

# VIS VISUAL INSPECTION SOLUTION

MULTI-STATION SOLUTION FOR HIGH PERFORMANCE VISUAL INSPECTION



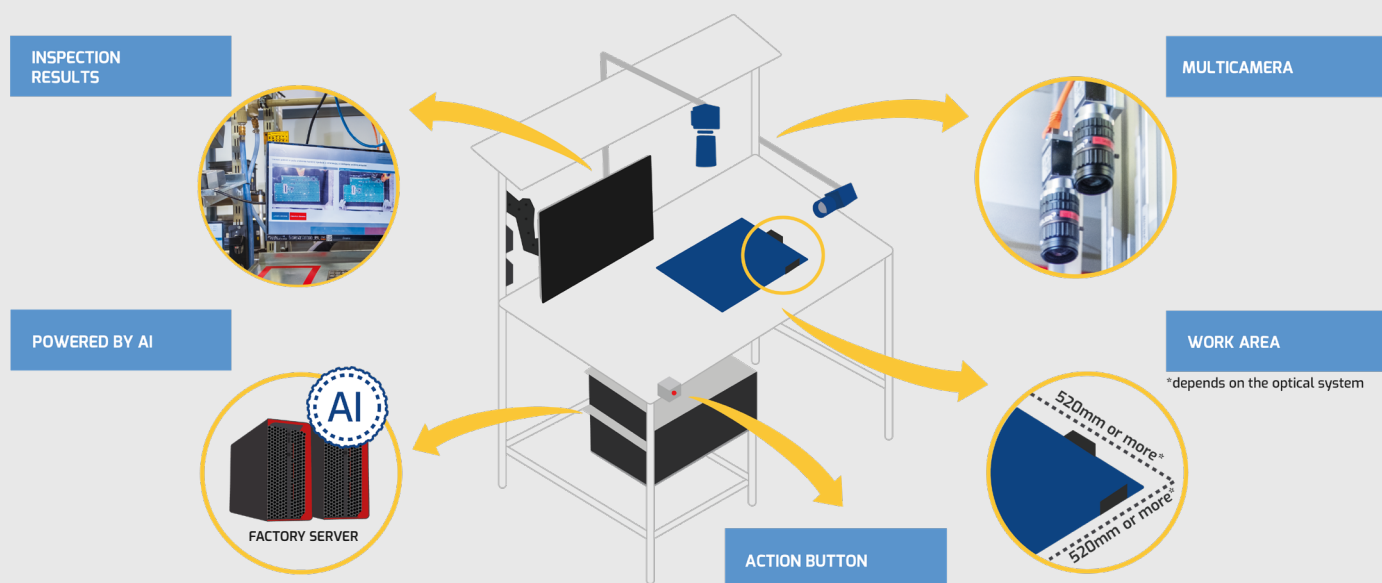
## MARKET CHALLENGE

- Defect prevention in assembly processes for various industries
- Efficient inspection at affordable price
- High quality assurance for risk-free business
- Strong advantage on highly competitive market
- Inspection system integrated with MES

## SMART QUALITY INSPECTION PROCESS

## OUR SOLUTION

- AI-driven solution for high-quality visual inspection in manufacturing industry
- Proprietary Smart-VIS™ algorithms for high-performance and ease of use
- Verification efficiency at multiple-stage production and multi-tasking processes
- Hundreds of inspection stations under the control of a common platform
- Seamless integration with existing production lines



## APPLICATION SCENARIOS

VIS inspects various types of fitting components to detect any anomalies against the reference model:

### Inspected objects:

- Screws
- Pads
- Plugs
- Seals
- Buttons, keys
- Components
- Foaming
- Siliconizing
- Adhesive application
- PCB Masks and Protectors
- LED lighting
- Others

### Inspected characteristics:

- Existence vs. absence
- Object location / positioning
- Correct assembly/rotation of the object
- Categorization of objects
- Multi-ROIs (Region Of Interest)

**3  
sec.**

test time independent  
of the number of ROIs

**<1000  
ROIs**

inspected  
in one test

**99,99%  
accuracy**

for fails  
detection

**MES**

data integration  
with MES

**up to 100  
stations**

scalable solution - add  
stations as lines grow.

### Case study of an EMS electronics factory

- One VIS station
- 1 year of operation
- 1 group of products inspected
- Over 77 000 pieces of products inspected
- Visual inspection for presence and type of bolts, presence and quality of mounting of washers, presence of insulators
- Defects detected and corrected in 4.48% of production volume
- Eliminates the need for an additional operator to perform visual inspection and rework
- Saves over 1.632 hours of rework, cost over € 81,500\*
- A large part of the cost was customer complaints, which have now been significantly reduced.

\*assuming a cost per hour of service of €50



### FACTS

- AI-driven solution for excellent QA
- Integrated and custom neural networks
- Out-of-the-box & easy to deploy
- Easy to operate & benefit from
- No programming or machine learning skills required
- Minimal calibration and quick setup
- Stand alone or inline mode
- Low entry cost

### BENEFITS

|  |  |
|--|--|
| No additional space or operator required                             | Quick adoption to changes in inspection requirements |
| Suitable for various scenarios & applications                        | Scalable solution for numerous production stages     |
| High quality production at low cost                                  | Real-time data for instant decisions                 |
| Module for the creation of dedicated neural networks by the customer | System upgrades on-the-fly                           |

### APPLICATION AREAS

VIS supports visual inspection challenges in many industries:



lighting



automotive



medical



EMS



telecom



consumer and other



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