

# **FOSIS** FLIP OFF SEAL INSPECTION SYSTEM



Optomech flip off seal inspection system is a high performance machine for checking the visual defects in a flip off seal

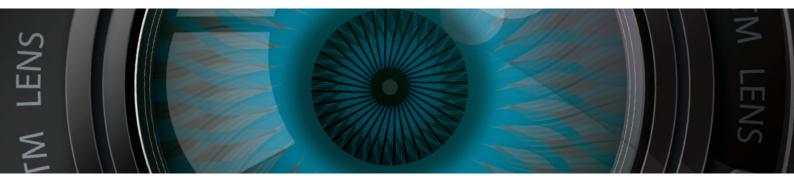


During the process of seals manufacturing a number of defects are generated, due to unavoidable conditions such as process variables, raw material defects, contamintions etc.

But customers today are becoming more and more demanding and have zero tolerance for defective products. It is essential for seals manufacturing companies to inspect 100% of their products.

It is not possible to do so anymore by the traditional methods of manual checking and sorting.

The FOSIS is a high performance system which does 100% inspection and sorting of seals for all possible defects automatically and ensures peace of mind for manufacturers as well as their customers.



# Salient features

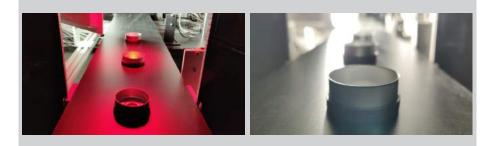
- Each seal is inspected for defects like black spots, dent mark, color shade, black mark, cut on pp button, short fill, dirt and dust, wrinkles and inter mix of shell.
- High speed, machine vision cameras, precision optics and customised lighting coupled with state of the art 21 CFR Part 11 compliant software provide security, accuracy and repeatability.
- 3 Level access control for 'User', 'Supervisor' and 'Administrator' through separate passwords.
- All the product data is stored in a database and can be retrieved at any time.
- Easy to define tolerances allow the user to decide which seals need accepted and which need to be rejected.
- The system changes over quickly to inspect new products. Changeover, involves simply selecting the required product from the system library using the touch screen.
- The large monitor displays the image of the seals as they are passing through the system.
- Periodic reports are generated as per user defined frequency eg. hourly, daily, weeklyetc.

## Setup



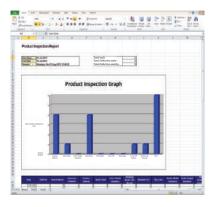
# Results





## Reporting

- Reports can be exported to Excel.
- Reports can be exported over the network.
- System can be configured to automatically generate an Excel report at a predefined time, and send over the network.
- The user can at any time select the product and a start and end date. The software will generate reports on the
- Number of seals inspected per shift.
- Number of defective seals per shift classified as per the defect classes.



# Typical Defects

# Defects on the outer Surface of the Seal

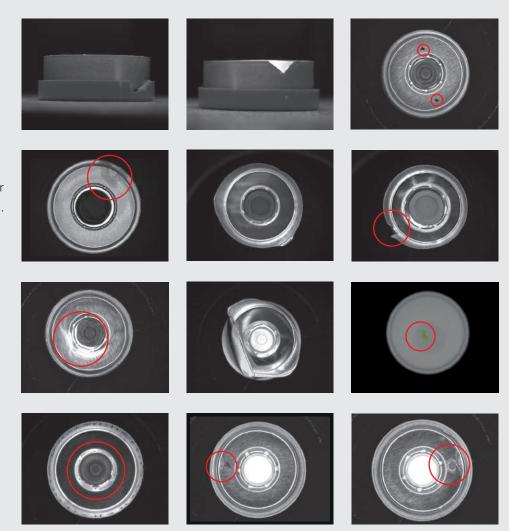
- Cuts on aluminum shell.
- Wrinkles.
- Strain Mark outside aluminum Shell.
- Deformation/Bends of aluminum shell.
- Aluminum Shell missing.
- Ring not separating the aluminum shell.
- Gap of aluminum cap when other diameter of aluminum shell is coming for inspection.

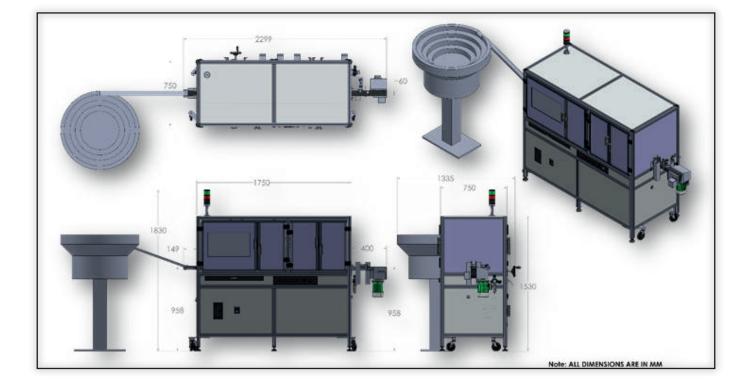
### Defects on the inside the Seal

- Black marks
- Dent marks
- Dirt & Dust
- Improper Crimped Seals
- Inter Mix of shell

### Defects on the PP Button

- Horizontal Flash/Vertical Flash
- Short Fill
- Black Spots
- Color Shade
- Cut on PP Button
- Plastic Cap Missing







Optomech Engineers Pvt. Ltd. was founded in Hyderabad, India in the year 1981.

Optomech has over 37 years of experience of successful development, manufacturing, servicing and marketing of products involving vision technology for quality inspection.

We are closely orientated towards the needs of the market. We are one of the leading providers of vision technologies for quality inspection. Renowned companies place their trust in the solutions and services provided by Optomech.

For us at Optomech, 'Professional After-Sales Service' is not just a simple catch phrase; instead, it is our company philosophy. We accompany you all the way from the initial consultation up to final installation and training – and beyond. You will benefit from our many years of experience and will be able to deal with the challenges encountered when implementing the new technology. Optomech has a well equipped optical and mechanical design and fabrication facility at its works at Hyderabad which is ably supported by a team of motivated and trained engineers for installation, commissioning, training and after sales services of its equipments.

Optomech specializes in the development and manufacturing of quality control equipments based on optical and video imaging technologies.

#### SPECIFICATIONS

MODEL	: Optomech – FOSIS (Flip off seal Inspection system)
SOFTWARE	Propriety User-friendly Software - 21CFR part 11 compliant.
USER INTERFACE:	21" touch screen Graphical user Interface.
PRODUCT INSPECTED	Flip top caps, of following size:
	1) Dia 15 x Height 8 mm (13 mm)
	2) Dia 22 x Height 8 mm (20mm)
	3) Dia 31 x 11 mm (28 mm)
	4) Dia 36 x 16 mm ( 32 mm)
	5) Dia 36 x 14 mm (34 mm)
SPEED	Upto Max 600 Caps/Min For 13 mm
DEFECTS DETECTED:	Short Fill, Blackspots, Short Fill, color Shade, Cut on PP button, Cut on
	Aluminum shell, Wrinkles, Black Marks, Strain Marks, Dent marks, Dirt &
	Dust, Deformation/Bends, Improper Seal, Missing Seal, Ring Missing, Plast
	cap missing, Intermix of Shell, gaps between caps
MACHINE SIZE: ( APPROX)	Length: 2300mm Width:750mm Height:1530mm
	Weight: 150 Kg
CONVEYOR:	Main conveyor : Belt Width : 40 mm Length: 1800mm
	Belt Speed: Upto 30 m/min
	Conveyor 2: Belt width: 40 mm Length: 1000 mm
	Belt speed: upto 30 m / min
	Conveyor 3 : Belt Width: 20 mm Length : 500 mm
	Belt speed: upto 30 m / min
VIBRATORY BOWL FEEDER	SS 304 bowl Feeder, with Stand and Chute.
UTILITIES:	Electric: Voltage and Current: Ac 240 v 1 phase, 5A.
	Compressed Air: 6-10 Bar, oil free clean air, Push in connection 6mm.
	Ethernet connection for Internet (for remote support)
OPERATING CONDITIONS	Temperature: +10 °C to +40°C
	Humidity : 40% -90% RH, non-condensing.
	Maximum operating altitude: 1900 m

### Some of our esteemed customers





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We reserve the right to modify the product specifications, in the interest of product development