Fire Assay Cupellation Furnace

For gold, silver and precious metal analysis

50 or 100 cupels • SiC heating • Omron temperature control



1200 °C

MAXIMUM TEMPERATURE

50 / 100

CUPEL CAPACITY

LT-M1525

PRODUCT CODE

Furnace Design and Main Components

LT-M1525 • Carbon steel body and batch cupel processing

The Liya Test Cupellation Furnace is used for the cupellation of lead buttons during Fire Assay. Its controlled heating system and multiple-cupel capacity support batch sample processing in the laboratory.

FURNACE DOOR

The image shows the open door and access to the furnace entrance.

CONTROL PANEL

Front control area for temperature values and target settings.



FURNACE CHAMBER

The working area where cupels are processed at high temperature.

CARBON STEEL BODY

Main structure supporting the chamber and heating system.

Product image: open door, hot furnace chamber and front control panel.

1200 °C

Maximum temperature limit.

SiC Heaters

Silicon carbide heating elements.

K-Type Sensor

Thermocouple for temperature monitoring.

Omron Control

Target temperature setting and process monitoring.

LT-M1525 • FIRE ASSAY

Temperature Control and Cupel Capacity

Heating system, control area and the Fire Assay process sequence



FURNACE CHAMBER • DETAIL



CONTROL PANEL • DETAIL

Controlled Heating System

SiC heating elements bring the chamber to the working temperature. A K-type thermocouple monitors the current temperature, while the Omron controller manages the target temperature setting.

CUPEL CAPACITY OPTIONS

50 / 100

Cupel dimensions and the internal layout are defined for the selected 50- or 100-cupel configuration.

FIRE ASSAY PROCESS SEQUENCE

01

After Fusion

Lead buttons are placed in cupels.

→

02

Cupel Loading

Cupels are loaded into the chamber.

→

03

Cupellation

Heat and air cause the lead to oxidise.

→

04

Metal Bead

Precious metals remain on the cupel.

The maximum temperature is not the process temperature for every analysis. Working conditions are defined according to the analytical method in use.

Technical Data and Installation Planning

LT-M1525 • Main product specifications and configuration information

Technical Specification	Value
Product Code	LT-M1525
Product Name	Cupellation Furnace
Cupel Capacity	50 or 100
Maximum Temperature	1200 °C
Heating Elements	Silicon carbide (SiC)
Temperature Sensor	K-type thermocouple
Temperature Controller	Omron
Main Body Material	Carbon steel
External Dimensions	105 × 145 × 170 cm
Approximate Weight	620 kg

Installation and Order Requirements

Capacity Selection

50 or 100 cupels; cupel dimensions and internal layout.

Electrical Infrastructure

Supply voltage, phases, electrical power and connection details.

Layout and Access

Floor load capacity; working clearance for loading and maintenance.

Extraction and Workflow

Local extraction arrangement and cupel loading, removal and cooling areas.

Internal chamber dimensions, process time and temperature accuracy are confirmed for the selected configuration. External dimensions follow the order given on the product page.

PRODUCT INFORMATION SOURCE

liyatest.com.tr/urun/kupelasyon-firini/