The leading automated surface inspection partner for fast and accurate materials checking.

SURFACE INSPECTION OF MOBILE DEVICES AND DISPLAYS

DELIVERED THROUGH

**SmartView®**
Online detection, classification and visualization of surface defects

**SmartAdvisor®**
Synchronized real-time process monitoring and inspection

GIVING YOU THE WHOLE PICTURE

The leading automated surface inspection partner for fast and accurate web inspection and monitoring.
ENSURING SCREEN MATERIAL QUALITY

Modern touchscreens and display panels, used for applications ranging from mobile phones and tablets to OLED and LCD televisions, are expected to meet the highest standards of quality and performance. The materials used in touch panels and screens must meet strict criteria to ensure they provide a clear, high-quality display, withstand frequent use, and allow accurate touchscreen operation.

These screens are assembled from a number of different layers, and a single defect in one layer may significantly affect the quality and performance of the finished product.

Accurate, automated inline surface inspection of each layer during the manufacturing process is essential to deliver a defect-free product.

AMETEK Surface Vision provides a powerful and highly accurate surface inspection solution for a wide range of materials, including glass, plastic and metals.

Our customizable systems use the best-fit technology for each application, delivered with the highest consistency and without compromise by experienced service personnel.

They detect defects in real time, automatically identifying and visualizing product imperfections, and tracking the root cause of the problem with our web monitoring solution.

It means screen manufacturers get improved product quality, better productivity, maximized yields, defect detection prior to value-added processes or shipping, and a reduced need for manual inspections.

SOFTWARE

CAMERAS

LIGHTING

DATA CAPTURE & ANALYSIS

APPLICATION SUPPORT

Our proprietary Windows-based software integrates seamlessly with “off the shelf” system hardware to provide continuous detection, classification, visualization and reporting, accessible across the network.

High-precision, continuous-operation cameras are located across the process, using resolutions and optical technologies best suited to each specific application.

Powerful, long-life LED lights brightly illuminate the web for inspection and monitoring, delivering uniform lighting levels.

Our Windows-based, non-proprietary computer systems store and analyze data from the cameras, supporting video streaming and defect classification capabilities.

Our expert applications knowledge helps you to run your system more easily, providing the optimal solution for your process.

| Protection (film) | Fold, holes, pollution, gel, fish-eye, scratch |
| Flat panel display glass | Inclusions, glass chips, scratches, bubbles, stone defects |
| Cover glass | Fents, scratches, stains, inclusions, edge chips, printing defects |
| Laminated film | Coating void defects, wrinkles, contamination, gluing defects |
| ITO/TCO hard-coated film | Scratches, holes, particles, non-uniform coating |
| Liquid crystal display cell | Press marks, scratches, inclusions, bubbles, ripples, bumps, pollution defects |
| Touch sensor | Dents, logo defects, bubbles, fingerprints, functional defects |
| Polarizing film | Scratches, PVA and lamination defects, bubbles, particles, roller defects |
| Liquid crystal module | Scratches, dents, bubbles, inclusions, lamination defects, fingerprints, edge chips |
| Battery (separator foil) | Fold, holes, relief material, strip, gel, pollution |
| Connector Material | Dents, scratches, stains, inclusions, rolled in material |
| Cover housing (Case) | Dents, scratches, stains, inclusions, rolled in material |
AMETEK Surface Vision is a world leader in automated online surface/web inspection and monitoring solutions. Our broad product range is optimized for the monitoring and inspection of webs and surfaces, and for process surveillance applications.

The SmartView® and SmartAdvisor® product lines deliver robust, flexible solutions to continuous production processes across a variety of industries, with more than 2,500 installations worldwide.

Our systems have become vital to increasing efficiency, streamlining operations, improving product quality, reducing waste, and lowering costs in industrial processes. Manufacturers in the metals, paper, plastics and nonwoven industries rely on our solutions to detect surface flaws or defects, and optimize process efficiency, at their production facilities across the globe.

We continue to innovate, providing cutting-edge technologies and world-class technical support that delivers highly accurate defect data, high-definition video, intelligent grading, archiving and detailed reporting. Customers who use AMETEK Surface Vision’s services get the benefits of:

▶ Reduced operational costs
▶ Reduced material waste
▶ Process optimization
▶ Improved product quality
▶ Maximized yield
▶ More thorough and objective grading of material
▶ Detection, classification and visualization of defects
▶ Minimized need for manual inspections
▶ Inspection reports you need, in a form you can use

Based in Hayward, California, AMETEK Surface Vision has offices and sales representatives around the world. We are part of the Process and Analytical Instruments Division of AMETEK, Inc., a leading global manufacturer of electronic instruments and electromechanical devices.

SURFACE VISION WORLDWIDE

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