

Introduction

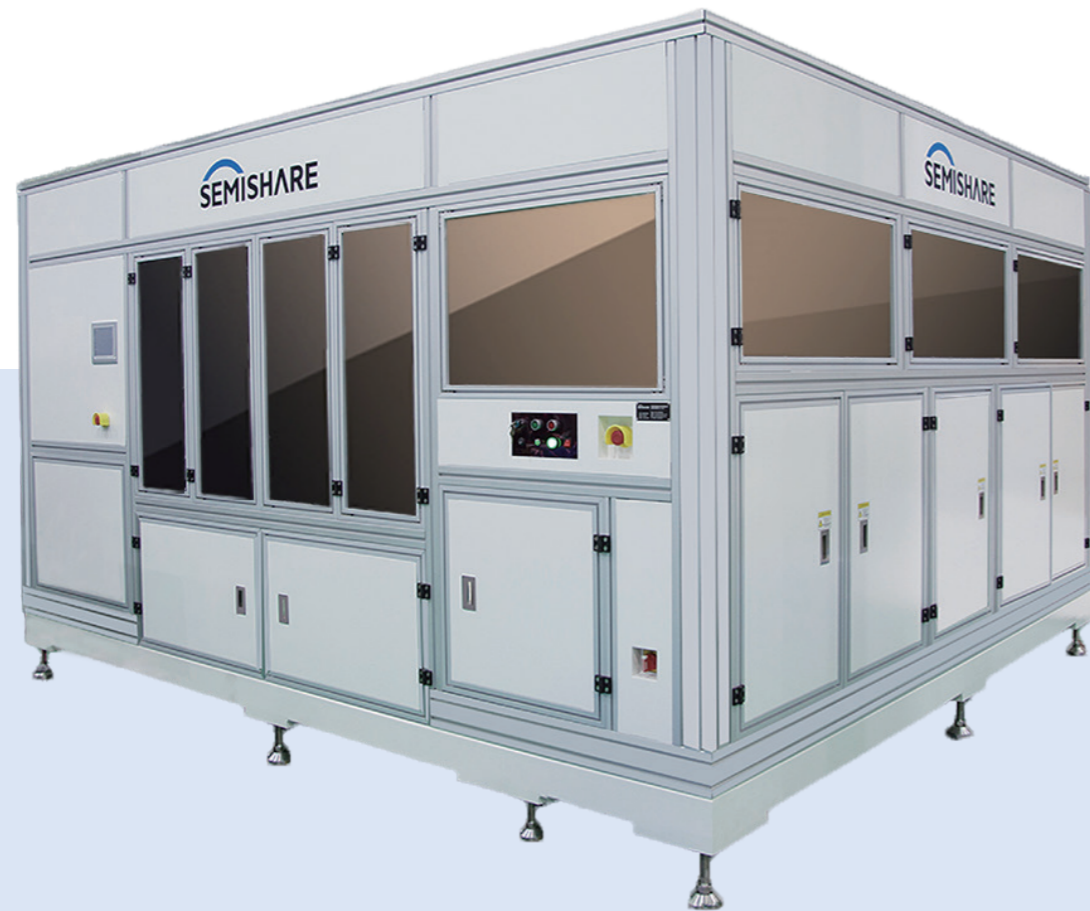
FlexScan is a laser panel repair device designed for highlights, anomalies and defects in display panel processing. With the leading machine vision system of SEMISHARE as the core, the equipment can provide high-precision and low-cost solutions for the defects of LCD finished products and semi-finished products, which greatly improves the yield and economic benefits of the enterprise's technological process.

Application Direction

Tft-lcd panel bright spot repair, OLED panel bright spot repair

Product Feature

- Laser system visual operation, greatly improve the efficiency of repair
- Repair shape can be edited, can be multi-station design
- Linear motor structure, 1um laser precision, high speed mute
- Leading internal anti-shock system device, more stable operation
- High power optical image recognition, automatic calibration focus
- Local darkening can be achieved
- Automatic AOI positioning, automatic upper and lower slice
- Rich software testing function, high precision calibration of mechanical system



Model	Flex-85	
Dimension	W 3000mm*L 2500mm*H 2500mm	
Weight	7500KG	
Electricity Demand	380V, 50Hz, 3Phase, approx. 50A Max	
Repair ability	Sample size	3~85 inch
	Repairable range	Any position in the panel
	Repair time	120s or so per pixel (pixel in size 200μm*100μm)
	Repairable product type	Cell (OLED, IPS, ON-CELL / IN-CELL TFT panel etc.), Module (with/without polarizer)
	Shading performance	Not visible when module backlight turn on
Gantry	X-Y-Z travel range	2000 * 1200 * 50mm
	Moving resolution	0.1μm
	X-Y velocity	0~400mm/s
	Z velocity	0~2mm/s Adjustable
	Location	AOI automatic defect location
Microscope	Optical circuit system ratio	50X~1000X, 5X, 10X, 20X, 50X, 100X Objects
	Objective switching speed	0.2~0.7s
	Focus	Laser auto focusing
	Optical resolution	0.7μm
	Camera	200W / 500W Pixel industrial camera
Laser	Laser system	Ultra fast laser
	Energy control	0~1000 steps, 0~100%
	Laser wavelength	1064nm, 532nm, 355nm
	Pulse width	500fs
	Spot size	0.8~1.5μm @ 100X object
		1.0~3.0μm @ 50X object
	Laser lifetime	>10years, Maintenance interval > 20000 hours
	Energy uniformity of scanning surface	Better than 5% IR
	Repair method	Scanning
	Scanning shape	Customer defined
	Recipes	Customer defined and stored locally
	Control	Mode
Semi-automatic/full-automatic repair		
Sample Exchange		Multistation and Automatic exchange
CIM system		Yes
Anti-vibration		Vibration free table installed
Industrial PC		23-inch display & computer: i7 processor, 2 blocks 1TB hard disk (one of which is a backup hard disk), 8G memory, 1G Independent video card, DVD-ROM
Communication interface		RS232 / EtherCAT / GPIB etc.
Security		Frame covered , and the operator operates outside .
		EMO
		Limit sensor, Motion platform and Laser system limit interlock
	Alarm	