

Precision Dispersion Testing Analyzer



The disperGRADER™ aview 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™ aview 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™ aview 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)

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

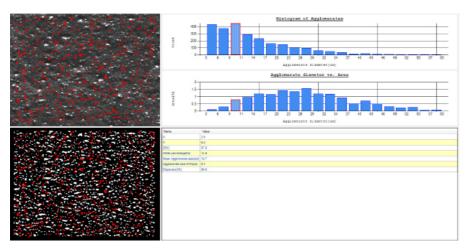


www.alpha-technologies.com



disperGRADER aview

Precision Dispersion Testing Analyzer



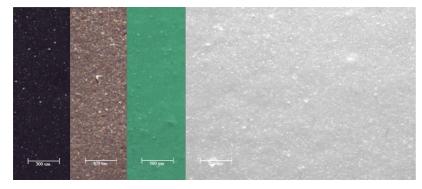
Agglomerate Location

disperGrader aview'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, disperGrader α view can automatically analyze five different sample locations per sample placement.

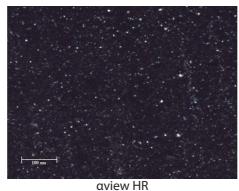
Variable A	Total	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5
Agglomerate size standard deviation [um]	3.3	3.2	3.0	3.2	3.9	3.2
Average agglomerate size [um]	4.7	4.5	4.5	4.5	5.5	4.3
Dispersion [%]	67.5	71.3	67.2	64.4	60.6	74.0
White area [%]	11.4	10.2	11.6	12.7	12.9	9.4
×	3.1	3.5	3.5	3.1	1.5	3.7
Υ	10.0	10.0	10.0	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.





Models

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