

# Streamlining AOI Solution From AI Training to Deployment

Manufacturers are dedicated to increasing overall production efficiency and yield rates, and Industry 4.0 is revolutionizing the way companies manufacture products. To improve inspection quality and speed, Aetina built a solution for clients, including integrating AI models, industrial-grade cameras, and NVIDIA-Certified Systems (NCS).

The most suitable pre-trained AI model was selected from the NVIDIA GPU Cloud (NGC) Catalog and downloaded to NCS for AI training. With NVIDIA TAO and Aetina's GUI customization interface, AI model training time was shortened with the added benefit of simplifying retraining and resizing operations. Then, the AI model was uploaded to the NGC Catalog and deployed on NCS for AI inference. As the AI model needs to be updated to remain accurate, assigning IT administrators to be on-site all the time is not cost-effective. Therefore, NVIDIA Fleet Command™ can manage AI model deployments from the cloud at any time, from anywhere, saving on maintenance costs.

## Benefits

- One stop service includes NVIDIA AI Enterprise Software Suite support, AI model training, evaluating, fine-tuning, and deployment
- NVIDIA-Certified Systems(NCS) ensures high reliability and computability
- Comprehensive technical supports and personnel training

## Results

- Improves overall defect detection percentage by several orders of magnitude
- Effectively manages production line
- Saves maintenance costs and time

