

INSPECTOR

DIFFERENT APPLICATION FOR SURFACE INSPECTION

Inspector is a complete solution for the inspection of surfaces and webs moving continuously as they are being produced or converted.

Inspector guarantees a 100% surface inspection on different kind of film, web widths, production speeds and optical characteristics of the product.

The system can be successfully used to inspect metallized film, any kind of plastic film, non-wovens, metal, paper and other laminated surface.

QUALITY IS EASY

Thank to its highly modular configuration Inspector can be easily integrated into any production line. It is possible to configure the web width and the appropriate illumination for each different applications.

The film is controlled thanks to of a series of linear cameras placed orthogonality to the direction of the web movement. The cameras can acquire a high resolution images even with very wide web width.

BENEFITS

Inspector is used either to detect and classify defects or to improve the process and increase the productivity. The integration directly into the metallizing machine or coating machine guarantees an immediate alarm in case of problems and helps in the waste



reduction. When a defect is found, the operator is alerted and the type of defect is logged in order to provide a detailed report for each roll.

Inspector ensure high levels of quality and offer the best solution during production, value-added processes, and converting operations where maximizing yield, productivity, and quality.

Defects information and images stored in our database are used in many ways. Reports, charts, and graphs can be tailored for every need. Defect information can be used to grade, sort, or reject material.



INSPECTOR

TECHNICAL FEATURES

Inspector has a very intuitive operator interface with a fast setup and a really powerful defect detection software. Standard features are:

- Modular camera configurations (up to 16 cameras).
- LED lighting system with three different light sources
- Touch screen interface
- Easy to learn and easy to use GUI interface
- Fast and automatic set up (new job can be started in few seconds)
- Thee different display modes: defect detection, defect history or inspection mode.
- Transversal direction and machine direction real time display
- Possibility to analyze the defect history during the inspection mode.
- Easily define different lanes or roll cutting
- Great reliability in defect detection
- Defect density based on user-specified criteria
- Grading of rolls based on defect density
- Alarm on repeating defects.
- Full report and automatic storing of all production process data
- **Different Login levels**

APPLICATIONS

- **Plastic film and sheets** Integration into blown film and flat film extruders, coating machines or into rewinding slitters.
- **Metallized film** Integration into metallizing machines or rewinding slitters.
- Paper

Installation in paper machines, coating machines and in paper processing.

Metal

Installation into stretching lines, rolling lines and coating lines for metals.

Nonwovens Installation on nonwovens lines.





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| TECHNICAL DATA | EXTRUDER | SLITTER | METALLIZING OR METAL LINE | OTHER |
| Maximum web width | 10.500mm | 10.500mm | 3.700mm | 5.000mm |
| Maximum speed | 600m/min | 1000m/min | 1200m/min | 500m/min |
| Material | BOPP, CPP, PVC, PP, PE, other | Plastic film (transparent and opaque), metallized film, paper, other | Metallized film, metal foil, other | Non-woven, paper, other |
| Defects | Gels, black specks, holes, bubbles, intrusion, dirt, oil or condense drop | Pinholes, scratches, gels, black specks, holes, bubbles, intrusion, dirt, oil or condense drop | Pinholes, trans way lines, lack of metallization, scratches, wrinkles | Water marks, holes, dirt, oil drop spots, thick/thin areas, intrusions |
| Camera resolution | Up to 4096 pixel | Up to 4096 pixel | Up to 4096 pixel | Up to 4096 pixel |
| Camera frequency | Up to 80Khz | Up to 80Khz | Up to 80Khz | Up to 80Khz |
| Max. number of camera | 16 | 16 | 16 | 16 |
| Light | Direct light and/or backlight | Direct light and/or backlight | Backlight | Direct light or diffuse light and/or backlight |
| Typical web width | 5.000mm | 3.500mm | 2.500mm | 2.000mm |
| Typical speed | 600m/min | 600m/min | 900m/min | 300m/min |
| Typical number of camera | 16-2048pixel | 12-2048 pixel | 6-2048 pixel | 2-4096 pixel |
| Resolution of typical application | 0.15mmx0.15mm | 0.15mmx0.15mm | 0.2mmx0.2mm | 0,25mmx0,25mm |
| Min. defect size of typical application | Ø 0,30mm ⁽¹⁾ | Ø 0,30mm ⁽¹⁾ | Ø 0,15mm ⁽²⁾ | Ø 0,5mm ⁽¹⁾ |

1. We consider a defect of 3 pixel dimension | 2. We consider a defect of half pixel dimension

Technical data and system specifications refer to the state at the time of printing. We reserve the right to modify them in the interest of a continuous program of further development.



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