## Specification

## Introduction

LCD series laser repair equipment is a kind of repair equipment to repair the defects and defects in the production process of display screen, so as to improve the yield of the process. With the leading machine vision system of SEMIS-HARE as the core, the equipment can provide high-precision and low-cost solutions for the defects of LCD finished products and semi-finished products, so as to improve the business efficiency to a greater extent.

## **Application Direction**

OLED/LCD panel within 20 ", 55 ", and 70 "highlights and abnormal repair  $\,$ 

## Product Feature

- High power optical image recognition, automatic calibration focus
- Laser system visual operation, greatly improve the efficiency of repair
- Linear motor structure, 1um laser precision, high speed mute
- Electrical shielding system, shielding light and electromagnetic interference
- Rich software testing function, high precision calibration of mechanical system
- Minimum machining accuracy up to 1\*1um
- Leading internal anti shock system device, more stable operation
- Can be upgraded for sample testing up to 120 inches



Model		LCD-70	LCD-55	LCD-20
Dimension		L2000mm*W1500mm*H2000mm	L 1500mm*W 1300mm*H 1500mm	L 1200mm*W 800mm*H 1500mm
Weight (about)		2500KG	1200KG	1200KG
Electricity Demand		220V, 50~60Hz		
Gantry	X-Y move range	1600mm * 1000mm	650mm * 550mm	fixed
	Resolution	1um	1um	1um
	Sample platform	The sample platform is Fixed in the Gantry design		X-Y travel range 8" * 8"
	Light source	Top light and bottom light		
Microscope	Travel range	1600mm * 1000mm * 50mm	650mm * 550mm * 50mm	z axis travel : 50mm
	CCD pixel	50W (Analog) / 200W (Digital) / 500W (Digital)		
	Eyepiece	10X Eyepiece		
	Objective lens	Configuration objective: 5X, 10X, 20X, 50X,100X (optional)		
	Objective changer	Motorized turret nosepiese unit	Manual/Motorized turret nosepiese unit	Manual nosepiese unit
	Focus	Motor-driven	Maunal or	Motor-driven Manual
Laser	Wavelength	Wavelength selectable: 1064 / 532 / 355 / 266nm		
	Energy	Output power : 2.2mJ / pulse		
	Machining capability	Machinable material: CR / Al / ITO / NI / TFT / RGB / Poly Silicon / MO / SIN / CF internal impurities, etc.		
	Machining accuracy	Minimum machinable accuracy 1*1µm (when configuring 100X lens)		
	Cooling-down method	Air-cooled laser or Water-cooled laser		
Control system	Principle			High precision lead screw drive, 1 micron resolution
	Speed	The speed is adjustable in 4 gears , each speed can be defined , the lowest speed is 1µm, the maximum speed is not lower than 20cm/s		Manual control
	System	The software system can realize lig source control, objective lens switc focusing, platform control, imag adjustment, laser size, energy, moc control etc. Can realize movement to click in image, custem defined trackin coordinate storage, fixed distant movement etc.	h, ge le le py g,	Manual control
Anti-vibration		Vibration free table installed		
Optional Accessories		control box with joystick		
		Special LCD laser repair lens		
		Special customization		

33