SIEMENS

SINUMERIK 840C
Software Version 6

User's Guide   **03.2001 Edition**

Alarm Dialog for PC
OEM Version for Windows™

Manufacturer Documentation

SINUMERIK 840C
Alarm Dialog for PC
Software Version 6

User's Guide
OEM Version for Windows™

Applies to

Control   *Software version*
SINUMERIK 840C/CE   6
(Standard/Export Version)

03.01 Edition

SINUMERIK® documentation

Printing history

Brief details of this edition and previous editions are listed below.

The status of each edition is shown by the code in the "Remarks" column.

Status code in the "Remarks" column:

A...........................New documentation.
B...........................Unrevised reprint with new Order No.
C...........................Revised edition with new status.

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This manual is included in the documentation available on CD-ROM (**DOCONCD**)

Edition	Order No.	Remarks
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Marken
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Other functions not described in this documentation might be executable in the control. This does not, however, represent an obligation to supply such functions with a new control or when servicing.

We have checked that the contents of this document correspond to the hardware and software described. Nonetheless, differences might exist and therefore we cannot guarantee that they are completely identical. The information contained in this document is, however, reviewed regularly and any necessary changes will be included in the next edition. We welcome suggestions for improvement.

Subject to change without prior notice.

Preliminary Remarks

Notes for the reader:

This manual is intended for OEM customers and manufacturers of machine tools who use the SINUMERIK 840C OEM Version for Windows™.

This manual describes the alarm dialog OEMFORM and includes the following:

- Installation

- Start of the operator interface and processing of user alarms

- Generation of alarm databases for the control of 840C OEM Version for Windows™

Note

This manual is a revised version of Section 4 "Alarms" of the documentation

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For the acquisition or improvement of knowledge of these subjects, we recommend the training courses provided by SIEMENS. Please consult your local SIEMENS branch office or national company for further information.

This manual applies only to the alarm dialog for PC,
Software Version 6.

The alarm dialog, Software Version 6, can be used for all
NC controls SINUMERIK 840C, OEM Version for Windows™.

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Warnings

The following warnings with graded importance are used in this documentation:

Danger

This symbol appears whenever death, severe bodily injury or substantial material damage **will** occur if the appropriate precautions are not taken.

Caution

This symbol appears whenever minor bodily injury or substantial material damage **can** occur if the appropriate precautions are not taken.

Warning

This symbol appears whenever death, severe bodily injury or substantial material damage **can** occur if the appropriate precautions are not taken.

Caution

This warning (without warning triangle) indicates that material damage **can** result if the appropriate precautions are not taken.

Notice

This warning indicates that an undesirable situation or condition **can** occur if the appropriate instructions/information are not observed.

Table of Contents

1   Introduction

The alarm dialog OEMFORM 6 allows the user to enter his own alarm texts and messages in the database of NC control 840C OEM Version for Windows and to modify texts of existing system alarms.

The alarm dialog OEMFORM 6 has a comfortable user surface that allows to add, modify, copy and delete data records of alarms and messages in dBase IV databases.

In addition, OEMFORM 6 is provided with functions that allow the user to export data records to normal text files and to import data records from text files. It is thus possible to provide the alarm and message texts for a foreign-language translation and to reimport them to the database after the translation has been completed.

OEMFORM 6.1 runs under MS-Windows 3.1 and MS-Windows 3.11 as well as under Windows 95.

Besides the possibility of entering your own texts in the database, you can acquire also the source files of the Windows help files belonging to the individual Siemens alarms from the OEM mailbox. The customer-oriented modification of existing help texts and the integration of new texts is possible with a RTF text editor (e.g. MS Word for Windows) and the help compiler.

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2 Installation

OEMFORM 6 is a database application for creating and maintaining customer alarm texts/messages for the SINUMERIK 840C OEM Version for Windows. OEMFORM 6 runs under MS ACCESS V1.1 (runtime version) on an AT-compatible PC.

2.1 Hardware and software requirements

Alarm tool OEMFORM 6 is installed separately from the OEM test environment. Your computer must have the following resources if you wish to run OEMFORM 6:

Hardware: IBM-compatible PC with 386 processor or higher

Memory: 8 Mbyte RAM, 15 Mbyte free memory on hard disk for installation. OEMFORM can be installed on any drive. The amount of hard disk memory actually required then largely depends on the size of the generated databases, i.e. the number of configured alarms.

Monitor adapter: VGA graphics card (640×480 pixels) or more

Operating system: MS-DOS 5.0, MS-Windows 3.1 or higher.

We recommend a mouse or trackball (e.g. Microsoft Mouse or compatible) for greater user friendliness.

2.2 Installation procedure

Use the set-up program (SETUP.EXE) to install OEMFORM 6 on your computer. If an older version of OEMFORM is already installed on your PC, the set-up program automatically updates the current version.

1. Start Microsoft Windows

2. Place diskette 1 (write protection removed) in disk drive A (or B).

3. Select the command **Run** from the menu **File** in the Windows program manager.
    (Windows 95: Select **Start/Run**).
    Windows displays the dialog box **Run**.
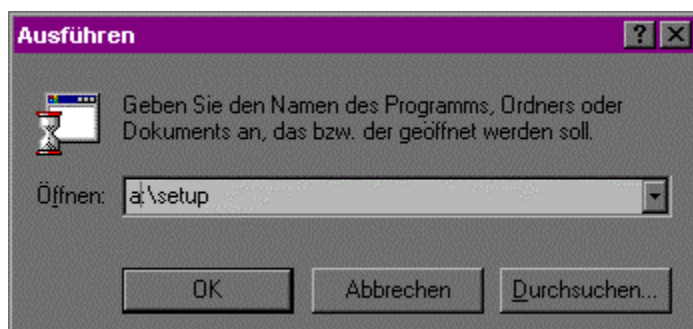
4. Enter the following in the "Command line": *a:\setup* (or *b:\setup*). (Open Windows 95: "open")

5. Select the button "OK".

6. Now follow the installation instructions on the screen. When you install OEMFORM for the first time you will be asked to enter 'user information' (name/company). This information is kept for subsequent installations of this version.

    Confirm your entries by clicking on the button "Continue".
    If you are requested to **update the file**, confirm with "Replace file".
    Select "No" to use the original version of **commdlg.dll**!

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7.   Then the dialog box **Enter directory** is displayed.

The default path is C:\OEM. You can define a different directory <AppPath>. Confirm your entry by clicking the button "Continue"

If the dialog box **Multi-user installation** is displayed you must click on the button "No" since OEMFORM uses its own working group! Click on "No" to use the original version of **WINHELP.EXE**!

After installation of the necessary data, the setup program creates an OEMFORM program group in which it enters the icon for OEMFORM 6 with the following file characteristics.

- **Command line:** *C:\OEM\MSAM110.EXE OEMFORM.MDB /INI C:\OEM\OEMFORM.INI*

- **Working directory**: *C:\OEM*

If an OEMFORM directory other than C:\OEM has been entered, you must enter the corresponding directory in the command line and working directory.

2.3   OEMFORM directory structure

After you have installed OEMFORM 6 the following directory structure appears on your PC.

deutsch		24.08.1998 20:29
english		24.08.1998 20:29
espanol		24.08.1998 20:29
francais		24.08.1998 20:29
italiano		24.08.1998 20:29
Leer		18.03.1998 22:41
portugue		24.08.1998 20:30
sprach10		01.09.1998 20:42
Sprache5		24.08.1998 20:30
Sprache6		24.08.1998 20:30
Sprache7		24.08.1998 20:30
Sprache8		24.08.1998 20:30
sprache9		01.09.1998 20:41
Msain110.dll	159 KB	19.11.1996 00:00
Msaju110.dll	69 KB	19.11.1996 00:00
Msarn110.exe	1.307 KB	19.11.1996 00:00
Ncktask.ico	1 KB	19.11.1996 00:00
Oemalarm.dbf	4 KB	11.06.1998 15:47
Oemalarm.mdb	64 KB	24.08.1998 21:06
Oemalarm.mdx	4 KB	11.06.1998 15:47

- The language directories are used to store the generated language-dependent databases with the user alarm and messages texts. Each one of these language directories contains a dBase IV *OEMALARM.DBF* with its associated index file *OEMALARM.MDX*.
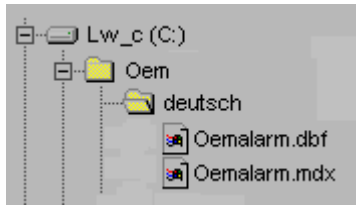
- You will find a detailed description of the alarm concept in the next Section.

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3   Alarm Concept

3.1   Overview

The SINUMERIK OEM Version for Windows alarm text manager is configured so that two separate dBase IV databases exist in the control:

- Siemens alarms (in database *SIEALARM.DBF* with index file *SIEALARM.MDX*))

- User alarms (in database *OEMALARM.DBF* with index file *OEMALARM.MDX*)
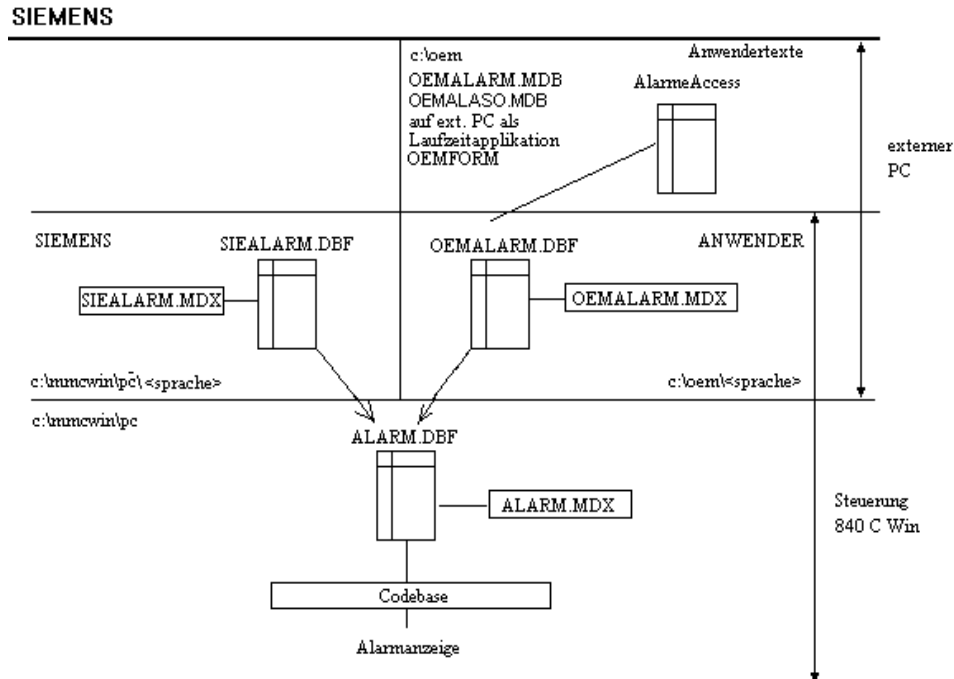
Fig. 3.1: 840C OEM Version for Windows alarm concept

Both the alarms/messages created by Siemens in directory C:\MMCWIN\PC\<language> as well as the alarms/messages created by the user in directory C:\OEM\<language> of the language currently set are linked to form a common database *ALARM.DBF* (with index file *ALARM.MDX*) "on-line" during start-up of the control.

ALARM.DBF is only generated in directory C:\MMCWIN\PC when the control is started up for the first time and when alarms/messages that have been changed are stored.

When this database is generated, Siemens alarms/messages are overwritten by user alarms/messages of the same name.

This database forms the basis for the alarm display with runtime-optimized access using CodeBase commands (CodeBase 5.0: C library for database management with fast on-line access).

3.2 Siemens alarm texts

All the NCK, cycle, PLC, MMC, start-up and 611D alarms/messages are stored in dBase IV database *SIEALARM.DBF* (index file *SIEALARM.MDX*) in the relevant language. These files are stored in the control in the directories C:\MMCWIN\PC\<language>.

3.3 User alarm texts

The user can create his own alarms and messages on an external PC and then integrate them in the 840C Version for Windows control. All the alarms/messages created by the user are stored in language-dependent dBASE IV databases OEM*ALARM.DBF* (with index file OEM*ALARM.MDX*). These language-specific databases are stored on the PC in directories C:\OEM\<language>.

To process the user alarm texts the two MS ACCESS databases OEM*ALARM.MDB (for the special languages: English, deutsch français, italiano, español, Language5..Language10) and OEMALASO.MDB (for the languages: português, svenska)* are used. These databases contain tables that are an image of the dBASE IV databases (OEM*ALARM.DBF* with index file OEM*ALARM.MDX)* linked in for each language.

The tables with the user alarms/messages and the language-dependent dBASE IV databases are linked to the MS ACCESS database *OEMFORM.MDB. OEMFORM.MDB* also contains the forms used to edit the alarm/message texts.

This separates code (*OEMFORM.MDB*) and data (*OEMALARM.MDB/OEMALASO.MDB*). It is thus possible to generate update versions of *OEMFORM.MDB* with extended functions which can still be used to edit the original texts in *OEMALARM.MDB/OEMALASO.MDB*.

The dBase IV databases OEMALARM.DBF (with index file OEMALARM.MDX) for each language can then be updated from the tables in OEMALARM.MDB and OEMALASO.MDB with OEMFORM.MDB. The language-specific dBase IV databases (OEMALARM.DBF with index file OEMALARM.MDX must be copied to the MMC-CPU module into directories C:\OEM\<language> of the control using a data transfer program (e.g. PCIN).

Moreover, alarm texts created for previous SINUMERIK controls can still be used. It is possible to import the alarm/message texts or PCF files created on the WS800A configuration workstation for a specific language.

3.4 Compatibility with previous software versions

dBase IV is a database system for a DOS environment, i.e. all texts in a dBase IV database are usually stored in the OEM character set (usually code page 437 or 850 for DOS).

In order to display these texts correctly on a Windows interface, MS Windows applications such as Excel, MS-Access etc. interpret texts stored in a dBase IV database (e.g. OEMALARM.DBF and ALARM.DBF) as texts created with a DOS application and therefore convert the stored characters from the current OEM character set (usually code page 437 American and 850 for several languages) into the ANSI character set (standard code page 104 for Windows).

To be precise, the OEM character set is defined by the code page that applies to the Windows version currently installed. The code page can be specified during user defined-installation of Windows. If the express setup for Windows is used the setup program identifies the code pages currently active for MS DOS and assigns it to Windows.

The active code page for Windows can be determined by starting the setup program from the DOS level and can then be changed.

3.4.1   Database concept for SINUMERIK 840C WIN SW up to 4.5

The procedure described above for ensuring correct display and processing of dBase IV databases is also supported by the alarm display of SINUMERIK 840C OEM Version for Windows up to and including SW 4.5 and MS-Access application OEMFORM SW 4.

The diagram below shows this:
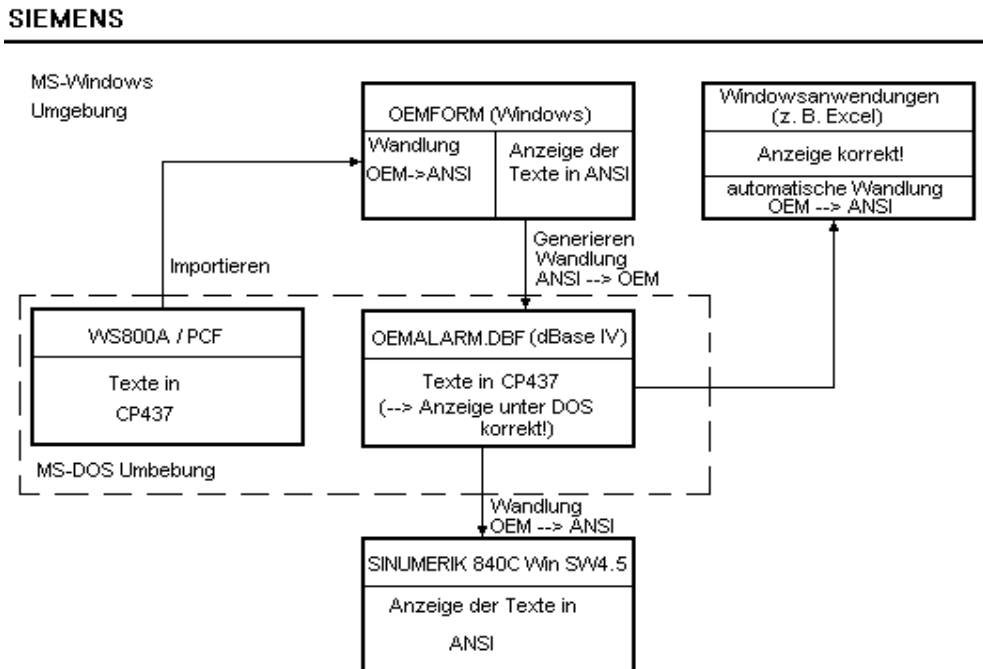
Fig. 3.2: Database concept SINUMERIK 840C WIN SW up to 4.5

The texts in the language-specific MS-Access databases (OEMALARM.MDB) have all been stored in the ANSI character set, i.e. when alarm texts are imported from previous PCF files the characters are automatically converted from code page 437 to ANSI.

When the language-specific dBase IV databases (OEMALARM.DBF) are generated from the MS-Access databases (OEMALARM.MDB) the texts are then converted from ANSI to code page 437. The texts in the dBase IV database OEMALARM.DBF are then stored in the OEM character set of PC Windows.

When the alarm texts stored in dBase IV database ALARM.DBF are displayed by the control's alarm display the characters are then converted again, i.e. interpreted according to the OEM character set set in the control (permanently set to code page 437) and converted to the ANSI character set.

This conversion can also be performed by other Windows applications, such as MS-Excel, so that texts are correctly displayed on the Windows interface.

The following is required for this database concept:

- The OEM character set that applies under Windows on the PC when generating language-specific dBase IV databases OEMALARM.DBF **must be identical with** the OEM character set of the MMC of the control. **Code page 437** is the standard setting for the control.

3.4.2 Database concept for SINUMERIK 840C WIN from SW 4.6

The database concept explained above can be used with SINUMERIK 840C OEM Version for Windows which supports the languages: English, deutsch français, italiano and español in software versions up to 4.5, i.e. automatic conversion between OEM and ANSI character sets can be used because the alarm texts can be created with code page 437 for all these languages.

In SINUMERIK 840C OEM Version for Windows from SW 4.6 the range of languages of the control has been increased to include: **português (Portuguese).** However, the texts of this new language cannot be created with code page 437 but must be created with the ANSI character set 850 or 860.

To get away from the character coding restrictions of MS-DOS and make the whole system more open for the integration of additional languages in the future, alarm texts in the dBase IV databases are no longer stored in the OEM but in the ANSI character set.

The diagram below elucidates the database concept used as from SINUMERIK 840C SW 4.6.
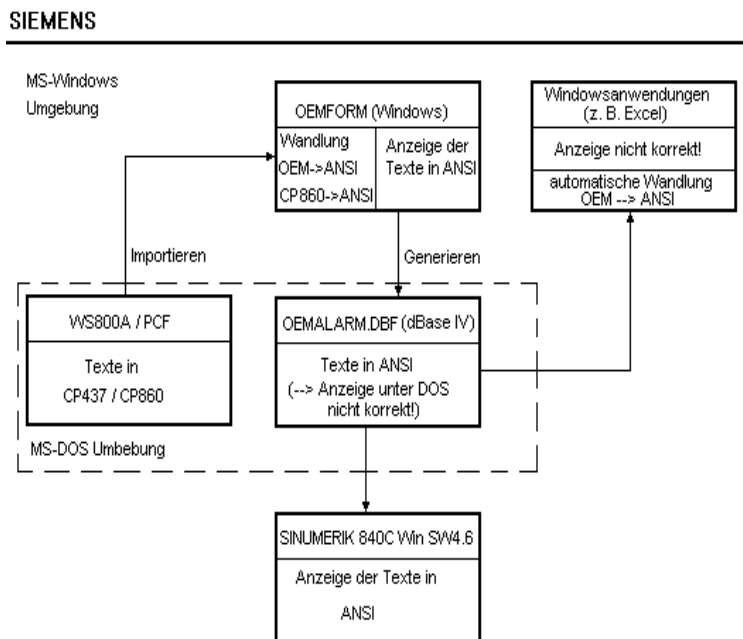
Fig. 3.3: Database concept SINUMERIK 840C WIN from SW 4.6

In contrast to earlier software versions, you can determine with software version 5.2 and higher of alarm tool OEMFORM whether the alarm texts are to be converted from ANSI to the OEM character set (for software versions up to 4.5) or not (for software versions as from 4.6) when creating the dBase IV databases OEMALARM.DBF.

Nor does the alarm display of the control convert from OEM to ANSI with software version 4.6 and higher, i.e. the alarm texts of the dBase IV databases generated with the new OEMFORM are displayed correctly.

The texts of database OEMALARM.DBF are no longer displayed correctly under DOS applications such as dBase nor under Windows applications.

3.5   Consequences for alarm text creation

The various database concepts within control software versions up to 4.5 and as from 4.6 result in the following:

- The alarm texts of dBase IV databases OEMALARM.DBF that were generated with the old OEMFORM version (up to SW 4.5) will no longer be correctly displayed in the control as from SW 4.6 because in this case the alarm texts are converted from ANSI to OEM when the databases are generated. Texts are not converted back from OEM to ANSI in the control from SW 4.6.

  dBase IV alarm databases OEMALARM.DBF created as such cannot simply be copied to the control when upgrading the control software from SW up to 4.5 to SW as from 4.6, for example, but must be regenerated from the MS-Access databases OEMALARM.MDB with OEMFORM!

- In the current OEMFORM 6, you can select whether the dBase IV databases are to be generated according to the procedure for NC control software versions up to 4.5 or for software versions as from 4.6.

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4 Editing User Alarms

Database application OEMFORM is used to create and maintain user-specific alarm and message texts for the SINUMERIK 840C OEM Version for Windows.

4.1 Starting OEMFORM

When it has been installed, there is no language in the command line of the OEMFORM 6 file characteristics. All forms are displayed in "English" as default. If the forms are to be displayed in a different language the command line must be completed as follows.

- **Command line**

  ..\msarn110.exe oemform.mdb /ini ..\oemform.ini **/cmd <language >**

- The following **languages** can be entered:

  English

  deutsch

  français

If a language other than one of the above is selected, a message stating that the chosen language is not available is output. Then the forms are automatically selected in the English language.

To start OEMFORM 6 proceed as follows:

1   In the Windows program manager open the program group that contains the symbol for OEMFORM.

2.   Double click on the symbol for OEMFORM. OEMFORM 6 displays the dialog box **Log on** when it is started up.
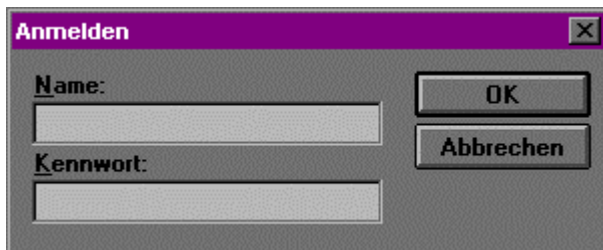
3.   Enter the user name **kunde** in the box "Name". If you have defined a password (see Section 4.2.15 Changing the password), enter your password in the box "Password", otherwise leave this box empty.

4.   Now select the button "OK" to log on.

OEMFORM is started.

With the first call after SetUp/update, a dialog window appears offering the compression of databases OEMALARM.MDB and OEMALASO.MDB.
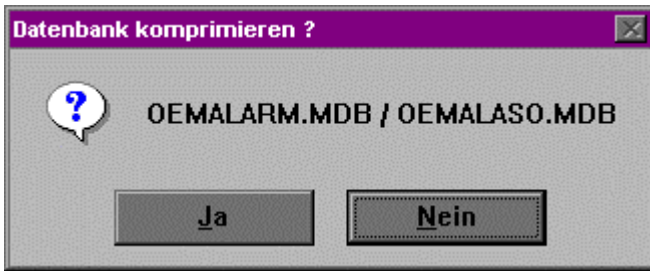
Fig 4.1: Compress database?

Button	Description
Yes	To be able to compress databases, these and any established connections must be closed. Oemform is, therefore, closed and you will be asked to register for the compression of OEMALARM.MDB and then OEMALASO.MDB. The databases are then repaired and compressed. After successful repair and compression a message is displayed for each database. After acknowledging these messages, you can restart Oemform.
No	No compression takes place. When restarting, the dialog window is displayed again offering to compress the databases OEMALARM.MDB and OEMALASO.MDB.

When it is called for the first time after OEMALASO.MDB has been introduced, a data record is generated in the table for every user text in OEMALARM.MDB. The following message appears:
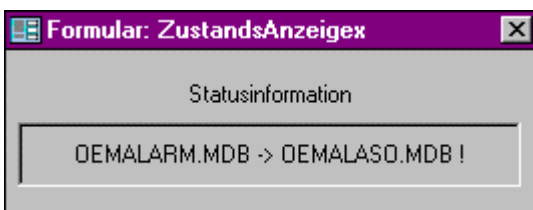
Fig 4.2: Initialize OEMALASO.MDB

On subsequent calls, a check is made to see if the databases OEMALARM.MDB and OEMALASO.MDB are consistent. During the checking process, the following message is displayed:
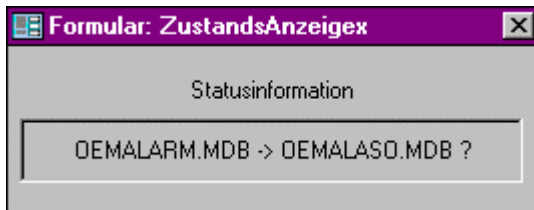
After the check has been successfully completed the form "Main overview" is displayed.

In order to start OEMFORM correctly OEMALARM.MDB and OEMALASO.MDB must always be taken from the same database!

If OEMALARM.MDB and OEMALASO.MDB are taken from different databases, i.e. the alarm text numbers do not correspond, the following error message is output when OEMFORM is started:

After this message has been acknowledged OEMFORM is terminated.

4.2 Main overview form of OEMFORM
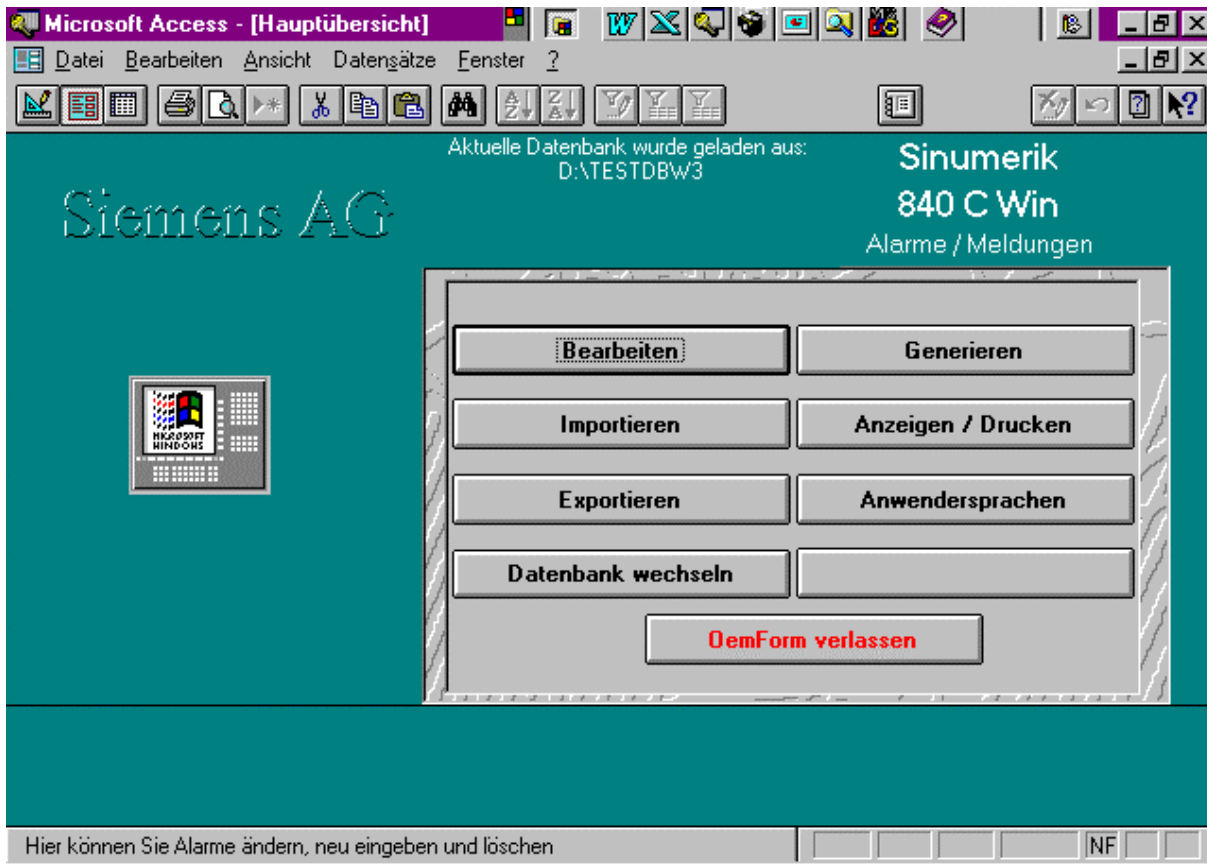
Fig. 4.3: Main overview form

Button	Description
Edit	Opens the form "Edit" to change, delete and add to alarms and messages.
Import	Opens the form to import text, WS800A, PCF, DBF and FlexOS files.
Export	Opens the form "Export" to export text files. It is thus possible to edit (e.g. translate) alarm texts and messages in a text file. As from OEMFORM 6.3 FlexOs alarm files can also be generated here.
Change database	Opens the form for changing the currently loaded database displayed in the main window: "Current database has been loaded from: <Drv>:\<Path>".
Generate	Opens the form "Generate" for creating the merged dBase IV database OEMALARM.DBF with the index file OEMALARM.MDX in directory c:/oem/<language>.
Display/print	Opens the form to display the alarms/messages on the screen. Also for printing out the alarms/messages.
User languages	Opens the form "User languages". This form is used to enter own language designations and their character sets.
Exit OEMFORM	Terminates the OEMFORM session

4.3   Edit form

Fig. 4.4: Edit form

Button	Description
Change	Opens a dialog box for entering the alarm/message number of the text you wish to change.
New	Opens the form "Enter alarms/messages" with an empty data block for entering new alarms/messages.
Delete	Opens the form "Delete alarms/messages".
Back to main overview	Closes the form "Edit" and returns to the "Main overview".

4.4   Enter alarm/message number

Click on the "Change" button in form "Edit" to open the following dialog window.
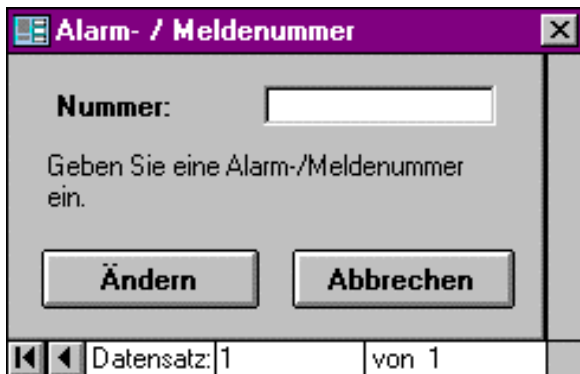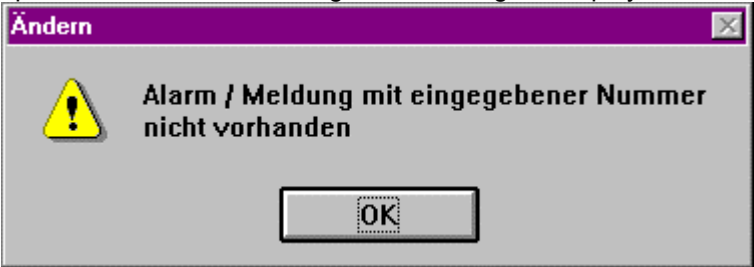
Fig. 4.5: Enter alarm/message number

Box/button	Description
Number	This is a text box in which you can enter the alarm/message number of the text that you wish to change.
Change	Click here to open the form "Change alarms/messages" with the text of your choice. If no data record with the alarm/message number you have specified exists, the following error message is displayed. Clicking the OK button takes you back to the form "Edit".
Cancel	Click here to close the dialog window and return to the form "Edit".

4.5   Change and enter alarms/messages

After you have clicked the "Change" button in the dialog window "Enter alarm/message number" or the "New" button in the form "Edit ", the following form opens with the selected or an empty data record.

Fig. 4.6: Change

Box	Description
Alarm/message number	An alarm/message number is entered in this text box. Each number can only be entered once. 0 or a number that already exists is rejected!
	See also Section. 5.3.4 "Number ranges of alarms and messages".
Text color	These are text boxes for entering the text color. The color is made up of red, green and blue, each of which can have the value 0 = zero component to 255 = full component.
	Red, for example, is produced with the setting 255, 0, 0 (default)
Background color	These are text boxes for entering the background color. The system default setting for the background is 40, 40, 40 (dark gray)
Display location	In this selection box the position at which the alarm/message text is to be displayed is defined by marking the check boxes "Alarm line", "Message line", "Logbook" and "Service Logbook". The default setting is display in the message line.
	The check boxes "Logbook" and "Service logbook" are not supported. For MMC, only messages are supported! The check boxes "Alarm line" and "Message line" are updated from "Type of alarm" (FlexOs data) if necessary.

FlexOs data	Here you can enter the values required to generate the FlexOs attribute file meldattr.080..		
	Scheme number	(Dialog window)	See SINUMERIK 840C under Interface description, part 1, section 13.4, Configuration of alarm, message and dialog texts and attributes.
	Type of alarm	0 other:	This box is updated from the display location if necessary. Alarm linezeile Message line
	Class of message		See SINUMERIK 840C under Interface description, part 1, section 13.4, Configuration of alarm, message and dialog texts and attributes.
	Type of message	(Class of deletion) 0 1 2 other	This box is updated from the type if necessary. PO RE CA ME
Type	The alarm/message acknowledgment class is entered in this box. PO = "Power On" RE = "Reset" CA = "Cancel" ME = "Message" (default setting). The acknowledgment class defines when the alarms/messages are acknowledged. This box is only for information for NCK/PLC and 611D alarms/messages as the acknowledgment class is defined internally or via machine data (PLC). The configurer should therefore check consistency with the control behavior here. Only MMC messages are supported. This box is updated from message text (FlexOs data) if necessary.		
Priority	Alarm priority can be assigned to the text here. Alarms/messages with a lower priority number have higher priority for display. Where priority is identical, the lower alarm/message number is displayed. Type Permissible range Default value Power On 0 - 100 10 Reset 101 - 200 110 Cancel 201 - 300 210 Message 301 - 999 310		
Sequence text number	A sequence text number can be entered here (default = 0). Not used.		
Help text number	The corresponding context ID (cf. Section 6.4 "Alarm help files") of the associated help topic in a help text file can be entered here (default with alarm/message number). This is useful if several alarms have the same help text (e.g. axis-specific alarms).		
No. of help text file	The number of the help text file that contains the help texts is entered here. Default setting = 0 for Siemens help text file. The associated file name in the INI file SIN840C.INI is selected with this number (cf. Section 5.2 "Alarm window").		

Language 1/Language 2	This is a pull-down list box by which you can select the language for alarm/message and status texts. Two languages can be selected for translating.

Language 1/Language 2 (only if special language support is activated, see Section 4.15.4) By double-clicking, you can display the code page table of the set font (see example on the right showing code page 852)	This pull-down list box allows you to select any font for alarm/message and status texts (see also page 20). The contents of the list depend on the fonts installed in the computer. To allow correct display of the texts on the control, ensure that the relevant system font of the control is set here. For special fonts the generation of the alarm text database OEMALARM.DBF is possible only with 4.6 →!
	
	NCK CP 852
	
	`[ALT]  0 1 2 3 4 5 6 7 8 9`
	`012x                    Ç Ü`
	`013x   é â ä û ć ç ł ë ő ő`
	`014x   î Ź Ä Ć É Ł í ô ö Ľ`
	`015x   ĺ Ś ś ö Ü Ť ĺ Ł × č`
	`016x   á í ó ú Ą ą Ž ž Ę ę`
	`017x   ź Č ş « » ▒ ▓ █ │`
	`018x   ┤ Á Â Ě Ş ╣ ║ ╗ ╝ Ż`
	`019x   ż ┐ └ ┴ ┬ ├ ─ ┼ Ă ă`
	`020x   ╚ ╔ ╩ ╦ ╠ ═ ╬ ¤ đ Đ`
	`021x   Ď Ë ď Ň Í Î ě ┘ ┌ █`
	`022x   ▄ Ţ Ů ▀ ó ß ô Ń ń ň`
	`023x   Š š Ŕ Ú ŕ Ű ý Ý ţ ´`
	`024x   - ˝ ˇ ˘ § ÷ ¸ °¨`
	`025x   · ű Ř ř ▪ █`

	840C-Win/FlexOs	English, deutsch, français, italiano, español, português and svenska	Standard setting MS Sans Serif
	840C-FlexOs	russkij suomi magyar, cesky, slovensky, polski	NCK CP 866 MS Sans Serif NCK CP 852
Alarm text 1/2	The user text is entered here (see also Section .6.4 "Structure of alarm/message line"). The text can contain max. 59 characters. This text also contains the alarm parameters (%n).
Status text	A note can be entered for the user here. The text must not be more than 80 characters long. The languages selected for the alarm/message text also apply to the status text.
End	Closes the form "Add alarms/messages" and returns to the form "Edit".
Copy	Opens the window "Copy" (see section 4.6). With the copy function you can reproduce the alarm currently displayed in the input form and copy it into an alarm area (e.g. axis-specific alarms).
Standard	Sets the attributes for color, display location, type, priority, sequence text number, help text number of the help text file as standard settings in the form "Enter"/"Change". New alarms/messages are provided with these standard settings. First, the preset system standard settings apply. If other values are set and this button is selected, these are entered as standard settings.

User	Sets the attributes for color, display location, type, priority, sequence text number, help text number and help text file number stored in the form "Enter"/"Change" with the button "Standard" if you have made another setting in the meantime (e.g. system standard settings).
System	Click here to set the standard system settings.

MS-Access automatically saves the displayed (current) data block after clicking the End key in the form "Change" or "Insert". If an attempt is made to exit the form "Enter" without entering an alarm number, the following error message is displayed:

Microsoft Access

⚠ Nullwert in Index oder Primärschlüssel nicht möglich.

[OK] [Hilfe]

To ensure unique identification of the data records the alarm number is set as the primary key. The value for the primary key must be different in every data record. This prevents entry of duplicate data records werden. MS-Access automatically generates an index, i.e. the contents are sorted. Sorting a zero value (empty data record) causes an error.

Another error message is then displayed when the OK button is pressed:

Microsoft Access

? Der bearbeitete Datensatz kann nicht gespeichert werden. Wenn Sie das Formular schließen, gehen Ihre Änderungen an dem Datensatz verloren. Trotzdem schließen?

[OK] [Abbrechen] [Hilfe]
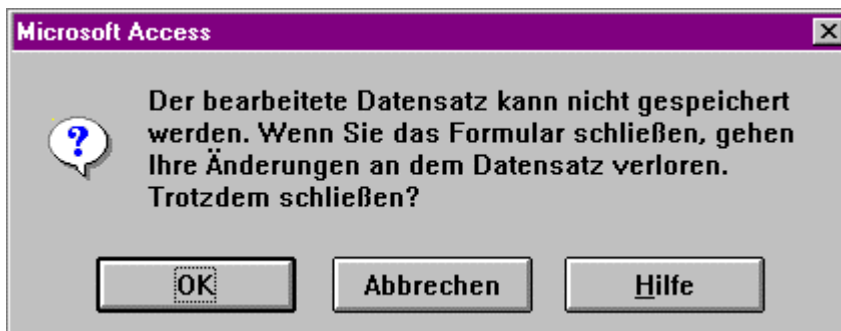
This error message means that the data record cannot be stored for the reasons given in the previous message. This message can be acknowledged with OK because the data record is empty.

Botton	Description
OK	Closes the error message. The input form is then closed without being saved and the Edit form is displayed again.
Cancel	Closes the error message, the input form continues to be displayed.

4.6   Copy alarms/messages

The following dialog window is opened when the button "Copy" in form "Enter"/"Change" is clicked.
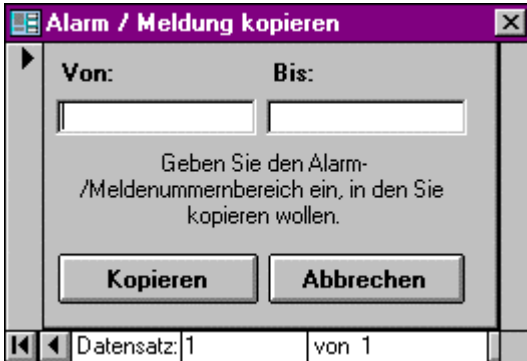
Fig. 4.7: Copy alarms/messages

Box/button	Description
From	This is a text box in which you enter the first number into which the alarm in the input form is to be copied.
To	This is a text box in which you enter the last number into which the alarm in the input form is to be copied. If either no number at all or the same number as was entered in <From> is to be entered, the alarm in the input form is copied to <From>.
Copy	Copies the alarm in the input form into range <From> to <To>. No confirmation is requested if alarms already exist in the range to be copied. If the alarm to be copied is in range <From>/<To> or if <To> is less than <From> error messages are displayed!
Cancel	Terminates the dialog without copying and returns to the input form.

If alarms already exist in the range to be copied (from / to) the following request for confirmation appears.
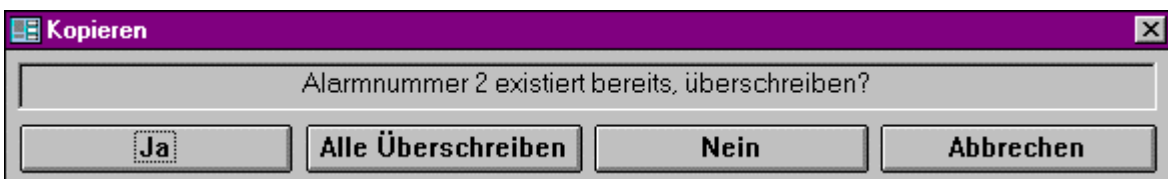
Button	Description
Yes	The displayed alarm is overwritten
Overwrite all	All the alarms in the range (From/To) are overwritten
No	The displayed alarm is not overwritten
Yes	Aborts copying and returns to the input form

Click the OK button to return to the "Enter"/"Change" form.

The following error message appears if a number smaller than the one in <From> is entered in <To>.
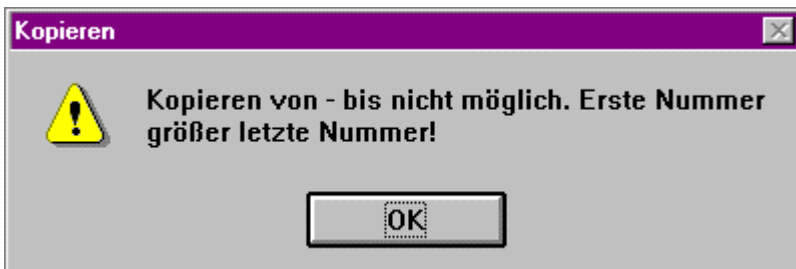
Click the OK button to return to the input form.

4.7   Delete alarms/messages

After clicking the "Delete" button in the "Edit" form, the following dialog screen is displayed.
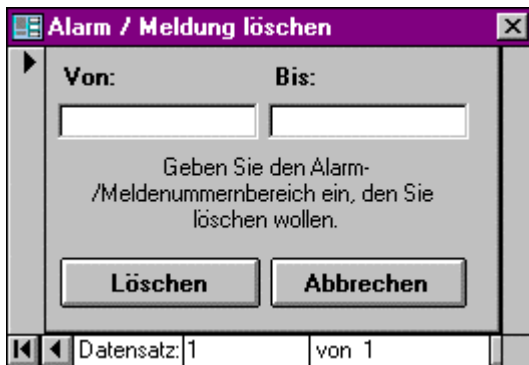
Fig. 4.8: Delete alarms/messages

Box/button	Description
From	This is a text box in which you enter the number of the first alarm to be deleted.
To	This is a text box in which you enter the number of the last alarm to be deleted. If you enter no number at all in this field or the same number as you entered in <From>, the alarm with the number in <From> is deleted.
Delete	The alarms in range From/To are deleted. If the value entered in <To > is smaller than that entered in <From>, an appropriate error message is displayed.
Cancel	Terminates the dialog without deletion and returns to the input form.

If a smaller number is entered in <To> than has been entered in <From>, the following error message appears.
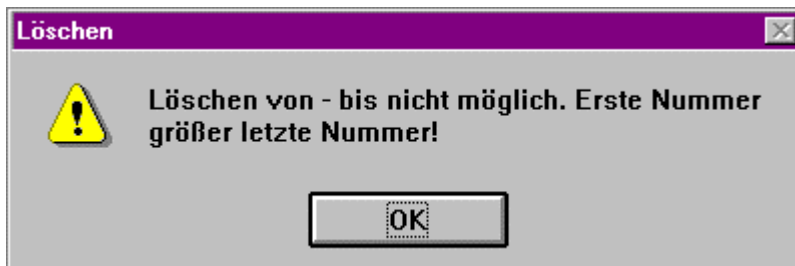
Click the OK button to return to the Edit form.

4.8   Export alarms/messages

To make it possible to translate alarm texts and messages without OEMFORM an option has been created for exporting the alarm texts into a text file. To do this, select the button Export in the OEMFORM main menu. This opens the form for exporting alarm texts shown below.

Fig. 4.9: Export alarms/messages

Box	Description
File name	This is a pull-down list box which you must first open to make a selection or in which you have to enter the name of the text file into which alarm/message and status texts are exported. If a file name with the extension .081 is entered, a FlexOs file is generated (see Section 4.8.1 Export FlexOs alarms).
Export language	This is a pull-down list box which you have to open in order to make a selection. Select the language of the texts that you wish to export. At the same time the export language also defines the directory into which the text file is to be written. The language selected here is entered in the 1st line of the text file when exported. A comparison with the language selected for import is then made.
Substitute language	Here you select (pull-down list box) the language for text output if no language has been entered in the export language. If no language is selected here, no text is output if there is no text in the export language. If a language is selected here, the text is output in the substitute language if there is no text in the export language. If there is no text in the substitute language either, only the alarm/message number is output. When exporting FlexOs files, the substitute language is ignored.

Code page	Here you select the code page (pull-down list box) to which the texts are to be exported. The following table gives an overview of the required conversions.			
	Language	from Code page in OEMForm	to code page for DOS text editor and FlexOS files	to code page for Windows text editor
	english	ANSI	437	ANSI
	deutsch	ANSI	437	ANSI
	français	ANSI	437	ANSI
	italiano	ANSI	437	ANSI
	español	ANSI	437	ANSI
as from 4.6	português	ANSI	860	ANSI
as from 5.6	svenska	ANSI	437	ANSI
FlexOs	suomi	ANSI	437	ANSI
FlexOs	russkij	866/A-Cyr	866	ANSI-Cyr
FlexOs	magyar	852/A-CE	852	ANSI-CE
FlexOs	cesky	852/A-CE	852	ANSI-CE
FlexOs	slovensky	852/A-CE	852	ANSI-CE
FlexOs as from 5.7	polski	852/A-CE	852	ANSI-CE
	With text files, the code page selected here is entered in the first line.			
OK	Initiates export of the texts into the text file (for FlexOs alarm text files, see Section 4.8.1 Export FlexOs alarms).			
Cancel	Terminates the dialog "Export" and returns to the form "Main overview".			

4.8.1 Export FelxOs alarms (from SW 6.3)

When a FlexOs alarm text file (meldtext.081) has been requested for export, the following dialog window opens to enable the user to manage FlexOs alarm/message texts. The file meldattr.080 is generated under the Oemform directory in the...\REG.051 directory and the language-related files meldtext.081 are generated in the corresponding ...\REG.051\<language>.008 directories. The header data for meldattr.080 and meldtext.081 which were read in during the import of FlexOs alarms can be modified here.

Fig. 4.11

Header data for: REG.051\meldattr.080	Here, information on the first lines for the attribute file of the FlexOs alarms is indicated. The user can change and extend this information as and if required. See SINUMERIK 840C, Interface description, part 1, section 13.4, Configuration of alarm, message and dialog texts and attributes.
Header data for: REG.051\<language>.008 \meldtext.081	Here, information on the first lines for the text file of the FlexOs alarms of the corresponding languages is indicated. The user can change and extend this information as and if required. See SINUMERIK 840C, Interface description, part 1, section 13.4, Configuration of alarm, message and dialog texts and attributes.
Code page	Here it is indicated with which code page the texts are exported.
OK	Initiates the export of texts into the FlexOs alarm file. Starting from the Oemform directory, the FlexOs alarm files are saved as REG.051\meldattr.080 and REG.051\<language>.008\meldtext.081.
Import	Imports the header data (meldattr.080 / .081) from the corresponding files (see Section 4.9 Import alarms/messages). Import is executed only if meldattr.080 and <language>*.081 are present!
Cancel	Closes the dialog "Generate FlexOs alarms" and returns to the form "Export".

4.8.2 Alarm concept for 840C (FlexOs)

The generated FlexOs alarm files have to be copied to the corresponding directories on the control. When booting the control, the alarm files meldattr.052 and meldtext.053 are generated from Siemens and user alarm files (see Fig. 4.12).
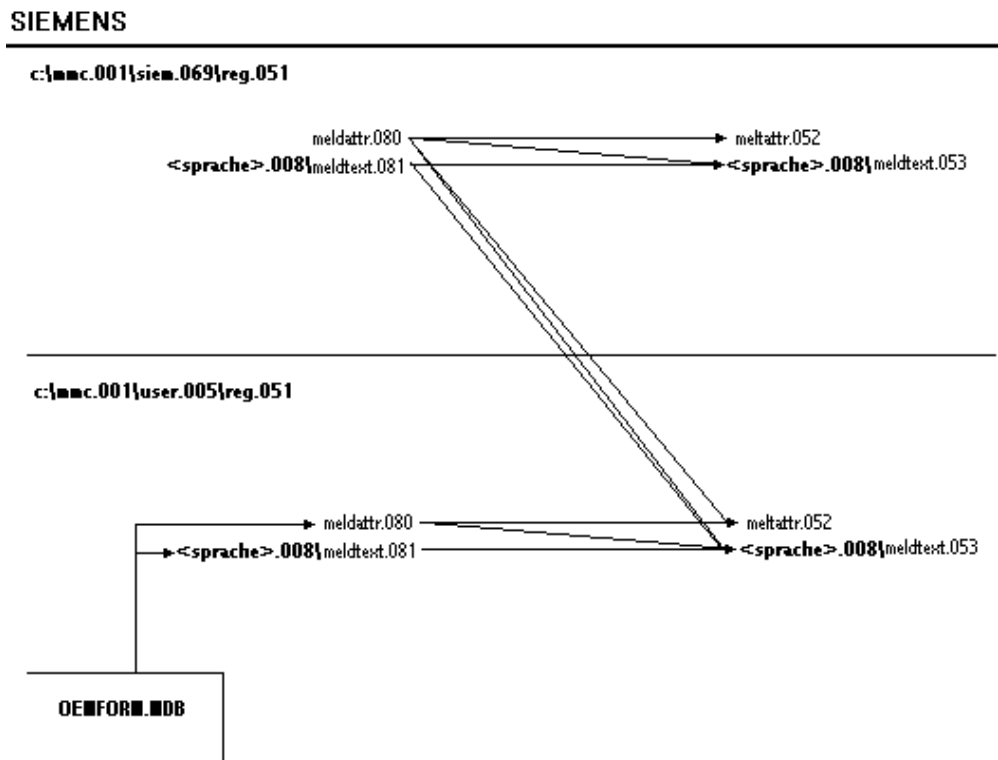
Fig. *4.12: Alarm concept for 840C (FlexOs)*

4.8.3 Structure of exported text file

The structure of the text file is as follows:

```
1           2           3           4
12345678901234567890123456789012345678 90
    [<CP>] [<language>] [mm-dd-yyyy] DO NOT ALTER THIS LINE!!!
    <  No.>  <alarm text.../message...>
    KOMTEXT  <comment for the status line... (only if a status text exists)
    <  No.>  <alarm text.../message...>
    >...
```

The first line contains OEMFORM information which is evaluated when texts are imported. If the text file is created externally, the first line must also be created. The following entries are allowed:

```
[      <CP>] [    <language>] [mm-tt-jjjj] DIESE ZEILE NICHT ÄNDERN!!!
[      437] [     english]
[      850] [     deutsch]
[      852] [    francais]
[      860] [    italiano]
[      866] [     espanol]
[     ANSI] [   language5]
[  ANSI-CE] [   language6]
[ ANSI-Cyr] [   language7]
            [   language8]
            [   language9]
            [  language10]
            [    <anwbez>]
            [    portugue]
            [     svenska]
            [       suomi]
            [     russkij]
            [      magyar]
            [       cesky]
            [    slovensk]
            [      polski]
```

<*anwbez*>:Other entries (user language designations) are possible.

The first line is followed by the texts to be translated. Alarm/message text begin with the alarm/message number followed by a blank. The text to be translated starts after the blank and ends at the end of the line.

If a status text exists for the alarm/message (comment in the status line with notes for the user), this is entered in the line after the alarm/message. The line with the status text starts with KOMTEXT followed by a blank. The text to be translated starts after the blank and ends at the end of the line.

If no status text exists, the next alarm/message follows the alarm/message without the KOMTEXT line. If no alarm text/message exists for an alarm/message number, either only the alarm/message number or the alarm text/message of a selected substitute language can be entered.

Example:

```
[ 437] [     deutsch] [08-10-1995] DO NOT ALTER THIS LINE!!!
   1120 ORD%4 %a1 Zero speed monitoring
   4000 %2 %3 General programming error
```

The text can be translated with a text editor. When translating a text you must ensure that the alarm texts/message texts are maximum 59 characters long and that the status text is no longer than 80 characters. Texts longer than this are reduced to the maximum length when they are imported!

Note:

If alarms/messages are altered after they have been exported to a text file in OEMFORM (changed, added to, deleted) before the translation is imported, inconsistencies can occur. No changes should therefore be made to the alarm database between extracting and importing the alarms/messages!

Example:

Texts have been exported and sent off for translation. The German text for an existing alarm is subsequently changed. When the translated texts are imported, the translation for the old German text is imported to replace the altered German text!

4.9 Import alarms/messages

You can import the following files into the database using the function Import:

- Exported text files

- PCF and WS800A files (*.TTF)

- dBase IV files (SIEALARM:DBF/OEMALARM.DBF)

Note:

No guarantee can be made that DBF files that have been manipulated or created using other applications are compatible with OEMFORM, i.e. it may not be possible to import alarms that have been exported into DBF and then edited with EXCEL.

- FlexOs alarm / message text files (MELDATTR.080/MELDTEXT.081)

In order to import alarms and messages created for earlier SINUMERIK controls, the text files (*.TTF) created previously with the configuring station WS800A must be copied with the file manager to the corresponding language directory of OEMALARM (...\<language>). The same applies to PCF files.

When importing WS800A files or PCF files, only assign the standard attributes (see "Standard" button in section 4.5 Change and enter alarms/messages) for color, display location, type, priority, next text number, help text number and help text file number to new alarms. For existing alarms, only the texts are imported whereas the attributes remain unchanged. If imported alarm texts are too long they are limited to the maximum length (59 characters).

Exported text files can be imported in the same way as WS800A/PCF files.

To enable the user to enter the system alarm texts in his user texts, dBase IV databases (SIEALARM:DBF/OEMALARM.DBF) can also be imported in OEMFORM. For this purpose, copy the SIEALARM.DBF files from the relevant directories C:\MMCWIN\PC\<language> of the control to the corresponding directories ...\<language> of the PC on which OEMFORM has been installed. The user can select whether to import the texts with or without attributes (see also section 4.9.1 Import FlexOS alarms).

To enable the user to also include the FlexOs alarm/message texts in his user texts, the FlexOs alarm/message text files can be imported in Oemform. For this purpose, copy file meldattr.080 to the directory under which the Oemform has been installed, and files meldtext.081 to the corresponding ...\<language> directories.

After selecting the "Import" button in the "Main overview" form, the following form is opened:

Fig. 4.13: Import

Box	Description
File name	This is a pull-down list box that you must first open before you can make a selection. The list displays all files in the directory ...\<language>. Select the name of the text/WS800A/PCF/DBF/FlexOS file from which the alarm/message and status texts are to be imported. In the case of flexOS files, please observe that also the file meldattr.080 is stored in the directory of OEMFORM.
Language	This is a pull-down list box that you must first open before you can make a selection. Here, you select the language of the texts that are to be imported. At the same time the language defines the directory from which the text/WS800A/PCF/DBF/FlexOS file is to be read. In text files the language selected here is compared with the export language entered when exporting. A request for confirmation appears if another language is selected here.
Code page	Here, you select the code page with which the texts are to be imported (pull-down list box). The following table gives an overview of the required conversions.

	Language	from code page for DOS text editor, FlexOs files and for 840C Win 4.5 dBase IV databases SIEALARM.DBF/OEMALARM.DBF	from code page for Windows text editor and as from 840C Win 4.6 ANSI/as from 6.2 ANSI Cyr and ANSI CE-dBase IV databases SIEALARM.DBF/OEMALARM.DBF	to code page in OEM form
	english	437	ANSI	ANSI
	deutsch	437	ANSI	ANSI
	français	437	ANSI	ANSI
	italiano	437	ANSI	ANSI
	español	437	ANSI	ANSI
as from 4.6	português	860	ANSI	ANSI
as from 5.6	svenska	437	ANSI	ANSI
FlexOs	suomi	437	ANSI	ANSI
FlexOs	russkij	866	ANSI-Cyr	866/A-Cyr
FlexOs	magyar	852	ANSI-CE	852/A-CE
FlexOs	cesky	852	ANSI-CE	852/A-CE
FlexOs	slovensky	852	ANSI-CE	852/A-CE
FlexOs as from 5.7	polski	852	ANSI-CE	852/A-CE

Box	Description
	The code page entered here is compared with the code page entered in the text file for export. A request for confirmation appears if another language is selected here.
Text file	When an exported text file is to be imported, the information <DATE>I<LANGUAGE>I<CODE PAGE> entered in the first line is shown here. For other files, this box is not indicated.
OK	Starts importing texts from text file.
Cancel	Terminates the "Import" dialog and returns to the form "Main overview".

If a text file has been exported from English and Portuguese is selected when the file is imported, the following request for confirmation appears:

```
Warnung                                    [X]

  (?)   Die Textdatei wurde aus English exportiert, soll sie
        in portugue importiert werden ?

      [  Ja  ]      [  Nein  ]      [ Abbrechen ]
```
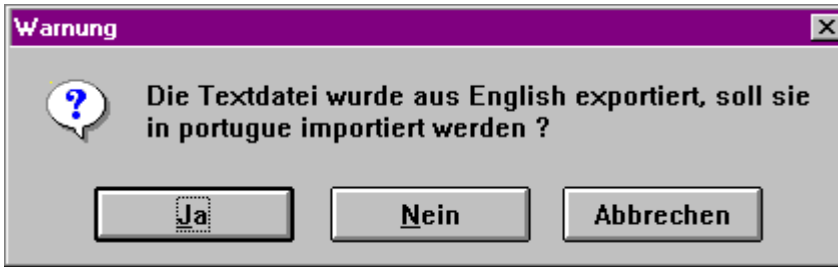
Button	Description
Yes	The texts are imported in the language português (Portuguese)
No	The texts are imported in the language English
Cancel	Returns to Import form without importing the text file

If a text file has been exported with ANSI and code page 860 is selected when the text is imported, the following request for confirmation appears:

```
Warnung                                    [X]

  (?)   Die Textdatei wurde mit ANSI exportiert, soll sie
        mit 860 importiert werden ?

      [  Ja  ]      [  Nein  ]      [ Abbrechen ]
```
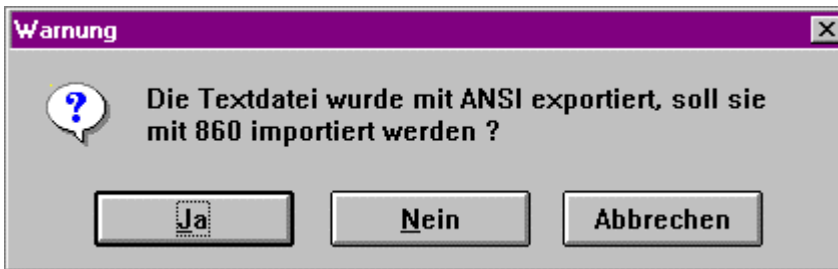
Button	Description
Yes	The texts are imported with code page 860
No	The texts are imported with the ANSI code page
Cancel	Returns to Import form without importing the text file

When a dBaseIV database (SIEALARM.DBF/OEMALARM.DBF) or a FlexOs alarm text file (meldtext.081) has been requested for import, the following dialog box appears asking whether you wish to import only the texts or attributes and texts.

```
Importieren                                [X]

  (?)   Nur Texte importieren ?

      [  Ja  ]      [  Nein  ]
```

Yes	Click here if you wish to import texts only. For alarms that already exist in the database, only the texts are imported without changing the existing attributes. For new alarms, the attributes are also taken.
No	Click here if you wish to import texts and attributes. For alarms that already exist in the database, not only the texts but also the attributes which then overwrite the existing attributes are imported.

4.9.1 Import FlexOs alarms

If the previous dialog window is acknowledged with "no" when importing FlexOs alarm text files (meldtext.081) and if the size of the meldattr.080 file does not differ from the last imported one, the following dialog window appears:

```
┌─────────────────────────────────────────────────────────────────────────┐
│ 🔳 Ich übernehme die FlexOsAlarme in die Datenbank:                    ✕ │
├─────────────────────────────────────────────────────────────────────────┤
│ ┌─────────────────────────────────────────────────────────────────────┐ │
│ │                                                                     │ │
│ └─────────────────────────────────────────────────────────────────────┘ │
│  1 4 0 0 0 0 10  meldattr.080 --> OemForm                                │
│  ! ! ! ! ! ! ++- Meldetextnummer  (Zuordnung zu <sprache>/meldtext.081)  │
│  ! ! ! ! ! +---- Schemanummer     nur FlexOs                             │
│  ! ! ! ! +------ Alarmart         (0=Alarmzeile sonst Meldezeile)        │
│  ! ! ! +-------- Meldungsklasse   nur FlexOs                             │
│  ! ! +---------- Typ              (0=PO 1=RE 2=CA sonst ME)              │
│  ! +------------ Priörität        (10   110   210   310..)              │
│  +-------------- Alarmnummer      (Primärschlüssel)                      │
│ ┌─┐                                    ┌──────────┐    ┌──────────────┐  │
│ │ │ meldattr.080 immer importieren     │    Ok    │    │  Abbrechen   │  │
│ └─┘                                    └──────────┘    └──────────────┘  │
└─────────────────────────────────────────────────────────────────────────┘
```

Box/Button	**Description**			
meldattr.080 → OemForm	Explains how the attributes in meldattr.080 for the individual alarms are transferred to the database.			
Always import Meldattr.080	If you select this checkbox the attribute settings in meldattr.080 are read in again. If you do not select this checkbox the attribute settings are only read in if the size of the meldattr.080 file differs from that of the one last imported.			
Ok	Click here to start importing. The following conventions apply to the attributes:			
	If alarm type (meldattr.080) = 0			
	Text for alarm line if user attribute settings in OemForm activated for message line		Otherwise text for message line if user attribute settings in OemForm activated for message line	
	Then system attributes for alarms are entered for the text Text red= 255 Text green = 0 Text blue = 0 Background red = 40 Background green = 40 Background blue = 40 Alarm line = Yes Message line = No Logbook = Yes Service logbook = No	Otherwise user attributes are entered for the text	Then user attributes are entered for the text	Otherwise system attributes for messages are entered for the text Text red = 202 Text green = 101 Text blue = 4 Background red = 40 Background green = 40 Background blue = 40 Alarm line = No Message line = Yes Logbook = Yes Service logbook = No
Cancel	Click here to return to return to the "Import" form without importing.			

4.10   Change database

A function is provided for keeping different alarm databases on one PC where the alarm databases in OEMFORM can be backed up in an archive and copied into directory C:\OEM for editing. This function is called by selecting button Change database in the main menu of OEMFORM.

4.10.1   Save database

First of all, the form for changing the current database is opened. You are requested to back up the current database in an archive directory.
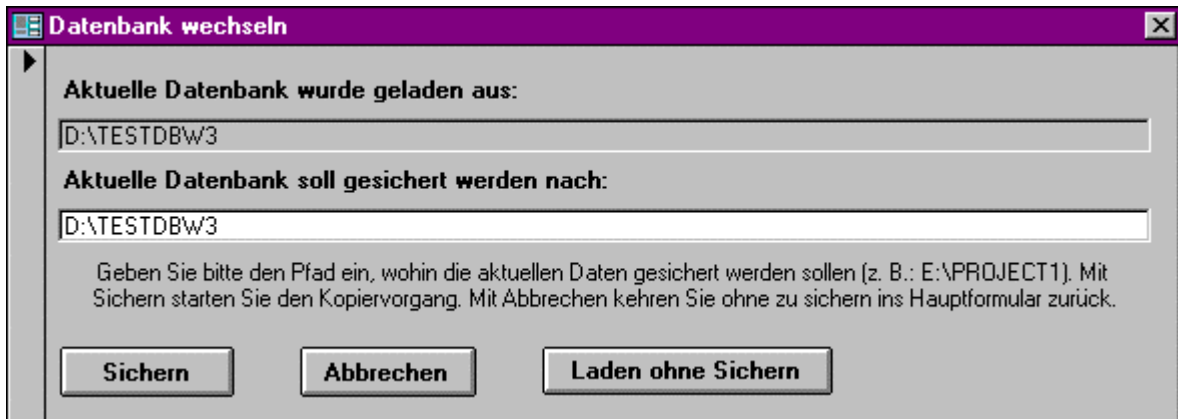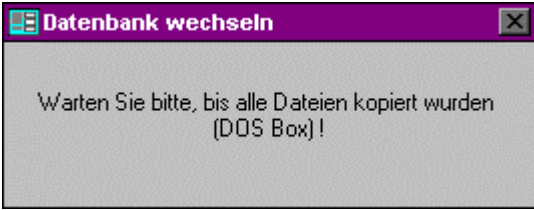
Fig. 4.15: Change database

Box/button	Description
Current database has been loaded from	This is a text box which displays from which directory the current database has been loaded.
Current database to be saved on	This is a text box in which you can enter the directory in which the current database is to be backed up.
Save	Starts back-up procedure. A batch file (*.BAT) is generated and started in a DOS window. A dialog window brings up the message "Please wait until all files have been copied (DOS box)!" Once the batch file has been executed the form "Load" is opened.
Cancel	Returns to main form without saving

Load without saving	Click here to call form "Load database" without saving. First of all a dialog window appears reminding you that the current data will not be backed up.
	Datenbank wechseln ☒ ⚠ ACHTUNG: aktuelle Datenbank wird nicht gesichert! OK
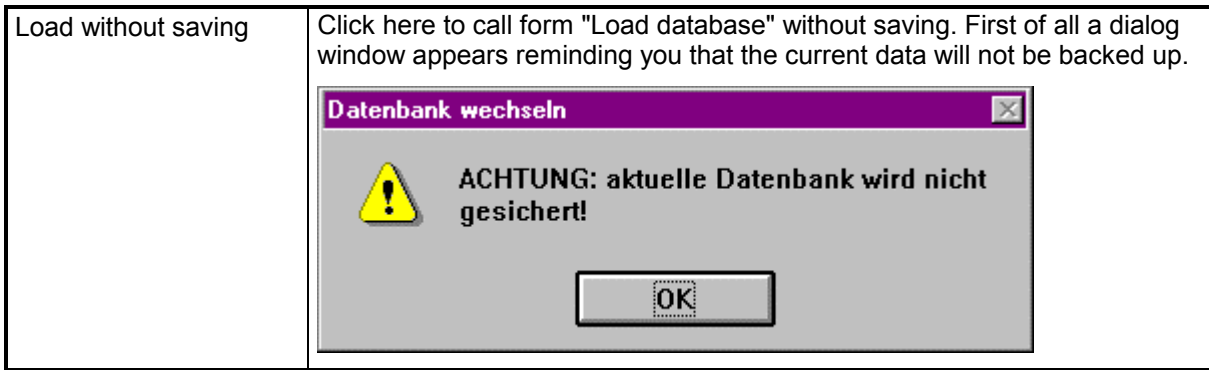
4.10.2   Load database

When you click the OK key the form for loading a new database appears.

Datenbank wechseln ☒

Aktuelle Datenbank ist geladen aus:

D:\TESTDBW3

Aktuelle Datenbank soll geladen werden aus:

D:\TESTDBW3

Geben Sie bitte den Pfad ein, aus der die aktuellen Daten geladen werden sollen (z. B.: E:\PROJECT1). Mit Laden starten Sie den Kopiervorgang. Mit Abbrechen kehren Sie ohne zu laden ins Hauptformular zurück.

Laden   Abbrechen
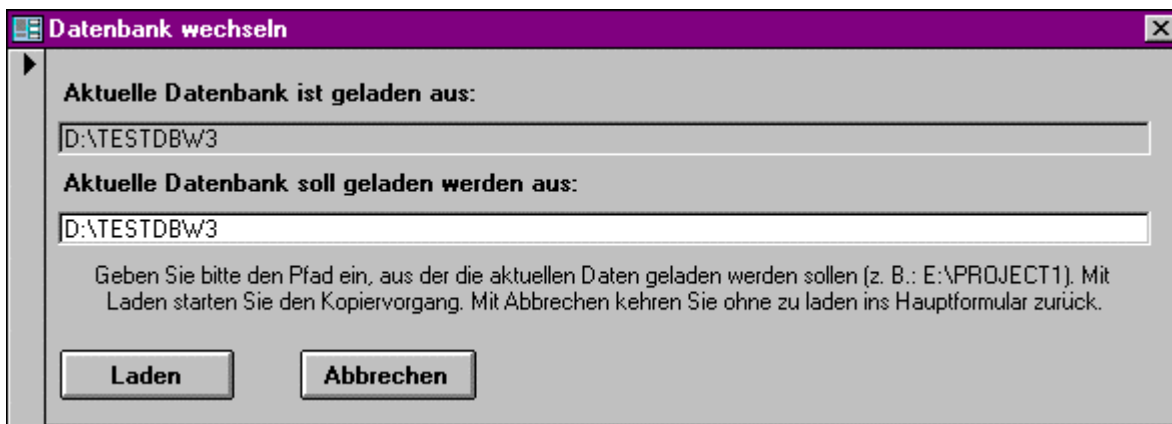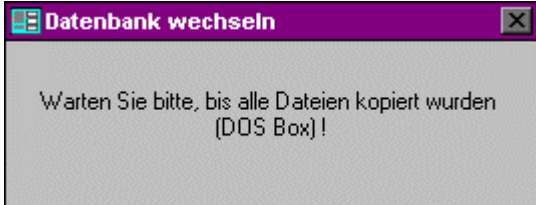
Fig. 4.16: Load database

Box	Description
Current database loaded from	This is a text box which displays the directory from which the current data are loaded.
Current database to be loaded from	This is a text box in which you can enter the directory from which the data are to be loaded.
Load	Starts the loading procedure. A batch file (*.BAT) is generated and started in a DOS window. A dialog window brings up the message "Please wait until all files have been copied (DOS box)!" **Datenbank wechseln** ☒ Warten Sie bitte, bis alle Dateien kopiert wurden (DOS Box)! Once the batch file has been executed you can return to the main form. If the database has not been compressed since the last Update/Setup, a dialog window opens which offers to compress the databases OEMALARM.MDB and OEMALASO.MDB (see Section 4.1 Starting OEMFORM).
Cancel	Returns to main form without saving

4.11   Generate alarms/messages

The following dialog window is displayed when you click on the button "Generate" in the "Main overview" form.
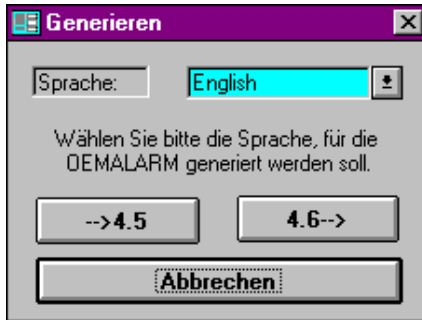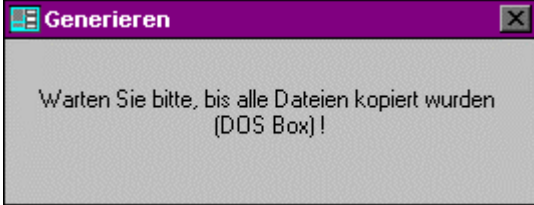
Fig. 4.17: Generate

Box/button	Description
Language	This is a pull-down list box which you open only to make a selection. Here, you select the language of the texts that are to be generated
--> 4.5 4.6 -->	Starts generating the language required. Click on the "-->4.5" button to generate OEMALARM.DBF and OEMALARM.MDX for 840C Win up to software version 4.5 (only english, deutsch, français, italiano, español and language 5..10). Click on the "4.6-->" button to generate OEMALARM.DBF and OEMALARM.MDX for 840C Win software 4.6 and higher. A batch file (*.bat) is generated and started in a DOS window. A dialog window tells you to "Please wait until all files have been copied (DOS box)".
Cancel	Click here to exit the form "Generate" and return to the main overview.

4.12   Display/print alarms/messages

Printing a selected area

Apart from the choice of languages to be indicated/printed, the dialog window for displaying/printing alarms also allows an area from ... to ... to be set.
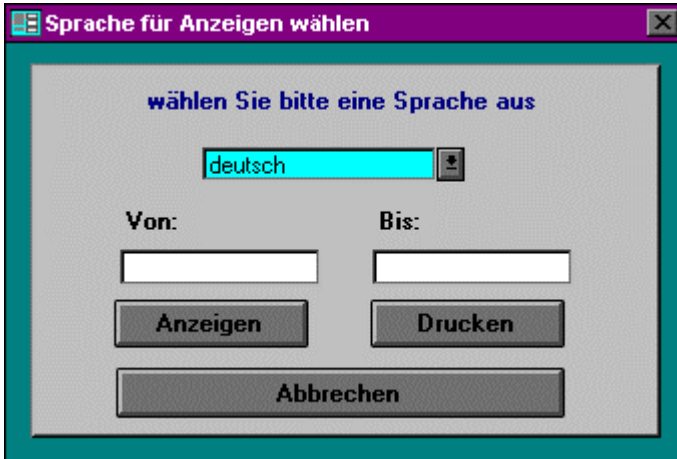
Fig. 4.18: Display/print

Box/button	Description
Language	This is a pull-down list box which you must first open in order to make a selection. Select here the language for the alarms which are to be displayed/printed.
From	This is a text box in which you enter the number of the first alarm to be displayed/printed. If nothing or 0 is entered, all alarms are displayed/printed.
To	This is a text box in which you enter the number of the last alarm to be displayed/printed. If nothing or the same number as in <From> is entered here, the alarm with the number <From> is displayed/printed.
Display	Click here to display alarms in the language required in the area <From> to <To>. If <To> is smaller than <From>, an error message is issued!
Print	Click here to print alarms in the language required in the area <From> to <To>. If <To> is smaller than <From>, an error message is issued!
Cancel	Click here to return to the form "Main overview".

4.12.1 Display report

After selecting a language and clicking on the "Display" button, the report is displayed in the desired language:

Fig. 4.19: Display report

4.13   Enter user languages (from SW 6.3)
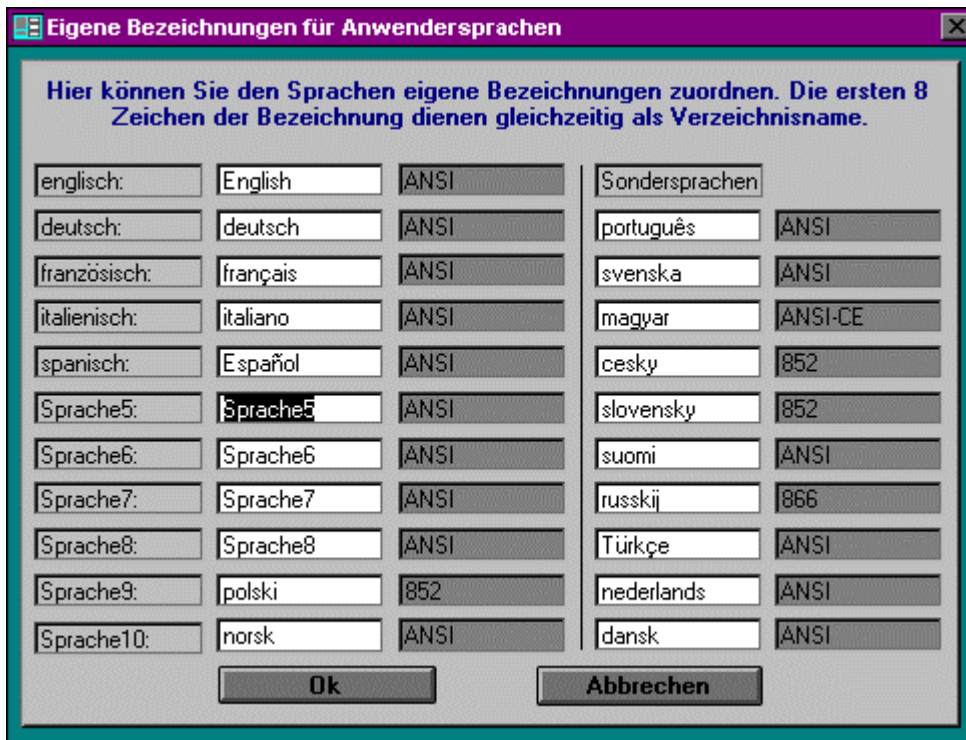
Fig. 4.20: Enter user languages

Box/button	Description
<Language> <Code page>	Here you can allocate your own designations to the languages in the corresponding input boxes. The designations may have a maximum length of 12 characters. The first eight characters serve as directory name. On the right, next to the language description, the code page is displayed with which texts are stored in the database. For system languages, the code page is preset. For user languages, the code page can be set as follows: By double-clicking on the corresponding code page box, the following form is opened: Here you can select from a pull-down list the code page required (852, 866, ANSI...). After clicking on the "OK" button, the code page is accepted and you return to the user designation form. After clicking on the "Cancel" button, you return to the user designation form without the code page having been accepted.
OK	If you select the "OK" button, you return to the "Main overview" form with a new allocation of the designations.
Cancel	If you select the "Cancel" button, you return to the "Main overview" form without a new allocation of the designations.

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4.14   Changing the password

The standard password for the user account "kunde" is empty (empty string). If you change this password you will limit access to your OEM application to the users who have been given the password. If you wish to allow unlimited access to your system through the user account "kunde", do not change the password.

Passwords can be up to 14 characters long and contain any characters with the exception of ASCII character 0 (zero). Passwords distinguish between capitals and small letters.

Proceed as follows to enter a new password or change the password:

1.   In the Windows program manager open the program group that contains the symbol for OEMFORM.

2.   Double click on the symbol for OEMFORM. OEMFORM displays the dialog box **Log on** when it is started up.

3.   Enter the user name **kunde** in the box "Name".

4.   Leave the box "Password" empty if you do not yet wish to enter a password. Otherwise enter the password.

5.   Now select the button "OK" to log on. OEMFORM is started and the form "Main overview" is displayed .

6.   Double click on the system menu symbol in the menu bar to close the form "Main overview".

7.   Select the command **Change password** from the menu **Access rights**.

8.   Leave the box "Old password" empty if you have not yet entered a password, otherwise enter the current password.

9.   Enter the new password in the box "New password".

10.   Confirm the password by entering it again in the box "Confirm".

11.   Select the "OK" button.

12.   Double click on the system menu symbol in the title line to terminate the OEMFORM application.

The next time you start OEMFORM you must enter the new password. If you have forgotten the password you can access the application OEMFORM again by proceeding as follows:

1.   Rename the following files with the MS Windows (Windows 95: Explorer) file manager:
...**oemalarm.mdb** in **oemalarm.tmp**
...**oemalaso.mdb** in **oemalaso.tmp**
...**system.mda** in **system.tmp**

2.   In the MS Windows program manager delete program group **OEMFORM**.

3.   Re-install OEMFORM (see Section 2.2 Installation procedure)

4.   Rename the following files with the MS Windows file (Windows 95: Explorer) manager
...**oemalarm.tmp** in **oemalarm.mdb**
...**oemalaso.tmp** in **oemalaso.mdb**

The next time you start OEMFORM proceed as described in Section 4.1. The password is now empty again. If you wish to protect your data with a password you must also keep your set-up diskettes under lock and key because anyone who has access to the set-up diskettes can also get bypass the password!

The old password can be reactivated by renaming **...\\system.tmp** in **system.mda**.

4.15   Tips and tricks

4.15.1   Copy OEMFORM from one PC to another

To copy OEMFORM to another PC with the same data stock, please proceed as follows:

1.   Install OEMFORM on the second PC (setup).

2.   Copy ...\oemalarm.mdb from the first to the second PC.

3.   Copy ...\oemalaso.mdb from the first to the second PC.

The data stocks on both PCs are now identical.

4.15.2   Translate texts with OEMFORM

To have the user alarms/messages translated in the translation office, please proceed as follows:

1. Send the OEMFORM setup diskettes 1, 2, 3;...\oemalarm.mdb ...\oemalaso.mdb to the translation office.

2. Install OEMFORM in the translation office and copy oemalarm.mdb and oemalaso.mdb into the OEM directory. The texts can be translated comfortably with the installed OEMFORM. The databases ...\oemalarm.mdb and ...\oemalaso.mdb must then be returned from the translation office.

3. The files oemalarm.mdb and oemalaso.mdb returned from the translation office must be copied into the OEM directory.

While the files are being translated by the translation office, no changes may be made to the database. Any changes will be lost when the translated texts are copied!

4.15.3   Generation aborted with runtime error

If generation of the dBase IV databases is aborted with a runtime error, this may have the following causes:

1. Check the AUTOEXEC.BAT and CONFIG.SYS files. SHARE.EXE must be called up in one of these files. If this is not the case, insert the following line in the AUTOEXEC.BAT file:

   C:\DOS\SHARE.EXE /L:500 /F:9192

2. Check the OEMFORM.INI file. In the OEMFORM.INI file(in the Windows directory and in the OEMFORM directory), the original entry **dBase IV =C:\...** in the section Installable ISAMs must if necessary be changed as follows:

   [Installable ISAMs]

   dBase IV=**C:\WINDOWS**\SYSTEM\XBS110.DLL   // original entry
   dBase IV=**<Windows-Verzeichnis>**\SYSTEM\XBS110.DLL   // altered entry

4.15.4   Activate special language support

Oemform 6.3 permits processing of special languages with fonts differing from ANSI. There are two ways of activating this special language support:

4.15.4.1 Install NCK fonts for FlexOs alarms (Win 3.x)

To install the 840C character fonts for processing FlexOs special languages on your PC, insert the following line in the file WIN.INI (in the Windows directory e.g. c:\windows) in the fonts section:

[fonts]

.

.

.

NCK FONT=c:\oem\nckfont.fon

If Oemform has been installed under a different directory than c:\oem, then of course the other directory name must be entered! The following fonts are then available after rebooting Windows:

Typeface	Use
NCK CP 437	*not required in Oemform (covered by ANSI)*
NCK CP 852	**required for the processing of FlexOs alarms in magyar, cesky, slovensky and polski**
NCK CP 860	*not required in Oemform (covered by ANSI)*
NCK CP 866	**required for the processing of FlexOs alarms in russkij**

4.15.4.2 Install multi-language support (Win 95)

You need the Windows 95 installation CD in order to install the multi-language support. You can select this software component facility within the scope of the user-specified installation or post-install it at a later date when required. To do this, proceed as follows:

1. First of all, select the command *Settings/Control Panel* in the menu *Start* and double-click on the *Software* module.

2. When the dialog box *Software characteristics* has opened, change to the register page *Windows software (Windows setup)* and mark the component *Language support*.

3. Now click on the *Details* button to open up the dialog box *Language support.* Here all languages are displayed which are available in your country-specific Windows 95 version. For reasons of storage space, mark only the languages which you really will require for your work.

Required components/fonts	Use
Language support cyrillic Fonts with the addition Cyr (e.g. **Times New Roman Cyr**)	**Processing of alarms in russkij**
Language support Central Europe Fonts with the addition CE (e.g. **Times New Roman CE**)	**Processing of alarms in magyar, cesky, slovensky und polski**

Finally, confirm your selection by repeatedly clicking on the *OK* button. Now the extended software components for the multi-language support are transferred from the installation CD to the hard disk.

4.15.5 Transfer of alarm and message texts from FlexOs to Windows

4.15.5.1 Generate the sources

First of all, it is assumed that alarm and message texts as well as the corresponding attributes are available under FlexOs. These two directories must then be transferred to your PC in PC format using PCIN. So far, the name and the directory of the file to be transferred are irrelevant. Under PCIN, these files must be unpacked with the directory structure (UNPACK PC FORMAT WITH DIR). Here, the user must specify a directory in which the files are to be unpacked. It is recommended to specify separate directories for message texts and attributes, e.g. C:\MELDTEXT and C:\MELDATTR. In this way, the same subdirectories as on the control are automatically created in these directories. The last subdirectory, therefore, contains the required source in each case (MELDTEXT.081 or MELDATTR.080).

4.15.5.2 Edit the sources

The above generated sources can now be edited using any text editor. However, it is important to adhere to the syntax and the prescribed format. When storing, it is important to really save "Text only" when making changes e.g. using Microsoft Word. The most important settings are described below so that messages are displayed in the same form in both systems (display location and type of acknowledgement).

4.15.5.3 Structure of alarm and message attributes

The first place represents the alarm or message number, the second the priority. The third place stands for the **message type**. Under FlexOs any value between 0 and 255 can be set. Under Windows, however, this place specifies which key can be used to acknowledge the alarm. The following applies:

0   Power On
1   Reset
2   Cancel ("Big Mac")

The fourth place defines the message class and the fifth the message category. "0" herewith means that the display in the alarm line and "1" stands for display in a dialog window.

Under FlexOs, the sixth place is a reference to the scheme number, and the last place is the reference to the message text number in the file "Meldtext.081".

The control contains two files for the message attributes and possibly two files per language – one in the SIEMENS branch and one in the user branch. If you wish to retain the Siemens definitions, you must start the numbering for your own schemes in the attribute file where Siemens numbering is discontinued, i.e. continuously. Otherwise schemes of the same number are taken from the user branch and Siemens alarms are not displayed as usual when using different colors.

Assuming the standard setup, i.e. Siemens attributes are taken over and own schemes are assigned to own alarms, scheme numbering then starts with number "6".

4.15.5.4 Acceptance in FlexOS

For the acceptance in FlexOs, all you require is PCIN. For both files (meldtext.081 and meldattr.080) you must generate a file in PC format for transfer to the control. Under the menu PC format, select menu option **Generate** and then option **Catalog complete**. Then you are asked for the location of the file to be packed. Here you specify the corresponding subdirectory already used for unpacking the files (in this example either C:\MELDTEXT or C:\MELDATTR). Once the file has been generated in PC format, you can transfer it immediately to the control if you can answer the question "Transfer to control" with a "Y". Once both files have been generated and transferred in such a way, the control must be booted once more to activate the new alarm messages.

4.15.5.5 Acceptance in Windows

Acceptance in Windows is somewhat more complicated. First of all, the sources must be copied to various subdirectories. The file MELDATTR.080 must be in the directory in which the tool Oemform has been installed (e.g. C:\OEM).

The file MELDTEXT.081 is a language-related file. If it contains German texts for example, it must be copied into the directory ...\DEUTSCH which in turn is in the directory where Oemform has been installed (e.g. C:\OEM\DEUTSCH).

After that, Oemform can be started. In the main menu select the "Import" button, and in the following dialog window select "Deutsch" from the language list box. Only then can you select from the list box "File name" the file "Meldtext.081". By clicking the "OK" button, you are then asked "Import texts only?". The question must be answered with a "No" in order to read the attributes as well.

Once this process has been successfully completed, you should check via the "Process" button if the changes of the sources have been transferred properly to the database. In this case, select the "Generate" button in the main menu. Two files (OEMALARM.DBF and OEMALARM.MDX) are now generated in the directory ...\Deutsch. These two files must be copied on the control under Windows to the directory C:\OEM\DEUTSCH. To do this, you can use, for example, a diskette and the file manager under Windows. Once both files have been generated and transferred, the control must be rebooted once more to activate the new alarm messages.

■

5 Alarm Display

5.1 Alarm and message line

You can configure the display location in the alarm text database and define where an alarm or a message is to be displayed. The display location - where the alarm is to be displayed - can be the alarm and message line, the logbook and the service logbook, the last two of which are not supported in this version.

5.1.1 Display priorities

The alarm or message with the highest priority is always displayed in the alarm or message line. The following applies:

Low priority number = high priority.

If several alarms or messages have the same priority, the alarm or message number is used for assigning priority. Here, the same principle applies:

Low alarm/message number = high priority.

The alarms and messages are displayed together with the number, text and acknowledgment class in one line.

Acknowledgment classes CA (Cancel), RE (Reset), PO (Power On), ME (Message) and PA (PLC alarm) define when the alarms and messages are acknowledged.

The acknowledgment classes of NCK, PLC and 611D alarms and messages are defined internally, i.e. when an alarm is set they are sent by the components to the MMC and can therefore not be changed by configuring. When these alarms are displayed the entries for the acknowledgment classes in the database are ignored.

Only acknowledgment class ME (message) is supported for MMC alarms or messages

The position and the size of the alarm and message line is defined in the system. The alarm and message line always appear in the same position and can be covered if the following entry is made in the *SIN840C.INI* file:

```
[Alarm]
Topmost=on/off
```

The part program comments in the alarm line are only displayed when no alarm is active.

5.1.2 Switching off the standard alarm display during start-up

The OEM user can switch off the SIEMENS alarm display during start-up and replace it with his own. The Siemens alarm application which, together with the alarm display is responsible for internal alarm processing can be started during start-up as a hidden application.

In *REG_AUTO.CFG* you must therefore define whether ALARM.EXE is to be started as an "icon" (minimized) or "hidden" (hide). The default setting is "minimized". If ALARM.EXE is started with "HIDE", no alarm/message line is displayed. This area remains empty on the screen and can be used for another application.

The following entries can be made in *REG_AUTO.CFG*:

Alarm display activated (standard):

```
c:\mmcwin\pc\ALARM.EXE                    ;MINIMIZED;wait
```

Alarm display deactivated:

```
c:\mmcwin\pc\ALARM.EXE                    ;HIDE;wait
```

5.1.3   Page alarms from PLC

You can activate the paging of alarms and messages from the PLC or enable this option according to the settings in *SIN840C.INI* via interface signal DB 58 D 0.11.

PLC interface signal D 0.11 (page from PLC) in DB58 has the following meaning:

- 1 signal (static signal, no edge triggering): Alarm and message line are paged from the PLC. The rate at which the alarms/messages are paged can be set in the *SIN840C.INI* file under section [alarm].

```
[alarm]
Alarmtime      =2000
Messagetime    =2500
```

The values are entered in ms. Lowest value 100 ms. Highest value 30000 ms = 30 secs.

- 0 signal: The entries in the *SIN840C.INI* file for display of the alarm and message line are evaluated in section [alarm]. The following functions can be implemented with these entries.

It is both possible to display the alarms and messages with the highest priority or page through the alarm and message line:

```
[alarm]
Alarmpaging=on/off
Messagepaging=on/off
```

off: Alarms and messages are not paged.

on: Alarm and message paging is selected.

The following entries are evaluated for the paging speed.

```
Alarmtime      =2000
Messagetime    =2500
```

If paging is not activated (Alarm/Messagepaging=off),

```
Alarmpriority=on/off
Messagepriority=on/off
```

either the alarm/message with the highest priority (-priority = on) or the last alarm/message to be output (-priority = off) is displayed in the relevant line depending on the settings:

Remarks:

- If paging is selected and only one alarm or message is active, this alarm/message is permanently displayed.
- The interface signal in DB 58 D 0.10 (display of alarm with highest priority) has no meaning.
- These settings can also be made in the alarm display under the new menu item "Configure alarm/message line". The settings are stored in *SIN840C.INI* and are activated as soon as the dialog box is closed with "OK".

5.2   Alarm window

Only one active alarm or message can be displayed in the alarm or message line. Additional active alarms or messages can be viewed in the alarm window.

The user can activate the alarm window via area switchover, task switchover or the hotkey *<SHIFT><ETC>*.

The current NCK/PLC/611-D/MMC alarms and messages are displayed in the order in which they are output, i.e. the last alarm and message to be set appear at the top of the list.

The alarms and messages can also be sorted according to priority in the overview "All alarms", under menu item "Prio". The alarms cannot be sorted according to priority within individual alarms groups.

Alarms and messages are displayed in one line together with the number, text, acknowledgment class (type of alarm) and time.

Explanatory information for the alarm or message output can be displayed in the status line of the alarm window. A status text can be put into the database for this purpose.

Active cancel alarms can be acknowledged with the "Alarm acknowledge" key (ESC function). This key only has this function if the alarm window is displayed. This ensures that this key can still be used as an ESC function in other applications.

The alarms and messages can be sorted and displayed according to the criteria "All alarms", "NCK alarms", "PLC alarms", "PLC messages", "611D alarms" and "MMC" alarms. This sort function is selected either via softkey or menu.

The number of alarms and messages that can be displayed can be limited by an entry in the *SIN840C.INI* file.

```
[Alarm]
Entries=0...65000
```

The default setting is Entries=0, i.e. there is no limit. If the number of alarms or messages to be displayed exceeds the set limit, the message "105 001 Too many messages" is output.

MMC alarms and messages can be deleted with the menu item "Delete".

The user can select an active alarm/message with the cursor. He can call up Windows own help system together with the help text number and help text file by pressing the **i** key which displays explanations and notes for the alarm/message selected.

<u>Notes:</u>

- Alarms and messages can only be sorted according to priority in the window "All alarms". If, instead, an alarm group (NC alarms, PLC alarms, etc.) is selected, the alarms cannot be sorted according to priority.

- In initialization file ALARM.INI section [PLC] the number of alarms which are accepted before the alarm application signs off for a short time so that other applications can run in the meantime is defined in the entry "Break":

```
[PLC]
Break=8
```

- If the value selected is too high, the control will appear inoperable for a short time if a large number of alarms are changed.

A help text number (context ID) and the number of a help text file can be entered in the alarm text database for every alarm. The number of the help text file is used to select the corresponding file name in the INI file *SIN840C.INI*.

[alarm]	
helpfile*1*=<path> <name>	Name of the help file that is addressed with number 1 in the database.
helpfile*n*=<path> <name>	Name of the help file that is addressed with number n in the database.

Explanations about the Siemens alarm texts are stored in help file *ALARM.HLP*.

If no. 0 (default) is entered for an alarm in the database, the Siemens file *ALARM.HLP* is called from directory C:\MMCWIN\PC. The same applies if no entry is made in *SIN840C.INI*.

5.3 Structure of the alarm/message line

In 840C OEM Version for Windows, a separate application (ALARM.EXE) is used for the management and display of alarms and displays. Alarms and messages that occur in the NCK, PLC and 611-D are displayed in the line that is configured in the alarm text database (display location). Part program comments are always displayed in the alarm line

In addition to the permanently configured text, the following parameters (runtime variables) can be entered in the database for the **NCK/PLC/611D** alarms and messages:

%1 - %5,   When the alarm occurs the parameters are evaluated by the
%a1   control during runtime and the value (string) is inserted in the alarm/message line text. Up to 6 parameters can be inserted in the alarm/message text in the database when the alarms are configured.

The text for the **MMC** alarms and messages can contain the following call parameters:

%0 - %9   The parameters in question which are inserted at the relevant points in the alarm/message text must be transferred as string variables when an alarm is set. The calls for setting alarms/messages are sent via the link to the DDE server (cf. Appendix A.2.2).

	NCK	PLC	611D	MMC
1st parameter	Alarm type	Alarm type	Alarm type	Configured
2nd parameter %1	Axis/spindle number	Axis/spindle number	Axis/spindle number	in Text %0
3rd parameter %2	Channel number	-	-	in Text %1
4th parameter %3	Block number	-	-	in Text %2
5th parameter %4	Sequence number	-	-	in Text %3
6th parameter %5	Interlocks	- reserved	- reserved	in Text %4
7th parameter%a1	Axis name	-	-	in Text %5
	-	-	-	in Text %6
	-	-	-	in Text %7
	-	-	-	in Text %8
	-	-	-	in Text %9

Alarm type:

Power On	PO
Reset	RE
Cancel	CA
PLC message	ME
PLC alarm	PA
Part program comment	KO

%a1:   Number defined as text is interpreted as a global axis or spindle number and the axis or spindle name displayed.
      (0 - 39 are axes)
      (40 - 49 are spindles)

5.3.1   Alarms with the sequence (NCK alarms)

```
11 1 1111111222222222233333333333444444444455555555555666666
12345 6 78901 2 34567890123456789012345678901234567890123456789012345


[---][-][---][-][----------------------------------------------------]
  |   |   |   |   |                           |
  |   |   |   |   Blank                    ÷53 characters text
  |   |   5 characters for ordinal number
  |   Blank
  5 characters for alarm number
```

Example:
A new alarm with the following entries is entered in the database:
Alarm number: 1120
Alarm/message text: ORD%4 %a1 Zero speed control

This text is output in the alarm line as follows if:
the ordinal number = 99
the axis name   = X1

 1120 ORD99 X1 Zero speed monitoring

5.3.2   Alarms with the block number (cycle alarms)

```
1111 1 1111222222222233333333333444444444445555555555666666
12345 6  7   8 90123 4 5678901234567890123456789012345678901234567890123456789012345


[---][-][-][-][---][-][-----------------------------------------------]
  |   | | | |   | |   |                         |
  |   | | | |   | |   Blank                  ÷51 characters text
  |   | | | |   5 characters for block number
  |   | | | Blank
  |   | | 1 character for channel number
  |   Blank
  5 characters for alarm number
```

Example:
A new alarm with the following entries is entered in the database:
Alarm number: 4000
Alarm/message text: %2 %3 General programming error

This text is output in the alarm line as follows if:
the channel number = 2
the block number   = N1000

 4000 2 N1000 General programming error

5.3.3   PLC error and operational message

```
1111111111222222222233333333333444444444445555555555666666
12345 6  78901234567890123456789012345678901234567890123456789012345


[---][-][------------------------------------------------------------]
  |   |   |                         |
  |   |   |                      ÷59 characters text
  |   Blank
  5 characters for alarm number
```

Note: Only an approximate number is given for the character text length because SINUMERIK 840C uses a proportional font for the text displays and the individual characters therefore have varying lengths. The maximum length of the text will vary depending on the characters actually used.

5.3.4 Number ranges of the alarms and messages

0	-	99999	**NCK alarms and PLC alarms/messages**
0			Reserved for the color setting of the comments
1	-	999	NCK alarm class 3
1000	-	1999	NCK alarm class 1 (axis-specific alarms)
2000	-	2999	NCK alarm class 4
3000	-	3999	NCK alarm class 2
4000	-	5999	Cycle alarms
6000	-	9999	PLC error and operational messages
10000	-	19999	NCK alarm class 6 (axis-specific alarms)
20000	-	29999	NCK alarm class 7 (spindle-specific alarms)
30000	-	99999	Reserved for NCK
100000	**-**	**159999**	**MMC messages**
100000	-	109999	Master control
100000	-	100099	NCK
100100	-	100199	Master control
100200	-	100299	Data manager
100300	-	100399	Drive driver
100400	-	100499	Parameterization, initialization and operation of V24
100500	-	100599	Alarm handling
100600	-	100659	Language
100660	-	100699	Version
100700	-	100799	Alarms for system menu item (END --> DOS)
100800	-	100859	KYRU
100860	-	100899	HOOKS
100900	-	100999	Server
101000	-	101099	WEdit
101100		101199	Watchdog
101200		101299	Booting
110000	-	119999	Services
120000	-	129999	Diagnosis
130000	-	139999	Programming
140000	-	149999	Simulation
150000	-	159999	User
160000	**-**	**199999**	**Machine data dialog**
160000	-	164999	Installation system
165000	-	199999	Reserved for MMC
200000	**-**	**299999**	**PLC dialog**

300000	**-**	**399999**	**611-D alarms/messages**

400000	**-**	**999999**	**Reserved for Siemens**

1000000		**1099999**	**Free for OEM applications**

■

6 Alarm Help Files

The user can call up additional information about the alarms if he positions the cursor on the alarm in the alarm window and presses the help key. The Windows standard help system is used to generate this on-line help. A detailed description is given in:

<div align="center">

MS-Windows Software Development Kit
Programmer's Reference
Volume 1: Overview
Microsoft Corporation

</div>

and by the many commercially available tools. The Siemens standard help files were created with the following authoring system:

<div align="center">

ROBOHELP
Windows Help Authoring System
Version 2
BLUE SKY SOFTWARE

</div>

6.1 Structure of the language directories

In order to make it easier to develop your own alarm help files or to change the Siemens standard help files, you can retrieve the source files of the Siemens standard help files **(for all languages) from SW 6.4** from eSupport **(Sinumerik Software/customer_oem_Support)**. **The individual language-dependent help projects are in the self-extracting files:**

– **840cen.exe (english)**
– **840cgr.exe (deutsch)**
– **840cfr.exe (français)**
– **840cit.exe (italiano)**
– **840csp.exe (español)**
– **840csw.exe (svenska)**
– **840cpg.exe (português)**
– **840ccz.exe (cesky)**

The following directory structure is generated when extracting the file:

AI_840c
└─ V6.4
   ├─ cz
   ├─ en
   ├─ fr
   ├─ gi
   ├─ it
   ├─ pg
   ├─ sp
   └─ sw

Fig. 6.1 Directory structure of the alarm help files

The following files are accommodated in a language directory:

- alarm1.rtf   (Alarm-No.:   1   -   111)
  alarm2.rtf   (Alarm-No.:   100* -   2506)
  alarm3.rtf   (Alarm-No.:   3000   -   3283)
  alarm4.rtf   (Alarm-No.:   1000* -   2097*)
  alarm5.rtf   (Alarm-No.: 100402   - 110058)
  alarm6.rtf   (Alarm-No.: 300000   - 301708)

These files contain the source texts of the individual alarm descriptions. To make handling easier, all the alarm texts have been divided up into six files.

- 840alrm1.hh
  840alrm2.hh
  840alrm3.hh
  840alrm4.hh
  840alrm5.hh
  840alrm6.hh

These files contain the header files of the above RTF files. The header files contain the conversion of the "context ID" into the corresponding "context string" and are linked to the [map] section of the 840c**...**hpj files by an "include" instruction.

- 840C**...**hpj

This file contains the specifications and options for each help project. This file must also be passed as a parameter when the help compiler is called. If the associated option was set in the *.hpj file, then the error of the help compiler is output in the following file.

- 840C**...**err

If compilation has been performed without error, this file contains only the copyright note and the version number of the help compiler.

- robohc.bat

Calling the help compiler is simplified with this batch file in which the relevant *.hpj file is specified. You can call the batch file directly from the relevant project directory. All addressing within the *.hpj file is relative, i.e. you can move the project directory as much as you want without having to change the entries. You merely have to ensure that the help compiler (not part of the OEM package) is made accessible in the path variable. All compile tasks were performed with the protected mode help compiler (part of ROBOHELP)

HCP.EXE   Microsoft (R) Help Compiler Version 3.10.504 (extended)

because of the size of the resulting help file. If compilation has been performed without error, the output file of the compiler, i.e. the actual help file 840C...hlp, is placed in the relevant project directory.

- WINHELPE.EXE

This is a utility for testing context-sensitive help files.
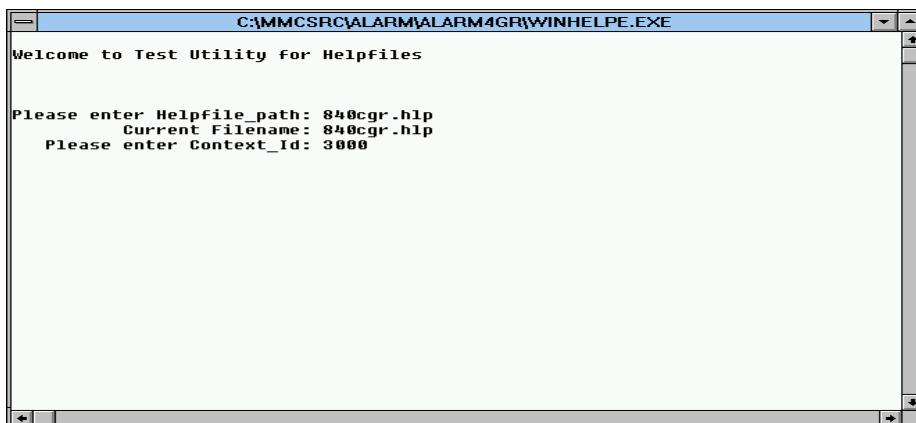
Fig. 6.2: Test utility "WINHELPE.EXE""

The help file to be called as well as the context ID of the help topic must be passed to the test utility as an input parameter.

- BITMAP directory

This directory contains the bitmap files *.bmp that are linked into the help file.

6.2   Structure of the RTF files

The individual help texts are stored in the corresponding RTF files. These files can be edited with a word processing system that can process RTF format such as Winword 2 or 6. Existing alarm descriptions can be edited and new ones added. When changes have been made the files must be stored in RTF format and the help compiler restarted (by calling ROBOHC.BAT).

If new alarm topics are added, the relevant changes must be made in the header files.

When a file is loaded in Winword 2.0 (any messages stating that the dot file does not exist can be ignored), the following display appears (View: Normal; View: Footnotes):
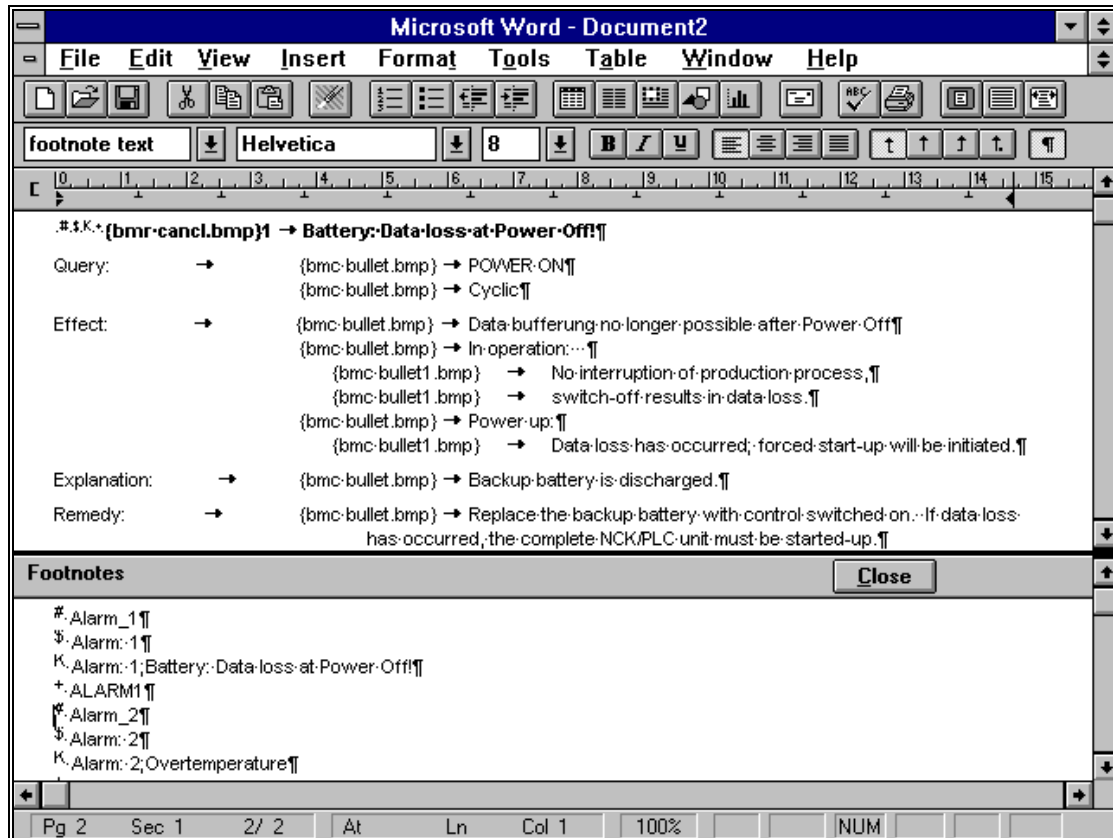
Fig. 6.3: Structure of the RTF files

Of the many functions that the Windows standard system offers, the following features were included in the standard help files:

- Each alarm description consists of a separate topic. Each topic is identified uniquely by its "context string". The assignment of the "context string" is made by inserting the user-defined footnote character # and inputting the "context string", Alarm_1 in the example above. The boundary between topics is a "hard" page break (Insert: manual page break...).

- A title is also assigned to every topic: e.g. Alarm: 1. (Insert: Footnote..., user-defined $, Alarm: 1). The title of the topics are displayed in the Windows help system both in the lower list box of the "Search" menu and in the "History" menu.

- Moreover, every topic has two keywords (Insert: Footnote..., user-defined K, Alarm: 1; Battery: Data loss on power-off). The keywords are displayed in the first list box of the "Search" menu.

- Each topic also contains a browse sequence (Insert: Footnote..., user-defined +, Alarm1). The browse sequence determines the order of the topics when "browsing" in the help system (Buttons << and >>). The standard sequence is simply the order of the topics.

- The heading of each topic (print format: heading 1) is defined as "not scrollable" by the format: Paragraph, "Do not split paragraphs". A bitmap for the cancellation condition is also inserted on the right with instruction {bmr cancl.bmp}.

- The actual help text is subdivided into the items: scan, effect, explanation and remedy. The print formats: Topic Text0, Topic Text1 and Topic Text2 are used. A bullet is placed in front of each item using the instruction {bmc bullet.bmp}. The font used is Helvetica.

6.3   Structure of the header files

In the header files, the context ID is redirected to the associated "context string". The context ID is specified for every alarm in the alarm database (alarm text number) and passed onto the "engine", the WINHELP.EXE, on the API call. With the "#defines", the "context IDs" are redirected to the associated "context strings" to identify each "help topic". An entry

#define *<context String> <context ID>*

must therefore be made in the header file for each alarm. The header files can be processed with any Windows ANSI editor.

```
Editor - 840ALRM1.HH
Datei  Bearbeiten  Suchen  Hilfe

#define Alarm_1 1
#define Alarm_2 2
#define Alarm_3 3
#define Alarm_4 4
#define Alarm_5 5
#define Alarm_6 6
#define Alarm_7 7
#define Alarm_8 8
#define Alarm_9 9
#define Alarm_11 11
#define Alarm_20 20
#define Alarm_43 43
#define Alarm_45 45
#define Alarm_46 46
#define Alarm_47 47
#define Alarm_48 48
```

Fig. 6.4: Structure of the header files

6.4   Structure of the 840C...hpj files

The *.hpj file specifies the structure of the entire project. It is subdivided into sections [sections]. The following sections and entries are used for the Siemens standard help file:

```
[OPTIONS]
BUILD=WINDOWS              ;
WARNING=3                  ; All alarms and messages are displayed
OLDKEYPHRASE=FALSE         ; Creation of a new key table
OPTCDROM=FALSE             ; No optimization for help file on CD-ROM
REPORT=FALSE               ; No screen output during compilation
CONTENTS=Alarm_1           ; "Content" button is assigned to the first topic, i.e. there is no
                           ; separate table of contents.
COMPRESS=TRUE              ; Alarm help file is compressed
TITLE=Alarmbeschreibung    ; Title of the alarm window (old title: "Information about alarms")
                           ; Caution - interpreted as DOS not ANSI code page
ERRORLOG=.\840CGR.ERR      ; Error messages of the compiler into the error file
BMROOT=.\BITMAP            ; The directory for the bitmaps to be linked

[CONFIG]
BrowseButtons()            ; Additional browse buttons are displayed in the toolbar of the;
                           ; help window

[FILES]
ALARM1.RTF                 ; Describes the RTF files that are linked into the project
ALARM2.RTF
ALARM3.RTF
ALARM4.RTF
ALARM5.RTF
ALARM6.RTF

[MAP]
#include <840ALRM1.HH>     ; The header files to be linked into the context-sensitive
#include <840ALRM2.HH>     ; help (redirection of the context ID to the context string)
#include <840ALRM3.HH>
#include <840ALRM4.HH>
#include <840ALRM5.HH>
#include <840ALRM6.HH>

[WINDOWS]
main=,(0,88,1023,869),0,,  , Size of the help window with reference to the virtual
                           ; screen of size 1024 x 1024.
```

■

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Alarm Dialog for PC
Software Version 6
OEM Version for Windows

Manufacturer Documentation

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