

Low-Cost Vision with

Validator

Simple, No Training Required



It's That Easy

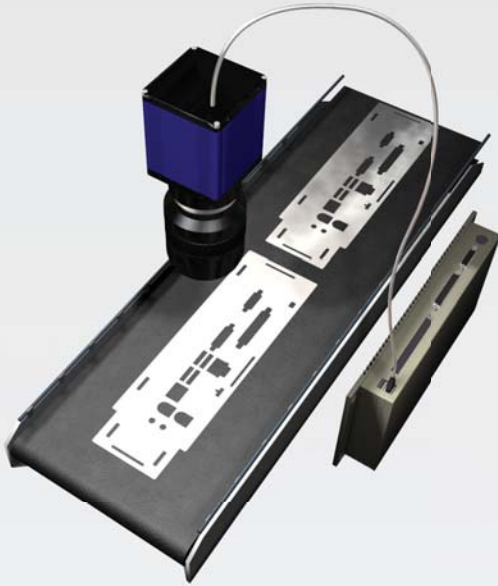
Keeping Machine Vision Simple

Validator. Simple vision. Versatile vision. With five minute set-up and a point and click interface, Validator delivers hi-speed, 100% accurate inspections. Ideal for a myriad of applications, Validator is a robust system. It is available in multiple configurations depending on application requirements.

As a PC based vision system, Validator offers outstanding benefits. Whether your computer or ours, benefits include USB capabilities with built-in I/O. Networking options allow for remote process monitoring and set-up. Provides ideal solution for multiple camera applications.

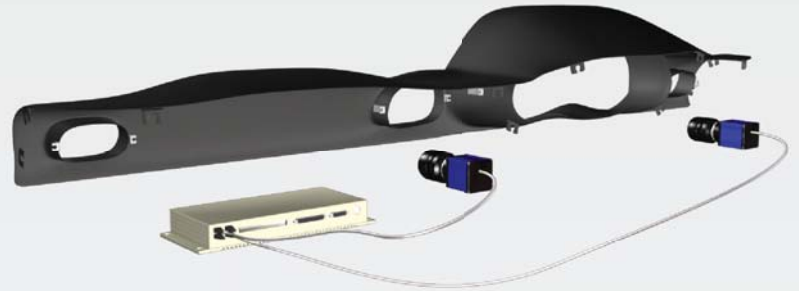
Validator requires NO TRAINING.

The Worlds Simplest Vision System



SINGLE Camera Set-up:

Quickly and easily set up part inspections such as: Metal Stamping Verification, Flash/ Short-shot Detection, Assembly Verification, Label and Print Verification, and many More. Realistic inspection rates in excess of 10 parts/ second.

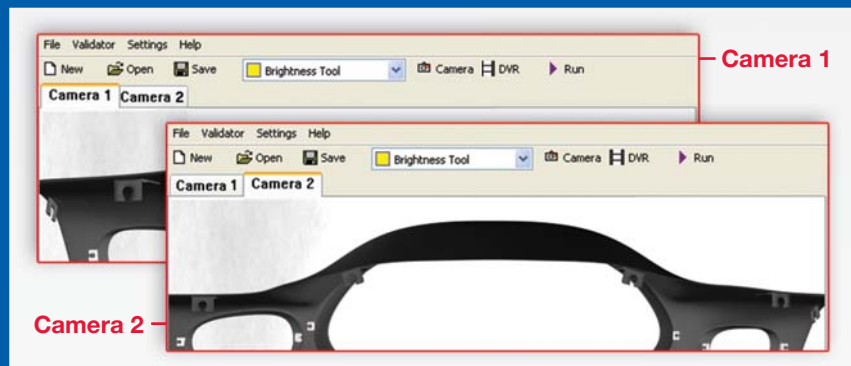


MULTIPLE Camera Set-up:

Simply plug in additional cameras as you need them (up to 8 cameras standard). Inspect large parts or zoom in on areas for tighter requirements.

Realtime Display Update

The Validator imaging window toggles between each camera's runtime displays during the inspection process. This allows the operator to view which each image as it is being processed.

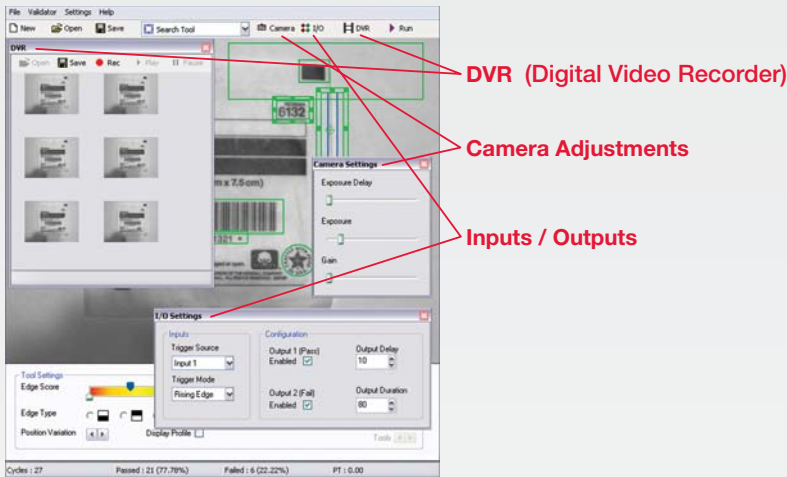


- Simple Point-and-Click Interface
- Flexible Vision Tool Set
- Save Hundreds of Pre-taught Configurations
- Supports up to 8 Cameras
- Easily Debug On-line with Built-in DVR
- Ideal for a Broad Range of Applications
- Use any Windows Controller with USB2.0
- No Development / No Additional Runtime Licenses

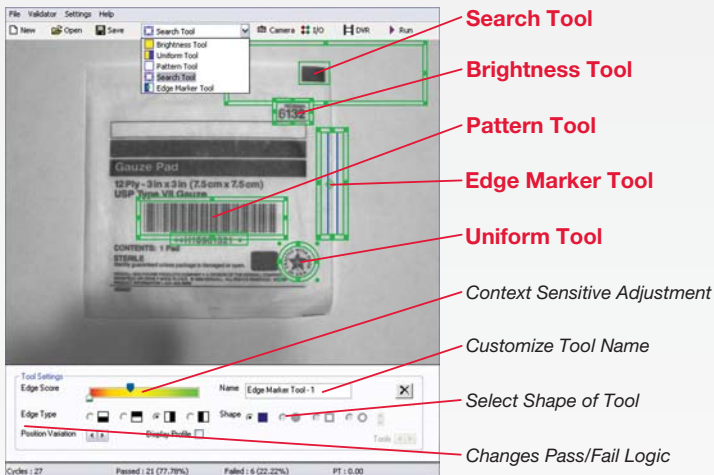
Validator

Easy As 1 - 2 - 3

Step 1: Adjust Camera and Set I/O

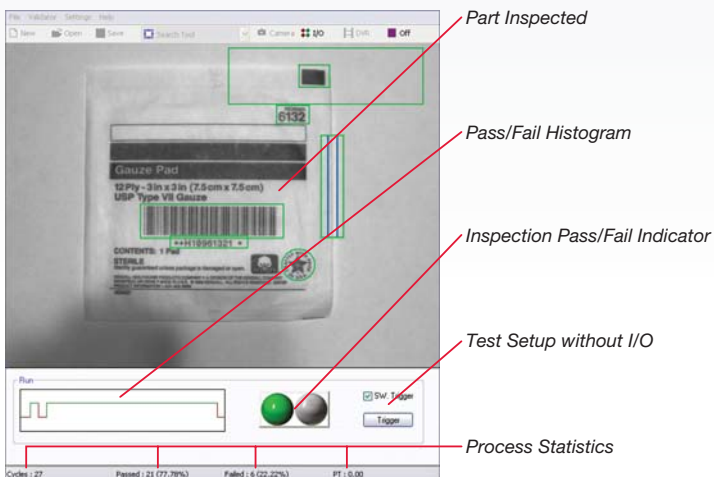


Step 2: Find Part with Search Tool and apply inspection tools



Step 3: Test and Run

Pass / Fail



*requires keyboard, mouse and display for setup

Software

- Simple image window with real-time video
- No tedious menu layers
- Multiple tools may be applied
- Four tool geometries
(Rectangle or Ellipse with or without mask)

Search Tool

- Locate a reference feature
- Slide bar adjustment for object search

Brightness Tool

- Measure area brightness
- Dual slide range adjustments for range selection and image intensity

Uniform Tool

- Measure area-based contrast
- Slide bar adjustment for image uniformity

Pattern Tool

- Find a pattern in the image
- Slide bar adjustment for pattern consistency

Edge Marker Tool

- Find the true edge of a part feature
- Slide bar adjustment for edge location

Camera Adjustments

- Exposure Delay: Used to coordinate with a strobe light
- Exposure Time: Shutter speed adjustment
- Gain Settings

Input / Output Adjustments

- Output 1 (Pass) Enabled
- Output 2(Fail) Enabled
- Output Delay
- Output Duration

DVR (Digital Video Recorder)

- Record up to 12 images
- Save inspected part images
- Review inspection for debug
- Use images for training

Product Specifications

Validator is available in multiple configurations.
Call Avalon to discuss the system best suited for your environment.

Validator**CORE**

Validator Software & Camera:
38mm (w) x 38mm (h) x 58.5mm (l)
Operating Temperature: 0 to 45° C
Two Available USB2.0 Connections:
 Standard A-B (Cable Provided)
 Circular Connector with Lock
No External Power Supply Required
SUB D9 I/O Connector
1 Digital Input (Opto-isolated)
Input TTL (5V) 3-24 VDC
Input PLC 12-24 VDC
2 Digital Outputs (Opto-isolated)
Output 30 VDC Max at 100ma
640 x 480 Resolution
C-Mount for Lens (Sold Separately)
Mounting Bracket with 1/4-20 (Provided)

Validator**PROFESSIONAL**

Includes **ValidatorCORE** & Industrial PC Platform:
Windows XP Embedded OS
Solid State Memory: 1GB
Speed: 60 Inspections per second
VGA Output for any 1024 x 768 Display
LAN Connectivity for Remote Setup, Viewing & Monitoring
Two USB2.0 Connections
Operating Temperature: -10 to 50°C
Power Requirements: 48 Watts, 9-36V DC
50G Shock, 2Grms Vibration

Typical Applications

Verification	Object Matching	Placement
Final Packaging	Labels	Bar Codes
Package Contents	Machined Features	Date Codes
Product Fill Level	Molded Parts	Product Labels
Product Orientation		Components
Threads		Lids & Caps
Nuts & Bolts		

Avalon Vision Solutions
422 Thornton Road, Suite 104
Lithia Springs, Georgia 30122

Phone: 770.944.8445
Fax: 770.941.7299
sales@avalonvision.com