



Industrial Vision Systems  
• Innovation • Knowledge • Success •

## VISION SOLUTION FOR SYRINGE NEEDLE INSPECTION



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## SYRINGE NEEDLE INSPECTION SYSTEM

**SYRINGE NEEDLE INSPECTION SYSTEM** developed by the TIVS is a comprehensive inspection solution for the visual defects occurring in sample which is given by you. The Inspection system is compact in design and can be easily integrated into existing production lines.

### Highlights of the system

- ✓ Designed to work in the industrial environment.
- ✓ Can be easily integrated into the existing machinery.
- ✓ Easy menu based programming. Doesn't require knowledge of programming languages like C or C++
- ✓ Faster System Integration leading to Faster ROI.
- ✓ Optional data Capturing system to store and report shift wise data.

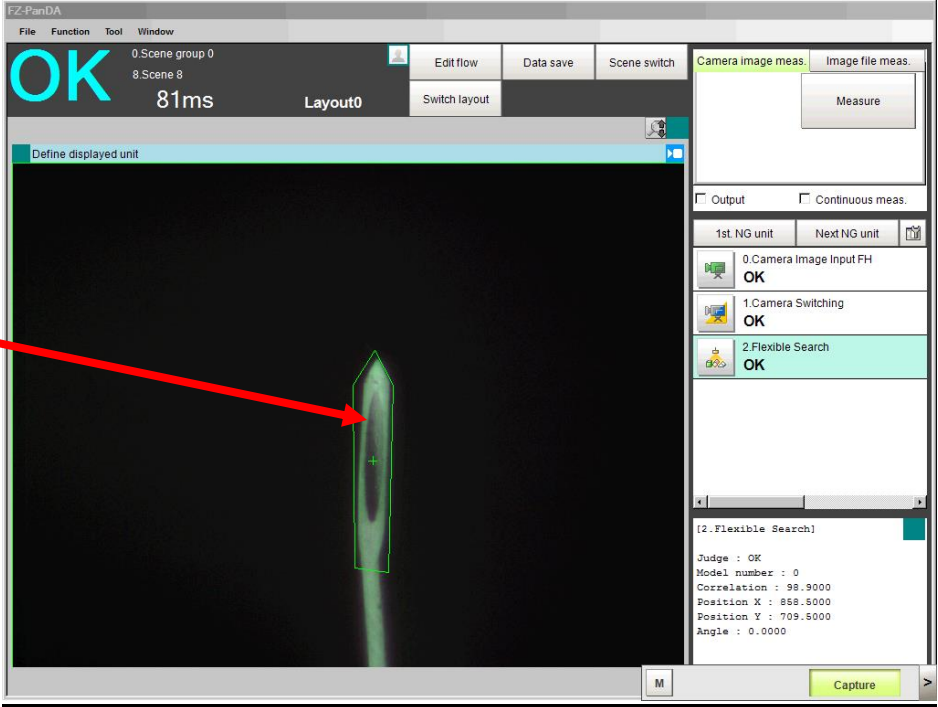
### Standard Solution Offering

The solution offering are strategically designed to suit the industry needs.

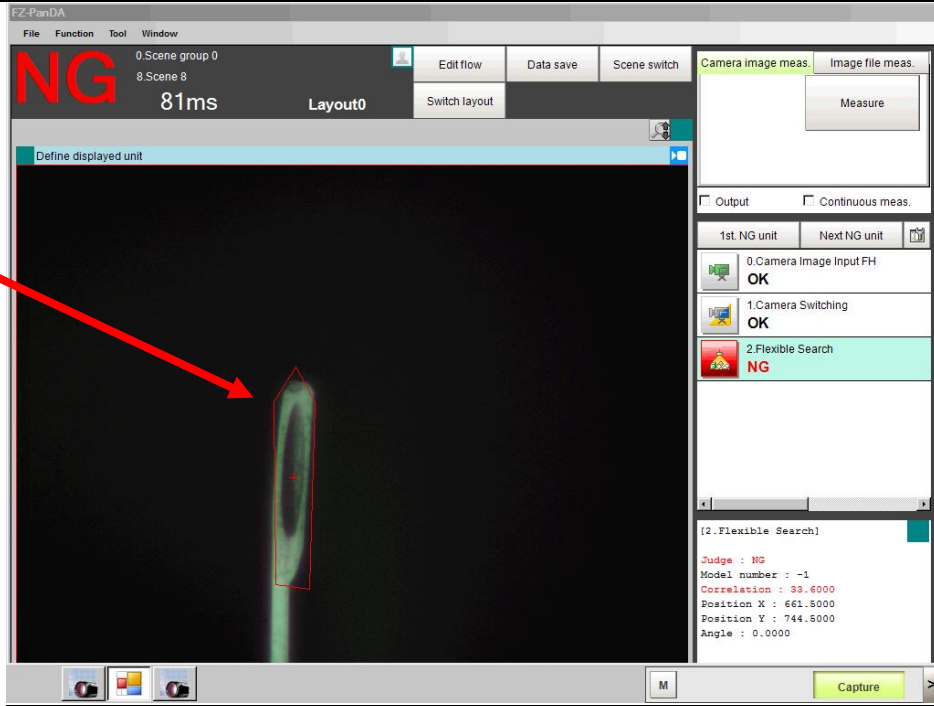
The system comprises of the following stations:

- High Resolution Single Camera based Inspection System.
- High speed Vision Capturing & processing System.
- High speed Strobe controlled Lighting system.
- LCD monitor for process monitoring.
- Programming console or mouse for programming the Vision System.
- High speed rejection system.
- PLC based control Station.
- Complete mounting accessories.
- Inspection station for inspection of various defects.
- Pneumatic Rejection Station for rejecting the defective samples.

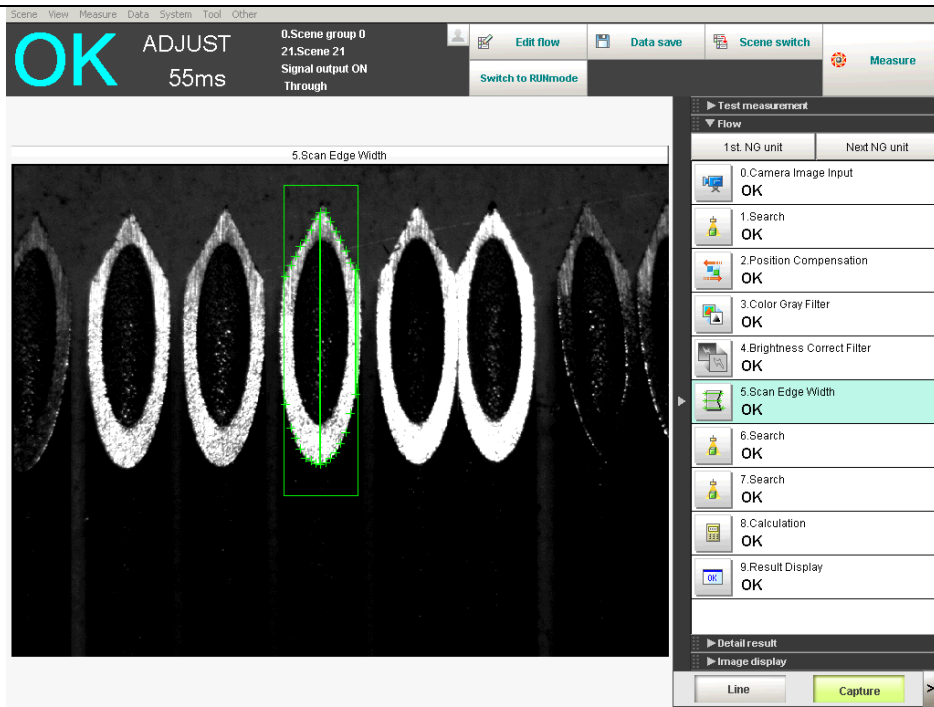
<b>INSPECTION CAPABILITY</b>	<b>Camera:-</b>  1. <b>NEEDLE TIP SHAPE</b> 2. <b>LENGTH OF NEEDLE</b> 3. <b>NEEDLE ANGLE</b>
<b>SYSTEM SPEED</b>	60 / min
<b>PRODUCTS TYPE</b>	As provided by customer.
<b>CAMERA</b>	Higher Range High resolution With controller.
<b>UTILITIES</b>	415V, 3-phase +N +E, 50 Hz, A.C.

<b>Defects/Parameters being checked</b>	<b>Sample picture</b>	<b>Accuracy</b>
<b>NEEDLE TIP SHAPE IS POINTED (OK SAMPLE)</b>		

**NEEDLE TIP  
SHAPE FLAT –  
NG i.e. NOT  
GOOD  
SAMPLE**



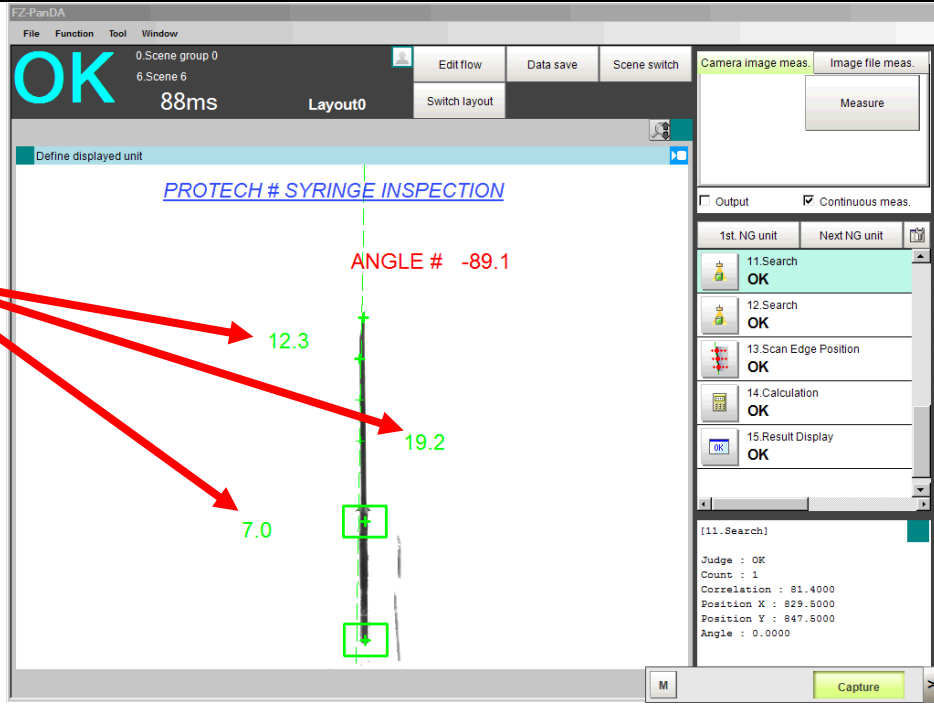
**OVERALL  
SHAPE OF  
NEEDLE**



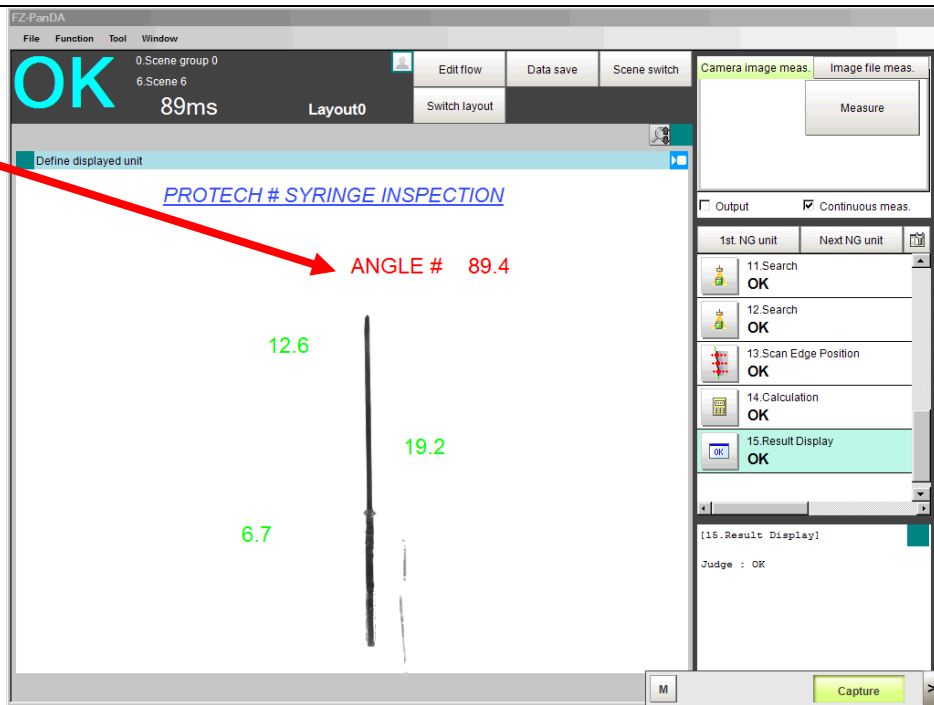
**DISTANCE  
BETWEEN  
EDGES AND  
CUTS**

The screenshot displays a vision inspection software interface. At the top, there is a status bar with 'OK' in large blue letters, 'ADJUST 55ms', and system information: '0.Scene group 0', '24.Scene 21', 'Signal output ON', and 'Through'. Below this is a menu bar with 'Scene', 'View', 'Measure', 'Data', 'System', 'Tool', and 'Other'. The main image area shows a sequence of five grayscale images of a component with two vertical slots. A red arrow points from the text 'DISTANCE BETWEEN EDGES AND CUTS' to the first image. The first image has a vertical green line with a double-headed arrow indicating the distance between the edges of the slots, labeled 'Dist between edges 612.17'. The second image has a vertical red line with a double-headed arrow indicating the distance between the cuts of the slots, labeled 'Dist between cuts 452.00'. To the right of the image area is a 'Test measurement' panel with a 'Flow' section containing steps: '0.Camera Image Input OK', '1.Search OK', '2.Position Compensation OK', '3.Color Gray Filter OK', '4.Brightness Correct Filter OK', '5.Scan Edge Width OK', and '6.Search OK'. Below the flow is a 'Detail result' section with 'Image display' settings: 'Image layout' set to '1 image', 'Active image' set to 'Image number 0', 'Image mode' set to 'Through', 'Positions' set to 'ON', and 'Sub image' set to 'Image 0'. At the bottom of the panel are 'Line' and 'Capture' buttons.

**TOTAL  
LENGTH OF  
NEEDLE  
(INNER+OUTE  
R)**



**ANGLE OF  
NEEDLE  
INCLINATION**



## **CONCLUSION:**

Camera System is able to check for all the defined parameters with a good degree of accuracy and consistency is required by the client.

## **Why Us**

TIVS is driven by the core values of service, integrity, and innovation. Our strength lies in our agility to adapt to a dynamic market, and our ability to transform challenges into successful market opportunities.

Our capabilities target winning results by understanding your technology needs aligned to your business objectives. Our differentiator is in servicing our clients to make them win; when you talk to us, you will understand our technologists possess significant insight into your business processes, much better than many other service providers.

We are renowned for our ability to provide products, solutions and implementation frameworks that are delivered through a strong focus on core business issues, strong process orientation and industry domain knowledge. We partner with our clients and implement solutions to successful completion, and ensure that they realize the desired business benefits.

We consistently focus on:

- \* Reducing the Total Cost of Ownership (TCO) for our customers
- \* Understanding customer needs before making recommendations
- \* Offering solutions based on specific customer needs
- \* Creating an organization based on learning, innovation, and quality
- \* Enabling employees to realize their full potential
- \* Conducting ourselves with the highest sense of integrity

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## **For more information contact:**

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