

ONLINE MACHINE VISION EXPERIMENT KIT

Machine Vision (combination of camera and processing technologies) is a wanted and reliable solution in manufacturing and production industry to improve quality and throughput with measurable return on investment.

This Experiment Kit is designed by Online Solutions bringing the onfield experience gained in 15 years of solution selling in the field of Imaging and Vision

- with a view to provide an overall experience of designing and using a machine vision system (need of the hour) towards different Industrial application projects
- to give professional training on machine vision to Students of Engineering Disciplines in Engineering Colleges and Universities
- to provide knowledge on Rapid Prototyping and Real world Development

Learn Machine Vision
Capture

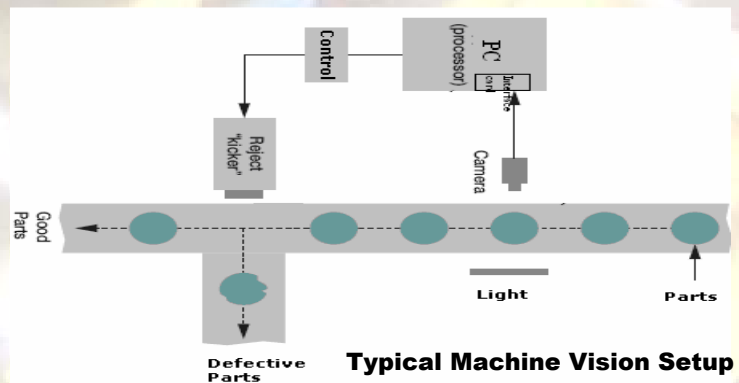
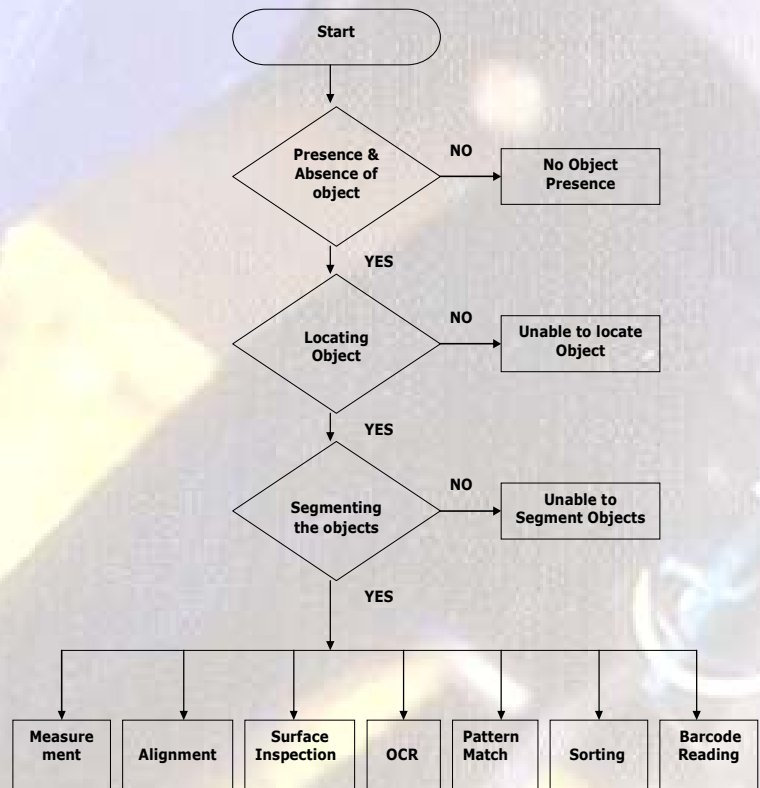


Compute

Control

ONLINE SOLUTIONS *The Solution Sellers*
Since 1995

Typical Machine Vision Experiment Flow



Presence / Absence

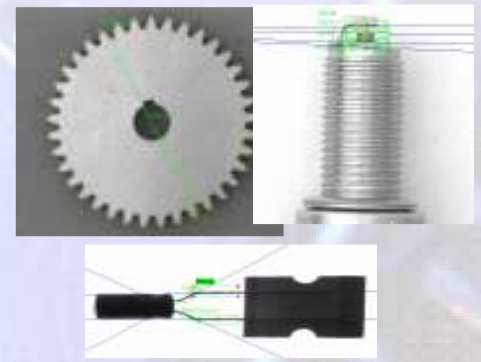
Finding the presence and absence of objects in the Field of View



Measurement

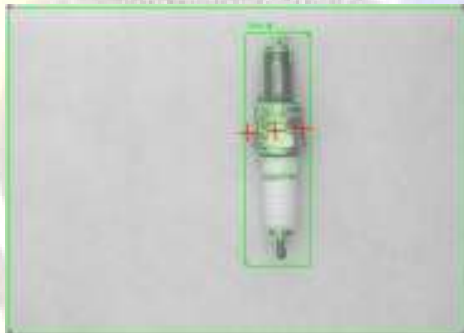
Measure

- Distance
- Gap
- Thickness
- Diameter
- Space
- Angle



Locating Objects

Locating and finding the position of the object in the Field of View



INDUSTRIAL MACHINE
READY ON
as **LAB EXPE**

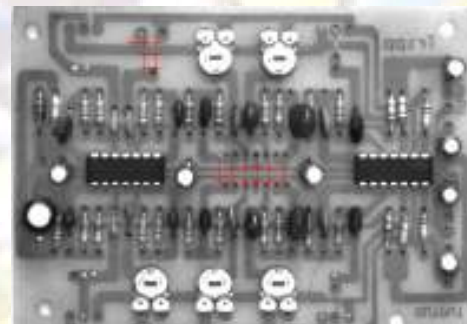
Segmenting Objects

Classify & identify the object of interest



Pattern Matching

- Check for correct pattern and placement position
- Check for existence of all components (Patterns)



Surface inspection

- Detect cracks, scratches, foreign material, breakage etc.



Optical Character Recognition (OCR)

- Train and Read MARK
- Train and Read alphabets in different fonts



ONLINE IMAGING
VISION EXPERIMENT
KIT

Barcode

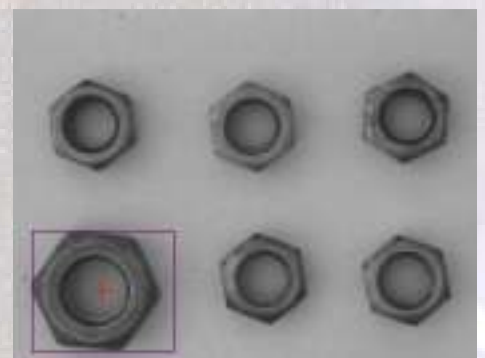
Reading Bar Codes and Matrix codes



VISION EXPERIENCE DESKTOP EXPERIMENTS

Sorting

Sort items by shape and /or size.



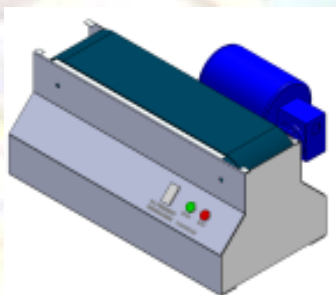
Alignment

Determine the Placement and Alignment



External I/O Control

- Digital I/O with tabletop conveyor
- Camera trigger
- RS-232 communication
- Ethernet communication to PLC



Color Classification

- Extensive Individual Color Training
- Classify and Qualify using color information



Choose this kit as your lab equipment for the following valuable reasons

- Provides a complete solution for setting up machine vision lab
- Provides theoretical and practical hands on training of "Imaging Concepts, algorithms, camera and control technologies required by Industry in terms of Machine Vision and Automation"
- Facilitates Training Program to the in house and other institutions.
- Facilitates Project Work to the final & pre final year students.
- Attracts industry and funding agency projects

Machine Vision Experiment Kit

- Include components shown under different machine vision headings for performing industrial machine vision experiments on desktop with state of the art technology
- Includes a detailed experiments manual & a project CD (with Machine Vision Experiments & Images) for effective learning & experimentation.
- Includes Guaranteed installation, training and maintenance support

Dealer Information

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OPTIONAL ACCESSORY KITS:

1) Machine Vision Lighting Kit:



Light (Illumination) plays major role in most of the machine vision projects. Considering the lighting requirement in majority of the machine vision projects, we have devised a suitable light kit that includes a LED RING LIGHT, BACK LIGHT, Power supply and accessories.

Ordering Code: ONL-MV-LIGHTKIT

2) Optics Kit:



Machine Vision Kit – the essential requisite for using this experiment kit is provided with one kind of lens with limited accessory set to utilize for all different experiments and projects.

Setting up a Machine Vision Lab always would prompt for having different lenses and accessories to try different projects. We have devised a suitable lens kit that includes different focal length lenses, extension tubes, focal extenders etc.

Ordering Code: ONL-MV-LENSKIT

3) Robotics Kit:



Robots play a major role in assembly and at times become part of machine vision system.

We provide a robotic kit that includes an ARM ROBOT for pick & place as a separate kit that can be used with or without machine vision systems.

Please contact us for more details, ordering info and pricing.

Requisites:

Online Machine Vision Kit

Please refer Online Machine Vision Kit Brochure for details

<http://www.onsol.com>

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* Pictures shown here are representative visuals only