

Main technical parameters

- 65 L industrial grade professional chamber, double magnetron microwave emission, with the highest microwave output power of 1800W; the operating power realizes automatic variable frequency control (VFC) and non-pulse continuous microwave heating via reaction temperature and pressure feedback.
- Six-layer steel structure armored glass explosion proof chamber door is equipped with an automatic pop-up buffer structure and electronic and mechanical dual-control door lock.
- The high pressure reaction vessel applies a fully closed anticorrosive super strength composite fiber outer vessel under the support of high strength frame structure and patented vertical explosion pressure relief technique, with max. sustained pressure of 15MPa (2250psi) and the highest sustained temperature of 300°C.
- Piezoelectric crystal pressure sensor controls and displays the internal pressure and pressure rise curve of reaction vessel in real time, with pressure control range of 0 to 10 MPa (1500psi) and control precision of 0.01MPa.
- High precision platinum resistor sensor controls and displays the internal temperature and temperature rise curve of the reaction vessel in real time, with temperature control range of 0 to 270°C and the precision of $\pm 1^{\circ}\text{C}$.
- High throughput reaction rotary table can bear up to 15 high pressure reaction vessels with the capacity of 100ml simultaneously, and a user may increase or decrease such vessels according to need.
- Dimensions of complete machine: 620 x 650 x 680 mm (length x width x height) Net weight: 65 KG.



HP-100 high strength frame type closed super reaction vessel

Maximum sustained pressure:

15MPa (2250psi)

Maximum sustained temperature:

300°C

Inner vessel capacity:

100 ml

Outer vessel material:

fully closed anticorrosive super strength composite fiber

Inner vessel material:

TFM (intensified Polytetrafluor Ethylene)

Cooling mode:

automatic air cooling inside chamber / natural cooling outside chamber

Sample processing capacity:

15 pieces per time

MDS-10

High Throughput Microwave Digestion /
Extraction /
Synthesis Workstation



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Sineo Microwave Chemistry Technology Co., Ltd.

MDS-10 High Throughput Microwave Digestion / Extraction / Synthesis Workstation

For more than 20 years, SINEO has been trusted by customers for its safety and reliability. MDS-10 high throughput closed vessel microwave digestion / extraction / synthesis workstation applies the best materials and shows the breakthrough and transcendence in structural design and production technique. This workstation meets the need of batch processing of samples and raises safety and reaction control accuracy greatly.



Main performance

NEW



Fully closed anticorrosive super strength composite fiber outer vessel has strong transverse impact resistibility and can't crack or break upon explosion, superior to other high molecular engineering plastics. Under full closed corrosion protection, this vessel can resist the erosion of any acid and alkalic liquids and gases. This vessel is also superior to other high molecular materials in dielectric property, has good microwave penetrating property and heat conductivity, and is able to heat and cool quickly, with max. sustained pressure of 15MPa (2250psi) and the highest sustained temperature of 300°C.

NEW



High throughput sample treatment can treat up to 15 high pressure sample vessels at the same time, as meets the need of batch sample treatment.

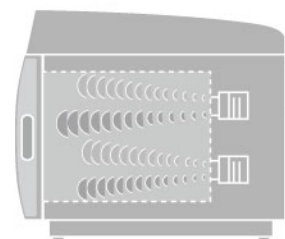
Electronic and mechanical dual-control door lock is safe, reliable and convenient.



NEW



NEW



Double magnetron microwave emission can guarantee the high power even microwave magnetic field heating. The maximum microwave output power is 1800W, the operating power realizes automatic variable frequency control (VFC) and non-pulse continuous microwave heating via reaction temperature and pressure feedback.

Top Chinese Microwave Digestion Brand, with 20 Years of Experiences *

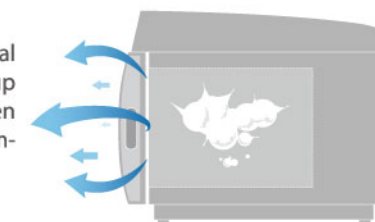
*. Sourced from Instrument Information Net (www.instrument.com.cn).

65 L industrial grade professional chamber with inner wall bearing not less than five fluoroplastic anticorrosive coatings.



Six-layer intensified steel structure armored glass explosion proof chamber door is equipped with an automatic pop-up buffer structure.

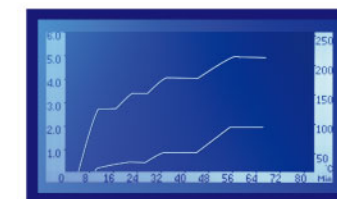
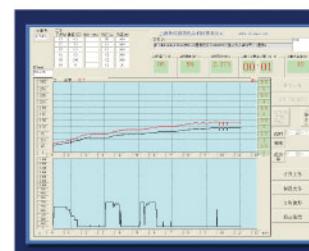
Buffer structure of automatic pop-up chamber door: Under abnormal circumstance of the inside of the chamber, the chamber door may pop up automatically to release high pressure gas from the opening, and then return automatically. As a result, the damage of high pressure gas to chamber structures and digestion vessel may be relieved.



Applying advanced piezoelectric crystal pressure sensing observation and control principle, this workstation can guarantee the full isolation of samples in the master vessel from the outside, avoid the problems such as joint leakage and cross pollution caused by traditional gas tube pressure sensing. Additionally it applies one-key plug in/out, as facilitates its operation.



Large LCD screen displays reaction parameters and curve change in real time.



(Optional) Computer software may be used for realizing bilateral control, displaying and recording reaction parameters, temperature, pressure and power variation curves in real time, and storing reaction schemes indefinitely; the microwave instrument may be controlled by computer to realize remote control involving practical operations such as setting, running, time change and power change.