

# Automated particle analysis at the nanoscale

Accelerate your product optimization through precise, statistically relevant data

## Better statistics, faster

Perform large-area, high-resolution imaging and data acquisition. The Thermo Scientific™ Automated Particle Workflow (APW) streamlines the workflow from sample to particle analysis by automating data acquisition, particle segmentation, and statistical analysis of morphological and chemical parameters.

From sample to particle statistics,  
automated and unattended

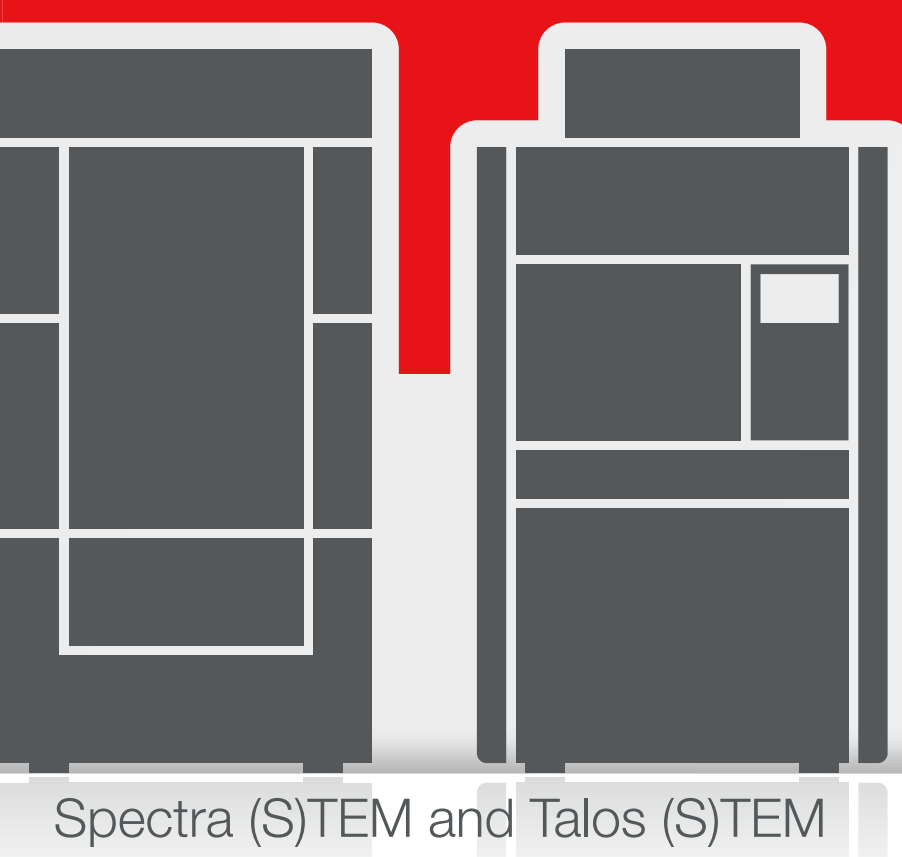
## Benefits

- ✓ Get statistics on more than 500 particles per hour
- ✓ Rapidly screen new products and processes
- ✓ Significantly improve repeatability
- ✓ Run the TEM 24/7, unattended

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Interpretation

Avizo2D Visualization Software allows you to analyze the segmented data to generate statistics such as size, surface area, perimeter, distribution, and chemical composition.



Automated workflow

1

Acquisition

Thermo Scientific Maps™ and Velox™ Software enable the acquisition of large-area, high-resolution scanning transmission electron microscopy (STEM) images and energy dispersive X-ray spectroscopy (EDXS) maps in a fully automated and unattended way.

2

Segmentation

During automated, unattended acquisition of STEM images and EDS maps, Maps Software and Thermo Scientific Avizo2D Software use the image and chemical information from the STEM and EDS maps to find and classify nanoparticles based on morphology and chemical composition.

Find out more at [thermofisher.com/APW](https://thermofisher.com/APW)