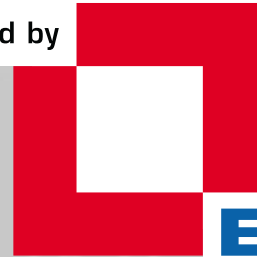
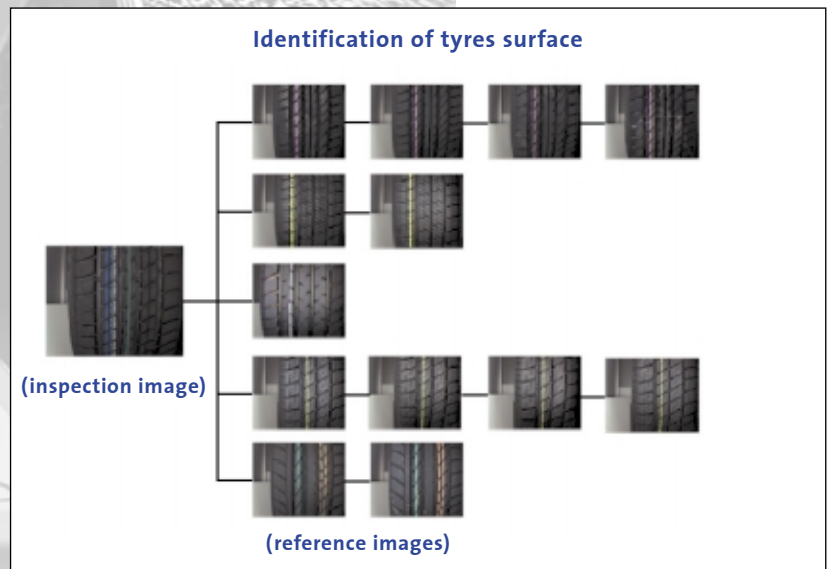


► Fuzzy Modules

powered by



COMMON VISION
BLOX



- Fuzzy moduls for
- Surface classification
 - Attribute analysis
 - Similarity calculation

Fuzzy
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IMAGING

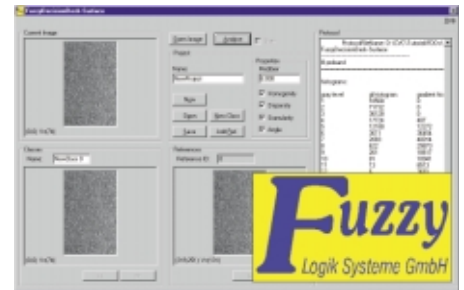
► Fuzzy Modules

► FuzzyDecisionDesk-Surface (FDDs)

FuzzyDecisionDesk-Surface is an analysis module for qualitative surface analysis that, in conjunction with the Common Vision Blox concept, carries out rapid and objective classification of inhomogeneous structures such as rubber compounds, enamel surfaces, etc.

In the process of fuzzy image analysis, the current image of the test object is compared with the reference image in much the same way as a person would do it. Either a ten-part reference scale or a set of customer-specific reference images is used as reference material for the purpose of assignment to quality classes.

- Training of the system using reference images
- Configuration by means of a user-specific scale
- Different attributes selectable for checking



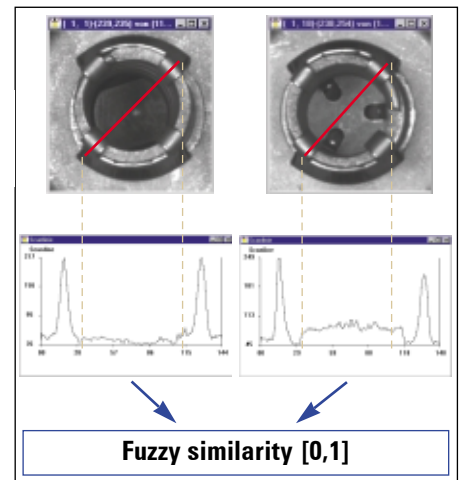
► FuzzyDecisionDesk-Relation (FDDr)

FuzzyDecisionDesk-Relation is an analysis module for calculating the fuzzy similarity of two attribute vectors. FuzzyDecisionDesk-Relation is used in conjunction with Common Vision Blox to analyze different attributes such as grayscale histograms, gradient histograms, pixel intensities and measured values, etc.

The various image attributes involved are standardized differently in such a way as to allow the presence and absence of image attributes to be explicitly modeled.

Similarity relations

- | Positive | Negative |
|--------------------|----------------------|
| ■ Analogy | ■ Trade-off |
| ■ Near analogy | ■ Near trade-off |
| ■ Cooperation | ■ Competition |
| ■ Near cooperation | ■ Near competition |
| ■ Support | ■ Hindrance |
| ■ Near support | ■ Near hindrance |
| ■ Indifference | ■ Diffuse dependence |



► FuzzyDecisionDesk-Image (FDDi)

FuzzyDecisionDesk-Image is a rule-based fuzzy decision module that, in conjunction with Common Vision Blox, permits the intuitive analysis of image processing tasks.

By formulating rules in conjunction with linguistic terms such as large, medium and good that describe, for example, the quality of attributes, even complex quality control tasks can be represented on the computer with a relatively low number of rules.

