

# PREPS

PREEKEM ROBOT ENHANCED PREPARATION STATION



**START SAMPLE PREPARATION INTELLIGENT ERA**

A platform: infinite choice and perfect interpretation of personalized programs, including microwave digestion, microwave extraction, microwave synthesis....

**Innovation  
Creates Values**

MICROWAVE CHEMISTRY DEVELOPMENT OF PREEKEM

**PREPS**  
Global Pioneer  
Industry leader

2003



2005



2012



2017



**ALLOW EACH SAMPLE  
AN INDIVIDUAL  
SOLUTION**

Start a new era of microwave digestion



**RELEASE YOUR HANDS, JUST SAMPLE WEIGHING**

You only need to weigh the sample and let PREPS to handle the rest process.



**PRECISE ROBOT ARM**

Precision three-dimensional robot arm can fulfill the function of adding acid, mixing, digestion, volume metering and sample transfer.



**EXCELLENT STABILITY**

17 years dedication in microwave digestion to create a total innovative unattended system.



**THOROUGH DIGESTION AND FAST COOLING**

Single-mode microwave focusing technology combine with vortex blower cooling system limits the whole process 10-15 minutes.



**SAFETY PERFORMANCE**

The intelligent/dynamic pressure control technology and infrared temperature monitoring system control the real-time pressure and temperature, which provide the highest level of security.

[Invention Patent No. ZL 2015 1 0586879.7]

## PROFESSIONAL ACID ADDING

Three-channel independent acid adding system allows three kinds of acids. It adopts high precision syringe pump that secure a accuracy acid adding volume and also indicates real-time acid residual volume.

## MULTI-FUNCTION PROBE

Non-contact acid adding, which can adjust the probe height and set the acid leaching rate to wash the sticky samples.

## STRUCTURE OF COVER

The cover could open only when temperature and pressure reach the safety standard.

## AUTOMATIC SAMPLE IDENTIFICATION

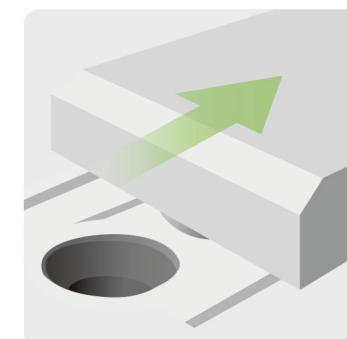
The position identification sensor could recognize sample rack.

## REAL-TIME SAMPLE TRACKING

The infrared sensors could scan sample at anytime and monitor the whole process.

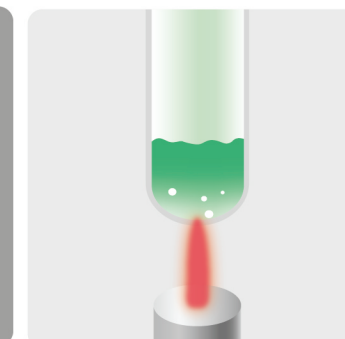
## ALL-AROUND ANTICOR-

The mechanical arm and pipeline are treated with anti-corrosion material.



### Structure of cover

The cover could open only when temperature and pressure reach the safety standard.



### Temperature Sensor

Infrared sensor is adopted to monitor the real-time temperature in the whole process of reaction.



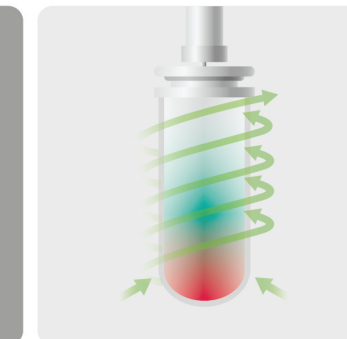
### Patented Pressure Control

The non-contact piezoelectric transmission technology could monitor the real-time pressure. The patented structure design could release excess pressure and reseal the system after releasing.



### Fast Air Cooling

The turbocharged design combined with the cooling duct could cool from 180 °C to 70 °C in 2 minutes.



## USER-FRIENDLY, HIGHLY AUTOMATED, ADVANCE IN SAFETY



Automatic acid adding



Acid spray

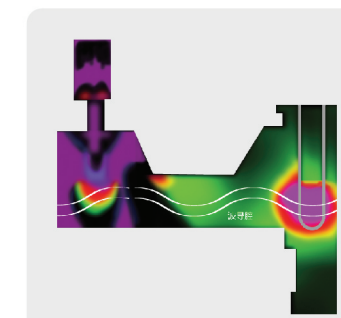


Automatic identification of the sample bottle

## EXCELLENT PROCESS CONTROL

### MICROWAVE RESONANT CAVITY AND PID CONTROL

The single mode microwave resonator based on vector modeling provides high density microwave field, and the precise PID control technology ensures the stability and reproducibility of the reaction.



**APPLICATION**

For various application in laboratories

PREPS could allow an individual method for different sample in each single vessel.

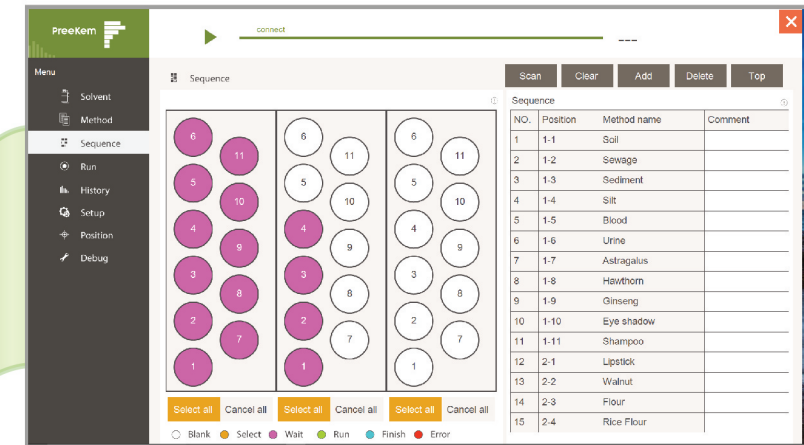


Different methods can be set for each sample

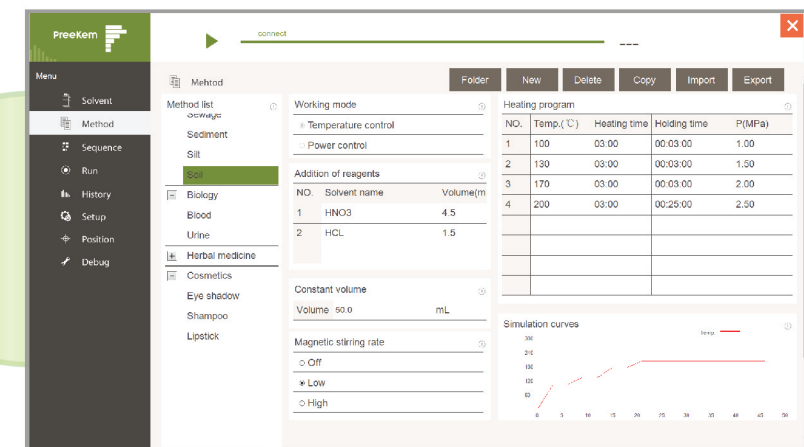
Change Your Lab Experience

**RELIABILITY**

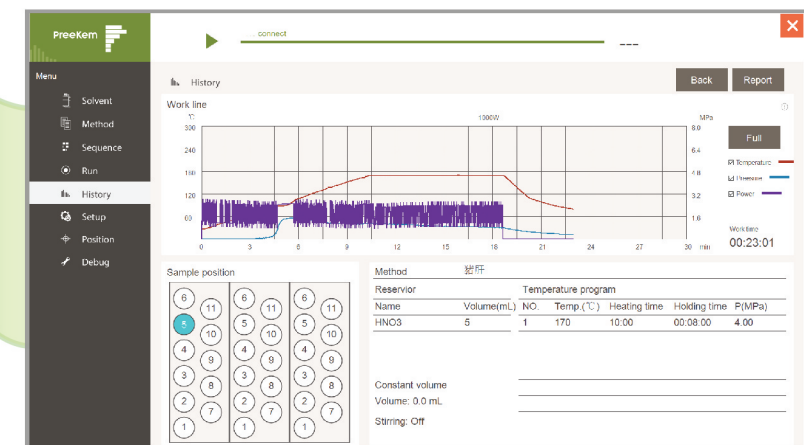
The intuitive software design, even a completely inexperienced operator, can be familiar with the whole operation in less time.



Sequence interface




The method of interface/operation interface



The parallel process/Parallel running



## Preekem Scientific Instruments Co., Ltd.

 Address: No.100-101 Building, No.2338 Duhui Road, Shanghai, China  
P.C. 201108

 TEL: 021-54427296 54426316 54426318  
FAX: 021-54427063 P.C. 201108

 E\_mail: [info@preekem.com](mailto:info@preekem.com)  
Website: [www.preekem.com](http://www.preekem.com)

