



WWW.FYICHINA.COM.CN

FANYUAN INSTRUMENT (HF) CO., LTD.
DOWELL SCIENCE AND TECHNOLOGY (HK) CO., LTD.
ADD: Tianyuan Road 9#, High-tech Zone, Hefei City, China Postal Code: 230088
TEL: +86-551-65232508
FAX: +86-551-65232507
Email: sales@hkdownell.com
Website: http://www.fyichina.com.cn

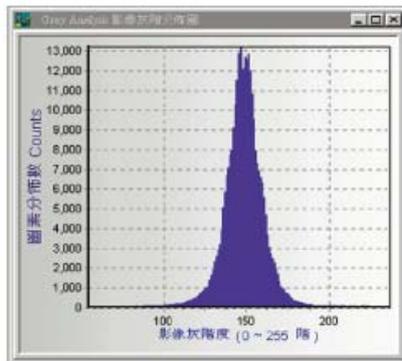
DW1430 CARBON BLACK DISPERSION TESTER



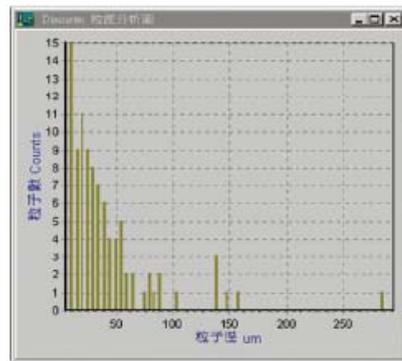
<Gray Image>



<Bilevel Image>



<Gray level analysis>



<Pixels Diameter analysis>



## Model No.

**DW1430**

## Application:

**DW1430 Carbon Black Dispersion Tester** is used to determine the degree of dispersion of carbon black in compound rubber and plastic that contains other fillers by the visual inspection method and the agglomerate count method. The specimen is put on the measuring platform. By using 30° angle light to illuminate the specimen and to enlarge the captured image with 100× magnification CCD lens, computer would directly carry out the bi-level analysis and pixels diameter analysis.

## Related Standards:

**STANDARDS**    **ASTM D2663 Method A and Method B**

Note: this tester can conform to but not limit to all the standards above, for more standards conformance, please contact us.

## Features:

- Bi-level threshold value is automatically calculated through statistical analysis;
- Bi-level analysis: to divide image brightness into 256 grades. Image would be transferred from gray image to bi-level (black/white) image according to bi-level threshold value. By bi-level image, analysis results can be quickly carried out;
- Automatically eliminate bubbles after thresholding;
- Particles and degree of dispersion analysis:
  - A. Particles and degree of dispersion analysis would be carried out based on ISO Philips 10-grade and method A, B of ASTM D2663;
  - B. Particles, particle diameter, particle area, particle rate, agglomeration and dispersion rate are acquired after image is transferred to bi-level image. Mixing state of carbon black and rubber compound can be automatically obtained to grade the result for user's reference according to ASTM and 4 kinds of ISO Philip 10-grade.
- User's free standard for automatic judgment: In addition to ASTM and 4 kinds of ISO Philip 10-grade standard, we also provide 1000 groups of file establishment space, so that users can set



their own standard pictures for automatic comparison and grade judgment;

- Agglomeration determination range setting and statistical analysis;
- User can sample different places of the specimen and calculate the average data to carry out a more objective test;
- User can select one kind of lens ranging from 100, 200, 500, 750 to 1000 magnification;
- Image analysis results can be converted into Excel format;
- Each testing results and image captured can be stored automatically;
- User can edit or delete the saved data;
- Storage and printing of the following pictures: Gray level analysis

Dispersion analysis

Pixels diameter analysis

**Key Specification:**

- Environment required 10°C~40°C , without dewing and vapor
- Image detector 1/2 inch CCD lens with the magnification of 100×
- Basic specifications of the computer 1GB memory or IBM compatible computer 80GB HDD  
Or 16× DVD-ROM installed with image converter and  
image analysis software
- Power supply AC 110V 2A or 220V 1.2A

**Standard configuration:**

No.	Item	Quantity
1	Main machine	1 set

**Optional Accessories:**

No.	Item
1	Computer