



WX-8000 Microwave Reaction System

Simpler process » Easier work



WHAT CAN WE DO?

PreeKem has been focused on the field of microwave technology for more than 15 years. The latest innovation, **WX-8000** represents the state of the art in closed vessel microwave digestion. Superior vessel design, combined with more precise temperature and pressure control provides comprehensive reaction control features and better digestion results.

Microwave digestion • Microwave extraction • Microwave synthesis

Preekem

Preekem has been dedicated to microwave chemistry and sample preparation for 17 years and has been a leading supplier of these two fields in China. WX-2000 microwave digestion system is the first unit with dual control of temperature and pressure in China market. Since its launch in 2001, Preekem has developed over 20 new models including microwave digestion, microwave synthesis and automated solid phase extraction.


Preekem has the top R&D team, skilled manufacturing team, professional sales team and dedicated service team. Our products have been exported to countries and regions like U.S., Japan, German, Italy, Russia, India, Korea, Malaysia, Turkey, Pakistan, Australia and etc.

With consciousness of crisis and eagerness to innovate, Preekem aims to build one of world's top instrument brands with international advanced technology.

Superior safety and performance comes from technical design in Germany

Dedicate to 2000+ commercial labs for more than 10 Years

- 4 initiative and 6 passive safety design
- LCD screen displays real-time temperature and pressure
- 316 seamless laser welding stainless steel cavity
- 2000 W dual magnetrons provide high density microwave field, quickly boost the temperature
- High quality TFM super pressure vessel could apply to all kinds of samples
- Air duct is designed according to hydromechanics, which insures fast cooling
- Stable for more than 10000 hours Panasonic microwave technology



KJ-100



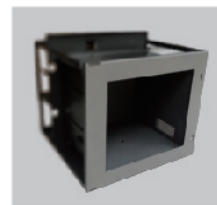
WX-8000 Microwave Reaction System

Quality lies
in the details!

1

Cavity

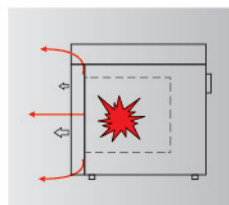
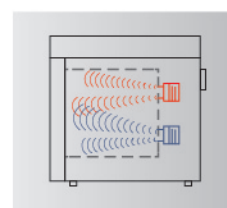
- Industrial-quality components made of 316L stainless steel and built by seamless laser welding
- Multi-layer Dupont PFA coating efficiently protects cavity away from corrosion
- Large cavity provide large batch of vessels
- Maximum withstanding temperature: 350°C



2

Microwave source

- Microwave output via two staggered magnetron and special waveguide design by PreeKem
- Uniform and high efficiency microwave heating focus on sample area



3

Door

- One-touch Key for opening and closing door
- Active door lock: Door opens only after a run has finished successfully
- Self-sealing action in case of an uncontrolled overpressure release



4

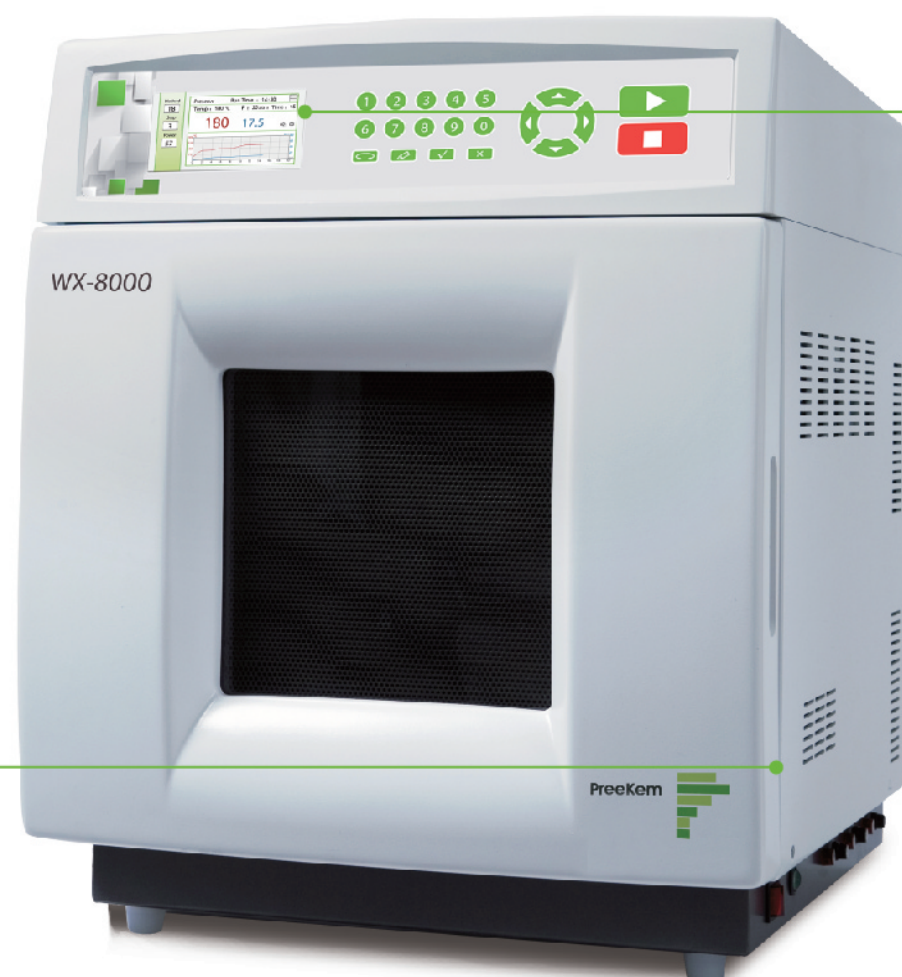
Closed-vessel design

- Inner vessel made of TFM provide better anti-penetration performance compared with PTFE
- Double pressure-release protection design: safety membrane releasing pressure and sealing cover breaking
- High strength frame-type structure design, withstand high temperature and high pressure
- Maximum throughput is 10 vessels



Safety comes from scientific design and strict quality control

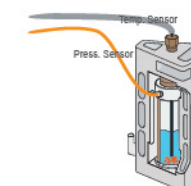
WX-8000 Perfect integration of technology, wisdom and manufacture



5

Dual reaction control

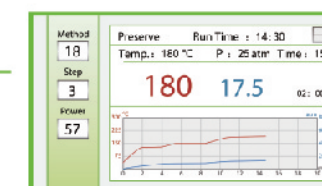
- Immersing PT sensor allows accurate temperature measurements inside the solution
- High-precision high temperature melt pressure sensor measures the pressure in real time
- This precise control of the temperature and pressure is essential for reproducible results and ensures safe processes every time



6

Straightforward software solutions

- The large and high-resolution screen provides a convenient, straightforward interface
- Simple Method Programming:
A comprehensive library of methods gives
- Ready-to-use applications for a wide range of samples
- Easily monitor an active run from the graphical output of the screen
- Running data can be saved, reviewed and exported



7

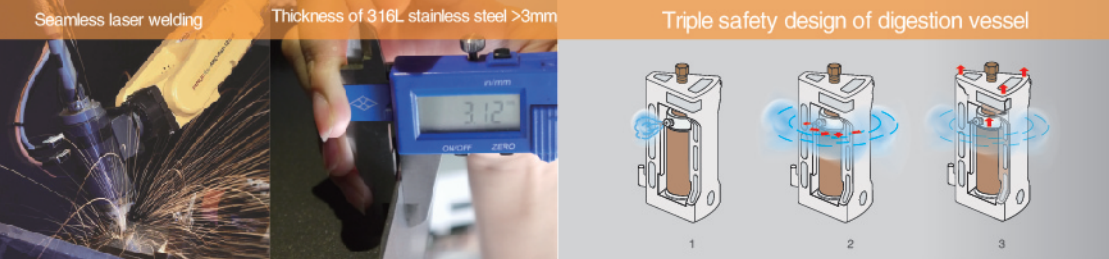
Broad safety viewer

- Stable stainless steel door with broad safety window
- It enables observation of the entire run in real time

8

High efficiency cooling unit

- Strong anti-corrosion exhaust unit provides effective heat transfer and cooling of vessels within minutes after decomposition
- No handling of hot pressurized vessels and increased lifetime of key components



Worthy of customer's trust » Sample preparation expert

Initiative safety features

- Temperature measurement and control system
- Pressure measurement and control system
- Safety-view monitor system
- Additional assist sensors

Passive safety features

- Safety membrane venting for over pressure(graph1)
- Long skirt seal venting for over pressure (graph2)
- Vertical pressure-release design (graph3)
- Seamless laser welding cavity made by 316L stainless steel
- Integrated multi-layer stainless steel door ensures the highest safety
- Overpressure release and resealing action

High performance Closed acid digestion vessel

Number of vessels	10
Liner material	TFM
Pressure jacket	PEEK
Volume	100mL
Maximum operation pressure	900psi
Maximum withstanding pressure	2200psi
Maximum operation temperature	260
Maximum withstanding temperature	310



KJ-100

Specifications

Microwave Cavity	Industrial special designed microwave resonant cavity
Material of Cavity	316L Stainless steel
AC Power Input	220-240v/50HZ, 15A
Power Consumption	2400W
Maximum Microwave Power Output	2000W
Microwave Frequency	2450MHz
Microwave Emission Mode	Non-pulse continuous microwave output
Microwave Control Mode	High frequency closed-loop feedback (PID) control
Volume of Resonant Cavity	53L
Rotors	KJ-100 Digestion Vessel
Pressure system	Pressure measurement range: 0-1500psi Pressure measurement precision: ± 0.1bar
Temperature system	Temperature measurement range: 0-300℃ Temperature measurement precision: ± 0.1℃ Temperature control stability: ± 1℃
Exhaust system	Anti-corrosion converting-frequency centrifugal blower Maximum air-flow capacity is 5 m ³ /min
Ambient Temperature	0-40℃
Air Humidity	15-80%RH
Dimensions (W x D x H)	550mm× 650mm× 655mm
Weight	65Kg

Service and Technical support

All Preekem products are backed by our experienced applications support team and service department. Specialists from Preekem are at your service. Quick and efficient service reduces downtimes to a minimum



Subject to change without notice. PreeKem reserves rights of final explanation. Version: 2st edition, 2016.8

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