

## Intelligent Volume Solids Content Tester

The volume solids content of coatings is of great significance in guiding their application. However, traditional testing methods (density method, disc/plate method) are difficult to operate and often yield highly variable results.

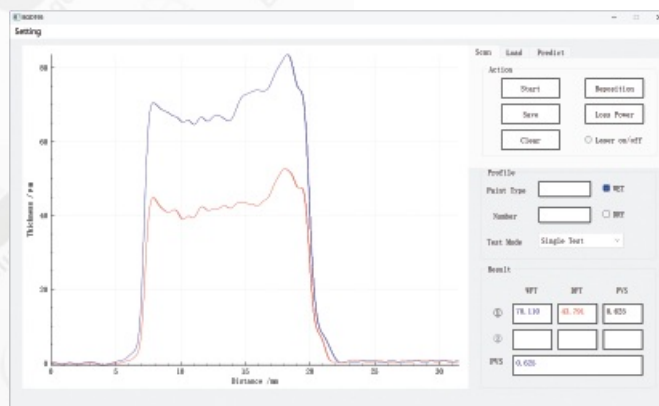
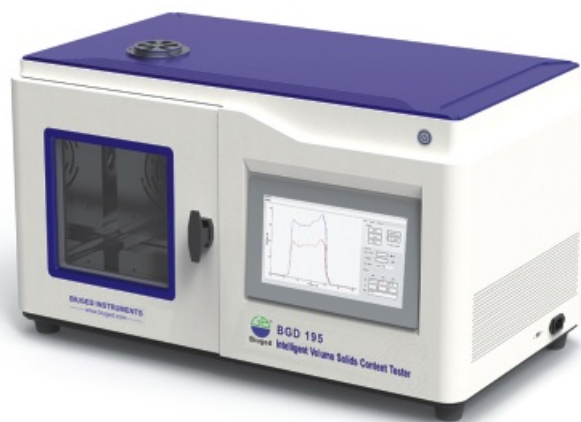
The newly developed **BGD 195 Intelligent Volume Solids Content Tester** by Biuged is a fully automated smart instrument that utilizes a non-contact laser scanning principle. With just a small drop of sample, it enables fast, simple, and accurate measurement of the volume solids content of coatings.

The instrument consists of two working zones: the left side is a baking chamber, and the right side is a high-precision laser scanning measurement area. The operator places the wet film sample into the working chamber, and the system automatically transfers it to the right-side laser scanning zone for wet film volume measurement. After this step, the sample is automatically moved to the left-side baking chamber for drying at a preset temperature. Once the drying time elapses, the sample is automatically returned to the right-side laser scanning zone for dry film volume measurement. Finally, after obtaining both wet and dry film volumes, the instrument automatically calculates the volume solids content of the sample.

- ◆ Built-in baking system, allowing simulation of any curing scenario or drying mechanism for coatings
- ◆ Fully automated measurement, easy to operate, high accuracy, and excellent repeatability
- ◆ Capable of measuring fully transparent samples without compromising precision or repeatability

### Main Technical Parameters:

- ★ Optimal scanning film thickness range: 30  $\mu\text{m}$ –1200  $\mu\text{m}$   
(recommended film thickness: 100  $\mu\text{m}$ )
- ★ Volume measurement accuracy:  $\pm 1\%$
- ★ Volume measurement repeatability:  $\pm 0.1\%$
- ★ Measurement result repeatability: 3%
- ★ Sample drying temperature range: 50°C–150°C  
(recommended: 60°C–90°C)
- ★ Instrument dimensions (L  $\times$  W  $\times$  H): 760mm  $\times$  465mm  $\times$  450mm
- ★ Net weight: approx. 50kg
- ★ **Ordering information:**  
BGD 195 Intelligent Volume Solids Content Tester



Operation Windows