

# Surface Inspector

for **Power Cables and Large OD Cables**



## › Ensure your product is Defect Free

The Surface Inspector is the only tool that can capture, analyze and judge every square millimeter of your product. It is the most thorough method of detecting surface flaws available. The system also provides dimensional measurements simplifying the QA process and allowing the operator to see the bulge or neck-down simultaneously. Because it is camera based, defects that are on the surface will be detected; unlike a spark tester which require defects to be exposed to the core. With the Surface Inspector you can be sure the product you are sending to your customers is without any surface defects.

## › Image Feedback and QA Improvements

The Surface Inspector provides the operator with up-to-the-second digital image feedback of the current jacket on any production line. This continuous stream of real time information – especially the failure images - allows the operator to isolate causes of jacket imperfections and where the defect is along the cable. This will result in reducing jacket defects before they result in scrapping of product or worse, customer complaints or recalls. Defect images are also saved, so they can be included in quality reports for internal or external use.

## › Industrial Setup, even for Dirty Environments

The Surface Inspector is designed for a 24/7, dirty, industrial environment in mind. The height adjustable aluminum extrusion frame allows for quick and accurate line height adjustments. A sliding rail at the base allows for lateral adjustments as well as for operators to slide the system out of the way so bulky cable joints can pass through. Covers and shields that are easy to clean prevent dust particles from entering the system. Fans, lens filter, and optional air wipes are also used to keep the whole system clean and dust free.

## FEATURES

- › Detects pinholes, bulges, neckdowns, surface blemishes, die cuts on cable jacket
- › Four camera configurations integrated into a one-box design
- › Dimensional readout of measured outer diameters
- › Supports line speeds up to 400 meters per minute
- › Detects defects before they reach your customer or fail in the field
- › Large opening for cable to pass through without problems
- › Height adjustable aluminum extrusion frame mounted on rails to easily slide system out of the way
- › Simple and low maintenance to keep the system running 24/7
- › Optional air wipes to clear cable from debris before entering the system
- › Alerts and records any defects into database for QA records and operator verification
- › Software analyzes full circumference and 100% of product length

# SPECIFICATIONS

## > Maximum Line Speed:

400 m/min | 1,300 ft/min  
Higher speed may be available depending on application

## > Minimum Detectable Defect Size:

1 mm and up | 0.040" and up  
Depends on line speed and product diameter

## > Cable Diameter Range:

0.01 mm - 200 mm | 0.0004" - 8"  
Other diameters available upon requests

## > Camera Configuration:

4 camera - 100% coverage of very small defects

## > Types of Defects Detected:

Jacket defects  
Pin holes  
Neck downs  
Bulges  
Die cuts

## > Pixels/mm<sup>2</sup>:

~100 for large diameter cable jacket

## > Percentage Overlap Between Images:

5%

## > Camera and Light Housing :

Black anodized single box with 9" opening  
Clear cover and sliding shield  
Air ventilation with removable filters

## > Computer and Interface:

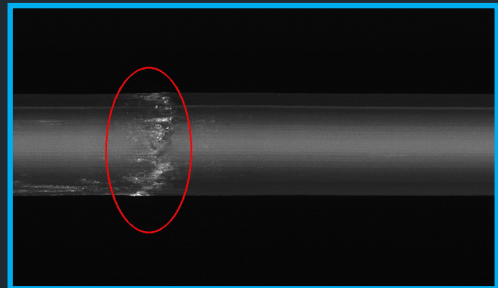
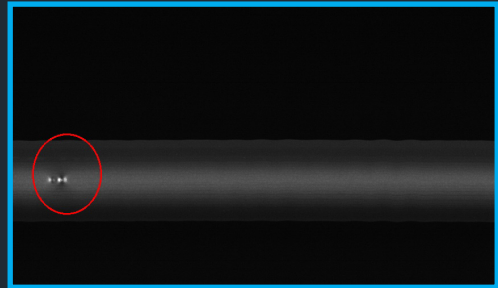
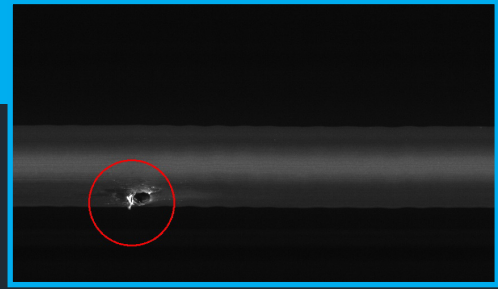
Windows Operating system  
Taymer Surface Inspection Software  
Allows for remote access and database integration

## > Image Processing:

All images from all cameras are read, enhanced and analyzed,  
resulting in 100% product coverage at the maximum line speed

## > Dimensions: with stand (custom stands can be built)

457 mm x 635 mm x 1580 mm - L x W x H  
18" x 25" x 62" - L x W x H



## > Lighting:

LED

## > Industrial Stand:

Height adjustable  
Aluminum extrusion construction  
Sliding base rail

## > Power Supply:

110VAC or 220VAC

## > Weight:

115 kg | 250 lbs.

## > Options:

Air wipes  
Encoder measuring wheel with pivot arm

# -TAYMER-

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