## **ASC International Launches Advanced SPI and AOI Solutions to Revolutionize Electronics Manufacturing**



Mendota Heights, Minnesota Oct 11, 2025 (<u>Issuewire.com</u>) - ASC International, a world leader in making electronics, has said that it is expanding to its already large collection of 3D Solder Paste Inspection (SPI) systems and Automated Optical Inspection (AOI) machines. These devices are supposed to enable electronics makers all over the world generate more items with fewer problems and make the most money. With new inline and tabletop SPI equipment, solder paste measuring systems, and automated optical inspection equipment, ASC International is setting new standards for quality, precision, and operating efficiency.

Making gadgets that don't have any flaws

Even little mistakes in PCB assembly can cost a lot of money in the electronics sector, which is increasingly competitive these days. They can also cause delays and damage relationships with clients. Manufacturers can detect problems soon after stencil printing with ASC International's Inline 3D SPI Machines and Benchtop 3D Solder Paste Inspection equipment. This makes sure that the proper amount of solder paste is always put down and that the quality is always the same from the beginning.

"Our goal is to give manufacturers inspection systems that are not only very accurate but also fit right into their production lines. "ASC International has solutions for high-volume SMT lines that need inline SPI systems or R&D labs that use benchtop 3D SPI machines. These solutions increase yields, reduce waste, and make products more reliable overall."

Full SPI Solutions for Every Production Need

Inline 3D SPI Systems are designed for SMT lines that need to be quick and precise all the time. These technologies measure the height, area, and volume of the solder paste in real time. This gives printers fast feedback and lets operators make changes on the fly. Finding faults early helps manufacturers make less scrap, get better first-pass yields, and undertake less expensive rework after reflow.

For small businesses, research and development labs, and creating prototypes, ASC International supplies Benchtop 3D SPI Machines. These little systems are equally as accurate when it comes to volume as full-sized inline systems, but they are small enough to fit in compact areas. They work well for pilot lines, creating little volumes of things, or for training and learning.

ASC International's Solder Paste Measurement Systems also give correct information on how paste is deposited, which helps with process improvement, compliance, and traceability. These systems are particularly crucial for industries like automotive, aerospace, and medical electronics that need things to work all the time.

Quality that stays the same with automated optical inspection equipment

ASC International's Automated Optical Inspection (AOI) equipment do more than just look at solder paste. They also check that the arrangement of parts and solder junctions satisfies tight standards. Using high-resolution photos and clever algorithms, modern AOI systems can discover parts that are missing, parts that are out of alignment, solder bridges, not enough solder, and polarity issues.

You can utilize AOI machines on their own or as part of a bigger system. They cut down on the need for human checks, deliver consistent results, and produce data that can be utilized to make processes better. Companies that use ASC International's <u>AOI systems</u> say they experience quantifiable gains in

first-pass yields, fewer field failures, and faster production line turnaround times.

Smart manufacturing needs fresh ideas and strategies to make them happen.

ASC International's systems are based on the ideas of Industry 4.0. You can leverage the thorough inspection data from both SPI and AOI equipment with analytics platforms and manufacturing execution systems (MES). With this connectivity, producers can keep an eye on trends, uncover the primary sources of errors, and initiate initiatives to make things better all the time.

ASC International's technologies are helping electronics makers switch from reactive quality control to proactive, data-driven production management. They do this by giving manufacturers input in real time, closed-loop integration, and powerful analytics.

Client Impact and Return on Investment

Companies who use ASC International's SPI and AOI solutions get tangible benefits:

Less Scrap and Rework: Finding faults early keeps poor boards from going further, which decreases expenses of doing business.

Higher Yields: Putting down solder paste and inspecting components the right way both raise first-pass yield and throughput.

Faster Time-to-Market: Testing prototypes and small production runs quickly speeds up the process of producing new products.

Better Reliability: Stronger solder joints and verified component positioning mean fewer field failures and warranty claims.

One business that builds electronics for cars coupled inline 3D SPI and AOI machines and found a 25% cut in faults after reflow in just six months. According to another contract manufacturer, employing benchtop SPI equipment for pilot production runs made their job 30% more efficient and cut down on the amount of work that needed to be done again.

Commitment to Quality and Help

ASC International <u>not only sells the newest tools</u>, <u>but they also help their customers come up with unique ways to boost yield that are tailored to each manufacturing scenario. This technique of working together helps sure that producers achieve outcomes that can be assessed and that they maintain up high quality standards in a market where there is a lot of competition.</u>

What is ASC International?

ASC International's 3D Solder Paste Inspection systems, 2D-3D Automated Optical Inspection systems, Conformal Coating Inspection systems, Digital Video Inspection systems, 3D Metrology systems, and fully integrated Jetting Valves for Solder Paste and Adhesives help electronics makers all over the world make more money and get better production yields. The business works closely with clients to create specific plans that will definitely lead to higher yields. They give knowledge, tools, and continuing help to help electronics manufacturers succeed in the long run.

## Frequently Asked Questions (FAQs)

- 1. What kind of manufacturing lines can employ ASC International's SPI and AOI products? ASC International's inspection instruments can be used in many settings, like schools, training centers, research and development labs, and high- and low-volume SMT lines.
- 2. What are the differences between inline and benchtop SPI machines? Inline SPI systems are made to make things quickly and fit into full SMT lines. On the other hand, benchtop machines are compact and precise, and they are used to make little amounts of things or prototypes.
- 3. Can AOI machines discover problems in both parts and solder? Yes. Automated Optical Inspection tools check for missing parts, parts that aren't lined up well, solder bridges, not enough solder, and polarity issues to make sure that quality stays the same.
- 4. How much money will ASC International's inspection systems save? Less scrap and rework, higher first-pass yields, shorter time-to-market, better reliability, and happier customers all lead to a higher ROI.

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Source: ASC International

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