Weld seam

The dhs software module Weld Seam was especially developed **for evaluating welded joints**. Some **components** involve **large numbers of welded joints**, particularly in automotive engineering, steel construction and pressure vessel construction. The dhs tool is used to record all the **necessary testing procedures in measurement profiles for each component** so that test procedures can be carried out without loss of time a**longside the production process.**
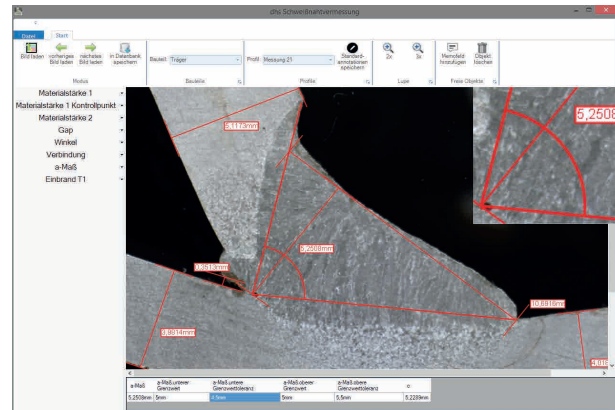It is also possible to **generate statistical evaluations of individual components** and measurement processes to facilitate the long term assessment of the entire production process.

- Indication of tolerance deviations from the component specification
- Measurement of target value in the image
- Adjustment of warning limit from measured value
- Automatic allocation of measuring profiles

Measuring functions

- Weld seam measurement
- Thickness of workpiece
- Thickness of seam, Length of seam
- Weld penetration, Weld elevation
- Notches, cavities
- Gap width, drop a perpendicular
- Design throat thickness
- Angle of weld fillet, Angle of weld toe

Additional functions

- Digital zoom
- Measuring lines can be edited freely (end markers, line width, colour)
- Measurements are continuously displayed throughout the measuring process
- turn measurement
- hide measurement values
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Information in the overview

- Specially developed tool for the **rational, production-related evaluation** of welded connections
- Numerous measuring functions and operating aids
- All measuring processes are **reproducible** (can be stored in profiles for the specific component)
- **Statistical evaluations** alongside production
- Export images and measurements to the dhs Image Data Base
- Adjustment from warning limits

about the dhs Image Data Base

Appropriate testing for each component

- International standards and customer-specific component standards are recorded for each measurement process
- Tabular overview of the measurements
- Group measuring functions into profiles to facilitate reproducing individual measuring processes
- Display deviations from the stipulated tolerance in the selected component specification
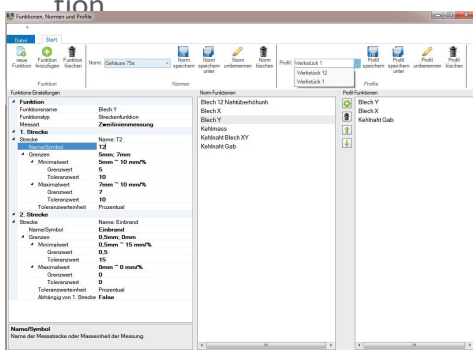
Recording standards

Storage options

All images and measurements are **stored in the dhs Image Data Base**. There are **special data base fields for this purpose** (for example, measurements, their specifications, their results) to allow precise correlation.

Statistical evaluations

The CSV interface, integrated into the basic module from dhs Image Data Base, can be used to generate statistical evaluations for individual components and specific measurement results. Data is selected using the previously created data base fields.

Reporting

The expansion module dhs Reporting offers you an ideal tool for professionally documenting your work. All previously recorded images, texts, and measurements currently in the data base can be compiled to form a test report and output.

Suitable hardware

For the rapid monitoring of welds at low magnification we offer the dhs EasyController (as an alternative to stereo microscopes and macroscopes). This is a compact, inverse optical system with integrated digital camera and LED ring light.

In conjunction with our software modules dhs Weld Seam Measurement and Reporting, this is an ideal system for the rational evaluation of samples and workpieces within the production facility.