PMD Profiler

Line scanner for inline quality control

Product presentation
Quality inspector ready for all challenges

The final quality of a product is determined by the greatest equivalence possible between specification and implementation in each individual production step. Does that sound complicated? From now on it won’t as the PMD Profiler is the answer to all the tricky challenges of your inline quality control.

It only takes a few steps for the photoelectric sensor to be ready for use and identify the contour of an object via laser line scan in order to detect any components, installation procedures, grooves or bore holes that do not comply with the target status – with a deviation of only 0.5 millimetres being detected. In other words: In future, your products will be manufactured with the maximum quality at each manufacturing step. Simply and safely!

Would you like to take a closer look at the PMD Profiler?
You’re welcome to do so: ifm.com/gb/profiler
**Product advantages**

**Why opt for the PMD Profiler?**

- **Set-up in just a few steps**
  Quick installation with standard M12 connection and optionally even without any software

- **Distance-independent**
  High tolerance on object positioning

- **Immunity to extraneous light**
  No screening against ambient light or external illumination required

- **Simplified fault analysis via IO-Link**
  Optional contour visualisation through use of software, for analysis of bad parts
Application overview

Sorting and orientation

Error-proofing applications

• Differentiate between parts, which optically can hardly be told apart
• Reliably detect and reject bad parts
• Monitor the correct position of objects during the running process

Advantages

• Early detection and elimination of sources of failure
• Minimise the reject rate in the long term
• Avoid consequential damage that would have resulted from installation of bad parts
Application overview

Correct and complete assembly

Assembly applications

• Checking the complete and correct installation of components
• Checking the correct installation of, for example, sealing rings or the tightening of screws

Advantages

• Detect incomplete components and, if applicable, retrofit
• Readjust or reject incorrectly installed components
• Prevent leakages or instabilities
Application overview

Gap control

Check if the seals are completely in place

- Check whether fasteners are latched completely
- Focus the contour comparison on the relevant profile area

Advantages

- Detect and, if applicable, correct incorrectly installed components
Application overview

Processing control

Checking the processing steps

• Differentiate between machined and unmachined parts by comparing their contour

Advantages

• The surface structure allows conclusions about potential faults in the installation (e.g. unmachined workpieces due to a machine fault)
Good to know

Increase product quality and production efficiency thanks to the PMD Profiler

- Minimise installation complexity and cost
  Plug & play solution for set-up in just a few steps

- Improve product quality
  Ensure correct and complete assembly and processing

- Higher production efficiency
  Inline quality control prevents complications in the production line

- Permanent reduction of the reject rate
  Early detection and elimination of sources of failure