HIKROBOT

Proven Integrated Solutions for Li-Ion Battery Industry

70+ successful cases with vision system & AMR solutions

Covering **90%+** of TOP10 power battery manufacturers worldwide

60+ satisfying co-operations with key accounts in the industry

Achieving **100%** repurchase rate of key accounts

*The above data comes from Hikrobot Project Statistics during 2020- May 2022

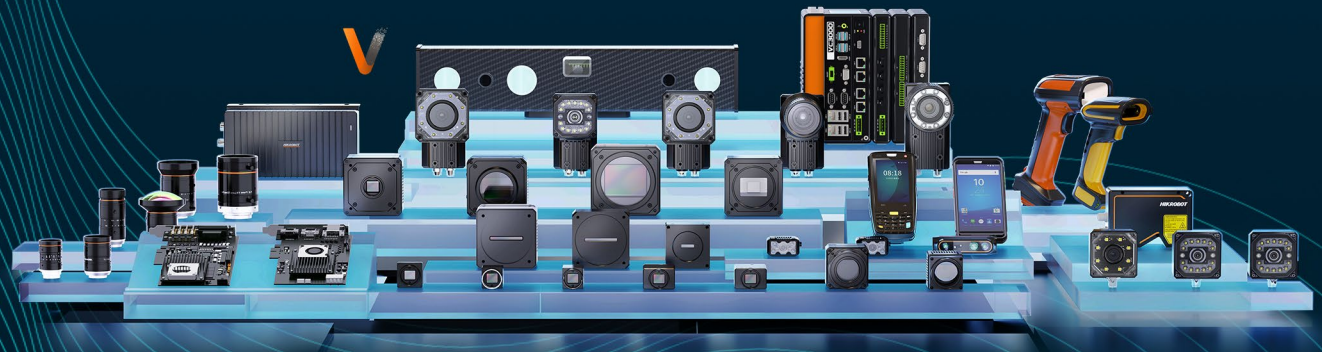
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Vision System Assists in Automating Battery Fabrication

Inspect, identify, and trace every step of the whole fabrication process

Stable code reading performance with recognition rate over **99.5%**

Eliminate every defects with deep-learning technology



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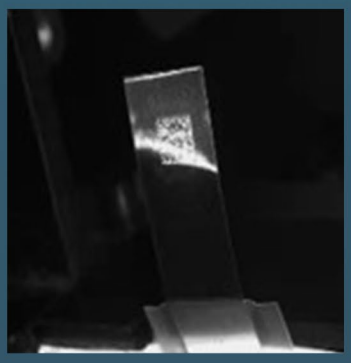
Smart Code Reader Applications in Li-Ion Battery Industry

Read cathode tab barcode

The compact-sized ID3000 series comes with the function of autofocus. Together with a polarizer, it reads barcodes on cathode tabs easily during manufacturing li-ion batteries with the recognition rate over 99.9%.



Installation environment



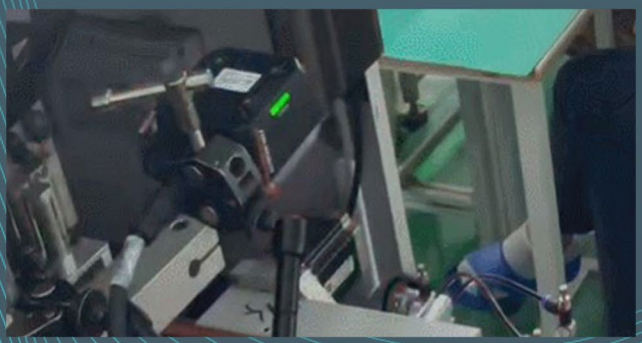
Before adjustment



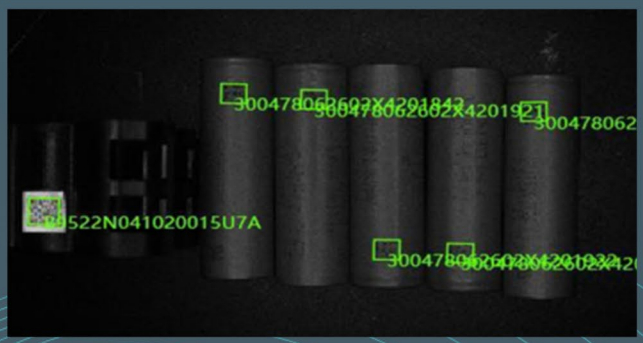
After adjustment

Read cylindrical battery barcode

Featuring high frame rate and strong anti-distortion, the AI-based ID3000 series reads barcodes on fast-rotating cylindrical batteries without efforts with the recognition rate over 99.5%.



Installation environment



Code reading effect

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Read finished battery barcode

The ID3050 code reader features the sequencer function to cope with different degrees of reflection. With powerful interaction, it cooperates with the mechanical arm to read barcodes on finished batteries easily with the recognition rate over 99.6%.



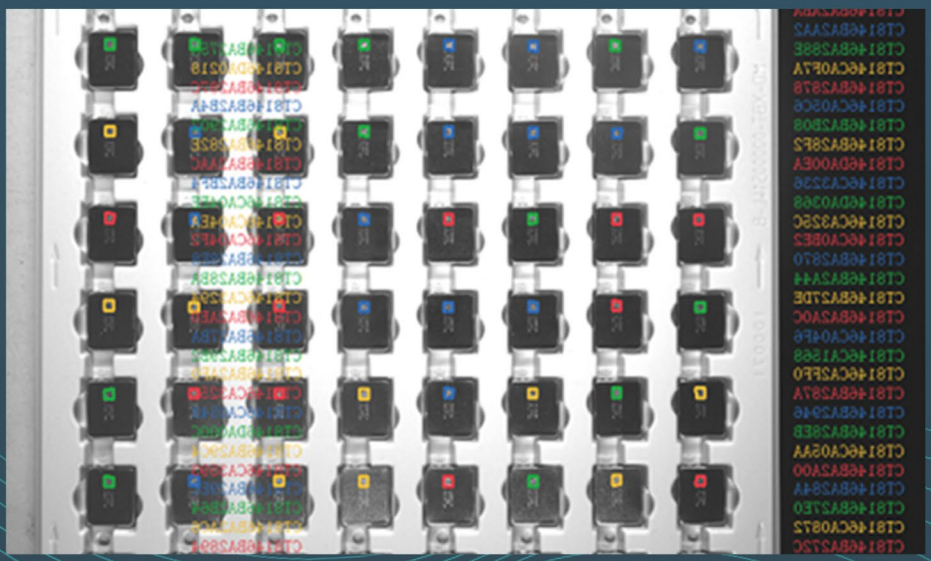
Installation environment



Code reading effect

Code reading during warehousing

Featuring the large field of view and 200 simultaneous decoding capabilities, the 20MP ID5200 code reader reads 64 laser-engraved barcodes on a pallet of finished batteries at one time with the recognition rate over 99.9%.



Code reading effect

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AMR Solutions Build the Smart Intralogistics

20+ successful cases in li-ion battery roll-to-roll coating process

7*24 operation with **25%** increased production efficiency

The transition accuracy is enhanced up to **100%**

ROI of some projects is less than **2 years**

Lower work strength and reduce labor input by **20-30%**



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Proven AMR Solutions for the Li-Ion Battery Industry

Lithium Battery Factory A

29 AMRs were deployed in one of the leading battery enterprises to realize automated, digitalized and intelligent on-site operations. With AMRs, the production efficiency was enhanced by 160% and the labor input was cut by 60%.





Lithium Battery Factory B

8 customized and PIO configured AMRs were deployed to transfer totes filled with coils. AMRs sent in-place signals when docking with the roller line to reduce manual handling and realize automated transportation.



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Lithium Battery Factory C

11 laser-SLAM navigated LMR and FMR were deployed to transport pallets with powder and foil rolls. The robot control system docked with the MES to implement automated material extraction between AMR and foil roll storage shelves.



Lithium Battery Factory D

60 LMRs docked with mechanic arms in the battery assembly line to load, transport and unload battery packs, greatly enhancing the production efficiency and lowering the work strength.

