Air Jet Sieving Machine

LT-G0021 | Controlled airflow and vacuum for fine powders

Digital time and vacuum settings • Transparent cover • Filter cartridge



0-99 minutes

SIEVING TIME SETTING RANGE

0-65 mbar

VACUUM SETTING RANGE

EN 933-10 • Grading of filler aggregates by air jet sieving

LT-G0021

Photograph and System Components

Sieving chamber, digital panel, aspirator and filtration equipment

LT-G0021 moves dry fine material with controlled airflow. Vacuum draws suitably sized particles through the sieve apertures. Material retained on the sieve is weighed to classify the specimen at the selected opening.

CHAMBER AND COVER

The transparent cover keeps the specimen in the test area and allows observation of sieving.

ASPIRATOR

Forms part of the vacuum suction arrangement. Check correct hose and connection placement.



DIGITAL CONTROL PANEL

Controls time, vacuum level and the calibration function.

FILTER CARTRIDGE

The self-cleaning cartridge limits transfer of fine dust into the suction system.



Sieving chamber, transparent cover and sieve area



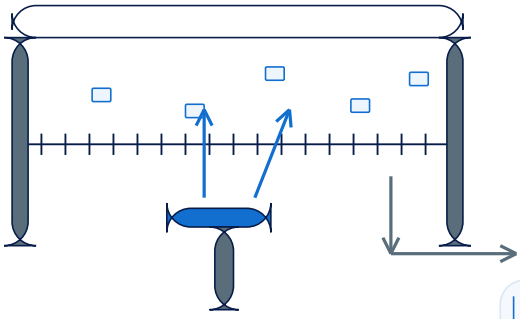
Digital display and setting buttons

LT-G0021

Fine Particle Separation by Air Jet and Vacuum

Select sieve • Load specimen • Set time and vacuum • Weigh residue

AIR JET AND SUCTION IN A SIEVE SECTION



AIR JET: KEEPS THE SPECIMEN MOVING

SUCTION: DRAWS FINES BELOW THE SIEVE

ROTATING AIRFLOW + CONTROLLED VACUUM

SUITABLY SIZED PARTICLES PASS THE SIEVE

M: INITIAL MASS • mr: RETAINED MASS

Passing (%) = 100 × (M - mr) / M

REPRESENTATIVE FLOW DIAGRAM • NOT TO SCALE

Select Sieve and Specimen

Fit the required sieve aperture. Prepare the specimen by the method and record initial mass.

Apply the Settings

Set time and vacuum by the method. Close the cover and check air and suction connections.

Weigh and Calculate

Weigh the retained material after sieving. Determine retained and passing percentages from initial mass.

The rotating air jet below the sieve disperses the specimen and helps separate agglomerates. Vacuum draws fines down through the openings. Retained mass is measured after sieving. Check specimen loss and residual particles when calculating the passing proportion.

Sieve Range and Method Scope

The machine operates with suitable test sieves in the 5-4000 micron aperture range. Select the appropriate sieve construction and opening for each specimen.

EN 933-10 determines the particle-size distribution up to 2 mm of natural or manufactured filler aggregates by air jet sieving. Evaluate machine sieve options alongside the scope of the test method.

Filter and Repeatable Conditions

The set includes an aspirator, self-cleaning filter cartridge and five dust collection boxes. Check filter and hose condition and establish correct connections for consistent suction.

For repeat testing, use the same aperture, specimen quantity, duration and vacuum conditions. Clean the sieve and chamber and remove residues from the previous specimen.

LT-G0021

Technical Specifications and Test Workflow

LT-G0021 • Time, vacuum, sieve options and complete operating set

Technical Specification	Value / Description
Product Code	LT-G0021
Test Method	EN 933-10
Specimen Type	Fine powder and dry granular material
Sieve Aperture Options	5-4000 microns
Time Setting	0-99 minutes
Vacuum Setting	0-65 mbar
Control Arrangement	Digital microprocessor
Additional Control Function	Calibration function
Sieving Cover	Transparent plexiglass
Filter	Self-cleaning filter cartridge
Included Equipment	Aspirator and 5 dust collection boxes
Overall Dimensions	45 × 60 × 40 cm
Approximate Weight	30 kg
Power Supply	220 V, 50-60 Hz, 1 phase

Suitable Sieves and Controlled Test Conditions

Select aperture and specimen condition by the test method. Record duration and vacuum settings; weigh retained material without loss to compare under consistent conditions.

From Fine Powder to Particle Size Assessment

01
Prepare
Select the sieve; prepare and weigh the specimen.

02
Set
Close the cover; set time and vacuum.

03
Sieve
Apply air jet and suction classification.

04
Calculate
Weigh residue; calculate retained and passing values.

Product Page | liyatest.com.tr/en/urun/air-jet-sieving-machine/