



Steinbeis
Qualitätssicherung und
Bildverarbeitung GmbH

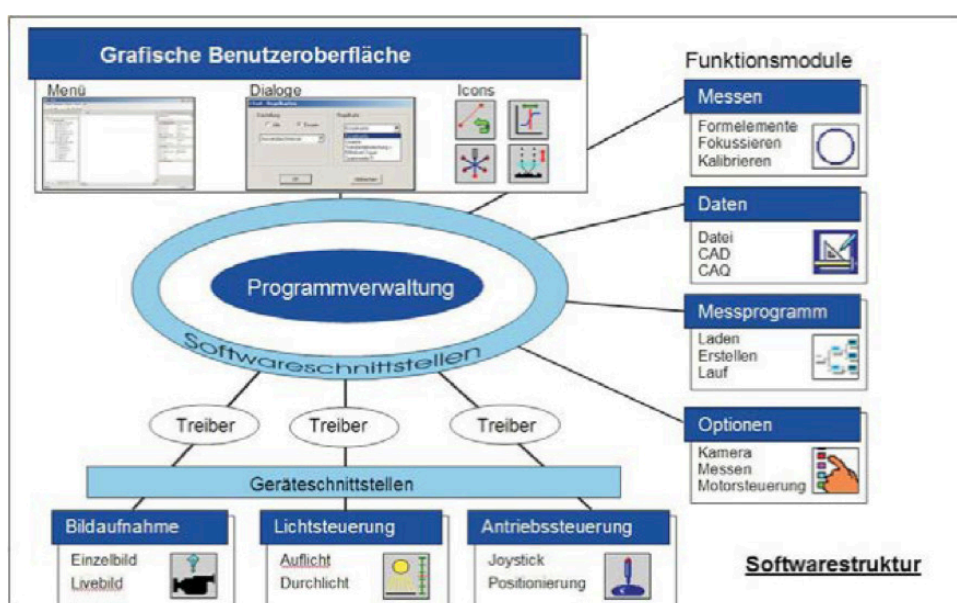
QuickImage

Object-oriented software library for measurement technology and industrial image processing

QuickImage significantly reduces the programming effort and investment costs in software projects.

QuickImage is a software library for precision metrology, quality assurance, image processing and automation in research, development and production.

In combination with the QualityTool, an online quality control for the measured quality characteristics - SPC or the monitoring of tolerance limits can be realised.



Example QuickImage: Structure Software for measuring and controlling optical coordinate measuring machines

The precision probing of edges can be carried out with different edge probing algorithms and enables minimal measurement uncertainties.

Camera interfaces and image processing cards, controllers for precision drives, light controllers and input/output cards from different manufacturers can be combined to form automated measuring systems.

The software algorithms are metrologically tested algorithms and have proven themselves in numerous application-specific projects. They provide reliable measurement results through certified compensation calculations for geometric elements.

Additional hardware components can be integrated on request.

The object-oriented software library QuickImage is systematically structured and the algorithms are implemented as a Dynamic Link Library (DLL) in the object-oriented programming language C++.

The numerous functions for controlling frame grabbers, image acquisition, image storage, image display as well as measurement functions solve problems of computer-aided quality assurance, measurement technology and automation technology with image processing systems.

The algorithms are grouped into classes and have programming interfaces for numerous software and hardware components. For example, programming interfaces are included for cameras, image capture, overlay display, filter functions, measurement and compensation of geometry elements, coordinate transformation and position compensation for the inspection objects, in/out interfaces, control of precision drives and the reading of incremental length measuring systems.

A quality guarantee and careful support through a service and maintenance hotline is provided.



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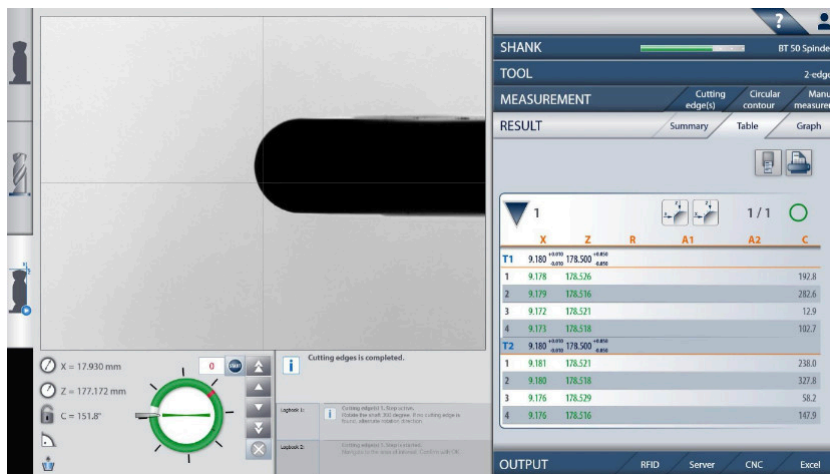
Description

QuickImage has been specially developed for optical coordinate metrology and therefore contains metrologically tested measurement and compensation functions:

- Precision edge probing with different edge probing algorithms, such as subpixeling, maximum slope, threshold and correlation.
- Algorithms for pixel and sub-pixel accurate contour tracking.
- Compensation calculation for geometry elements according to Gauss and Chebyshev.
- Autofocus algorithms with different focus criteria.
- Control of several different light sources.
- Readout of incremental sensors for precision length measurement technology.
- Reading of temperature sensors.
- Data exchange with other programmes via export/import functions and Dynamic Data Exchange (DDE).
- Tools for quality assurance/management, such as frequency distribution, quality control charts for six different statistical parameters, characteristic matrix with tolerance comparison, Pareto diagram, process and machine capability indices.
- QuickImage is extensively and precisely documented for the programmer.

Development environment

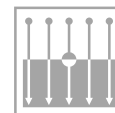
Quick-Image is available for MS-Windows 10 and Microsoft Visual Studio C++, VC 9 to VC 16.



Example QuickImage: Intuitive operating software for optical tool measurement



Products Service



Development Research



Consulting Training