disperGRADER αview

Precision Dispersion Testing Analyzer

ALPHATECHNOLOGIES

The disperGRADER™ αview is the newest addition to the Alpha Technologies family of products. With its horizontally translating color camera, autofocus capability, and four position LED lighting system, the disperGRADER™ αview provides superior repeatability and reproducibility, as well as application versatility in filler dispersion testing. Suitable for all filler types, including carbon black, silica, and natural inorganic materials.

Models

- disperGRADER™ αview SR - Optical Range of 3-57 microns
- disperGRADER™ αview HR - Optical Range of 1-20 microns

Features

- Pathfinder software.
- Laterally translating camera on precision rail system for automated analysis of multiple areas on a single specimen.
- Four position LED lighting system for precise and flexible sample illumination.
- Image analysis software determines size, number, and location of agglomerates.
- Automatic and manual scanning capabilities.
- Capable of Dispersion %, Z%, X value, and Y value, according to international standards.
- Histogram, analytical data, and image database.
- Five image banks for quantifying dispersion visually on a split screen.
- Color camera, capable of analyzing black, white, and colored compounds.
- Autofocus, for fast and consistent analysis.
- PC and widescreen monitor included.
- Meets ASTM D7723 and ISO 11345 (methods C, D, and E)

disperGRADER™ αview

Specifications

ELECTRICAL:	100-240 VAC, 1.3 A, 50/60 Hz
DIMENSIONS:	11.7 [296mm] W x 7.9 [200mm] H x 18.8 [478mm] D
WEIGHT:	40.5 lbs. (18.4 kg)
APERTURE SIZE:	.472 [12mm] W x .236 [6mm] H

www.alpha-technologies.com

Alpha Technologies
3030 Gilchrist Road, Akron, OH 44305
+1 330 745 1641

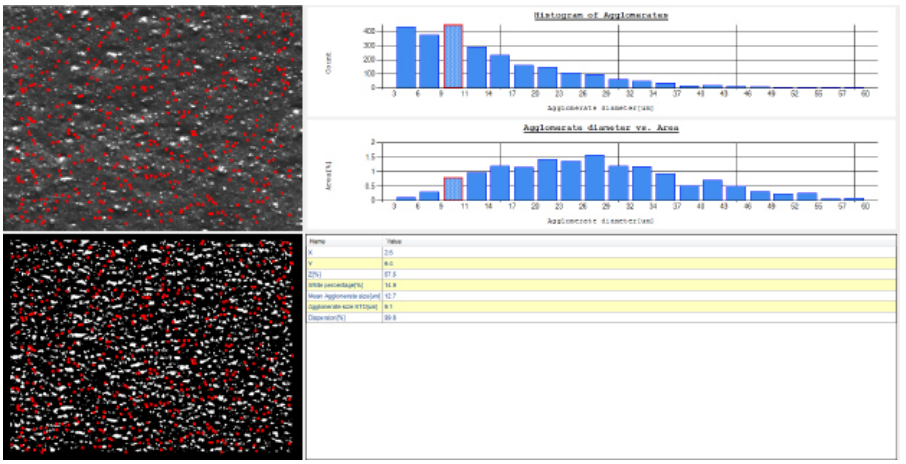
Alpha Technologies UK
Pfaffenstr.21, 74078 Heilbronn, Germany
+49 7131 297 170

Alpha Technologies Japan
NSK Building, 2-27-3 Taito, Taito-ku, Tokyo, Japan 110-0016
+81 3 3834 3451

dispersGRADER αview

Precision Dispersion Testing Analyzer

ALPHATECHNOLOGIES



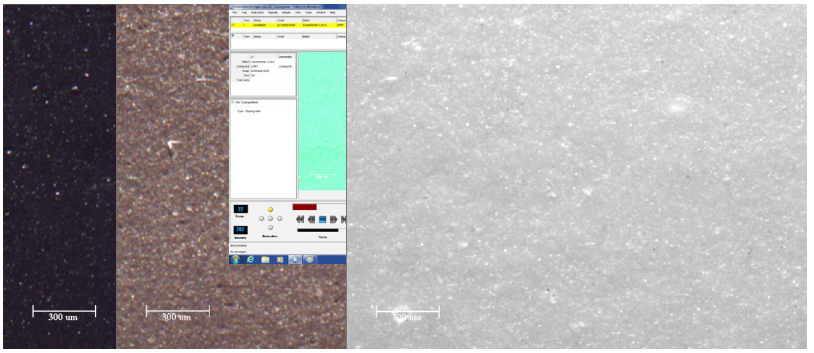
Agglomerate Location

dispersGrader αview's Agglomerate Location function allows the user to visually inspect the location of agglomerates of a particular size range. After selecting a range from the histogram, the agglomerates in question are highlighted in red on the sample images.

Multiple Readings/Surface Scanning

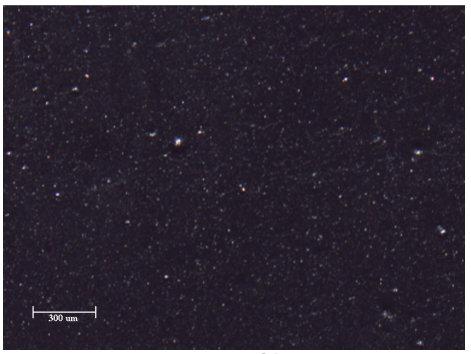
Variance along the surface of a sample requires that several readings be taken in order to truly evaluate the dispersion of a compound. With its laterally translating camera, dispersGrader αview can automatically analyze five different sample locations per sample placement.

Variable	Total	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5
Agglomerate size standard deviation [um]	3.3	3.2	3.0	3.2	3.9	3.2
Average agglomerate size [um]	4.7	4.5	4.5	4.5	5.5	4.3
Dispersion [%]	67.5	71.3	67.2	64.4	60.6	74.0
White area [%]	11.4	10.2	11.6	12.7	12.9	9.4
X	3.1	3.5	3.5	3.1	1.5	3.7
Y	10.0	10.0	10.0	10.0	10.0	10.0
Z [%]	67.5	70.8	66.7	63.8	63.2	73.2

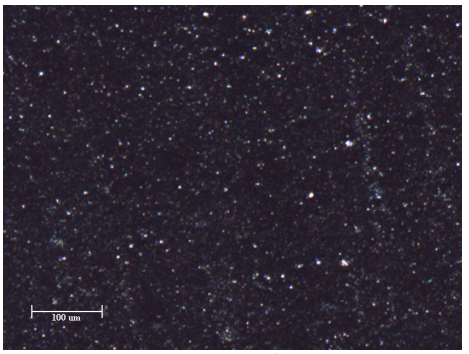


Color Camera

The color camera allows for inspection and analysis of color compounds. Additionally, with Color Channel and Exposure Adjustments, test methods can be optimized relative to compound characteristics.



αview SR



αview HR

Models

There are two models of dispersGrader αview: SR and HR. The SR model's optical range of 3-57 microns is most comparable to traditional dispersGraders. The HR model has an optical range of 1-20 microns, allowing for greater resolution of smaller agglomerates.

Alpha Technologies
3030 Gilchrist Road, Akron, OH 44305
+1 330 745 1641

Alpha Technologies UK
Pfaffenstr.21, 74078 Heilbronn, Germany
+49 7131 297 170

Alpha Technologies Japan
NSK Building, 2-27-3 Taito, Taito-ku, Tokyo, Japan 110-0016
+81 3 3834 3451