ASMPT enabling the digital world

WORKS Optimization

Successfully used in many SMT production facilities

Intelligent process optimization along the entire SMT line

End-to-end process visibility

Faster root-cause analysis

Improved process quality and stability

Integration of third-party SPI and AOI systems

Relief for skilled staff

Faster new product introductions

WORKS Optimization collects, correlates and analyzes **process, quality and production data across the entire SMT line**. The application supports **continuous optimization** of solder paste printing and placement processes, **accelerates root-cause analysis** and provides **actionable recommendations** to improve quality and productivity.

The intelligent inline expert system is based on the global I**PC-2591 CFX** standard for industrial communication. The universal WORKS Optimization software solution enables manufacturers to **minimize faults**, **reduce production costs**, **reduce their employees' workloads**, and **accelerate new product introductions**. WORKS Optimization already provides significant competitive advantages in many production locations, particularly in key industrial sectors.



ESCD GmbH

"With the combination of Process Lens and WORKS Optimization, we now have the demanding solder paste printing process fully under control. It's nice to be able to detect a faulty solder paste application immediately after printing and not just at the end of the line with the AOI system. After all, we are mostly dealing with highly complex products for which any kind of reworking is out of the question. The automatic offset correction is also a very nice feature. [...] As a result, WORKS Optimization saves lots of operator assists."

Matthias Warnecke
Technical Manager and VP at ESCD

Intelligent process optimization



Ilkka Ylönen, SMT Development Manager at Teleste (r.)
and Aki Enberg, SMT Process Developer at Teleste (l.)

> *"Since upgrading to the latest technology from ASMPT, our production runs faster, more effectively, and more transparently. We raised our output while reducing the number of manual assists."*
>
> Aki Enberg
> SMT Process Developer
> at Teleste

Automatic printing optimization

Teleste

Solutions for broadband networks and intelligent video and information systems, especially in the field of public transport

Customers: Telecommunication and transport companies, cities and communities

Effects of WORKS Optimization:

- **Downtime reduced:** by 30 minutes per day
- **Rework reduced:** by one hour per day
- **NPI/prototype reports accelerated:** by two hours per report
- **Cost savings:** of approx. €50,000 per line annually
- **Scrap reduced:** by 95 percent on average

Significant cost reduction and quality improvement through automated process optimization and reduction of working hours, scrap, rework, and downtime

Holistic quality management

System Electronics uses DEK solder paste printers whose output is instantly checked and automatically corrected, if necessary, with the Process Lens HD SPI system in combination with the WORKS Optimization expert software from ASMPT.

"With this combination, we have created a solid basis for our SIPLACE SX placement machines. These solutions reflect our core competencies of flexibility and quality perfectly. [...] This high level of process stability ensures that we always make an impeccable impression, also during customer audits."

Andrea Gozzi
General Manager at System Electronics



German specialist for measurement and sensor technology

High-precision measuring instruments for fill level, limit level and pressure measurements in industrial applications

Effects of WORKS Optimization:

- **Defects reduced:** through offset correction that significantly improves the printing process – especially when small components like µBGAs are involved – by reducing tombstoning and minimizing short-circuits.
- **Printing quality improved:** by optimizing the understencil cleaning frequency and automatically adapting the cleaning intensity based on process quality and conditions, leading to reduced material consumption and better printing results.
- **Stencil production simplified:** thanks to DFM Health Check functions.
- **Project and process data centralized:** via the Process Expert database. As a result, program maintenance and process data analysis across multiple production lines have been simplified significantly.

Improved production quality and efficiency through automated process optimization, defect reduction, and central data management

Reduced material consumption



ZKW Lichtsysteme GmbH

High-quality lighting systems and electronics for the automobile industry

Customers: International vehicle manufacturers and high-quality automobile brands

Effects of WORKS Optimization:

- **Paste defect rate reduced:** from 7.18 percent to 1.09 percent
- **Analyses shortened:** from approx. 4.5 hours to approx. 1 hour
- **FPY (first pass yield) increased:** from 76.4 percent to 90.4 percent

ZKW

A member of **LG**

Significant improvements in production quality and efficiency

"After the easy installation of the program, we were able to shorten our cycle times by 30 percent with the new technology, and the automatic optimization saves us a lot of time as well. The automatic offset correction runs permanently and saves a lot of manual assists."



Roland Eschker-Holzmann
SMT engineer at ZKW Lichtsysteme

Relief for technicians and specialists

Placement process optimization

One of the world's largest contract manufacturers

Wide range of design, engineering, manufacturing and supply chain solutions

Effects of WORKS Optimization:

- **Resource efficiency maximized:** by automatically correlating the data along the entire SMT line, which makes process and root cause analyses much easier for experts.
- **Faster process analysis:** has reduced the time spent on detailed process investigations by 83 percent.
- **Performance stabilized:** ensures constantly high output level and reduces downtimes.
- **More operating efficiency:** thanks to the combination of automation, faster error analysis and stable operations.

83-percent faster process analyses and stable performance: WORKS Optimization improves operating efficiency and production stability by maximizing the utilization of resources

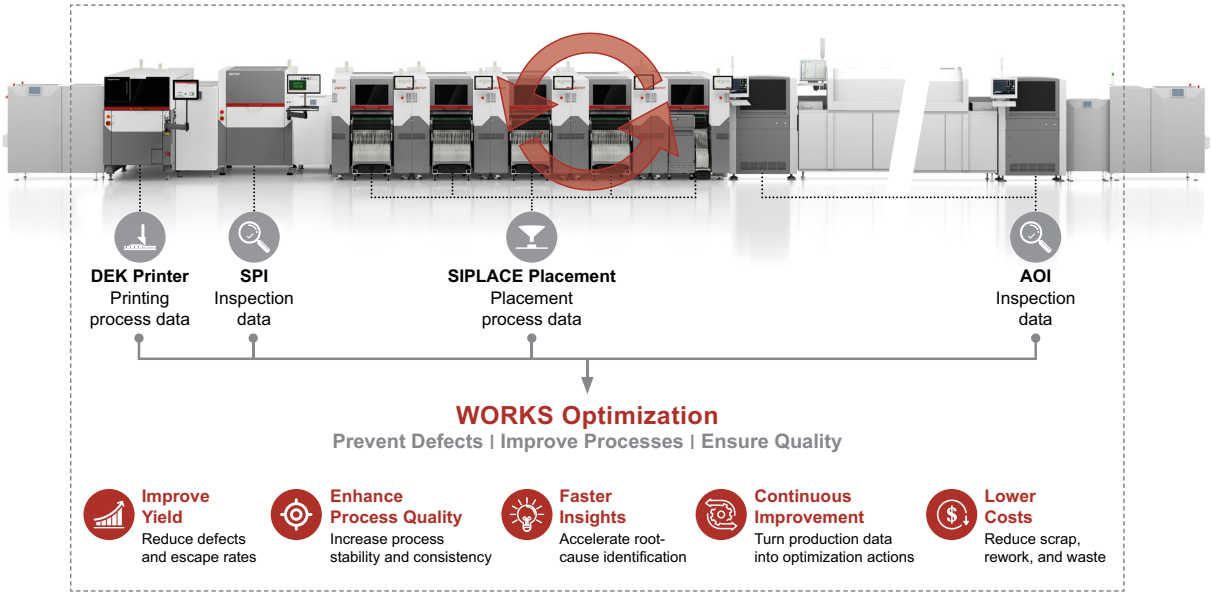


Intelligent process optimization along the entire SMT line

Reduce scrap, ease the workload on employees, and accelerate product introductions: WORKS Optimization, part of ASMPT's WORKS Software Suite, is an intelligent software solution that optimizes processes across the entire SMT line – with the ambitious goal of achieving 0 DPMO (Defects Per Million Opportunities).

By collecting, correlating and analyzing process, quality and production data from ASMPT and third-party equipment, the solution identifies optimization opportunities, accelerates root-cause analysis and provides actionable recommendations for continuous process improvement. The result is more stable manufacturing processes and higher productivity at lower costs.





More about
WORKS Optimization

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