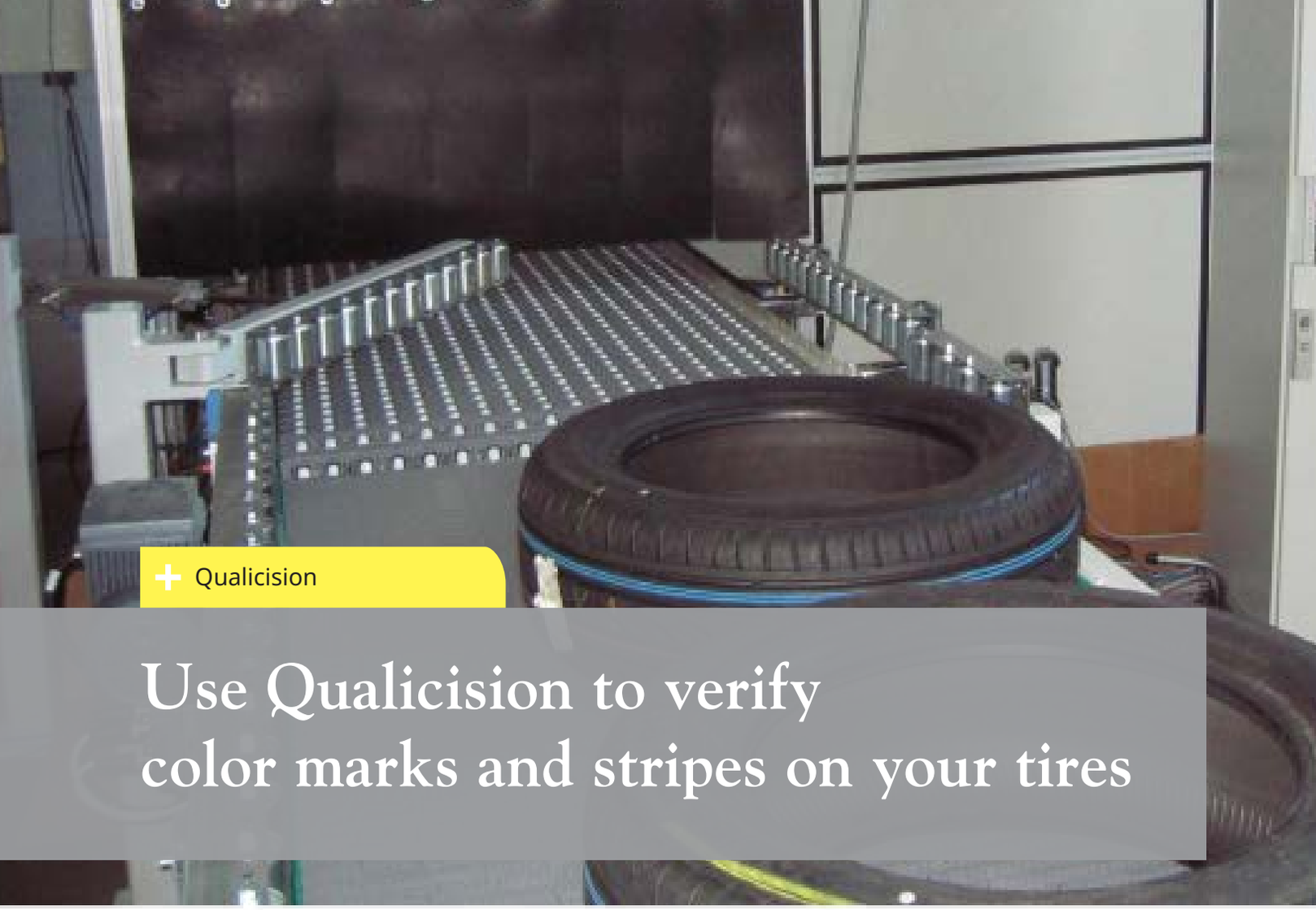
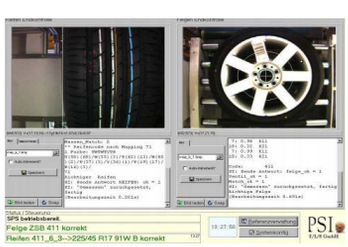


+ Qualicision

Use Qualicision to verify color marks and stripes on your tires

Innovative product solutions for optical quality control of tires

- Color dot on tire sidewalls
- Adhesive labels on tire sidewalls
- Color stripes on tire treads
- Tread profiles
- DOT positions

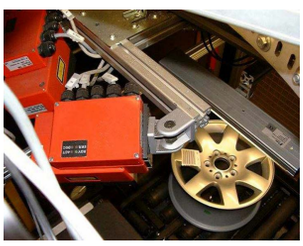


PSI FLS Fuzzy & Neuro Logik Systeme GmbH
Joseph-von-Fraunhofer-Str. 20
44227 Dortmund; info@fuzzy.de
www.fuzzy.de; www.qualicision.de

PSI
FLS Fuzzy Logik & Neuro Systeme GmbH

Qualicision Q solutions

Qualicision Q systems (with "Q" standing for product quality) can be used as inspection systems in the field of active quality control.



Here an example from the automotive supplier industry: in a highly automated process, tires and rims are assembled to wheels which are delivered directly to the vehicle assembly line.

Before the tire-mounting machine, the tire and rim combination to be assembled next is checked to be the correct one regarding material flow indications. Probable mixups would generate considerable and avoidable consequential charges, as the wrong tire and rim combination has to be filtered out from the material flow in order to be sure that vehicles are equipped always with the wheels that correspond to them. Thus, the Qualicision solution performs a constant product quality check of the outgoing wheel.

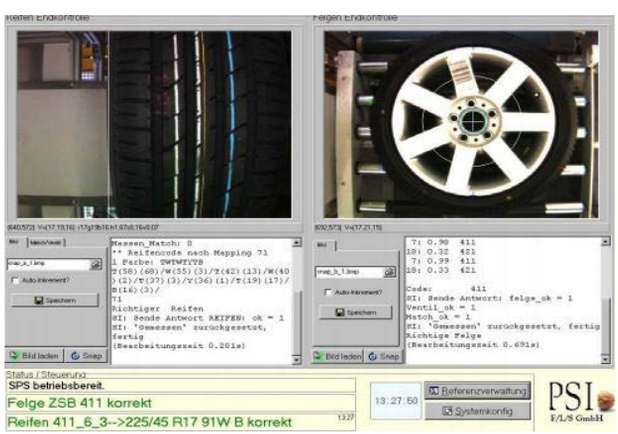
Qualicision solutions aimed at product quality control are called Qualicision Q solutions.

In the above-given example of quality control during wheel assembly, Qualicision systems are able to check and recognize tires (by means of color string codes and profile information) and rims (by means of design characteristics). The information obtained is then compared with data from the PLC or the main computer referring to the expected tire and rim combination. In case the information differs, the system immediately communicates the challenge.

Qualicision Q systems feature a special training module which allows online-adaptions to product fluctuations or quality variations.

Qualicision systems monitoring production processes are used for quality control like, for instance, image processing vision systems. Characteristically, these systems can be trained in an interactive process based upon quantitative and qualitative test piece parameters (teach-in).

As teach-in is done by programming of test piece snapshots it is possible to develop systems whose knowledge and reference databases can be enlarged without any further source code programming, only by entering optic images of new test pieces.



This leads to a substantial reduction of software adaption costs when confronting the system with new or modified control tasks. Users are now able to do both, train the solution using new test piece images and adapt the reference database all on their own.

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FLS Fuzzy Logik & Neuro Systeme GmbH