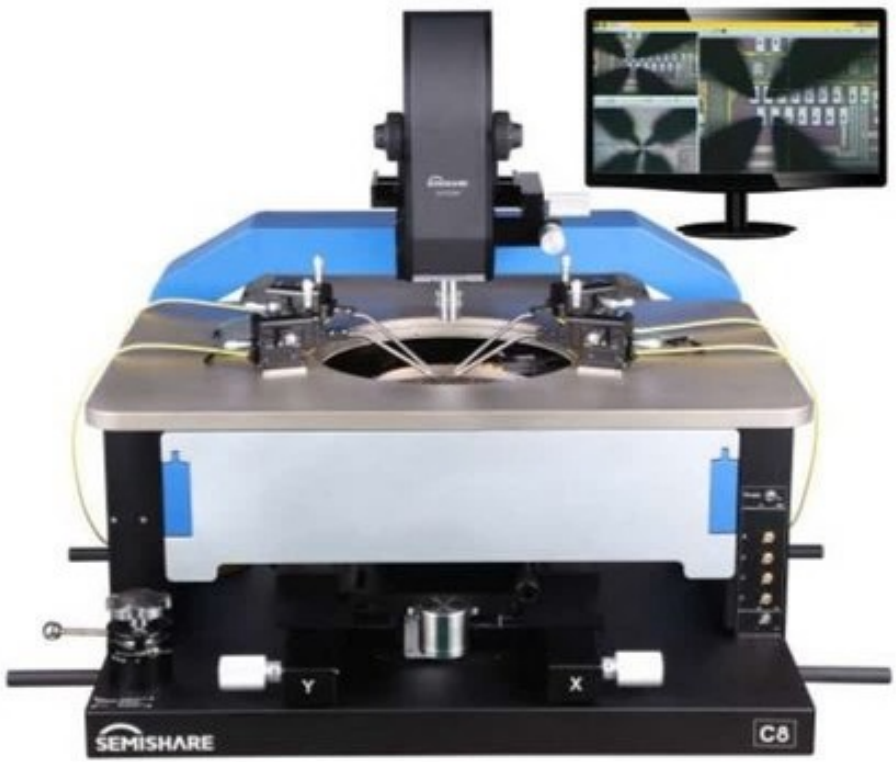
High And Low Temperature Analysis Probe

SEMISHARE



Model : C6 | C8 | C12

Product Overview

C series probe station has excellent mechanical stability and precision, easy to operate, support for multi-function upgrade, This product is mainly used in the manufacturing and research fields of integrated circuits, LEDs, LCDs, solar cells, and semiconductor industries.

Applications

LD/LED/PD test Under high and low temperature environment,, PCB/package device test, IV/CV characteristic test, internal circuit/electrode/, high frequency and radio frequency test.

Features

- Low temperature test in non-vacuum environment, up to -60℃.
- Compatible with high magnification metallographic microscopes.
- Circuit/electrode/PAD testing of chips above 1 micron.
- For the use of Institutions of research institutes/company laboratory.
- Can be used to test samples up to 12 inches.
- Precision screw drive structure and linear movement.
- High frequency characteristics of the device (supports frequencies up to 300GHz)

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Model		C-6	C-8	C-12
Dimension		L 860mm*W 850mm*H 700mm	L 880mm*W 860mm*H 750mm	L 1400mm*W 920mm*H 920mm
Weight (about)		150KG	170KG	250KG
Electricity Demand		220VC, 50~60Hz		
Chuck	Size & Rotation angle	6", 360° Rotation	8", 360° Rotation	12", 360° Rotation
	X-Y Moving range	6" * 6"	8" * 8"	12" * 12"
	Moving resolution	1μm		
	Sample exchange	Chuck quick move out mechanism for sample change		
	Sample fixed mode	Vacuum adsorption		
	Electrical design	Chuck Surface is Electrical Floating with Banana plug adapter, can be used as a backside electrode .		
Platen	O shape platen	8 micropositioners available	10 micropositioners available	12 micropositioners available
	Move range & adjustment	Platen can be quickly lifted up and down 6mm with automatic locking function		
		Platen can be fine tuned up and down 25mm precisely with 1μm resolution		
Temperature specification	Temperature range	- 100 ~ 200°C	- 80 ~ 200°C	- 60 ~ 200°C
	Temperature precision	0.01°C resolution		
	Heating method	Low voltage DC(LVDC)		
	Minimum temperature control rate	± 0.1°C / hour		
	Refrigerant	Liquid nitrogen or Refrigeration compressor		
Microscope	Moving range	X-Y axis : 2" * 2", Z axis : 50.8mm		
	Switching lens mode	Microscope tilting 30°manually by Lever		
	Magnification	16~100X / 20~4000X		
	Lens specification	Eyepiece: 10X ; Objective lens : 5X, 10X, 20X, 50X,100X(Option)		
	CCD pixels	50W (Analog) / 200W (Digital) / 500W (Digital)		

2. Product Structure

III ZOOM Microscope regulator

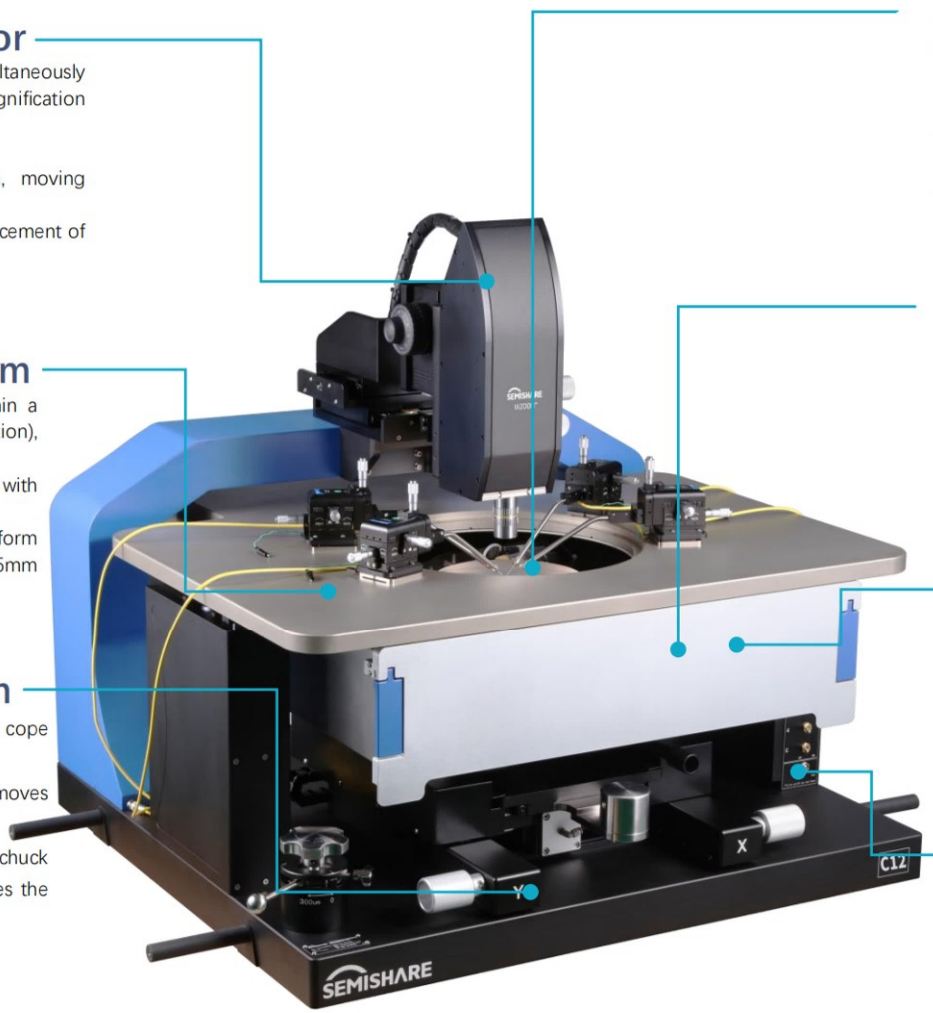
- 11:1 three-step zoom microscope, capable of simultaneously displaying low magnification and medium/high magnification images, facilitating precise needle-point operations
- Built-in dual digital camera of two million pixels
- Microscope XY motion range up to 50x50mm, moving accuracy up to 1μm
- Microscope pneumatic lifting up to 50mm, for replacement of objective lens

Lifting micropositioner platform

- The platform can be finely adjusted vertically within a travel range of 0-40mm (based on chuck configuration), with a lifting accuracy of 1μm.
- The platform can be lifted pneumatically and quickly with a stroke of 3mm.
- Comfortable large handle rotary control probe platform fine adjustment up to 0-300μm, toggle switch 0-5mm rapid lifting, for needle operation

Air-controlled mobile platform

- Rapid moving or fine moving mode is adopted to cope with different working scenarios
- In fine moving mode, the X/Y axis of the chuck moves without gap, and the moving accuracy is 1μm
- In rapid moving mode, the X/Y axis of the chuck air-floating moves smoothly and rapidly, and reaches the needle measurement position rapidly



Chuck system

- The central vacuum adsorption hole and multi-coil vacuum adsorption ring fix samples, and each vacuum channel is independently controlled
- The porous adsorption structure can be configured for wafer adsorption
- Triaxial structure, fA-level leakage, electrically independent suspension, with triaxial electrical interface

Closed chamber structure

- Shielding external telecommunication interference
- Providing a lower noise and current leakage environment
- At the same time, keeping samples frost-free at low temperatures under nitrogen or positive pressure
- Unique chamber blowing structure, to prevent low-temperature frosting phenomenon
- Rapid pull-out mechanism design, for rapid sample replacement

Temperature module

- Temperature range of -100~300℃, liquid nitrogen refrigeration
- Temperature range of -60~300℃, air refrigeration
- Temperature stability: ±0.1℃
- Temperature resolution: 0.01℃
- Rapid temperature increasing and decreasing rate

Chuck adsorption channel control

- Toggle vacuum adsorption switch, for rapid opening and closing of chuck vacuum holes

Optional functions

1. Probe card fixture, for application scenarios for probe card test
2. Gold-plating chuck, with lower contact resistance
3. High power chuck, for application scenarios for high voltage and high current test
4. Shockproof system with good performance, to ensure more stable needling and image effect
5. Octagonal box structure, to ensure higher chamber tightness
6. The shielding box provides application scenarios of darkroom and higher electromagnetic shielding performance