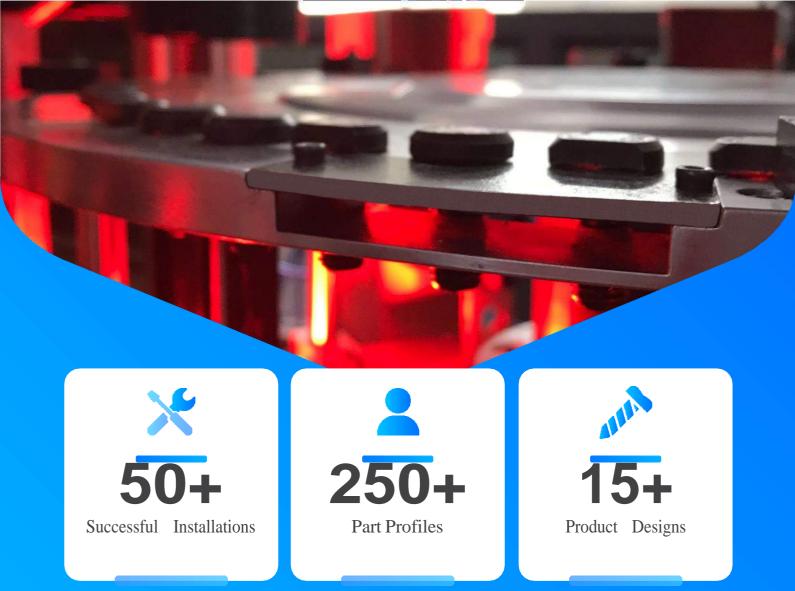


# TRUST QUALITY INTEGRITY







In the Era of Industry 4.0, SensoVision emerges as a leading manufacturer of 100% Visual Inspection and Sorting Machines for Fasteners, Auto Components and Electronic Components.

Our Products have been a vital tool in achieving thehighest quality end products.



## **HOW WE DO IT?**

SensoVision develops totally customized End to End Inspection Solutions with our In-House Software, Electrical, Design and Fabrication team which together thrive toprovide the best solution to all of your esteemed clients.

Our support team makes sure that any issue is resolved inno time. This has encouraged our clients to be a repeat

customer.

Client's Requirements	Feasibility Study	Design	Production	Installation	Post Sales
	Parameter Feasibility  Design Feasibility  Accuracy Feasibility	Mechanical Design  Software and Algorithm Development  Electrical and Automation	Mechanical Component Fabrication  Assembly of Vision, Electrical and Mechanical Components	On Site Installation Operator Training Commissioning	All Day Remote Support PAN India On Site Support Advising and Consultation
	Speed Feasibility	Design R & D	PLC and QualViz Software Integration Testing and Trials		

## **CLIENT RELATIONS**

For Manufacturers thriving towards achieving ZERO DEFECTS Goal, a 100% Visual Inspection Based Sorting Solution is inevitable and a crucial investment.

From the problem statement realization to Post-Sales support, our Goal has always been to be detailed and transparent to our Clients along each stage process.

**QVM** 

### **Slotted Metal Plate**

Visual Inspection On Headed Fasteners Like Screws, Bolts and Rivets QVG

### **Glass Dial**

Visual Inspection For Parts Like Washers, Nuts,Rings, Bolts and Brass Inserts **QVGG** 

### **Glass Dial**

Visual Inspection for Small Non Headed Fasteners Like Grub Screws,Studs Etc. QVC

### **Conveyor Setup**

Visual Inspection For Parts Like Washers, Nuts,Rings and Bolts

**QVMM** 

### **Mini Slotted Plate**

Visual Inspection for Small Screws and Rivets **QVAC** 

### Customized Conveyor Setup

Visual Inspection for auto components like Gear Sprocket, Piston Rings, Bushes, Iron Inserts **QVGF** 

### V-Groove Gravity Feed

Visual Inspection On Non Headed Fasteners Like Studs,Grub Screws and Pins. QVS

### Static Manual Feed Setup

Visual Inspection on all type of Fasteners with Manual Feed and Rejection.

## 100% INSPECTION

SensoVision Offers Fully Customized End to End
Automated Solution with more than 10 Existing Models, and
High Expertise in Inspection Solution Development.

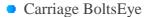
Our Products are tailor made to suffice the exactrequirement
of our customers

E

## Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection







- Bolts
- Hex Bolt
- Machine Bolts
- Penta-Head Bolts
- Round Head Bolts
- Shoulder Bolts
- Socket Head Bolts
- T-Head Bolts



- Solid Rivet
- Tubular Rivet
- Blind Rivet
- Drive Rivet
- Split Rivet



- Slotted Flat Head Screw
- Slotted Round Head Screw
- Slotted Oval Head Screw
- Phillips Drive Screw
- Square Drive Screw
- CSK Screw
- Counter Bore Screw

## **Unprecedented reliability and precision**

- Machine Vision Software
- Accuracy up to  $\pm 20$  microns
- Speed range up to 600 parts/min
- Support up to 7 Camera units

### 'Live' Inspections, Management, Statistics

- Real Time Monitoring
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspections Made Easy**

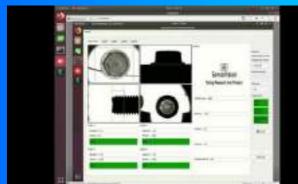
- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- U]
- Automatic operation 24/7

## **Inspection Criteria**

- Head Height Thread
- HeightHead Dia
- Thread Major
- Thread Angle
- Minor Dia
- Head Side Cracks 360°
- Missing Operation
- Bend
- Dia Mixing
- Length Mixing Thread
- MissingThread Burrs

- Length Mixing
- Head Max DiameterHead
- Roundness
- Head Top Cracks
- Socket ConcentricitySocket
- Blackness
- Socket Broken PunchSlot
- Missing
- Multiple Slot
- Particle in Slot/Socket
- Thread Direction
- Thread Damages





## **DATASHEE**

## Part's Dimensional Range

Diameter min/max Height min/max M3-M8/M10-M16

8-120 mm

## Machine's Specifications

Type Speed (max) Accuracy

Machine's Size

No of Cameras Requirements Screw Plate

250-600 parts/min

±20 microns

35 x 35 x 74 in

2-7

 $\mathbf{E}$ 

## Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection







- Insert
- Threaded Insert
- Cross Knurling Insert
- Parallel Knurling Insert



Tapered Section Ring

- Constant Section Ring
- Spiral Retaining Ring
- HO Retaining Ring



- Wing Nut
- Cap Nut
- Hex Nut
- Cross Dowel
- Flange Nut
- Square Nut
- Weld Nut
- Wedge Nut



- Plain Washer Spring
- Washer Locking
- WasherCSK Washer

## **Unprecedented reliability and precision**

- Machine Vision Software
- Accuracy up to ±20 microns
- Speed range up to 400 parts/min
- Support up to 7 Camera units

### 'Live' Inspections, Management, Statistics

- Real Time Monitoring
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspections Made Easy**

- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- UI
- Automatic operation 24/7

## **Inspection Criteria**

- Head Width
- Shank/Tail Dia
- Knurling/Threading ID
- Side Burrs
- Length Mixing
- Top Profile Dimensions
- Inner Thread Presence
- Crack on Head
- Plating Defect on Shank

- Head Height
- Outer Thread ParametersAF/AC
- Bend
- Dia Mixing
- Stud Concentricity
- Top Roundness
- Plating Defects on Head
- Anomaly on Bottom
- Dent/Crack on Shank





## **DATASHEE**

## Part's Dimensional Range

Diameter min/max M6-M35
Length min/max 2-25 mm

## Machine's Specifications

Туре

Speed (max)

Accuracy

Machine's Size

No of Cameras

Requirements

Glass Plate

Up to 400 parts/min

±20 microns

35 x 35 x 74 in

2-7

Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection





- Continuous Thread Stud
- Tap-End Stud
- Double-End Stud

## Unprecedented reliabilityand precision

- Machine Vision Software
- Accuracy up to ±20 microns
- Speed range up to 400 parts/min
- Support up to 7 Camera units

## 'Live' Inspections, Management, Statistics Real Time Monitoring

- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspections Made Easy**

- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- Automatic operation 24/7

## **Inspection Criteria**

- Total Length
- Thread Burrs
- Thread Length
- Thread DamagesShank
- Thread Major
- Dia
- Thread Missing Thread
   Multiple Slots
- DirectionPolling
- position
- Slot Presence/Absence
- Operation Presence/AbsenceShank
- Length
- Thread HeightThread
- Angle



## **DATASHEE**

## Part's Dimensional Range

Diameter min/max Thickness min/max

M3-M8

Up to 30mm

### Machine's **Specifications**

Type

Speed (max)

Up to 400 parts/min

Accuracy

±20 microns

Glass Plate

Machine's Size

35 x 35 x 74 in

No of Cameras Requirements

2-7

230 V, 4-7 bar

11

Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection





- Tapered Section Ring
- Constant Section Ring
- Spiral Retaining Ring
- HO Retaining Ring



- Wing Nut
- Cap Nut
- Hex Nut
- Cross Dowel
- Flange Nut
- Square Nut
- Weld Nut
- Wedge Nut



- Plain Washer Spring
- Washer
- Locking WasherCSK
- Washer

## Unprecedented reliabilityand precision

- Machine Vision Software
- Accuracy up to ±20 microns
- Speed range up to 250 parts/min
- Support up to 7 Camera units

## 'Live' Inspections, Management, Statistics Real Time Monitoring

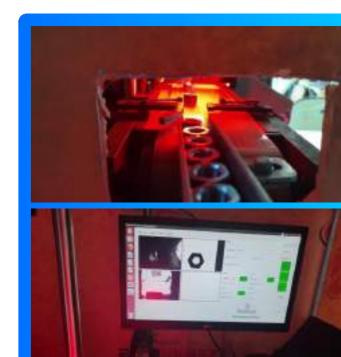
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspections Made Easy**

- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- UI
- Automatic operation 24/7

## **Inspection Criteria**

- Multiple Heights
- Multiple Widths
- Outer Knurling Measurements
- Outer Champher Angle
- Head ACHead
- AF
- ID and OD for Nut kind of parts
- ID/OD Burr
- Inner Thread Presence
- Half Thread Presence



## **DATASHEE**

## Part's Dimensional Range

Diameter min/max Length min/max

M6-M35 2-25 mm

### Machine's Specifications

Type Speed (max) Accuracy Machine's Size No of Cameras Requirements

Conveyor Based

Up to 250 parts/min

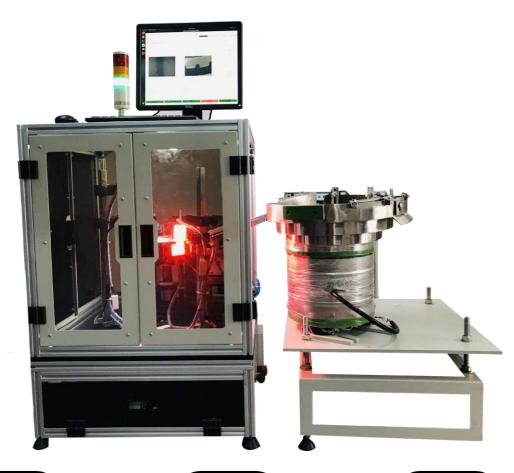
±20 microns

35 x 35 x 74 in

1-3

Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection

Equipped with State Of the Art Automation and QualViz Software Capable of Dimensional Measurements and Surface Defect Identification.





Carriage BoltsEye Bolts

Hex Bolt

APPLICABLE

- Machine Bolts
- Penta-Head Bolts
- Round Head Bolts
- Shoulder Bolts
- Socket Head Bolts
- T-Head Bolts



- Solid Rivet
- Tubular Rivet
- Blind Rivet
- Drive Rivet
- Split Rivet



- Slotted Flat Head Screw
- Slotted Round Head Screw
- Slotted Oval Head Screw
- Phillips Drive Screw
- Square Drive Screw
- CSK Screw
- Counter Bore Screw

## Unprecedented reliabilityand precision

- Machine Vision Software
- Accuracy up to ±20 microns
- Speed range up to 250 parts/min
- Support up to 7 Camera units

## 'Live' Inspections, Management, Statistics

- Real Time Monitoring
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

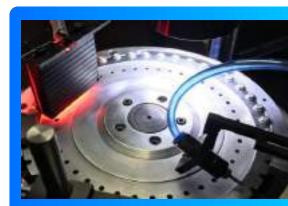
## **Inspections Made Easy**

- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- UI
- Automatic operation 24/7

## **Inspection Criteria**

- Thread Height
- Thread Angle
- Thread Missing
- Major Dia Mixing
- Head Max Diameter
- Head Top Cracks
- Socket BlacknessSlot
- Missing
- Particle in Slot/Socket

- Major & Minor Dia
- Missing Operation
- Thread Burrs
- Length Mixing
- Head Roundness
- Socket Concentricity
- Socket Broken PunchMiss
- Slot





## **DATASHEE**

## Part's Dimensional Range

Diameter min/max Length min/max M2.5-M6 Up to 50 mm

## Machine's Specifications

Type
Speed (max)
Accuracy
Machine's Size
No of Cameras
Requirements

Screw Plate

Up to 250 parts/min

±20 microns

25 x 25 x 37 in

1-3

Visual Defects and Dimensional Measurement based Sorting with Manual Feed Auto Ejection







- Multiple Strand Sprocket
- QD Sprocket
- Taper Lock Sprocket
- Steel Split Sprocket Idler
- Sprocket
- Double Single Sprocket
- Double Plus Sprocket



- Iron Casting
- Grey Cast Iron
- Alloy Cast Iron



**Tapered Section Ring** 

- Constant Section Ring
- Spiral Retaining Ring HO
- Retaining Ring

## Unprecedented reliabilityand precision

- Machine Vision Software
- Accuracy up to ±20 microns
- Speed range up to 150 parts/min
- Support up to 7 Camera units

### 'Live' Inspections, Management, Statistics

- Real Time Monitoring
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspections Made Easy**

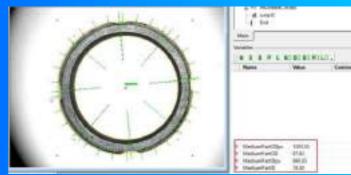
- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- UI
- Automatic operation 24/7

## **Inspection Criteria**

- ID/OD
- Teeth Angle Thread
- Major
- Thread Missing
- Thread Direction
- Inner Thread Presence
- Engraving inspection
- Surface Marking Inspection

- Teeth Count
- Thread HeightThread
- Angle Thread Burrs
- Thread Damages
- Champher Presence360°
- Inspection





## **DATASHEE**

## Part's Dimensional Range

Diameter min/max 30-300 mm
Thickness min/max 1-20 mm

### **Machine's Specifications**

Type Con
Speed (max) Up
Accuracy ±20
Machine's Size 118
No of Cameras 1-3
Requirements 230

Conveyor Based
Up to 150 parts/min
±20 microns

118 x 35 x 74 in



Visual Defect and Dimensional Measurement based Sorting with Auto Feed and Auto Ejection







- Continuous Thread Stud
- Tap-End Stud
- Double-End Stud



- Slotted Grub Screw
- Socket Grub Screw



- Cotter Pin
- Dowel Pin
- Hitch and Lynch PinSpring
- Pin

## Unprecedented reliabilityand precision

- Machine Vision Software
- Accuracy up to  $\pm 20$  microns
- Speed range up to 300 parts/min
- Support up to 7 Camera units

## **Inspections Made Easy**

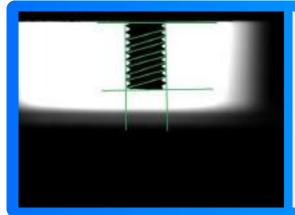
- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codesIntuitive
- UI
- Automatic operation 24/7

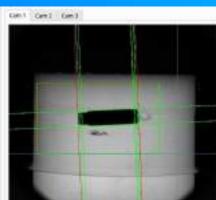
## 'Live' Inspections, Management, Statistics

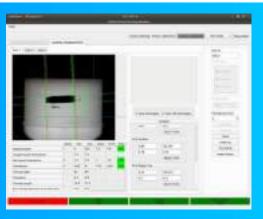
- Real Time Monitoring
- Resident Database SOL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI

## **Inspection Criteria**

- Total Length Shank
- Length
- Thread Length
- Polling position
- Shank Dia







## **DATASHEE**

## Part's Dimensional Range

Diameter min/max Thickness min/max M4-M24

Up to 200mm

## Machine's Specifications

Type
Speed (max)

Accuracy

Machine's Size

No of Cameras

Requirements

Gravity Feed

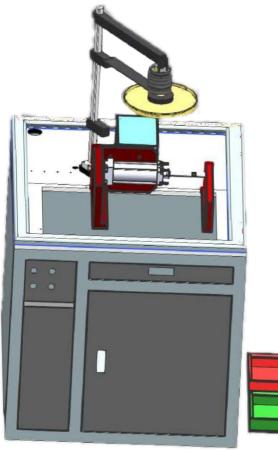
Up to 300 parts/min

±20 microns

35 x 35 x 74 in

2-7

### Dimensional Defects/ Surface Defects Analysis with Manual Feed and Auto Ejection





- Double Pitch Sprocket
- Multiple Strand Sprocket
- QD Sprocket
- Taper Lock Sprocket
- Steel Split Sprocket Idler
- Sprocket
- Double Single Sprocket
- Double Plus Sprocket



- Carriage BoltsEye
- Bolts
- Hex Bolt
- Machine Bolts
- Penta-Head Bolts
- Round Head Bolts
- Shoulder Bolts
- Socket Head Bolts
- T-Head Bolts



- Wing Nut
- Cap Nut
- Hex Nut
- Cross Dowel
- Flange Nut
- Square Nut Weld
- Nut
- Wedge Nut

## **Unprecedented reliability and precision**

- Machine Vision Software
- Accuracy up to  $\pm 10$  microns
- Support up to 2 Camera units

## **Inspections Made Easy**

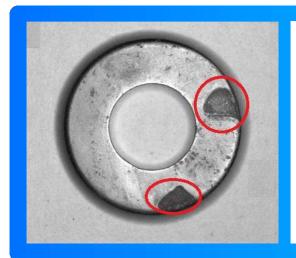
- Run as a Turn-Key system
- Simple Setup and Adjustments
- Short Setup Time for multiple codes

### 'Live' Inspections, Management, Statistics

- Real Time Monitoring
- Resident Database SQL
- Remote Control and Setting
- Vision Software Programmable by User
- Statistical Reports easily accessible through UI
- Intuitive UI
- Automatic operation 24/7

## **Inspection Criteria**

- Multiple heights
- Multiple Width Thread
- Angle
- Champher AngleHead
- AC/AF
- Head Roundness





## **DATASHEE**

## Part's Dimensional Range

Length min/max Width min/max Up to 40 mm Up to 40 mm

## Machine's Specifications

Type
Speed (max)
Accuracy
Machine's Size
No of Cameras

Requirements

Auto Profile Testing

-

±20 microns
35 x 35 x 74 in

1-2

230 V, 4-7 bar

21

## **OUR PRESENCE**



## **OUR CLIENTS**



































Supreme Industrial Fasteners





Manufacturers & Exporters of Industrial Fasteners





## TRUST QUALITY INTEGRITY

## SensoVision Taking Research into Product

## Contact Us:

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