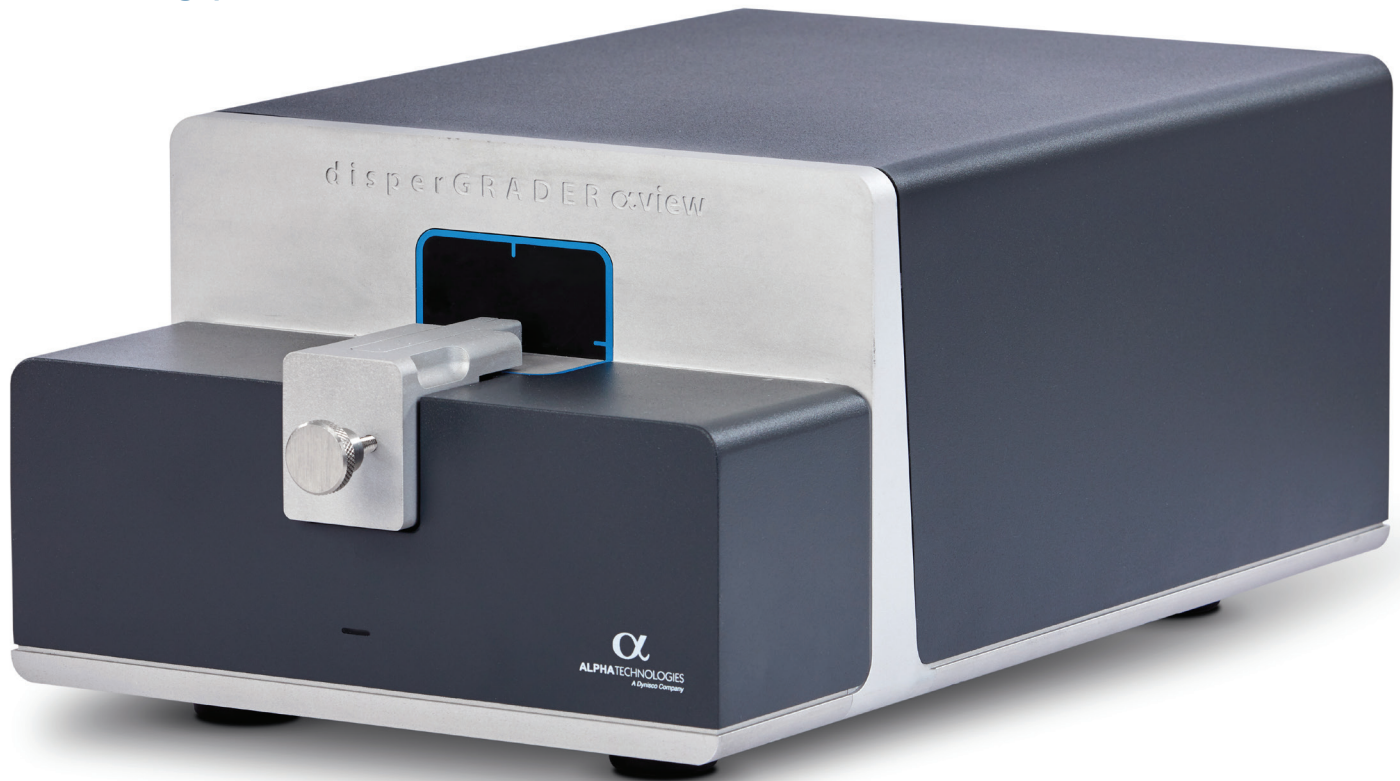


ALPHAVIEW DISPERGRADER

Measure dispersion to optimize
your mixing process



Take a good look at your compound.

The AlphaView Dispergrader is an advanced reflected light microscope designed to measure filler dispersion in a compound. Proven methodology combines with state-of-the-art technology to radically expand the capabilities of optical dispersion analysis.

The AlphaView Dispergrader can efficiently analyze dispersion of a carbon black and other fillers in the compound. Knowing the dispersion of a mixed compound allows the user to optimize process parameters and verify the quality of the mix. That insight is essential for improving processability and final mix properties. For example, even a small decrease in mixing time can result in large cost savings.

Intuitive controls. Enterprise software. Customized reports.

ShuttleXpress software is preloaded on the computer and is used to control the sample translation and focus

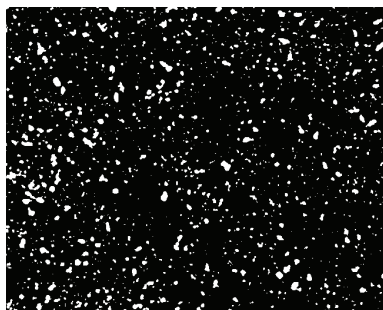
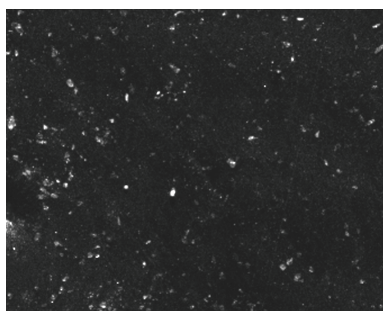
the stepper motors. Once the test has begun, the live image is captured and processed through an image algorithm to suppress noise and irregularities on the sample surface. The image is then filtered and thresholded to produce a black and white image used for the calculations.

Alpha's proprietary Enterprise software processes, displays and analyzes digitized images for visual comparison to your own established reference scale, or for automatic comparison to standard reference images and classifications. Reference standards and scales such as the Phillips 10-degree scale are pre-loaded in the software. The Histogram displayed within the software provides for the raging of number and size of agglomerates.

Quick, Easy and Cost Effective.

While there are three methods of dispersion testing – electrical, mechanical and optical – electrical is no longer viable since fillers such as silica are not considered conductive. The mechanical method correlation needs to be established with each compound formulation. Of the two options for optical testing, transmitted light is time consuming and requires complex sample preparation. AlphaView Dispergrader utilizes the reflected light method which is quick, easy and cost effective.

- Semi-Automated operation allows you to go through samples very quickly.
- Scanning can be automatic or manual.
- Precision stepper motors and rails are used to move the optical platform, allowing the operator to take multiple readings with one sample placement.
- Our Retest Individual Spot option means you can retest one spot if there was an issue, instead of having to restart the test.

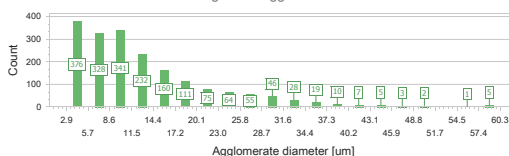


Dispergrader model **Dispergrader alphaView** Test name **AlphaView test**
 Serial number **CMP1** Compound name
 Test date **10/1/2021 12:06:56 PM** Order name
 Illumination **Top** Batch number **1**
 Volume fraction of the filler **20** Batch name **1**
 Reference Bank **E_CB** Threshold for Dispersion **23**
 Exposure time **40** Color channel **Blue**

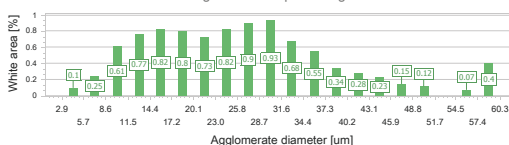
Test result Completed

Spot	X	Y	Z	White area[%]	Dispersion [%]	Average agg. size[um]	Agg. size Std. Dev. [um]
1	4.95	8.39	78.71	7.45	83.06	10.59	8.07
2	3.68	7.64	71.42	10.00	75.06	11.63	8.77
3	3.46	7.48	70.40	10.36	73.43	12.00	9.18
4	3.53	7.45	70.35	10.38	73.07	12.25	9.16
5	3.85	7.56	69.52	10.67	74.24	11.64	8.69
Overall	3.89	7.70	72.08	9.77	75.77	11.62	8.77

Histogram of agglomerates



Histogram of area percentage



SPECIFICATIONS

Testing Standards: Meets ASTM D7723 and ISO 11345 (Methods C, D, and E)

Electrical: 100-240VAC, 1.3amp, 50/60 Hz

Dimensions: W:18.8 in (47.8 cm), D:11.7 in (29.7 cm), H:7.9 in (20.1 cm)

Weight: 40.5 lbs. (18.4kg)

Resolution: SR Version – 3.0 μ
 HR Version – 1.0μ

Aperture Size: 0.472 in (12 mm) x 0.236 in (6 mm)

Pixel Size: SR Version – 2.87 μ/pixel (.0001 in/pixel)
 HR Version – 0.88 μ/pixel (.00003 in/pixel)

Other: Cured sample preparation cutter included
 Calibration set included
 Optional uncured sample preparation system



For more information scan the QR code or visit alpha-technologies.com/instruments/alphaview-dispergrader/

There's a lot riding on our testing.™



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