

# SharpVision: Advanced Machine Vision (AMV) Intelligence

ASTRI's SharpVision revolutionises industrial machine vision deployment by overcoming rare defect samples, prohibitive labelling costs, and time-intensive data preparation. Through intelligent automation, it dramatically reduces data requirements while accelerating development cycles. From quality control to predictive maintenance, it enables manufacturers to deploy sophisticated vision systems rapidly and cost-effectively, delivering measurable improvements in efficiency, accuracy, and operational intelligence.

## Industry Challenges

- **Scarce Defect Samples:** Limited availability of rare fault examples hinders model training
- **Prohibitive Labeling Costs:** Manual annotation consumes excessive resources and time
- **Dynamic Environments:** Evolving production conditions and data formats require constant model adaptation

## Major Benefits

- **Accelerated Preparation:** Reduces data preparation time by 50%, streamlining project delivery
- **Minimal Data Requirements:** Slashes data volume needs by 80% through advanced learning techniques
- **Agile Updates:** Enables swift model iteration and production line deployment, maintaining peak performance

## Application Areas

- Quality inspection and defect detection
- Intelligent robotics and object manipulation systems
- Infrastructure performance monitoring and predictive maintenance for infrastructures

## Collaborator(s)

Manufacturers of consumer electronics and chips

## Award(s)

International Exhibition of Inventions Geneva,  
Hong Kong Awards for Industries



This is a complete AI solution designed for industrial machine vision, building a smarter assembly line

