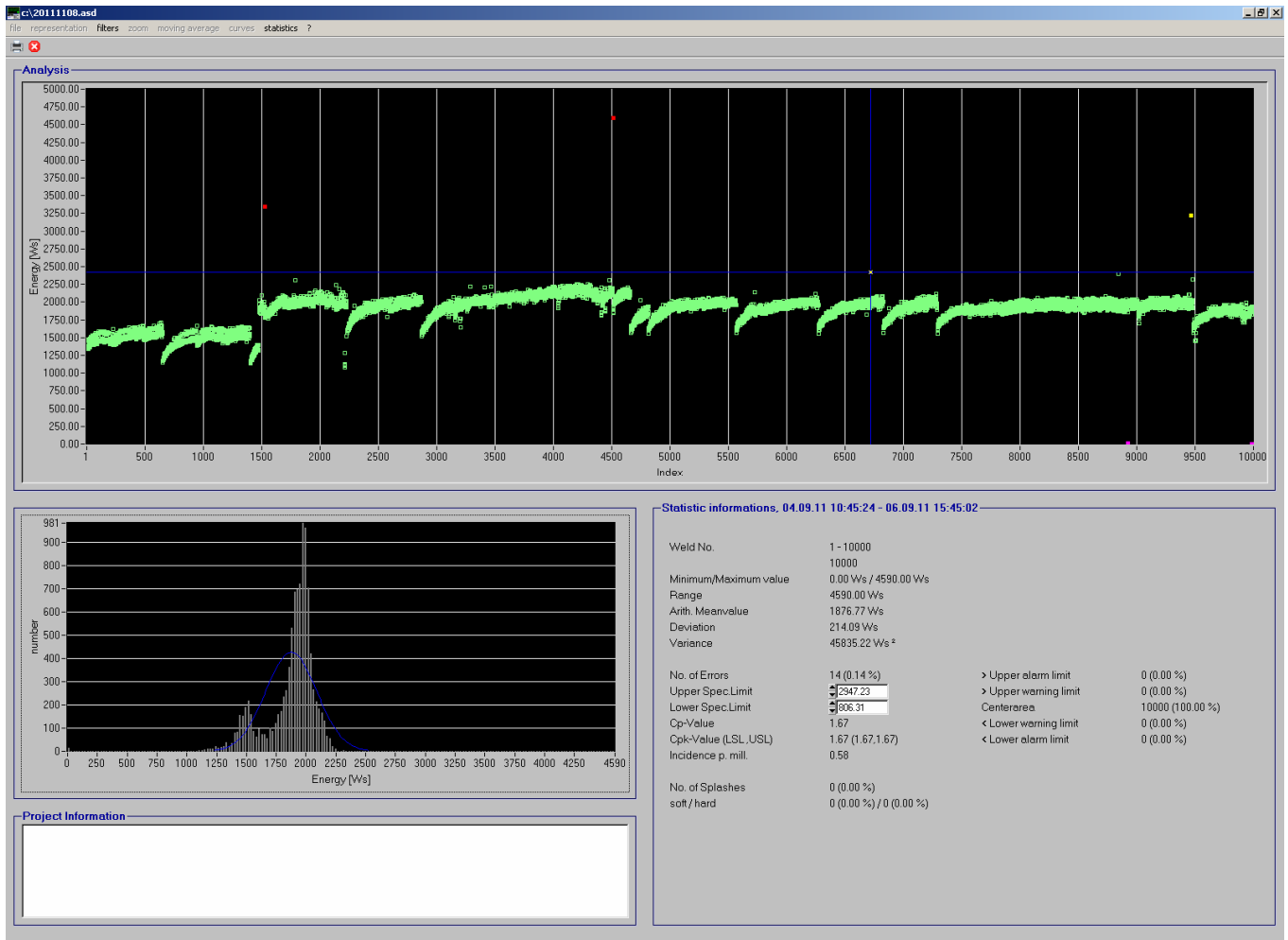


**SPATZQS+ PC-Quality Assurance Software**



Along with powerful and precise welding current sources, the **SPATZQS+** PC quality assurance software constitutes another key element of a quality assurance concept for high-quality resistance-welded joints. This applies in particular when manufacturing products which are subject to high cost pressure as a result of large production quantities.

Apart from serving as a means of documenting and archiving welding process data for up and running production operations, the **SPATZQS+** PC quality assurance software is also a particularly efficient tool for use in attaining and verifying the necessary machine and process capabilities in connection with commissioning and process optimisation measures.

Installed on the office PC, the **SPATZQS+** PC quality assurance software permits offline analysis of the welding process data records recorded by the **SPATZMulti04** weld recorder or the **AutoSPATZ**, **DragSPATZ**, **ServoSPATZ** and **SPATZ** welding systems.

The data records of the last 10,000 welds contain the complete process parameters for each individual weld. Data transfer to the PC is done via SD memory card with the **SPATZMulti04** weld recorder and with the weld timer of the **SPATZ** series via the handheld programming device **SPATZBG-02**, a laptop with the **AutoSPATZAS-01** software or a line PC with the **AutoSPATZAS-32** software. Analysis and evaluation of all the data can be carried out at spread or concentrated intervals, according to either delivery batches or production time.



This means that welding process data can be assessed at time intervals ranging from a few seconds to days or weeks, or in quantities ranging from individual welds to thousands of welds.

The scope of assessment intervals enables factors and correlations to be identified which previously went unnoticed. All analyses can be printed out for documentation purposes. Additional comments can also be inserted into the analysis record in a special entry field.

Both logs with time stamps and quality control charts can be generated for all welding process parameters. The quality control charts contain all the key characteristics which are necessary for the purposes of statistical process control (SPC). In addition to analyse the total population of all welding data, it is even possible to carry out program related or spot related analysis. Independent analysis is possible for each welding program.

In addition the curve progressions recorded by the **SPATZMulti04** weld recorder can be displayed in the **SPATZQS+** software. Analysis of a single weld or comparison for example of the current and voltage curve progressions is easily possible.

## Technical Data:

Analysis data: RMS welding current, electrode voltage, welding time, trigger angle, resistance, energy, welding force, electrode displacement, spot number, program number, time, date, type ID, part ID, welding error code, device error code, weld expulsions, change of values

Statistical information: number of faults, mean value, standard deviation, minimum value, maximum value, range,  $C_p$ ,  $C_{pk}$ - value, frequency distribution, histogram

Languages: English, German, French

Requirements: Microsoft Windows XP, Windows 7

