



Microwave Digestion Systems LMWD-B Series

Microwave Digestion Systems are self-vent and reseal structured units with multi-safety protection functions. The continuous rotating reduces impact on rotary motor, which greatly extends the service life of rotor motor. TFM material for inner vessel and PEEK glass material for outer vessel prevents corrosion. Contact free temperature and pressure measurement avoids cross contamination.

Features :

- ❑ Reseals instantly when a sudden over pressurization occurs
- ❑ Adopts multi-fiber to monitor pressure in a contactless way
- ❑ All temperature and pressure data are displayed real time during the microwave run
- ❑ Large storage capacity- can edit and store 255 programs
- ❑ Uniform heat distribution by diffuser for sample digestion
- ❑ Alarm sensor for detection of abnormal pressure and temperature
- ❑ Real time pressure and temperature curve
- ❑ Automatic calibration and troubleshooting
- ❑ Vertical pressure release for safe operation
- ❑ High strength double security door
- ❑ Instrument fault monitoring alert
- ❑ Instrument abnormal sound monitoring
- ❑ Multiple safety protection functions including temperature and pressure control, explosion proof security doors, lid-locking and real-time temperature

Application :

Used to dissolve compounds such as heavy metals, inorganic compounds, filters and sediments in food, textile, plastic, geology, metallurgy, coal, bio-pharmaceutical, petrochemical, environmental monitoring, wastewater treatment, battery manufacturing, cosmetics and other fields.

Specifications:

Model	LMWD-B12	LMWD-B13	LMWD-B14
Sample quantity	12 per batch	18 per batch	40 per batch
Rotation mode	360° continuous rotation	360° continuous rotation	360° continuous rotation
Microwave power	0 to 2000 W adjustable	0 to 3000 W adjustable	0 to 3000 W adjustable
Microwave frequency	2450 MHz	2450 MHz	2450 MHz
Pressure control range	0 to 10 MPa	0 to 10 MPa	0 to 10 MPa
Maximum working pressure	6 MPa	6 MPa	6 MPa
Pressure control accuracy	0.01 MPa	0.01 MPa	0.01 MPa
Outer vessel pressure limit	20 MPa	20 MPa	20 MPa
Temperature control range	50 to 400 °C	50 to 400 °C	50 to 400 °C
Maximum working temperature	250 °C	250 °C	250 °C
Temperature control accuracy	± 0.3 °C	± 0.3 °C	± 0.3 °C
Inner vessel temperature limit	300 °C	300 °C	300 °C
Microwave leak	< 5 mW / cm ⁴	< 5 mW / cm ⁴	< 5 mW / cm ⁴
Inner vessel material	TFM	TFM	TFM

Outer vessel material	PEEK + glass fiber	PEEK + glass fiber	PEEK + glass fiber
Explosion proof frame	Polypropylene Glass fiber	Polypropylene Glass Fiber	Polypropylene Glass Fiber
Temperature testing	Contactless	Contactless	Contactless
Pressure testing	Contactless	Contactless	Contactless
Display	8 inch touch screen	8 inch touch screen	8 inch touch screen
Power	AC 220 V 16A , 50 Hz / 60 Hz	AC 220 V 16A , 50 Hz / 60 Hz	AC 220 V 16A , 50 Hz / 60 Hz
Dimension	640 x 630 x 590 mm	640 x 630 x 590 mm	640 x 630 x 590 mm
Weight	70 kg	75 kg	78 kg