



## Ultra-fine Powder Screening | Product Introduction

The mechanical oscillating sieve analyzer, also known as the test sieve and inspection analysis sieve, is widely used in laboratories, quality inspection departments, and other inspection departments for particle size distribution measurement of granules, powders, and pharmaceutical materials, determination of product impurity content, and determination and analysis of liquid-solid content.

The product has a compact structure, low noise, high efficiency, and accurate precision. It uses a high-quality new type of power generator to generate multi-frequency and high-frequency vibration, which efficiently screens and measures the material. At the same time, the electronic delay timer can be used to achieve different working times according to different materials, minimizing inspection errors, ensuring the consistency of sample analysis data, and making accurate judgments on product quality.



## Ultra-fine Powder Screening | Structural Characteristics

The product is characterized by compact structure, low noise, high efficiency, and accurate precision. It adopts a new type of mechanical vibrator and power generator to generate multi-element high-frequency vibration for efficient screening and determination of materials. Therefore, it is also called an inspection sieve. The structure of the test sieve is mainly composed of two parts: the body and the sieve. The sieve machine part is designed and produced by our factory, and the sieve part is produced by China Aerospace Science and Industry Group, a national military enterprise. The standard sieve used by this type of sieve machine is divided into two categories: one is industrial grade that meets national standards, and the other is high-standard sieve used by scientific research institutions and national testing agencies. The industrial-grade sieve with a mesh size of 100 mesh or coarser is made of brass wire mesh mainly because brass has good ductility. For meshes finer than 100 mesh, 304 stainless steel material is used. The test sieve sieve frame adopts the national standard GB/T6003.1-1997 for production, with a basic mesh size of 2.36mm-0.038mm, which complies with international standards ISO3310-1:1990 R20/3, R20, and R40/3 series. The sieve mesh materials are brass, tin bronze, and stainless steel. For meshes ranging from 2.36um to 100um, they are processed by electroplating with nickel, which not only improves the mesh accuracy but also prevents mesh deformation, making them sturdy, wear-resistant, and durable.

1. The sieve (sieve mesh) is easy to replace. This mechanical oscillating sieve analyzer uses layers of sieve meshes stacked on the sieve machine tray. The sieve mesh is pressed tightly using circular handles, fixed handles, pressure heads, cover plates, and other components, making it easy to replace the sieve mesh for analyzing different material sizes.

2. The working time can be adjusted according to different materials through an electronic timer, which minimizes the testing error and ensures the consistency of sample analysis data, making accurate judgments on product quality.

3. Our factory's self-produced vertical vibration motor is used as the excitation source, which has a long service life and reliable quality.

4. The body part of the mechanical oscillating sieve analyzer can be designed as a 304 stainless steel body or a common steel body (polished, spray-painted, or brushed with anti-rust paint) according to user requirements.

5. The sieve (sieve equipment) is designed with national standard 304 stainless steel and meets national standards. The sieve is available in various types according to the material of the sieve surface, such as metal wire woven mesh, metal perforated plate, and electroformed mesh. The sieve is produced in accordance with national standard GB/T6003.1-1997 and meets international standard ISO3310-1:1990. For perforated plate test sieves, the basic mesh size ranges from 32mm to 1mm. For woven mesh test sieves, the basic mesh size ranges from 2.36mm to 0.015mm. For electroformed mesh test sieves, the basic mesh size ranges from 0.50mm to 0.005mm. The sieve frame, sieve cover, and sieve bottom are made of high-quality stainless steel.





## Instructions For Use

• Determine the standard sieve to be used according to the material being tested and the corresponding standards.

• Stack the standard sieves on the tray holder in order from large to small aperture and from bottom to top, positioning the sieves with grooves or positioning screws.

• Put the material to be tested into the top standard sieve (or cover the standard sieve cover), and then press the standard sieve with the sieve head fitted on the wire column, and tighten the nut on the wire column to compress the standard sieve. (Note: Apply consistent force on both sides, and then lock the locking screw.)

• Place the timer switch in the appropriate position (note the instructions for the timer, as different settings require different time settings), then turn on the power switch, and the test sieve starts working.

• After the mechanical vibration sieve stops working, loosen the nut on the wire column, remove the sieve head, and carefully take out the standard sieve.

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## **Technical Parameters**

Model	DHSF-U2
Standard sieve	8 layers
Sieve diameter	Φ300 Φ200 Φ100mm
Screening granularity	0.038-3mm
Noise	≤50db
Feeding amount (per time)	≤200g
Vibration amplitude	≤5mm
Rotation speed	1420r/min
Power	0.125Kw
Total weight	25Kg
Dimensions	360*300*736mm
Voltage	220V