



QualityTool

Statistical process control and visualisation with quality control charts

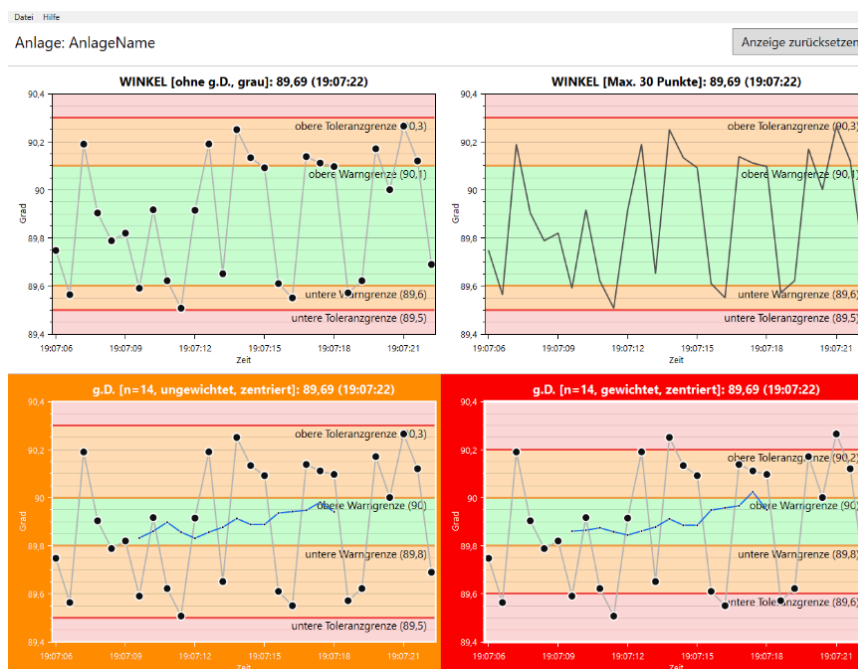
Functions

- Real-time display of the inspected quality characteristics of the manufacturing process.
- Automatic calculation of the intervention and warning limits after a preliminary run of 20 samples (number of samples selectable)
- Automatic comparison of the calculated characteristics with the intervention limits and visual signalling (green/yellow/red)
- Inspection severity of the control chart is adjustable by selecting the sample size (large sample size sharp inspection and vice versa)
- Overview for synchronous visualisation and control of several quality characteristics of the manufacturing process
- Possibility of combining different quality control charts in one application
- Flicker-free and freely scalable display
- Automatic tracking of the viewing window
- Interactive navigation in the characteristic area
- Switching to different control chart types during runtime possible
- Integration in automation software for quality measurement technology possible with C++ and C#

The Quality Tool contains a collection of functions for real-time evaluation of measurement information from industrial image processing machines and from quality measurement devices in production. SPC (Statistical Process Control) procedures are applied. These quality control chart procedures are used to record/visualise, control and regulate quality characteristics in the production process. They provide information about processes and are tools for systematically collecting knowledge and information about the process, from which conclusions can be drawn to improve the process.

Possible quality control charts

- Original value card
- Mean value map
- Standard deviation map
- Span map
- Fault collection chart with fault distribution
- Frequency distribution



QualityTool with quality control charts - SPC



Steinbeis
Qualitätssicherung und
Bildverarbeitung GmbH

Werner-von-Siemens-Straße 9
98693 Ilmenau / Germany

Phone +49 (0) 36 77 · 46 90 59 0
 Telefax +49 (0) 36 77 · 46 90 59 11

E-Mail info@sqb-ilmenau.de
 Internet www.sqb-ilmenau.de

Contact

Dipl.-Ing. Steffen Lübbecke
 Phone +49 (0) 36 77 · 46 90 59 12
 E-Mail steffen.luebbecke@sqb-ilmenau.de

M. Sc. Norbert Jahn
 Phone +49 (0) 36 77 · 46 90 59 15
 E-Mail norbert.jahn@sqb-ilmenau.de

Prof. Dr. Gerhard Linß
 Phone +49 (0) 171 · 5123758
 E-Mail gerhard.linss@sqb-ilmenau.de

Descriptions

The QualityTool-SPC contains functions for calculating and graphically displaying quality control charts for process improvement (Statistical Process Control).

The input data is stored temporarily to allow individual processing. It is possible to switch between different control chart types. With each change, the desired parameters are calculated with the temporarily stored data.

Exceeding the action limits of the quality control charts is continuously monitored. If an action limit is exceeded, the user is informed:

- Visually, by a colour change of the chart and display of a freely editable information text.
- Programmatically, with the corresponding parameters.

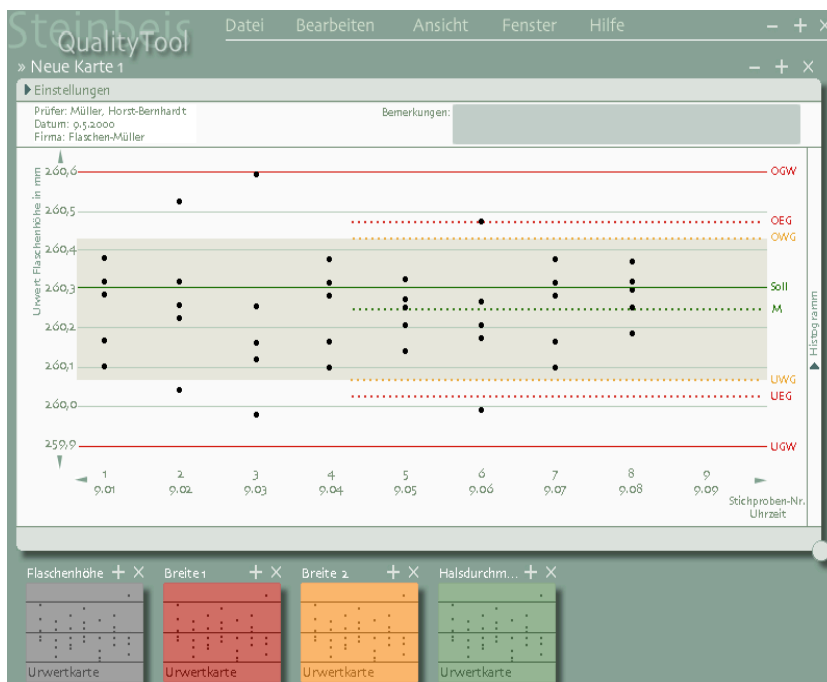
System requirements

Working memory: 2 GB or more
 Hard disk: 100 MB or more
 Operating system: Microsoft Windows 7® or higher

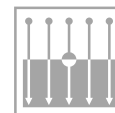
Development environments

Microsoft Foundation Class for integration into C++ projects:
 with Microsoft Visual C++ Compiler, minimum VC10.Net

Variant for integration into C# projects:
 with Minimum .Net Framework Version 4.6.1



Products
Service



Development
Research



Consulting
Training

QualityTool Comparison with tolerance limits