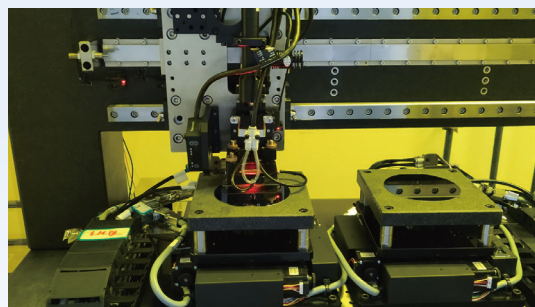


Custom Automation Equipment

Semiconductor Wafer Micro-Operation And Inspection Equipment



Description:

This platform is designed by Zolix for semiconductor wafer micro-operation and inspection, which consists of: semiconductor wafer holder unit, semiconductor wafer alignment unit, machine vision unit and micro-manipulator unit, and equipped with the main development of stable motion control system and machine vision software. A large variety of standard and custom options are available to meet specific process requirements like wafer clamping, alignment, transfer, cleaning, inspection and other functions.

Features:

- The system includes a variety of clamping and alignment structure, which can be customized according to the actual needs from customers.
- Secondary development interfaces are available for control system and machine vision software.
- Specific effective operations will be taken to be compatible with different wafer structures, different Mark point graphics.
- Support multi-dimensional micro-step adjustment of semiconductor wafers.
- Multi-station configuration, higher work efficiency

Specification: (The following indicators are for reference, please contact us for the final parameters)

Indicators	Data
Machine vision resolution(μm)	0.1
Microscope magnification	0.5~4.5
Camera resolution	2048×1536
Maximum frame rate(fps)	15
Camera type	monochrome
Light source	Monochromatic coaxial light source
Mark point recognition repeatability(μm)	0.1
Mark point recognition alignment accuracy(μm)	<0.5
Stage travel range of rough localization in X-axis(mm)	400
Stage travel range of rough localization in Y-axis(mm)	200
Repeatability accuracy of rough localization(μm)	1
Resolution of rough localization(μm)	± 1
Stage travel range of fine localization in X-axis(mm)	10
Stage travel range of fine localization in Y-axis(mm)	10
Stage travel range of fine localization in Z-axis(mm)	20
Fine alignment linear motion unidirectional repeatability(μm)	± 1
Fine alignment linear motion resolution(μm)	0.1
Stage travel range of fine alignment in θ Z axis($^{\circ}$)	5
Number of wafer processing station(set)	2
Number of wafer vacuum adsorption channels	4

Controller

Controller selection recommendation for motorized stage:

Motorized stage		Controller model		
		TMC-USB	MC600	ZC300
Linear motor- ized stage	LAK	●		
	CXP/CXPF	●	●	●
	KA	●	●	
	PA	●	●	●
	LA	●	●	●
	TSApp-B	●	●	●
	TSApp-C	●	●	●
Vertical motion motorized stage	CZF	●	●	●
	TBZF	●	●	●
	CXZ	●	●	●
	PSAV	●	●	●
	KA-Z	●	●	
	PA-Z	●	●	●
Motorized rota- tion stage	TBRK/TBRU	●	●	
	TBR/TBRF	●	●	●
	SIN	●	●	●
Motorized goniometer	GONX	●	●	●
	TBG	●	●	●
	PSAG	●	●	●
All-in-one two axis stage	XY	●	●	●
	XYR	●		
Note: ● Means suitable ; * Based on the specific model ; ○ Not fully applicable ;				
Description: If not specified, the conversion cable between the stage and the controller is provided by the controller ;				