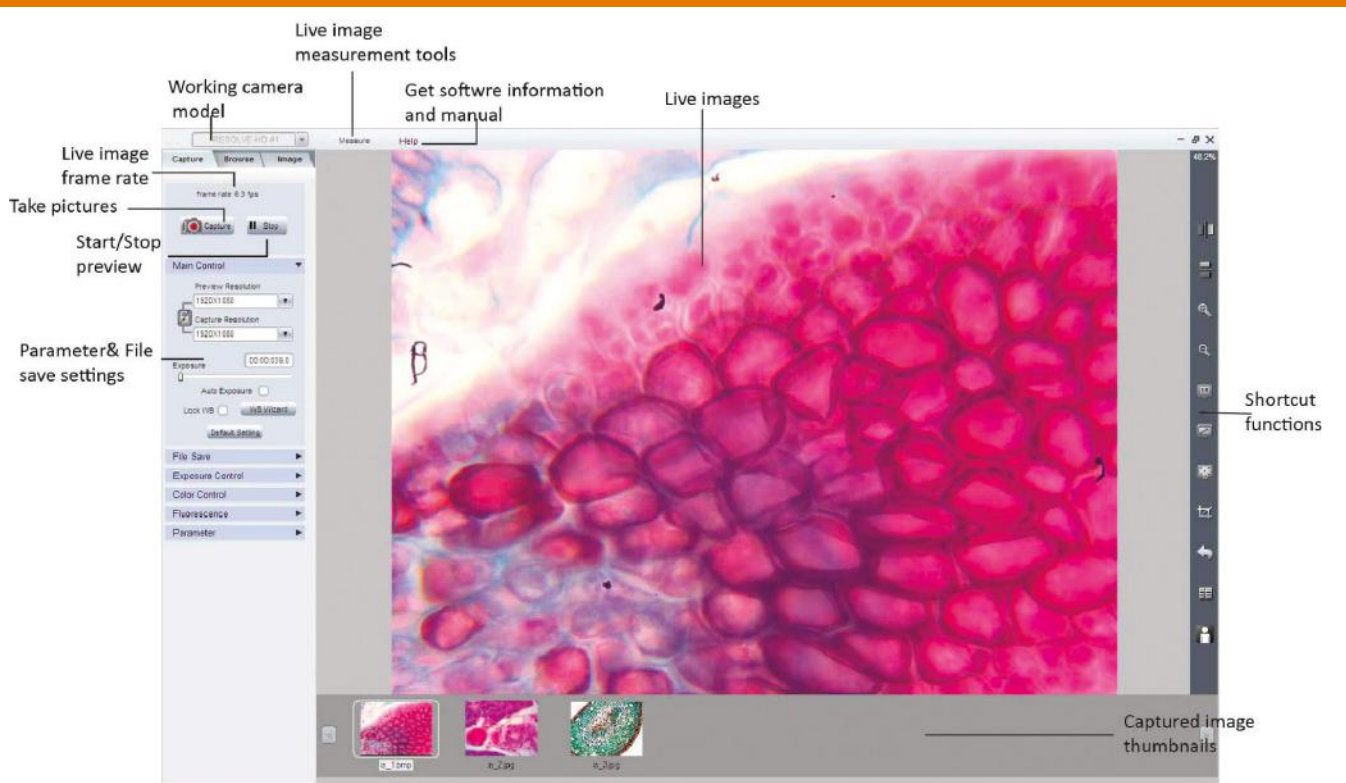


echolmage Capture 2.0

echolmage Capture 2.0 professional imaging software application

- > User-friendly interface, complete camera parameter control, advanced image processing functions, live and still image measurements provided for highly efficient workflow

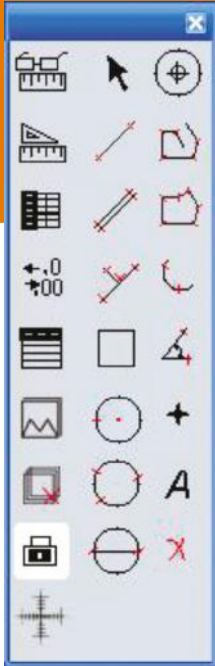


echolmage Capture 2.0 provides the full control of echoCAM:

- > Exposure time
- > Color control, red, green and blue channels
- > Gain setting to adjust the image brightness
- > White balance
- > Saturation



echolmage Capture 2.0

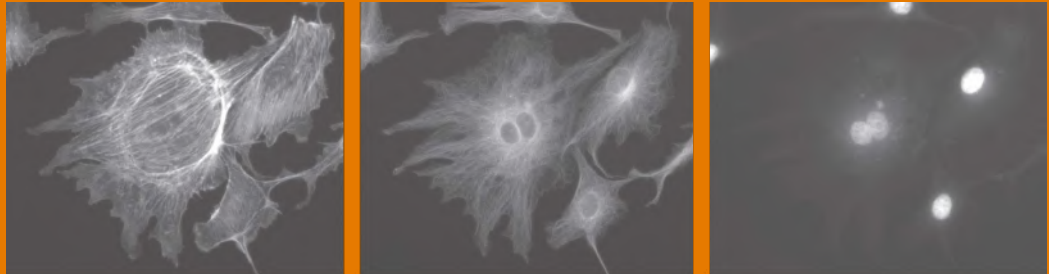


	Show Scale Line	On/off the scale line on the picture.
	Calibrate	Create calibration file.
	Calibrate table	Available calibration file list. Allow to add, edit and delete calibration file.
	Decimal	Set precision measurement. Allowed decimal range is from 0 to 7.
	Measurement list	List all the measurement data.
	Layer	Create a multiple layers to apply measurements and save layer information.
	Delete All	Delete all the measurements and layers.
	Unlock/Lock	Unlock/lock the measurement operation. Allow to do the same measurement continually when LOCKED. It is locked by DEFAULT.
	Select	Select to change measurement or the measurement data position.
	Line	Measure the length.
	Parallel	Measure the distance of parallel. Allow to do multiple parallels' distance measurement. Double clicking to end parallel measurement.
	Perpendicular	Measure the perpendicular length. Allow to do multiple perpendiculars' length measurement. Double clicking to end perpendicular measurement.
	Rectangle	Measure rectangle height, width, area and perimeter.
	2-points circle	Use center point and point-on the circle to draw a circle. Give the radius, area and perimeter of circle.
	3-points circle	Use 3 points on the circle to draw a circle. Give the radius, area and perimeter of circle.
	Diameter circle	Draw a circle according to the diameter. Give the radius, area and perimeter of circle.
	Concentric circle	Use center point and radius to draw concentric circle. Give concentric circles' radius, area and perimeter. Allow to do multiple concentric circles measurement. Double clicking to end the circles measurement.
	Polyline	Measure polyline length.
	Polygon	Measure polygon area and perimeter.
	Arc	Measure a curve angle, radius and length.
	Angle	Measure the angle.
	Count	Counter. Manually count the quantity.
	Annotate	Add remarks on the images.
	Delete	Delete previous measurement. Select it then click on the measurement to delete it.
	Cross-ruler	On or off cross-ruler on the images. The unit of the ruler depends on the applied calibration file.

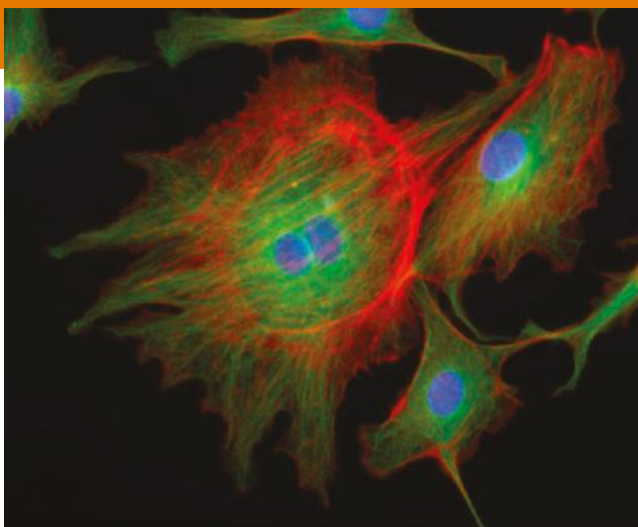
echolImage Capture 2.0

Image Processing

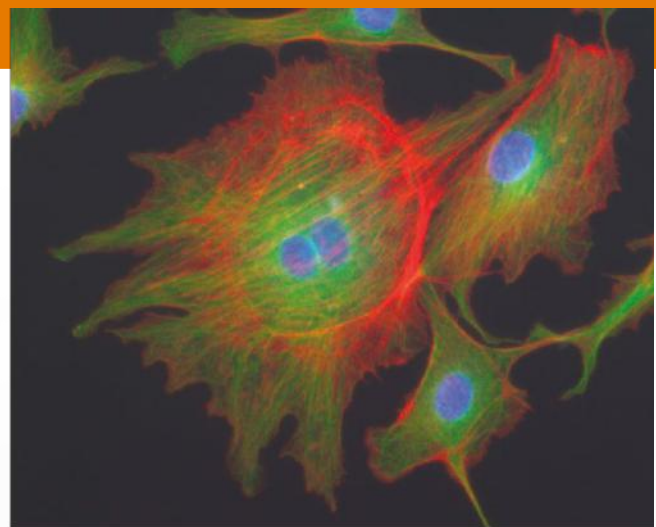
- Advanced image processing functions integrated into echolImage Capture 2.0 including:
 - fluorescence combination,
 - high dynamic range
 - focus stacking
 - image stitching



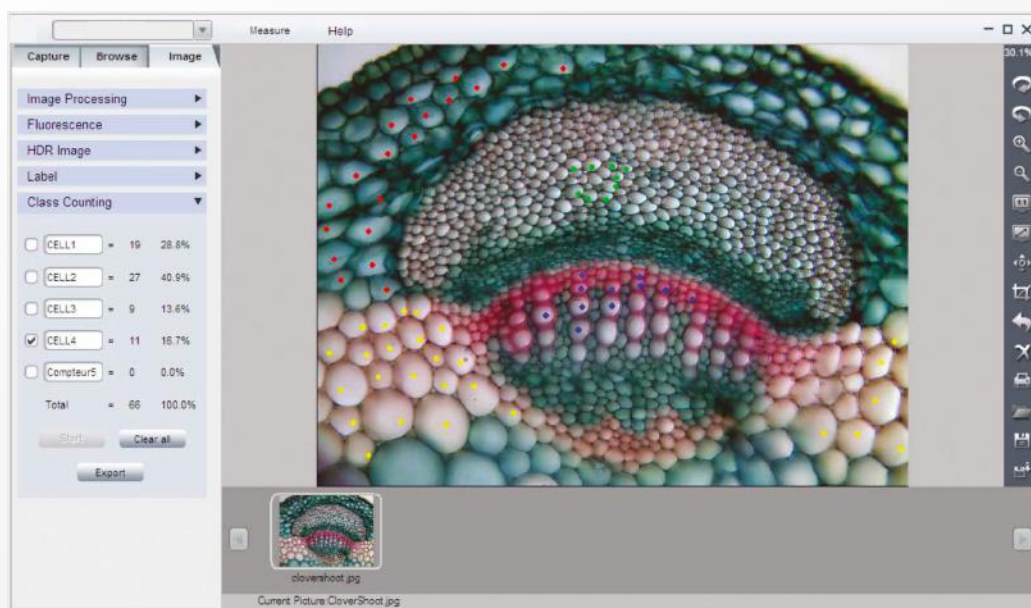
Original images



Combined image with optimization



Combined image without optimization



e-MET_{Pro}

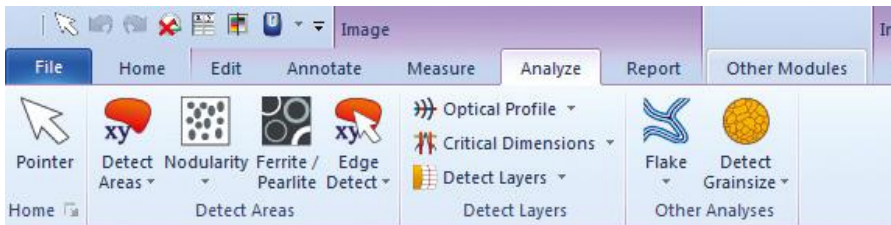
e-MET_{Pro} optical imaging software for materials science labs developed in partnership to software house PAX-it

> e-MET_{Pro} metallographic software is leading-edge digital imaging software for a wide variety of metallurgical applications, for labs set up, for quality control or quality assurance, production, inspection, failure analysis and research.

Metallographic analysis

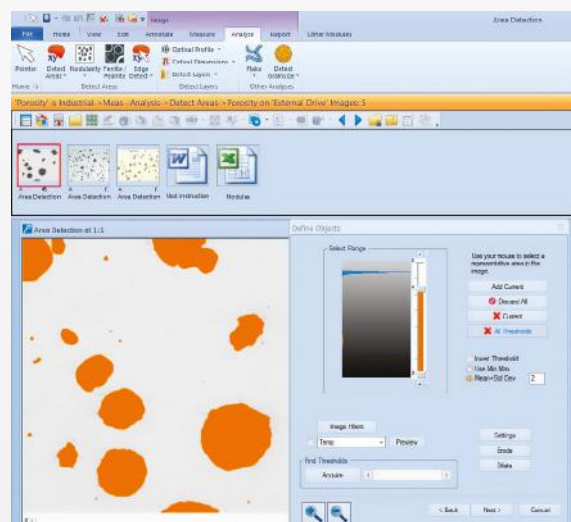
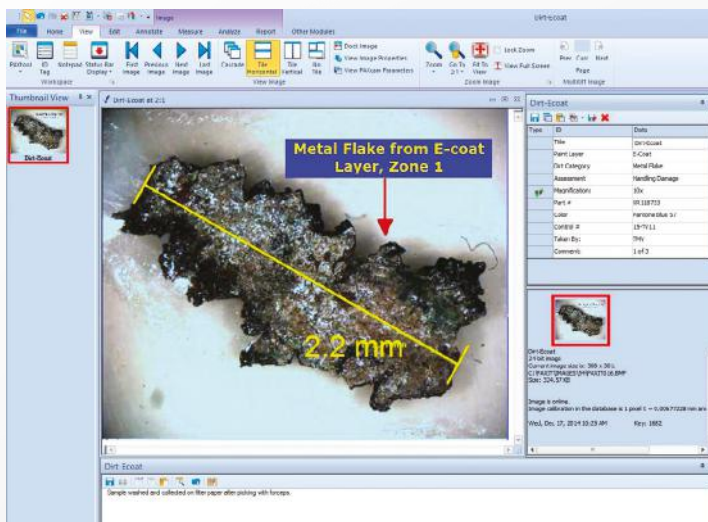
e-MET_{Pro} has many image analysis features including:

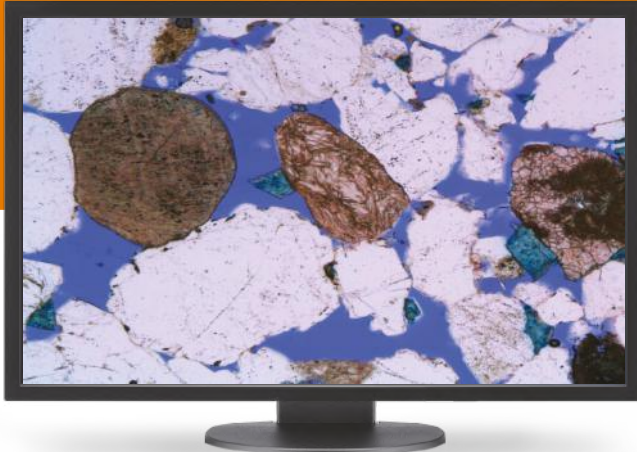
- > ASTM Grain Size Analysis
- > Plating, Coating & other Layer Thickness
- > Particle Counts and Size Distribution
- > Area Fractions
- > Porosity
- > ASTM Nodularity
- > Ferrite/Pearlite
- > ASTM Flake Size Classification
- > Primary Dendrite Arm Spacing
- > Secondary Dendrite Arm Spacing



e-MET_{Pro} will improve your workflow for analysis of graphite in cast iron, heat treat, gray iron, powder metal, copper, and many other materials.

Specific user-defined routines may be established for numerous materials including martensite, pearlite, ferrite, austenite, and many others, according to your own samples, sample prep and optical setup.



e-MET_{Pro}

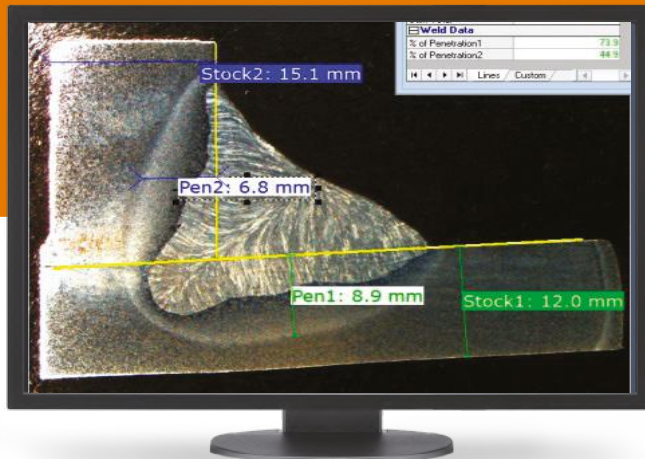
Easily capture, tag, annotate and archive images in database, all in one step

- Use image processing tools to capture those hard-to-view samples. With just a few mouse clicks, you can manually measure features including lines, angles, areas, arcs or perform automated image analysis on samples to detect and classify the features of interest. Information stored is in a searchable database, allowing quick retrieval of samples for a customer or co-worker.
- Answers come in seconds, rather than hours, as the results of your customized searches are displayed immediately on the computer screen, ready for reporting.



Save time by using e-MET_{Pro} to quickly create professional metallurgy reports

- e-MET_{Pro} makes creating reports easy with its report generation link to powerful applications such as Microsoft Word® and Excel®, allowing to incorporate your images, data, summary stats and graphs directly into customizable report templates.
- Commercial labs, contract labs, universities, and government facilities all use e-MET_{Pro} to document, analyze and archive their metallurgical samples.

e-MET_{Pro}

Welding analysis

- > e-MET_{Pro} allows to measure your welding cross-sections for fillet areas, throat, leg lengths and penetration.
- > Percent Penetration is calculated for you automatically, and compared to your specs for a “Pass/Fail” testing displayed on-screen. Quick, easy, accurate, and repeatable results, which can be sent to a report.



Computer requirements

- > Windows 7, Windows 8/8.1 or Windows 10 (32-bit or 64-bit) operating system
- > At least 4GB RAM, dual-core processor and 500 GB hard drive to store the high-resolution images and other files being managed
- > Customers using e-MET_{Pro} more process-intensive features (Image Fusion, Image Stitching, Particles Analysis, Report Generation, etc.) will benefit from higher-speed, multi-core processors and more RAM
- > High-resolution monitor is also recommended. Customers using e-MET_{Pro} will need USB2 or USB3 ports.

Report Generator requires Microsoft Word®, Excel® and PowerPoint®.