

# Machine Vision in Automation



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Request a demo



More Products

**HIKROBOT**

# Simpler, Smarter and Stronger SC7000Pro Smart Camera



**30+** detection tools

**6** logic tools

Capable of perform detection on **16** positions simultaneously

# Features

## ➤ Self-developed Deep Learning Algorithm

High performance, high precision and high compatibility

The hardware processing power is equivalent to GTX1660Ti, which can easily realize ultra-high speed visual detection.



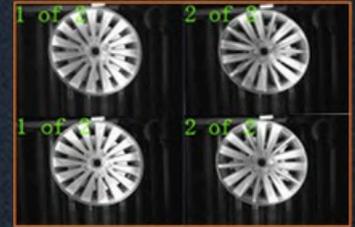
Complex Background



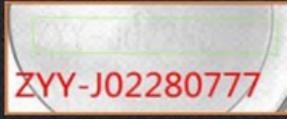
360° Characters



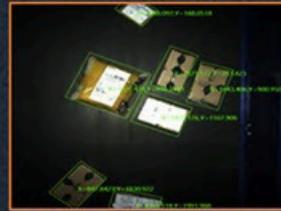
Complex Target Count



Fuzzy Characters



Ultra low-contrast Characters



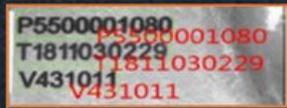
Multi-lines of Characters



Product Classification



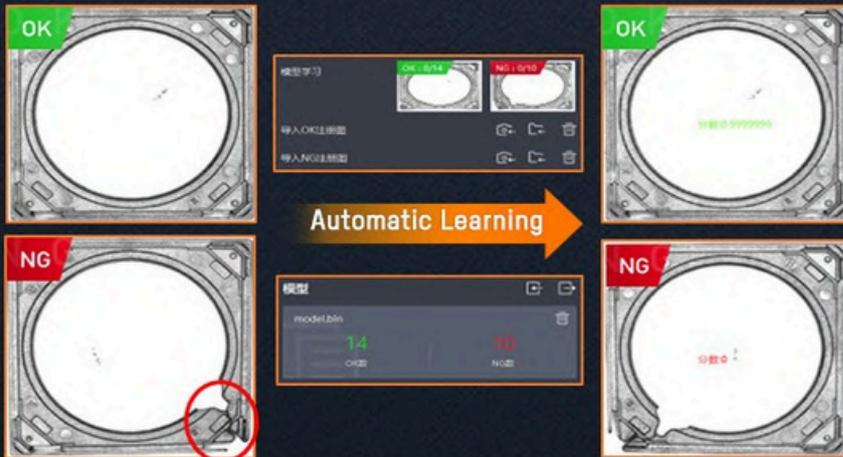
Metal Engraved Characters



Multi-lines of Characters

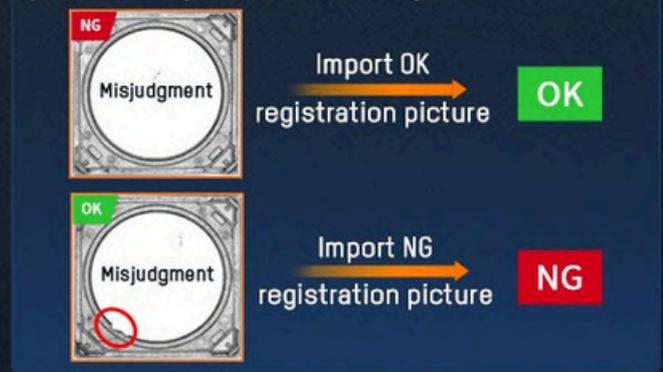
## ➤ Automatic Learning for Different Defect Detection Needs

For application scenarios with simple background, uniform texture, and obvious feature, you can register OK and NG pictures, and the camera will automatically learn and train for detection needs.



Model Training Process

When detecting exception, you can add registered pictures to optimize the learning model.



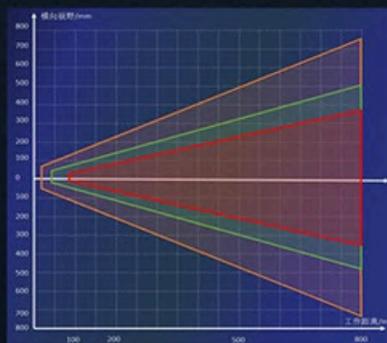
Model Updated

## ➤ Rich Resolution Choices

SC7000Pro series cover a full range of resolutions, from 1.6/5/6MP to 12/20MP, supporting ultra-long-distance and wide FOV inspection.



SC7060PM



- 8mm
- 12mm
- 16mm

# Abundant Function Modules

Meets the vision requirements of different industries.



Library OK

DL Object Detection  
dload



Library B

DL Classify  
dclassify



OK NG

OCR  
In the detection ROI range, identify the string



OK NG

String Compare



Match Calib



Match Locate

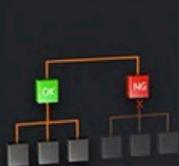
In the detection ROI range, the module matching method is used to find whether the pattern exists



OK NG

Spot Existence

In the detection ROI range, use the Blob method to find whether there are spots



If Module



OK NG

Condition Judge



Group B

Combination Judge



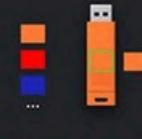
4 3

Pattern Count

In the detection ROI range, through the module matching method, find the number of patterns



Calculator



Library OK

Color Recognition

In the detection ROI range, identify color information according to the color template (only supports color images)



OK NG

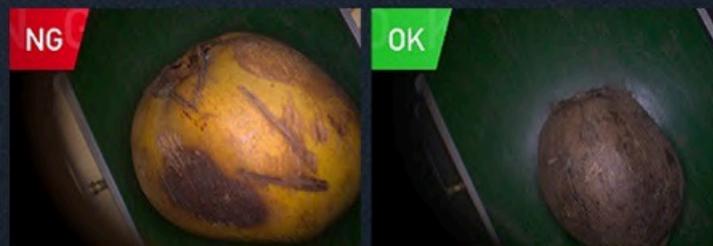
Edge Width Measurement

Find multiple edges in the detection ROI and find the distance between the each two edges

# Applications



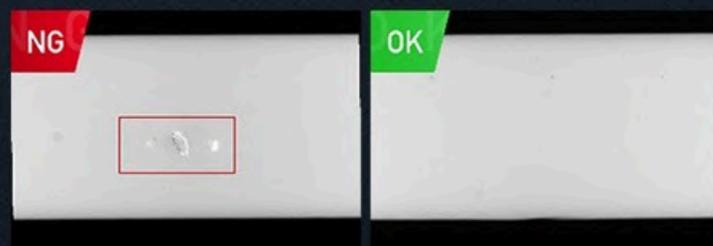
Pill Box OCR Recognition



Coconut Classification



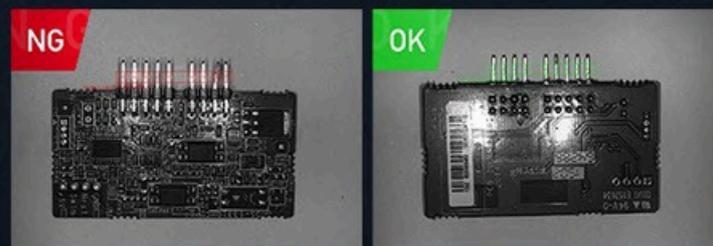
Milk Box Quantity Detection



Rubber Tube Inspection



Dot Matrix Comparison



Pin Pitch Measurement

## Efficient Inspection in Tight Spaces Made Possible

### SC3000X Series Vision Sensor

-  57\*43\*42mm, compact in size
-  180° rotatable tail cable design to fit in compact space
-  Triple optical design for maximum adaptability to complex scenarios
-  Built-in deep learning algorithms with 99.9% inspection accuracy



## Triple Optical Design

Maximum adaptability to complex scenarios

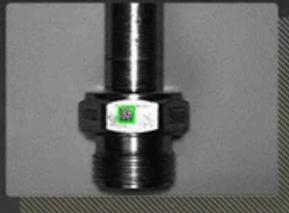
Sample

Fully Transparent

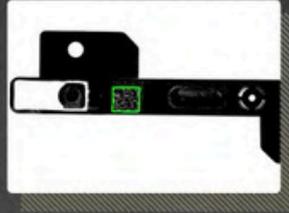
Polarization Illumination

Diffusion Illumination

Rough Surface Castings



Engrave Metal Pieces



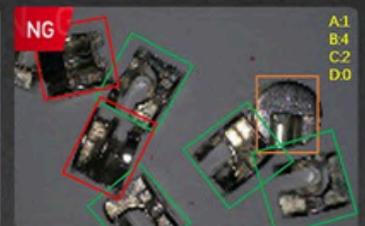
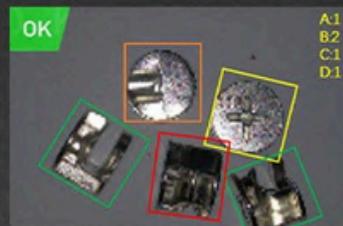
## Versatile and Accurate

Achieving **99.9%** Inspection Precision for Diverse Applications

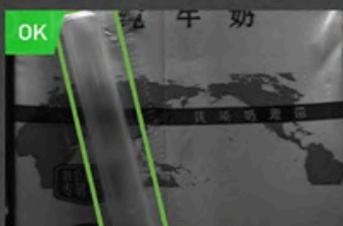
Character Recognition



Sortation & Counting



Presence/absence Inspection



Defect Inspection



# All-in-One Packaging Vision Solution for Quality & Reputation

SC Series AI-powered Vision Sensor



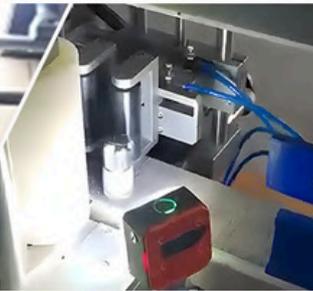
1

Object Inspection



2

Filling Inspection



3

Labeling Guidance



6

Positioning Guidance



5

Product Sortation



4

Code Reading



7

Label Quality Inspection



8

Missing Item Inspection



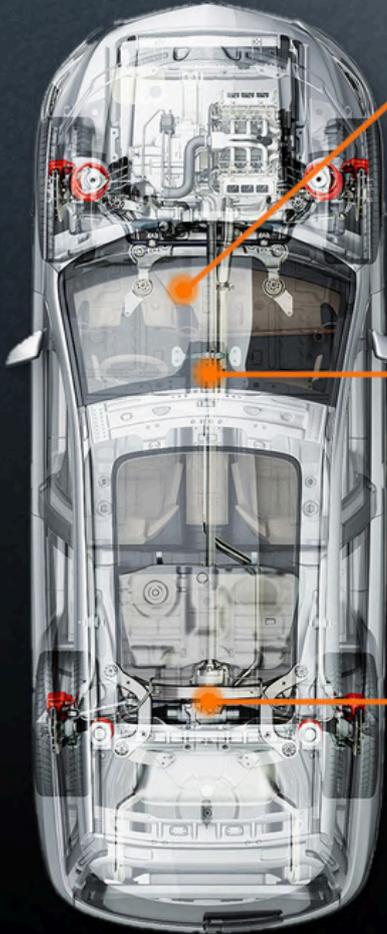
9

Package Quality Inspection

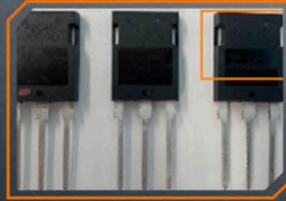
## SC Series All-in-One Packaging Vision Solution for Quality & Reputation

## Make Automotive Part Identification Easier & Faster

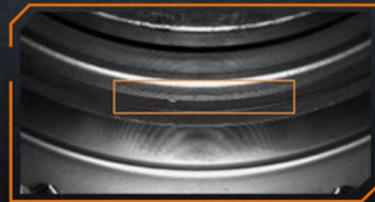
### HIKROBOT Smart Series Camera



#### 1 Character Recognition on Vehicle Chips



#### 2 Transmission Gear Welding Seam Inspection



#### 3 Axle Barcode Reading & Traceability



Computer

Ethernet Cable



PLC

Ethernet/Serial/  
IO Cable



Mouse and  
Keyboard

HDMI or VGA

C-Mount



Light source  
connection line

