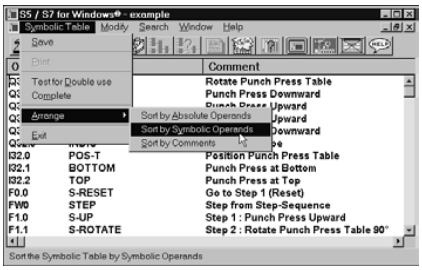
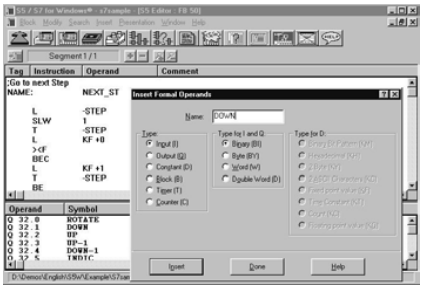
S5 for Windows®

The *S5 for Windows*® is an excellent software tool for creating, modifying, testing, and documenting programs for Programmable Logic Controllers (PLC). *S5 for Windows*® is used to program the Siemens PLC family SIMATIC® S5 with the programming language STEP® 5. The logic presentation is available in Ladder Diagram (LAD), Control System Flowchart (CSF), Statement List (STL), and Graphical Step Sequence G5 for Windows® for programming, editing, and testing. Import and Export Functions are available to convert existing programs in the *S5 for Windows*® format and vice versa. In addition, original Siemens PLC programs can be embedded into *S5 for Windows*® projects without any program conversion.



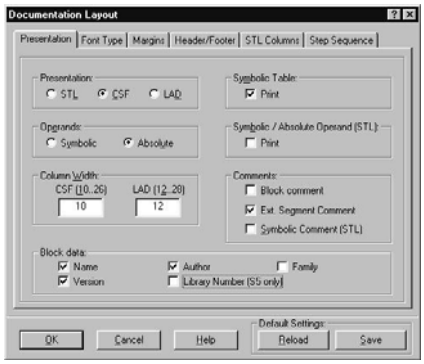


Creating and Editing

The Editor, integrated under *S5 for Windows*® can create, modify, and manage the contents of an entire Symbol Library, as well as search and replace functions with multiple criteria. This Editor provides the same easy to use tools as supplied with other *Windows* applications. The function "Rewire" is extremely easy to use. A Syntax check for existing addresses, absolute or symbolic is also integrated. The Editor, when used to create Ladder Diagrams or Control System Flowchart, can display complex functions. Special care has been taken to allow easy operations with the Mouse and / or the Keyboard. A Cross Reference List and / or the corresponding Symbol Library with the correct address is displayed simultaneously. The Symbol Library may be edited in its own window simultaneously. The allocation of new addresses with a syntax check is integrated. Statement Lists may be created with the same easy to use tools of the Symbol Editor. The *Windows* Clipboard with the Cut-, Copy-, and Paste Functions is supported for easy Statement List manipulation. Statement Lists may be converted to Ladder Diagrams or Control System Flowchart, if they can be displayed. Converting Ladder Diagrams or Control System Flowchart into Statement Lists is always possible.

Documentation

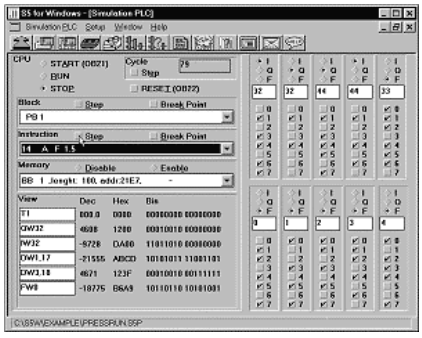
S5 for Windows® supports the installed *Windows* Printer. The program created will be printed with multiple comments and preset headers and footers. The selection of font and size are obvious.



A separate dialog box is provided to select groups of operands to be printed as a Cross Reference list. Open windows, such as the status window, may also be printed.

Simulation S5

With the *Integrated Simulation PLC* it is possible to test your PLC programs. No additional hardware is needed. The test will be performed on your PC. The *Simulation PLC* gives you the same online status display as a real PLC connected via a serial link. With the click of the mouse or with the keyboard you can set or reset Inputs, Outputs, or Flags directly within the online status display. From the *Integrated Simulation PLC* Window the PLC program can be executed in single steps. The single step operation allows you to execute a single program cycle, a single Block, or a single instruction within a block. You will find buttons to start, stop, and execute the start OB's. Fields to display the value of variables and fields to display and set inputs, outputs, and flags, are provided. The *Simulation PLC* is an open system. It is also possible to connect *Peripheral Bytes* with hardware ports. Doing so, the *Integrated Simulation PLC* may read or write to (I/O Boards) having hardware ports. To extend the instruction set, the *Integrated Simulation PLC* has the ability to call DLL programs whenever it executes an unknown command.



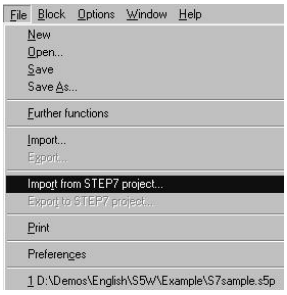
Extended Simulation Package

Optionally, an extended simulation package is available that can be executed under Windows 95/98/2000/NT/XP/ME. The Extended Simulation PLC provides the functionality of a Simatic® CPU 945. System commands, floating point values, and double words can be executed. Extended function blocks (FX), data blocks (DX), and extended flags (S) are supported. The number of timers and counters are extended to 256 each. The memory structure is equal to the memory of the CPU 945.

Import and Export of PLC programs

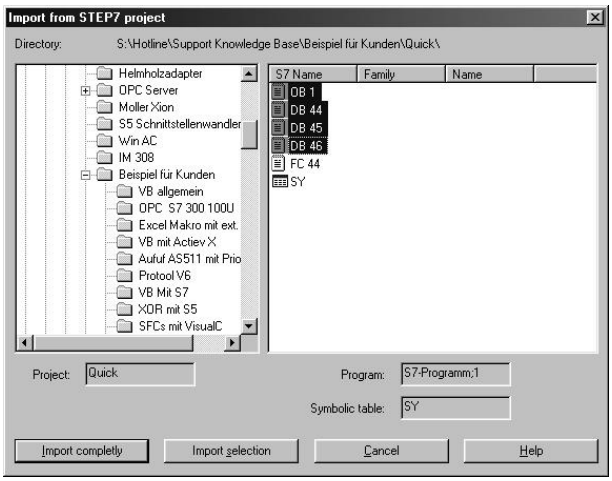
Existing PLC Programs

You can still use your valuable PLC program library. Importing and exporting existing PLC programs is easily done with *S5 for Windows*® and *S7 for Windows*®. S5 PLC programs stored on disk in a CPM format can be converted into DOS disks with a converter program. *S5 for Windows*® imports the converted files.



S7 Programs

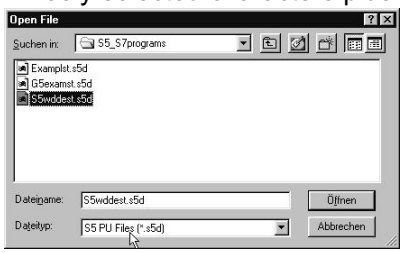
PLC Programs created with the *S7 for Windows*®



programming package can be conveniently transferred into the original Siemens STEP® 7 programming system. PLC programs written with a Siemens STEP® 7 programming system and S7 program libraries can be conveniently imported by *S7 for Windows*®.

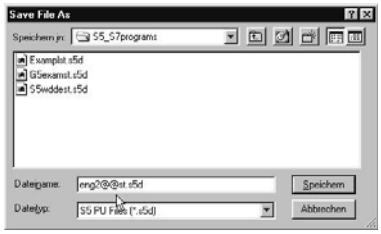
Importing [S5D - Format]

S5 for Windows® has an integrated import filter. PLC programs created with the basic PLC programming package, STEP® 5 from SIEMENS with a DOS operating system (or S5-DOS), can be opened directly. The import function creates an *S5 for Windows*® project without altering the original files. It is also possible to converts the files into the *S5 for Windows*® format by reading the data from the disk into the memory of your personal computer. Files created with SIEMENS software have a file name with six freely selected characters plus the characters **ST**. The characters **S5D** are used as the file name extension. At the same time the PLC program file is converted the symbolic table file is read into the memory of your personal computer. This file has the same name as the PLC program file (the first six characters), followed by the characters **Z0** and the file name extension **SEQ**.**)**. The conversion program does not alter original files.



Exporting [S5D - Format]

An export filter is also integrated in *SS5 for Windows*®. This filter converts PLC programs in the STEP® 5 format **S5D**. A PLC program existing in the memory of your personal is automatically converted during the write process to the disk. The file name has six freely selected characters plus the characters **ST.** The characters **S5D** are used as the file name extension. The symbol table relating to the PLC program is also stored on disk during this process. The symbol file gets the same name as the program file (the first six characters) followed by **Z0** and the file name extension **SEQ**.



S5 programs directly [S5D – Format]

S5 for windows also allows you to handle the S5D files directly without importing and exporting.

CPM Format

If your PLC programs have been created with one of the following SIEMENS programming systems, PG-685/-675/-635 in CPM, they must be converted in DOS disk format. We can supply the shareware converter program Sydex "22DISK". The converted files can be imported by *S5 for Windows*®.