Biuged

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PURCHASE
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Professional
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Intelligent Fineness of Grind Tester

Measuring the fineness of paints by grind gauge is a traditional and popular method, but it's very difficult to get a good testing results with high repeatability and comparability. The first reason is the different power and speed are given to scraper by different operators when they use scraper to applicate the sample in the gauge's channel. The second reason is there are always some subjective factors to judge particle number and distribution, because it is not easy to give a test result in 5 seconds, especially for the gauges with small range such as 0-25μm.

BGD 245 Intelligent Fineness of Grind Tester is an intelligent instrument newly developed by Biuged. This instrument can not only automatically draw the sample with consistent speed and power, but also immediately take and save the pictures of the sample particles in the grooves . And according to the regulations of the result reading of the relevant standards, it can automatically identify the fineness value of the sample within 5 seconds, and also display the statistical chart of particle distribution.

Features:

◆ Full-automatic and rapid fineness measurement with excellent convenience, high efficiency and good repeatability & reproducibility.

◆ Directly show the test results according to ISO 1524.

◆ Compatible with different types of grinding gauges, including single-channel (170mm × 50mm), double-channel (175mm × 65mm), wide-channel (175mm × 65mm) with different measuring ranges of 0-25μm, 0-50μm, 0-100μm, 0-150μm and 0-200μm.

◆ Based on the deep learing model framework, it can clearly specifies particles features, and identify pits, scratches, tiny bubbles, and bubble aggregation which could be taken as normal particles, also display the number and size of these defects.

◆ The displayer shows the current sample name, sample batch, testing time, the current steps being executed during the operation, the original image after scraping, the image processed by the algorithm, particle distribution, and the final judgment results according to Method A and Method B.

◆ To ensure consistency between human eye and the recognition system, operator can arbitrarily set the threshold range for the system to recognize particle size. If a detected particle is smaller than the set minimum threshold, it will not be counted in the statistics.If a particle exceeds the maximum threshold and meets bubble characteristics, the system will classify it as a bubble.The operator also can manually choose whether to include bubbles as normal particles in the readings.

◆ In order to compare carefully the fact particles with those which are included or excluded by software ,operator can enlarge the original picture or some parts of particles distribution.

◆ Operator can set the reading time after drawing sample, ensure to achieve a consistent results for every test.

◆ For the convenience of operators to judge the results according to ISO 1524, the system provides a band with a height of 3mm. The operator can drag this band up and down, and the number of particles framed inside would be displayed real-time.

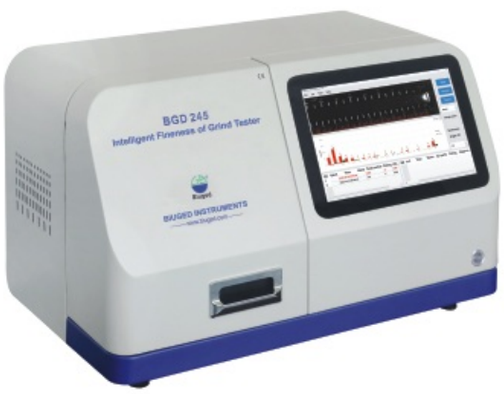
◆ The operation interface displays image processing parameters (particle threshold setting), speed setting, fine plate groove ROI detection area, counting the number of particles, and providing a special option for users to select and delete some misjudged particles

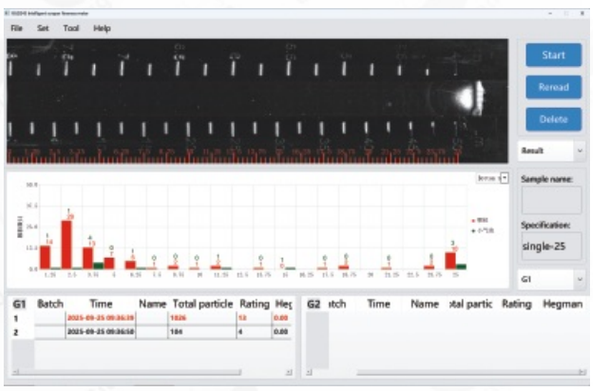
◆ High precision motion control system, with high priecision imaging system, ensure a perfect image resolution and reliable results.

◆ Download the testing results as PDF document

◆ Compatible with water-based sample and solvent-based sample.

Main Technical Parameters：
★ Measuring Range: 0~200 μ m（corresponding to the gauges range used）
★ Scraping Speed： 30mm/s~90mm/s（adjustable）
★ Measuring Accuracy： one graduation of used gauge
★ Single Testing Time: ＜1 min（fastest time is 10s）
★ Overall Size： 640mm × 360mm × 415mm（L × W × H）
★ Total Power： 0.5 kW
★ Net Weight： 30 KG
★ Ordering Information: BGD 245---Intelligent Fineness of Grind Tester





Operation Menu



High-definition Sample Particles Image

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