

SPV-5000

Short-Form-Information Welding-Process-Visualization

The SPV-5000 software is a powerful tool for the visualization of welding process parameters. In combination with our welding controller **Akzent-5000** all relevant welding parameters can be monitored and controlled. It is also a useful tool for the documentation and storage of process records.

The SPV-5000 software allows a complete trace ability of nonconforming results and/or disoperation. It is a very helpful tool to meet the requirements of common quality management standards.

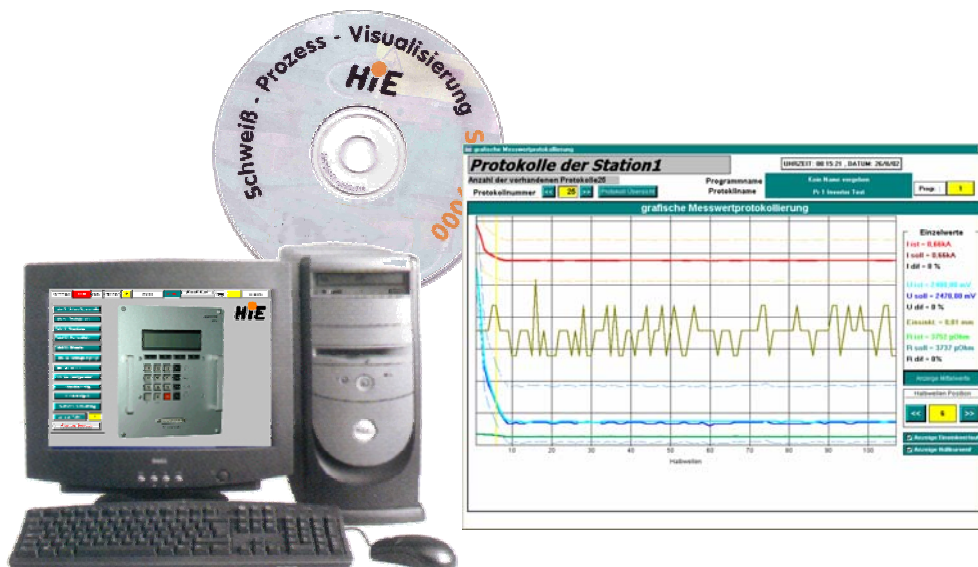
The operating shell with clear structured windows and function keys helps the operator to handle the software within short time.

Range of Performance of the SPV-5000 Software:

- Backup of the configuration parameters for each controller
- Project related administration of welding sets / programs
- Centralized administration of the configuration of up to 100 different controllers
- Record keeping of process data, non conformities, changes of parameters etc.
- Graphical analysis of welding records
- Fast parameter changes by intuitive operating shell
- Individual login for each user

Options:

- Networking of up to 50 welding controllers
- Part related administration of parameters/programs
- Alarm signal via SMS to the mobile phone in case of trouble
- Remote monitoring (intranet, remote data transmission)
- Operation via touch screen possible
- Export to MS-Excel



SPV-5000 Screens

The screenshot displays the HiE SPV-5000 software interface, which is used for recording and analyzing welding data. It consists of several overlapping windows:

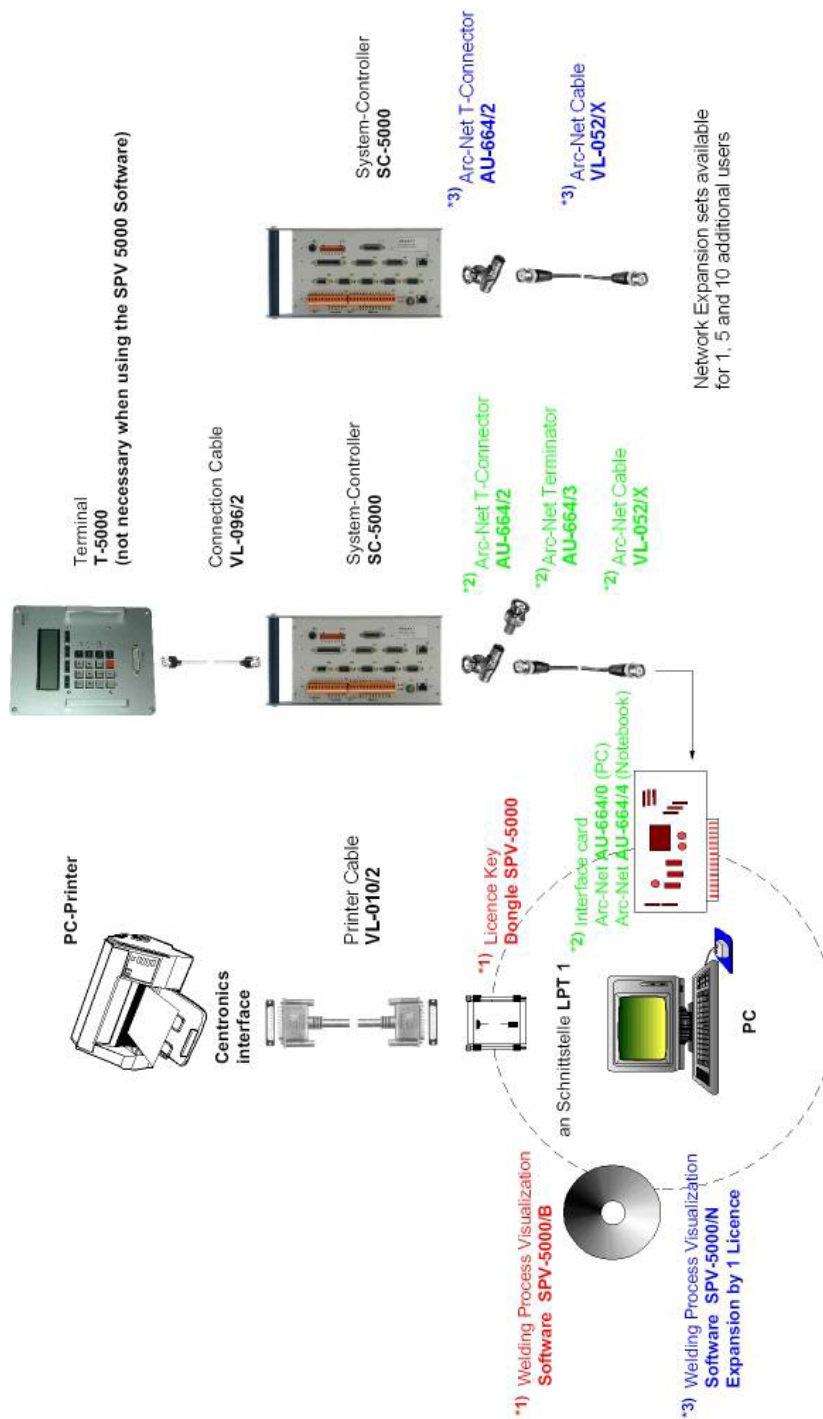
- Top Window (Data Table):** Shows a table of recorded data for 28 half-waves. The columns include 'U (mV)', 'U Lem (mV)', 'U dif (%)', 'I Lem (A)', 'I dif (%)', 'R (µOhm)', 'R Lem (µOhm)', 'R dif (%)', 'Einsinkl. (mm)', and 'Einsinkl. (mm)'. The data shows consistent values across all half-waves, such as U Lem at 470 mV and I Lem at 0.182 A.
- Protocol Settings Window (Wegprotokollierung):** Displays the configuration for the 'Einsinkl.verlauf' protocol. It includes fields for 'gewähltes Protokoll Nr.' (26), 'Anzahl der Protokolle' (25), and 'Programmname' (Pr 1 Inverter Test).
- Graphical Overview Window (grafische Messwertprotokollierung):** Shows a graphical representation of the measured data. The x-axis represents 'Halbwellen' (half-waves) from 0 to 100. The y-axis represents various electrical parameters. The graph shows a red line for current (I) and a blue line for voltage (U), both exhibiting a characteristic half-wave pattern. A green line represents resistance (R), which remains relatively constant. The interface also includes a sidebar with 'Einzelwerte' (individual values) and control buttons for 'Anzeige Mittelwerte', 'Anzeige Einsinklverlauf', and 'Anzeige Halbwellenverlauf'.

- The recorded data can be printed out on an external printer or written into an Excel file.
- The list design can be adapted to company specific requirements.
- The following parameters can be visualized in parallel in one graph:
 - Current
 - Voltage
 - Resistance
 - Depth
- The measured current and voltage values are recorded together with the results of the related teach welding
- The graphical tools include the visualization of deviations of current, voltage or resistance compared to the related teach welding curves.
- The measured curves of current or voltage can be enveloped. Transgressions and under runs are marked in the graph. Every welding spot can be analysed half wave wise or every millisecond.

SPV-5000 System Overview

SPV-5000 Software plus Arc-Net Hardware Package

Connection of one or more welding controller via Arc-Net PC-interface card (networkable).



SPV-9000 System Requirements

PC or Notebook

PC : CPU 600MHz, 128 MB RAM, 10 GB HDD, CD-ROM, LPT 1-Port.
Arc-Net interface card

Monitor : Screen size min. 17" (or 15" TFT), resolution: 1024x768, VGA, 16 Mio. colors

Operating system : Windows 95, Windows 98SE, Windows ME, XP, 2000

Akzent SC-5000: SC-5000 Software version 1.5.0 or higher