

## SKZ-MD01B Microwave digestion



Microwave digestion system has been widely used in the food, textile, plastic, geology, metallurgy, coal, bio-pharmaceutical, petrochemical, environmental monitoring, wastewater treatment, battery manufacturing, cosmetics and other fields.

Some solutions as followings

**Food and agricultural products:** rice, tea, calcium milk biscuits, chocolate, shrimp bran, dried seaweed, milk, coffee, peanuts, oatmeal, milk, peanut oil, powdered milk, peanut oil, bread, medlar, black sesame paste, apples, tomatoes, shrimp, crispy rice, orange peel, fresh fruit juice, carrots, jujube, celery, corn oil, pork, cabbage, soybeans, hawthorn slices, soy sauce, instant noodles, instant fabric bags, chewing gum, wine, beef jerky.

**Environment:** municipal wastewater, waste copper, waste circuit boards, tail coal, air filters, sludge.

**Plastic:** Nylon, PVC, silicone tube.

**Household and chemical products:** laundry soap, hand cream, shower gel, powder, moisturizing cream.

**MINERAL:** chrome ore, iron ore, hydrochloric acid borosilicate glass, copper wire.

**Clinical Medicine:** hollow capsules, tablets honeysuckle hair.

**Agriculture:** soil, gypsum, dry orange, feed, rice.

### Feature:

1. Multiple safety protection function: It has more than ten safety protection measures to ensure experiment safety, including temperature control system, pressure control system, real-time temperature and pressure abnormal monitoring system, explosion-proof security doors, thicken cavity with 10 layer TEFLON coating, High-power exhaust system, program with suspend or start at any time. Ladder-style control temperature system, the material is TFM for the vessel and aerospace composite material for the vessel cover, the vessel cap with PFA and the pressure shrapnel use PEEK.

2. Optical fiber temperature control system: It adopts the internationally advanced optical fiber temperature control system. It avoids producing the spark which other temperature

control mode caused, effectively eliminates microwave interference temperature control system and other factors. It not only achieves precision control temperature but also it is the most safe microwave digestion temperature control mode at present.

3. Double magnetron variable frequency control system: It could adjust microwave output continuously. It makes the microwave field more uniform and more accurate that could ensure the sample digestion are uniform.

4. The high accuracy pressure sensor could make the pressure control more precise.

5. 7"LCD color touch-screen real time display the temperature and pressure curve.

6. Built-in method library (30 methods) and the methods could be programmed.

7. The ARM chip with UCOS -II operation system: It is suitable for the experimental preparation equipment which runs stably and operates easily.

8. Unique Wifi control module, In the office can be freely controlled microwave digestion which is in the laboratory. (Optional)

**Specification:**

Cavity	48L Resonant Cavity
Teflon coating	10
Power output	1600W
Digestion method	50 preinstalled methods, programming 100 method
Max. temperature	305°C
Temperature range	-40°C - 305°
Temperature accuracy	±1°C
Temperature sensor	Optical Fiber Sensor
Running abnormal monitoring	YES
Pressure accuracy	±0.01Mpa
Max. pressure	80Mpa
Vessel Pressure capacity	80Mpa
Vessel quantity	1-12/batch
Vessel volume	100mL
Microwave cavity	SS316 with 10 layer Teflon
Cooling method	forced air cooling
Interface	USB, RS232
Wifi Module	Optional
Display	7" LCD screen
Control mode	touch screen
Detection of abnormal voltage	Yes

Video monitoring	YES
Power supply	220VAC±10% 50Hz
Dimensions	520mmx593mmx660mm
Weight	67Kg