

CNC VISION MEASURING SYSTEMS (ADVANCED TYPE)



programmable
segmented ring
light (included)

HIGH-RESOLUTION
AUTO ZOOM LENS

NAVIGATION
CAMERA



ISD-K432

- Motorized zoom objective
- Granite body, high accuracy and stability
- Panasonic servo control motor, with precise positioning performance in high-speed movement
- RSF brand linear scales

SPECIFICATION

Code		ISD-K322	ISD-K432	ISD-K542
Measuring range (X×Y×Z)		300×200×200mm	400×300×200mm	500×400×200mm
Stage size		620×380mm	720×480mm	750×600mm
Glass stage size		360×260mm	460×360mm	550×450mm
Resolution of X/Y/Z axis		0.5μm		
Accuracy of X/Y axis		≤(2.0+L/200)μm (L is the measuring length in mm)		≤(2.5+L/200)μm (L is the measuring length in mm)
Repeatability		2μm		
Objective		0.6X~8.0X (13.3:1 continuous zoom ratio)		
Working distance		83mm		
View field (diagonal length)		0.81~10.72mm		
Magnification		27X~356X (on 23.8" monitor)		
Camera		1/1.2"color CCD, 2.3M pixel		
Max. height of workpiece		200mm		
Illumination	surface	coaxial light, three-ring eight-zone adjustable ring light		
	contour	adjustable LED light		
Operation system		Windows 10/11		
Max. weight of workpiece		35kg		
Drive method		automatic		
Environmental requirement		temperature: 20°C±5°C, relative humidity: 20%~80%, vibration: <0.002g, less than 15Hz		
Power supply		190~230V, 50Hz, 1500W		
Dimension (L×W×H)		620×780×1750mm	740×930×1750mm	900×1300×1800mm
Net weight		350kg	400kg	550kg

STANDARD DELIVERY

Main unit	1pc
Dongle	1pc
Software	1pc
Lens with coaxial light	1pc
Controller	1pc
Computer	1pc
Calibration glass chart	1pc
Desk	1pc
Clay	1pc
Anti-dust cover	1pc

OPTIONAL ACCESSORY

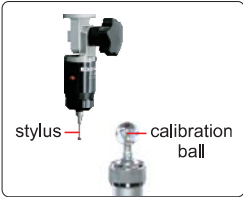
0.5X auxiliary objective	code: ISD-K-OB05X , working distance: 175mm magnification: 13.5~178X (on 23.8" monitor)
2X auxiliary objective	code: ISD-K-OB2X , working distance: 36mm magnification: 54~712X (on 23.8 " monitor)
Spectral confocal sensor	code: ISD-K-SCS (must be installed in factory)
Laser probe	code: ISD-K-LASER (must be installed in factory)
Probe	code: ISD-K-PROBE , includes Ø1mm styli and Ø2mm styli, Ø20mm calibration ball
Line laser sensor	code: ISD-K-LINE (must be installed in factory)
Line profile software	code: ISD-K-LP
Gear software	code: ISD-K-GEAR
Thread software	code: ISD-K-THREAD
Stitching software	code: ISD-K-STITCHING
Office software	code: 7313-OFFICE



laser probe(**optional**)
measuring accuracy is 4µm



spectral confocal sensor (**optional**)
measuring accuracy is 5µm



probe (**optional**), includes
Ø1mm and Ø2mm styli,
Ø20mm calibration ball,
measuring accuracy is 5µm



line laser sensor (**optional**)
quick measurement of flatness,
height, measuring accuracy is 10µm

SOFTWARE (INCLUDED)

real-time image

operation tools

X/Y/Z axis

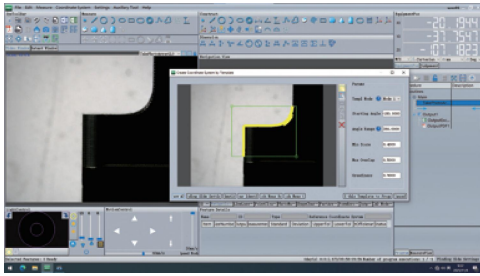
measuring objects

light controller

movement controller

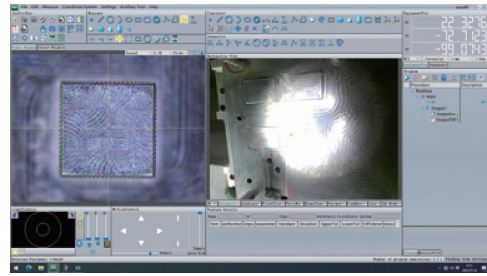
measuring results

The screenshot displays the SysToolBar software interface, which is divided into several functional areas. At the top, a menu bar includes File, Edit, Measure, Coordinate System, Settings, Auxiliary Tool, and Help. Below the menu is a toolbar with numerous icons for various operations. The main workspace is split into several panes. On the left, there's a 'Video Window' showing a real-time image of a square target with a crosshair. Below this is a 'LightControl' panel with a circular diagram and buttons. To the right of the video window is a 'MotionControl' panel with directional arrows and speed settings. The central part of the interface shows a '3D Model View' with a wireframe model of a part. On the far right, there's a 'EquipmentPos' panel displaying X, Y, and Z coordinates. Below this is a 'Procedure' panel with a tree view showing 'Main', 'Output1', and 'OutputExc'. At the bottom, there's a 'Feature Details' table with columns for Name, ID, Type, Reference Coordinate System, Item, Size, Number, Measurement, Standard, Deviation, UpperTol, LowerTol, Tolerance, and Status. The bottom status bar shows 'Selected Features: 0' and 'Number of program executions: 0 / 1'.



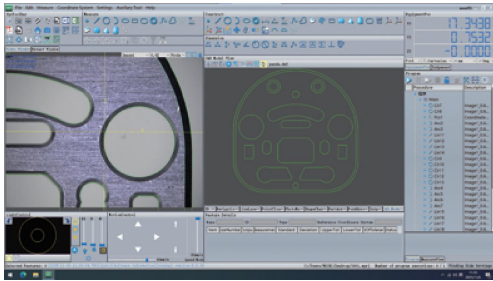
template assisted positioning function (included)

when the program runs repeatedly, as long as the positioning feature appears within the field of view, automatic measurement will be performed



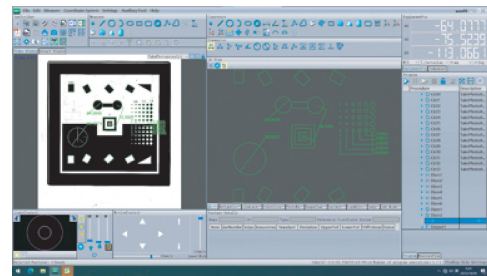
multi point autofocus function (included)

a single autofocus operation acquires height information of multi points, enabling efficient height measurement and flatness measurement



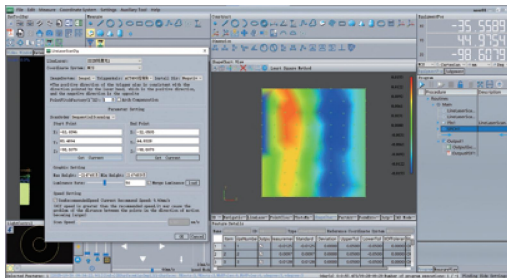
CAD import programming function (included)

import CAD drawings for quick programming



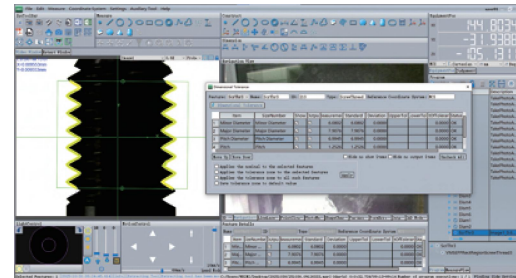
stitching software (optional)

stitching measurement for workpieces out of the field of view



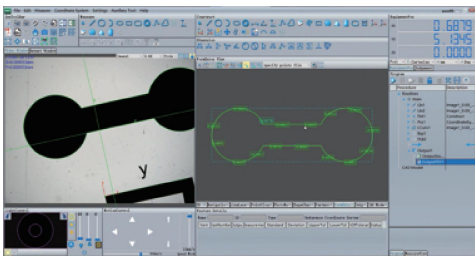
line laser sensor (optional)

high measurement efficiency, capturing all point data along a line segment in a single scan



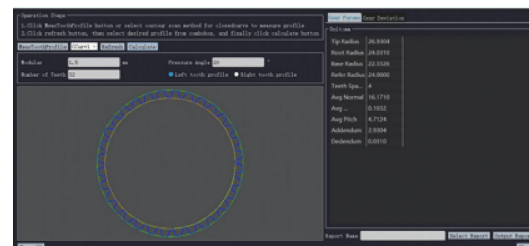
thread software (optional)

capture thread images, extract features through edge detection and contour fitting algorithms, and calculate parameters



line profile software (optional)

import the theoretical profile model and calculate the profile measurement results



gear software (optional)

non-contact measurement technology based on optical imaging for detecting critical dimensions of gears