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Reduction of False Calls from AOI Machines using Artificial Intelligence

What is the issue: in many factories, a high percentage (30-90%) of the fails reported by AOI machines are false calls. Meaning – they report a problem – when no actual problem exists. This phenomenon is also known as NFF – “no fault found”.

Why is NFF an issue?

- False calls dramatically reduce line utilization.
- The final pass/fail decision is performed manually, increasing the possibility of an erroneous “pass” decision, and causing a potential bottleneck at the manual station.
- NFF costs at [United States Department of Defense](#) fabrication plants are said to be in excess of US\$2 billion per year.

Our solution: To reduce the rate of false calls from pre- and post-flow AOI machines.

How: Using AI technologies in addition to the measurement data collected by the AOI machine, we can anticipate – with a high degree of certainty – whether a fail is real, or a false call. call.

What data is needed:

- AOI machine output files, including measurements and pass/fail data.
- Manual station pass/fail decision data, including false call findings.

Machine2Machine & AI-Based Applications

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Tovi.Yadin@Siemens.com
Siemens Innovation Team

siemens.com/software

