

Image Analysis

Routines for Alignment, Inspection, and Drop Analysis

Product Description

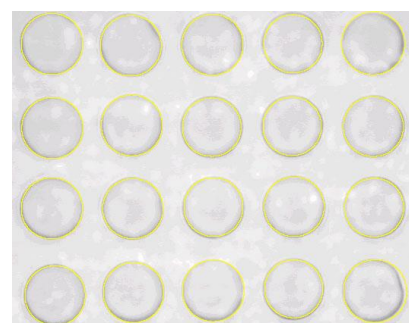
Custom image analysis routines are enabled in the JetServer™ and Jetlab® control programs by adding a runtime version of the Aphelion image analysis software to a subsystem using a Jetdrive V and video capture or to a Jetlab® Printing Platform. These routines allow for:

- improved and additional calibration / alignment options;
- measurement of droplet size, velocity and trajectory polar angle from vertical direction; and
- surveying of printed spot patterns (Jetlab® Printing Platforms, CT-VC-core).



Standard Features

- Generation and display of scales over both vertical and horizontal camera images, enabling rapid, accurate manual measurements.
- Multiple selection algorithms and tuning tools for automatic edge detection.
- Algorithms for spot detection in both high contrast and low contrast images (low contrast CT-VC-Core)
- Automated measurement of drop parameters: diameter, velocity, trajectory angle (one plane).
- Automated measurement and location of fiducials and printed features. Used for alignment of drops to substrate features and rotation correction.

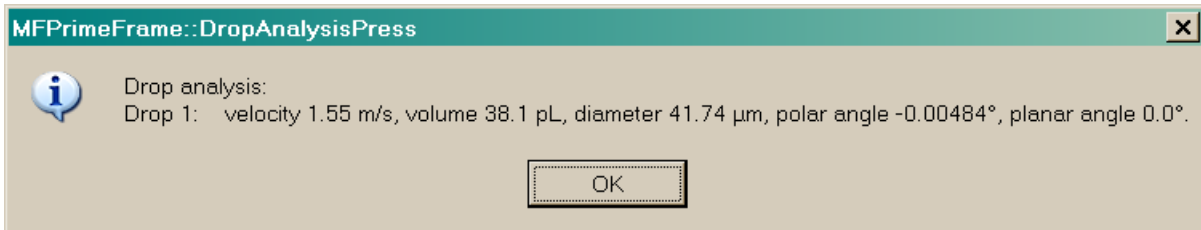
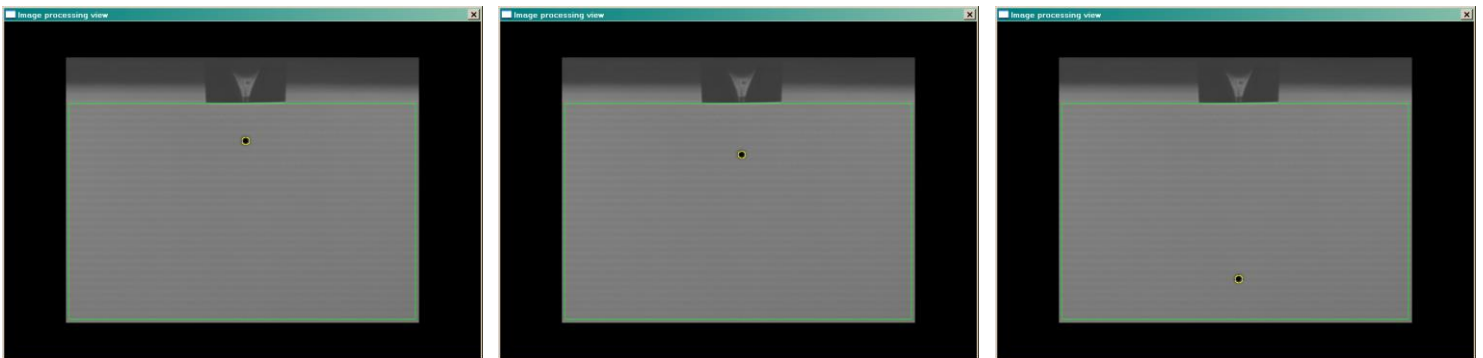
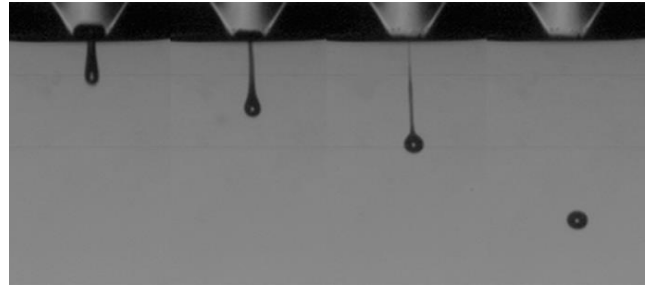


Available Options

- Aphelion developer version for standalone work on image processing/analysis.

Ordering Information

- CT-VC-core** Image analysis software and custom image analysis routines. Includes low and high contrast spot detection, drop placement survey, and drop analysis.
- CT-VC-base** Image analysis software. Includes high contrast spot detection and drop analysis.
- CT-VC-drop** Image analysis software for drop analysis. Only available on jetting subsystems.



Specifications*

Jetlab® II (substrate – 10:1 zoom)	2.1 μm / pixel – max zoom 21 μm / pixel – min zoom
Jetlab® II (observation – fixed focal length)	6.5 μm / pixel
Jetlab® 4 (substrate)	4 μm / pixel
Jetlab® 4 (observation – angled)	6.5 μm / pixel
Jetlab® 4xl-A (observation – horizontal)	6.5 μm / pixel

* note: for standard Jetlab® II and Jetlab® 4 optics and camera