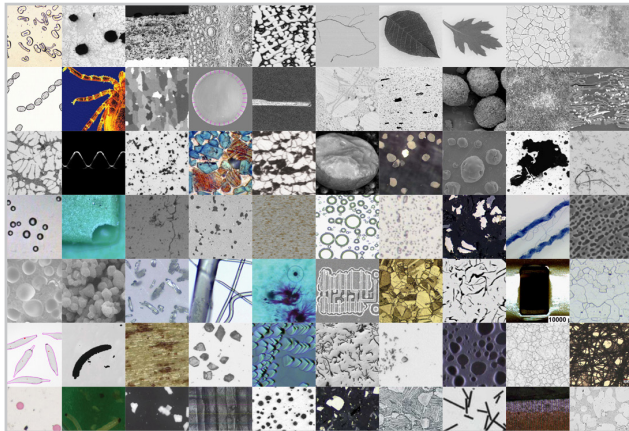
Whether used in a quality control, research or testing environment, Clemex Vision PE can adapt to changes in your analysis needs or to new industry requirements. Modular upgrades are easy and cost-effective.

### Deal with one supplier

We fine-tune every piece of image analysis equipment and software to make your application work. No third party involvement, simply smooth and seamless integration.

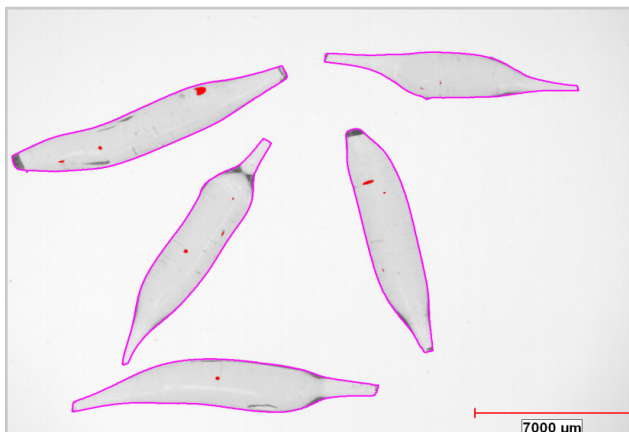
# The most complete image analysis solution

The exceptional range of digital functions makes this one of the most powerful multipurpose image analysis systems available. It is a fully integrated system for labs seeking flexibility, efficiency, and accurate results. Even without image analysis expertise, the short learning curve means you will be performing analyses within hours of setup.



## Powerful image processing tools

Flexibility and quicker analysis time are both made possible with this robust software capable of processing thousands of images and generating data all day long.



## Customized analysis made easy

Detect, characterize and measure phases or objects of interest using the extensive list of toolbox instructions. You can even create your own custom measurements.



## Excellent detection in low contrast images

High definition image quality, automated shading correction and an array of imaging instructions make Clemex Vision PE the perfect tool for analyzing faint objects on a filter, thin-walled cells and variable thickness crystals.



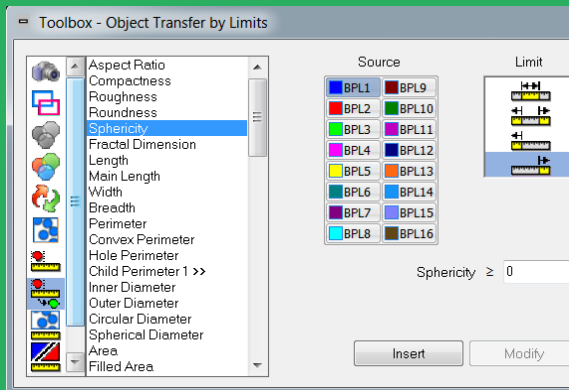
# Complex analysis in 3 easy steps

Clemex Vision PE is a top-of-the-line automated image analysis solution. In only 3 easy steps it goes from capturing images to creating detailed reports. By writing analysis routines with the easy-to-use Toolbox a broad scope of morphological measures can be extracted. No programming skills required. Results are tabulated automatically and reports can be created to your specifications.



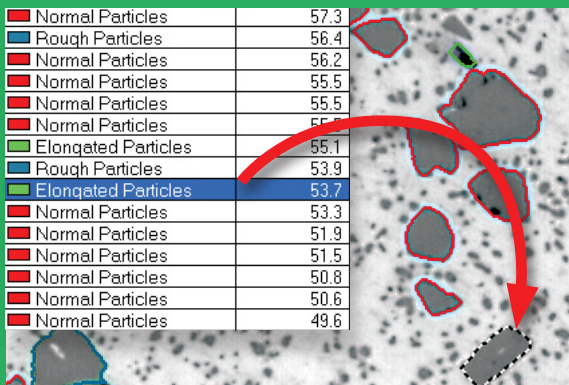
## Step 1 - Capture images

A wide range of ultra-high definition mono-chrome or color cameras can be used to capture images quickly and easily. Analyze your images using a live feed or save high resolution images for further analysis.



## Step 2 - Quantify images

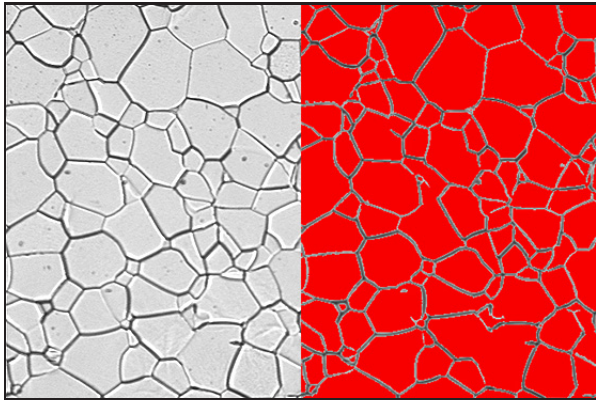
Writing an analysis routine is just a click away, no programming required. Simply establish a list of actions taken from the Toolbox and your Routine writes itself.



## Step 3 - Manage results

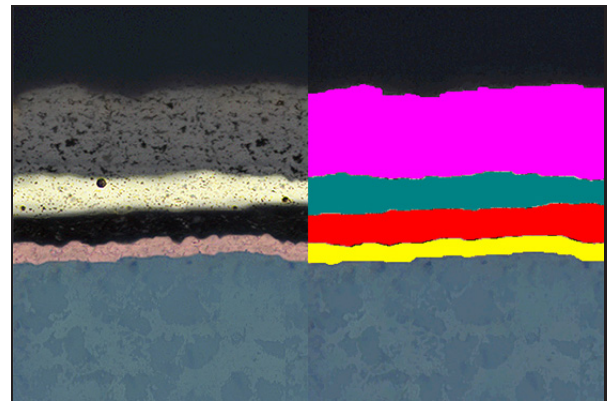
Validate your results easily within the Data Browser where each measurement is directly linked to its corresponding feature on the image. Customize printable reports to your specifications and save them in Excel or text format.

# Applications



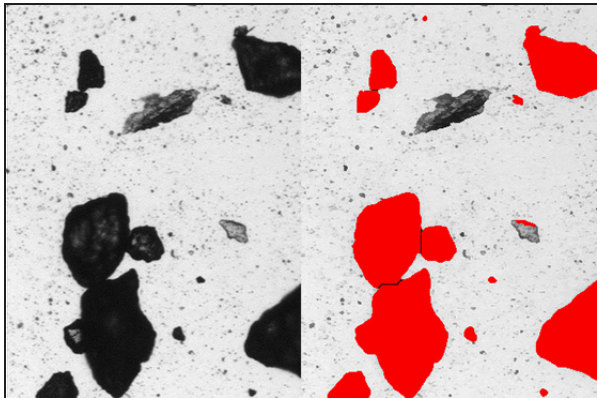
Application Module: Grain Size

Allows users to measure grain intercept, intercept counts, intersection counts, grain boundary length, and grain areas in accordance with ASTM E 112, ASTM E 930, and ASTM E 1382 methods, with validation using the Heyn method.



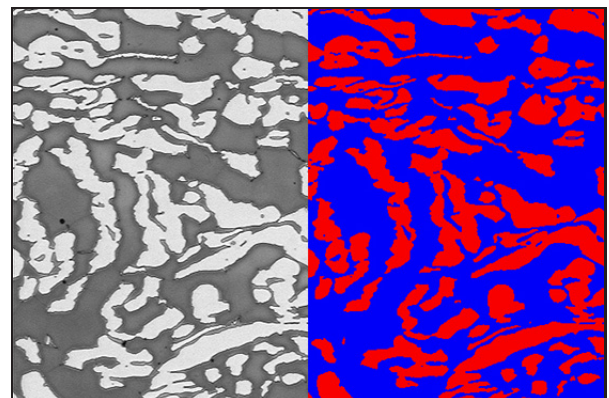
Application Module: Layer Thickness

Allows users to measure the thickness of thin surface layers on metals, alloys, carbides, and oxides (ASTM B 487). There is a range of different routines, from one layer of porous coating to multiple layers of different types of coating.



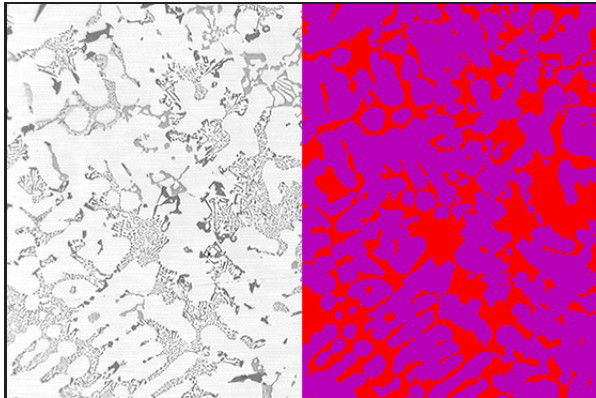
Application Module: Particle Size

Allows users to reliably assess the size and shape of particles as small as 0.5 micron. By using optical microscopy this package offers statistical and individual data on a large sample of particles. This module contains eight different routines with examples and tutorials.



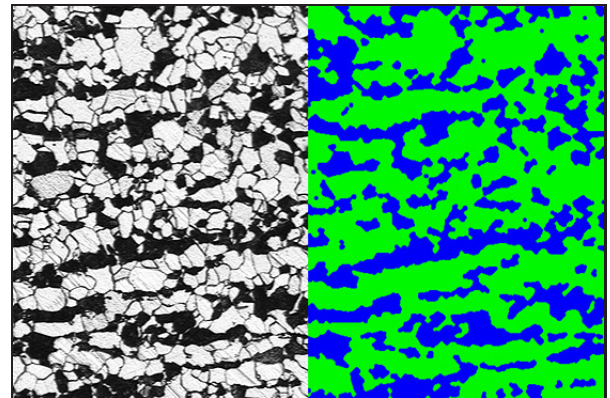
Application Module: Phase Analysis

Allows users to count any number of clearly distinguishable constituents or phases within a microstructure, providing a statistical estimation of the volume fraction of different phases. Each module contains a range of different routines, from two phases in black & white to up to five phases in color.



### Application Module: DAS

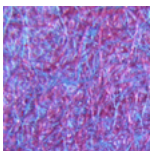
Allows users to measure the distance between adjacent secondary arms of a dendrite. It is needed for materials with dendritic structure like cast aluminum alloys.



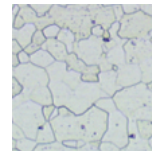
### Single and Custom Applications

Have our staff develop a custom routine for you or choose from a wide variety of single pre-built routines: banding, welding, flakes, nodules, titanium structures, decarburization depth, surface roughness, inclusion ratings and more.

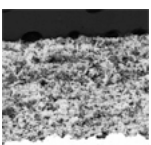
## Related Web Reports



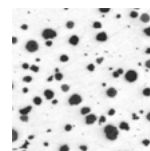
**Paper fiber percentage**



**Grain size in stainless steel**



**Inconel coating thickness**



**Nodularity in cast iron**

# A Commitment to Excellence in Imaging

We are experts in complex and simple  
microscopic image analysis applications in:

Raw Materials

Powders

Metal Parts

Contaminants

Custom Applications

**CLEMEX**

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