YOKOGAWA

FlowCam® 5000

FLOW IMAGING MICROSCOPY

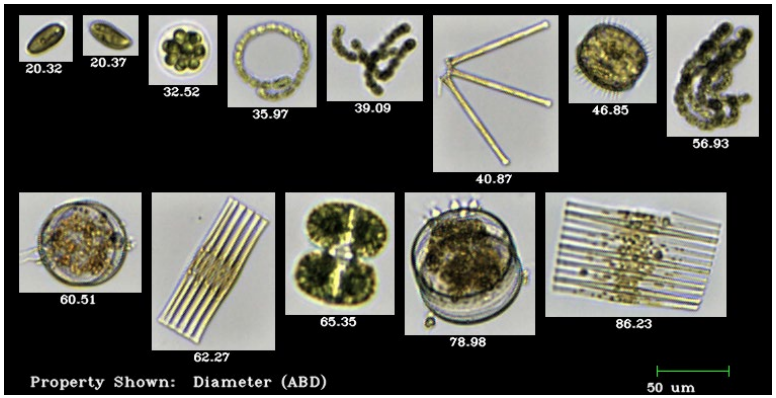
A compact and streamlined particle imaging solution

Particle Analysis with Vision®

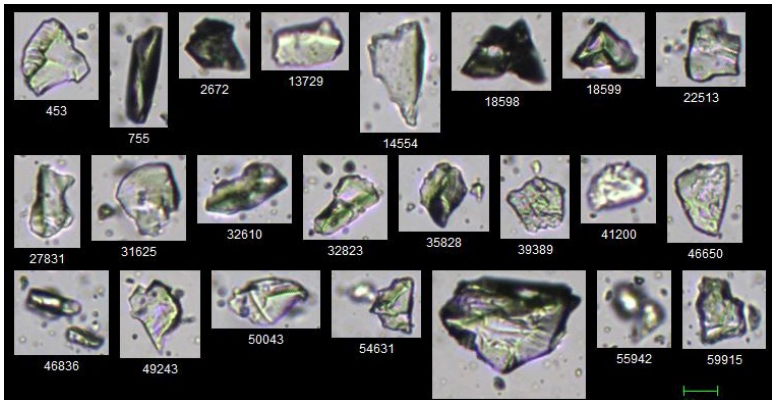
FlowCam 5000 is an economical, high-value solution for monitoring particles in the 3 µm to 300 µm size range for research, educational, and commercial applications.

The instrument's compact footprint allows for flexible use in a variety of settings. Accommodate small to large sample volumes for routine and specialized particle monitoring and research.

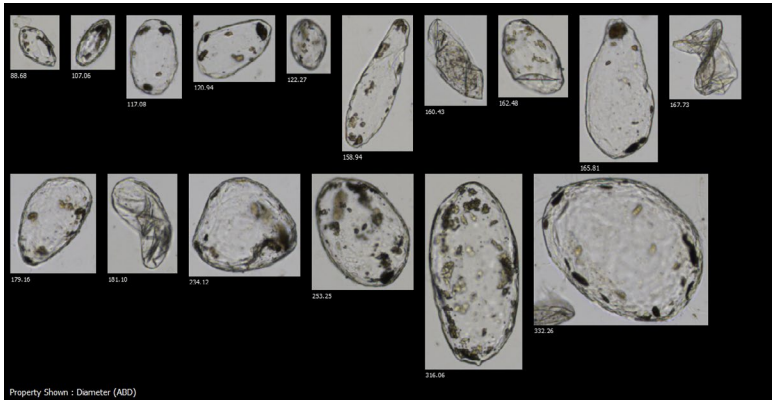
- Automate your data collection with a fast, accurate, and easy-to-use alternative to manual microscopy
- Analyze tens of thousands of particles per minute
- Go beyond size and count to analyze shape and type of your particles
- Correlate morphology information with material lot performance
- Save time and resources with an instrument optimized for your application and particle size range



Phytoplankton from a freshwater sample collected in Colorado



Particles in a silicate mineral sample



Tomato cells from a sample of commercial tomato paste

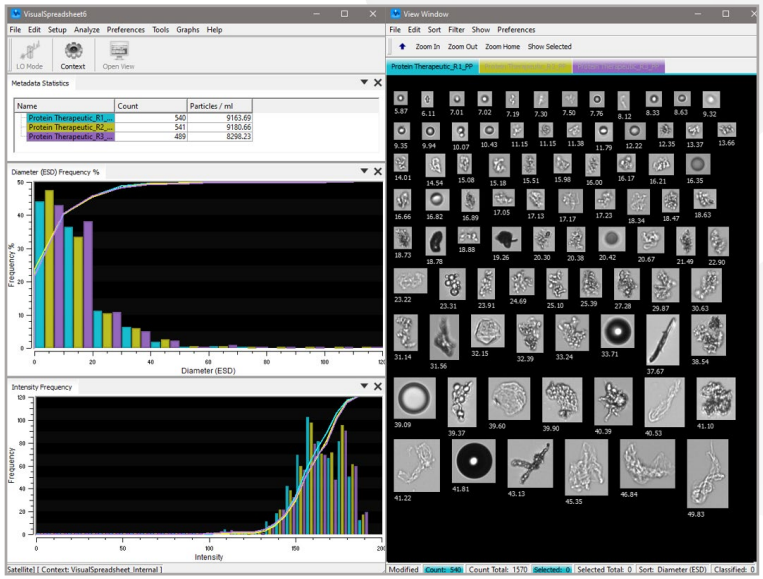
VisualSpreadsheet Software

Turning Data into Insight

VisualSpreadsheet is a powerful, all-in-one software program capable of setting up methods, acquiring data, and processing images captured with FlowCam.

Analyze, sort, filter, group, and classify images based on 40+ morphology parameters and their combinations, or use the “Find Similar” function in the software to identify what is in your sample. Group data from multiple runs or samples for easy comparison.

Collaborate with other researchers on plankton image annotation and classification using a streamlined workflow for exporting data to EcoTaxa.



World-Class Customer Service

Our customer service team is available to help with all things FlowCam, including:

- Technical Support
- Remote and On-Site Training
- Application Support
- Preventative Maintenance
- Repairs and Upgrades

Maximize your FlowCam utilization with a full training package led by our experts – customized for your application. This hands-on, in-depth training provides a thorough understanding of flow imaging microscopy. Learn from our scientists how to run and analyze samples; and get a wealth of tips and tricks to get the most out of your instrument.

Every new instrument includes a one-year warranty, unlimited email and phone support, and one year of free access to FlowCam University training.

For continuous support we offer Gold or Silver service plans that include annual preventative maintenance services, software upgrades, access to virtual training, personalized remote support, and other benefits.

Specifications

Specifications are subject to change without notice

PARTICLE SIZE RANGE	3 µm to 300 µm
MAGNIFICATION & FLOW CELLS	Choose one configuration: 20X, flow cell depth: 50 µm extruded 10X, flow cell depth: 100 µm extruded 4X, flow cell depth: 300 µm extruded
SAMPLE PROCESSING CAPABILITY	0.05 mL/minute at 20X and up to 2 mL/minute at 4X
FLUIDICS	Micro-syringe pump, size dependant on chosen configuration: 0.5 mL, 1 mL, or 5 mL
MAXIMUM PARTICLE CONCENTRATION	4 million particles/mL at 3 µm particle size
DATA ACQUISITION METHOD	Flow imaging microscopy, auto-imaging
CAMERA	High resolution (1920 x 1200 pixels) CMOS. Color.
FRAME RATE	Shutter speed up to 100 frames per second
FOCUS METHOD	Manual
MEASURED PARAMETERS	**Basic Shape Parameters**: Area, Aspect Ratio (width/length), Diameter (Spherical and Area-Based), Length, Volume (ABD-based), Volume (ESD-based), Width, 3 Biovolume Measurements **Advanced Morphology Parameters**: Area (Filled), Circle Fit, Circularity, Circularity (Hu), Compactness, Convex Perimeter, Convexity, Elongation, Fiber Curl, Fiber Straightness, Geodesic Aspect Ratio, Geodesic Length, Geodesic Thickness, Perimeter, Roughness, Symmetry **Grayscale and Color Measurements**: Average Blue, Average Green, Average Red, Blue/Green Ratio, Red/Blue Ratio, Red/Green Ratio, Edge Gradient, Intensity, Sigma Intensity, Sum Intensity, Transparency
DIMENSIONS & WEIGHT	44 cm wide x 25 cm deep x 27 cm tall, 10 kg (24 kg shipping weight)
POWER REQUIREMENTS	92 watt maximum

FlowCam® | Yokogawa Fluid Imaging Technologies, Inc. | www.flowcam.com | +1-207-289-3200

© Yokogawa Fluid Imaging Technologies – All Rights Reserved Rev B1