Flotation Machine

LT-M0614 | Laboratory mineral separation and beneficiation

Continuously variable speed • Digital speed display • Interchangeable flotation heads



700-2800

IMPELLER SPEED / RPM

250-2000 g

SAMPLE MASS PER TEST

2 L rated capacity • 1, 2, 3 and 4 L cell options • 380 V, 3 phases

Photographs and Components

Digital speed panel, shaft, drive guard and working area

The LT-M0614 combines agitation and aeration in an ore suspension. The flotation head and cell arrangement can be adapted to laboratory tests, while operating speed is monitored on the digital display.

DIGITAL SPEED PANEL

The speed display and adjustment control support monitoring of operating conditions.

DRIVE GUARD

The upper housing surrounds the impeller drive mechanism.



AGITATOR SHAFT

The shaft transmits motion to the flotation head to agitate the cell contents.

WORKING AREA

The flotation cell is positioned beneath the shaft and head.



Digital speed display and operating controls

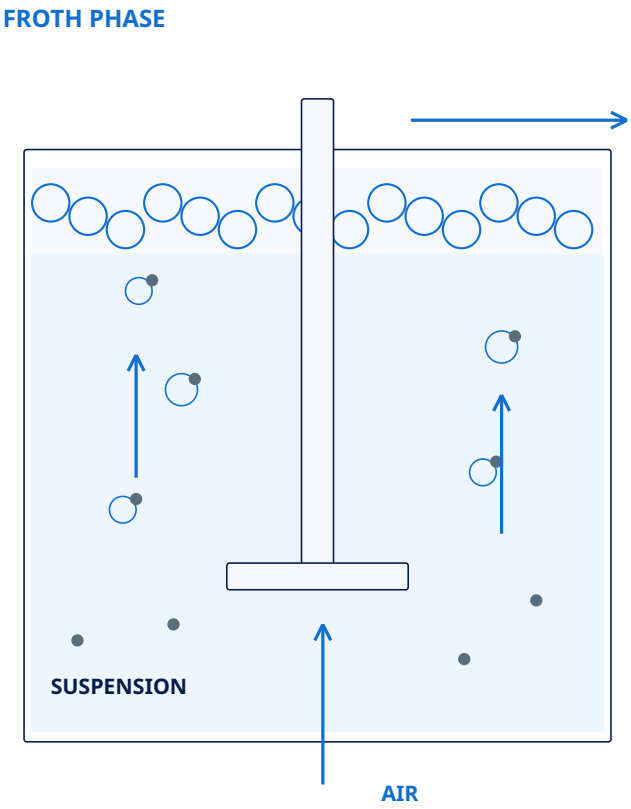


Shaft, air connection and working area

LT-M0614

Selective Mineral Separation by Bubbles

Agitation • Air bubbles • Mineral transport into the froth phase



Agitation

The impeller supports contact between ground ore, water and test reagents.

Bubble Attachment

Hydrophobic particles attach to air bubbles and are carried toward the surface.

Froth Collection

The surface froth fraction is separated from material remaining in the suspension.

Selective separation depends on mineral surface properties and the test conditions. The froth fraction and material remaining in the cell can be collected separately for comparative analysis.

Select Cell and Head

Plexiglas cell options are available in 1, 2, 3 and 4 L volumes. Four flotation heads in two sizes are supplied. Select the cell and head arrangement together with the sample quantity.

Record Test Conditions

Record sample mass, cell volume, solids concentration, impeller speed, reagent conditions and test duration. Use the same sample preparation method for repeated trials.

Technical Data and Test Workflow

LT-M0614 • Sample range, cells, speed, motor and power supply

Technical Specification	Value
Product Code	LT-M0614
Rated Capacity	2 L
Cell Volume Options	1 / 2 / 3 / 4 L
Sample Mass per Test	250-2000 g
Impeller Speed	700-2800 rpm, continuously variable
Speed Indicator	Digital electronic
Flotation Heads	4 heads, 2 different sizes
Material-contact Parts	AISI 316 stainless steel
Machine Base	Cast iron
Column / Arm / Drive Guard	Cast aluminium
Motor and Drive	1 HP, 1400 rpm / variable V-belt
Power Supply	380 V, 3 phases

Sample Mass and Cell Volume

Assess the 250-2000 g working range together with the chosen cell volume and solids concentration. Fill the cell to suit agitation and froth formation.

Flotation Test Workflow

01
Select Setup
Choose cell and head for the test plan.

02
Prepare Slurry
Prepare ore, water and method reagents.

03
Set Speed
Monitor agitation and air conditions.

04
Collect Fractions
Take froth and remaining cell material separately.

Product Page | liyatest.com.tr/en/urun/flotation-machine/