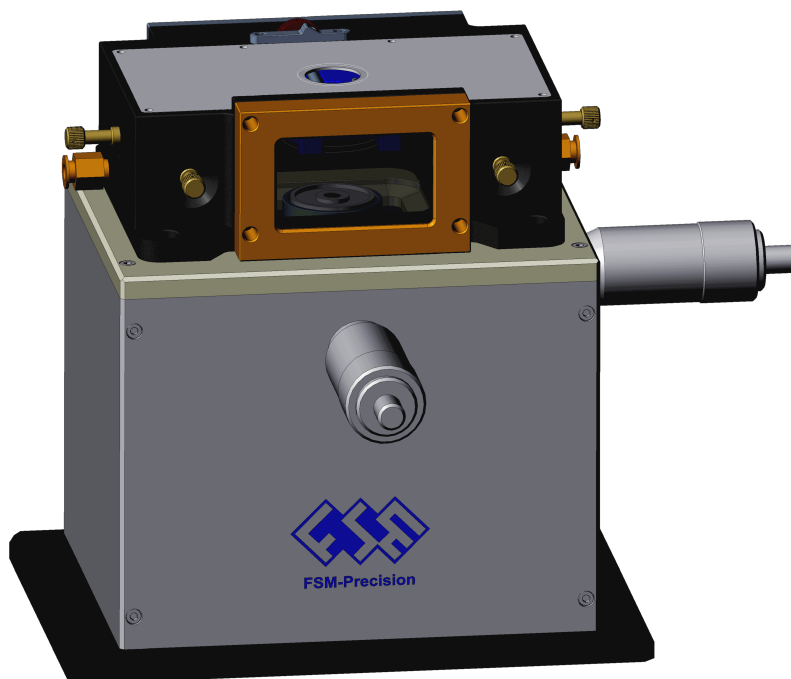


Sealed probe-sample stage system device with temperature control and liquid environment



1: KEY FEATURE

The hermetic-sealed design of the sample scanning table and of the laser detection head can be filled with special gases without adding a sealed cover; the laser detection uses a vertical light-path design, and the gas-liquid dual-purpose probe holder can work under the liquid; the internal scanning structure is above. A constant temperature heating plate is also designed, which can be used to adjust the sample temperature in real time in conjunction with a temperature controller. It can work in common air environment, liquid environment, temperature control environment and inert gas control environment at the same time.

2: SPECIFICATION OF TEMPERATURE STAGE

Size of the temperature control table: width 25mm, thickness 15mm

Temperature control range: from room temperature to $\sim 250\text{ }^{\circ}\text{C}$

Heating rate: $0 \sim 10\text{ }^{\circ}\text{C} / \text{min}$, can be set arbitrarily

Maximum sample size: $\Phi < 30\text{ mm}$, $H < 10\text{ mm}$

Maximum sample weight: $< 20\text{ g}$

Working modes: contact mode, tap mode, force curve measurement

3: SPECIFICATION FOR LIQUID POOL

Liquid pool size: 33mm inside diameter, 9mm depth

Maximum sample size: $\Phi < 30\text{ mm}$, $H < 5\text{ mm}$

Maximum sample weight: $< 20\text{ g}$

Working modes: contact mode, tap mode, force curve measurement

4: SPECIFICATION FOR INERT GAS

Gas control mode: equipped with an inflation nozzle and a deflation nozzle that can be charged and deflated at the same time

Internal pressure adaptation range of cavity: about $0.5 \sim 1.5$ standard atmospheric pressure

Maximum sample size: $\Phi < 50\text{ mm}$, $H < 20\text{ mm}$

Maximum sample weight: $< 30\text{ g}$

Working modes: contact mode, tap mode, force curve measurement