Introduction:

The DSP Data Management software is contained on a CD-ROM identified as INSTALLATION DISC FOR DSP-DM Version X.X
The version number and date appear for future updates and system maintenance.

All executable programs (EXE, DLL, OCX, etc.) are loaded into the application directory and in Windows\System, and
the file DSPM.INI will be copied into Windows to set up the DSP Data Management software.

Installation:
The system CD contains an autorun feature that will launch when the CD is loaded into the computer, opening a window
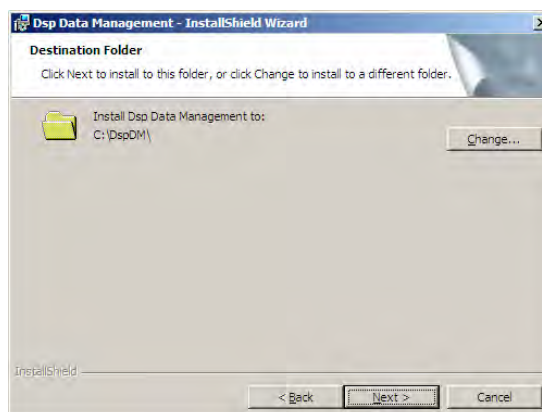that allows selection of installation start-up.

Step 1:

The installation program will check and prepare the operating system for installation.
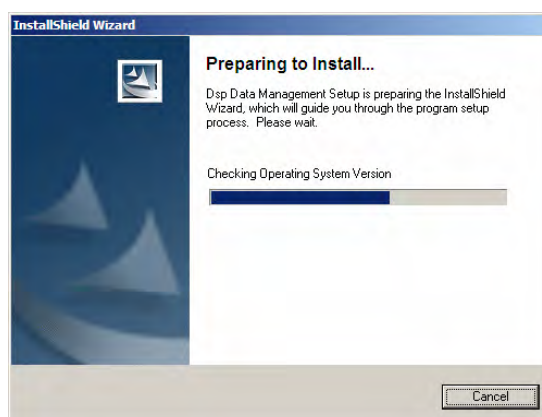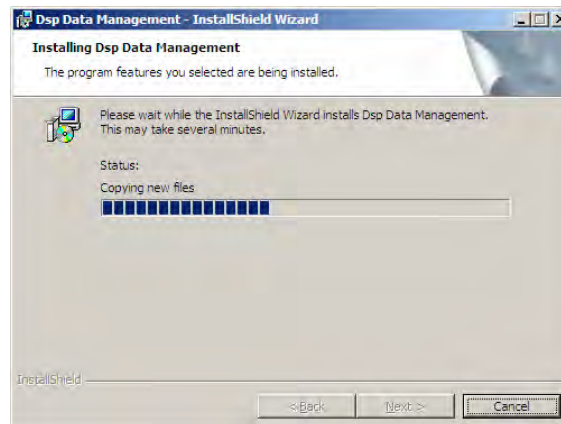
Step 2:

Once the operating system is prepared, the installation program will show where the software will be installed.
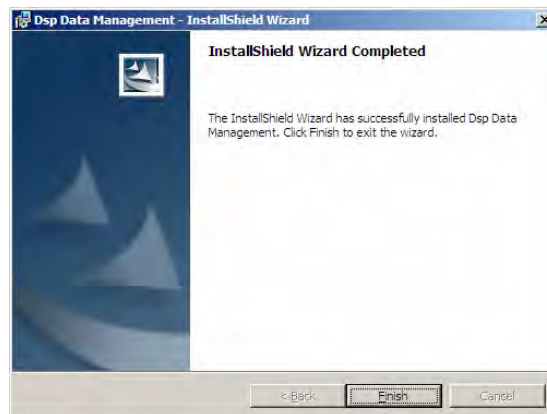
Step 3:

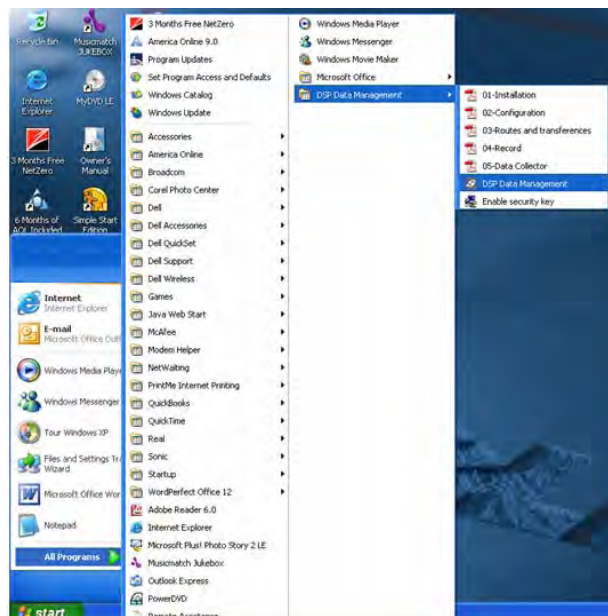The installation process will last several minutes and has several stages.

Step 4:

When the installation program opens the final window, the DSP Data Management software is ready to run.

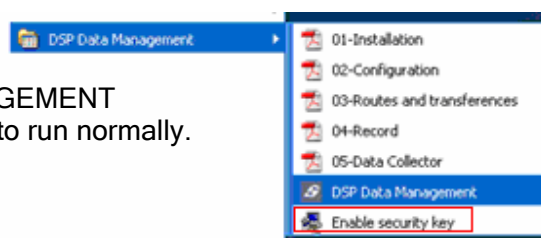The system can be started from the Windows program menu.

Enabling the Security Key:

The DSP Data Management software is protected by a device known as a "dongle", a type of digital key that must be plugged into the computer on which the application is run.
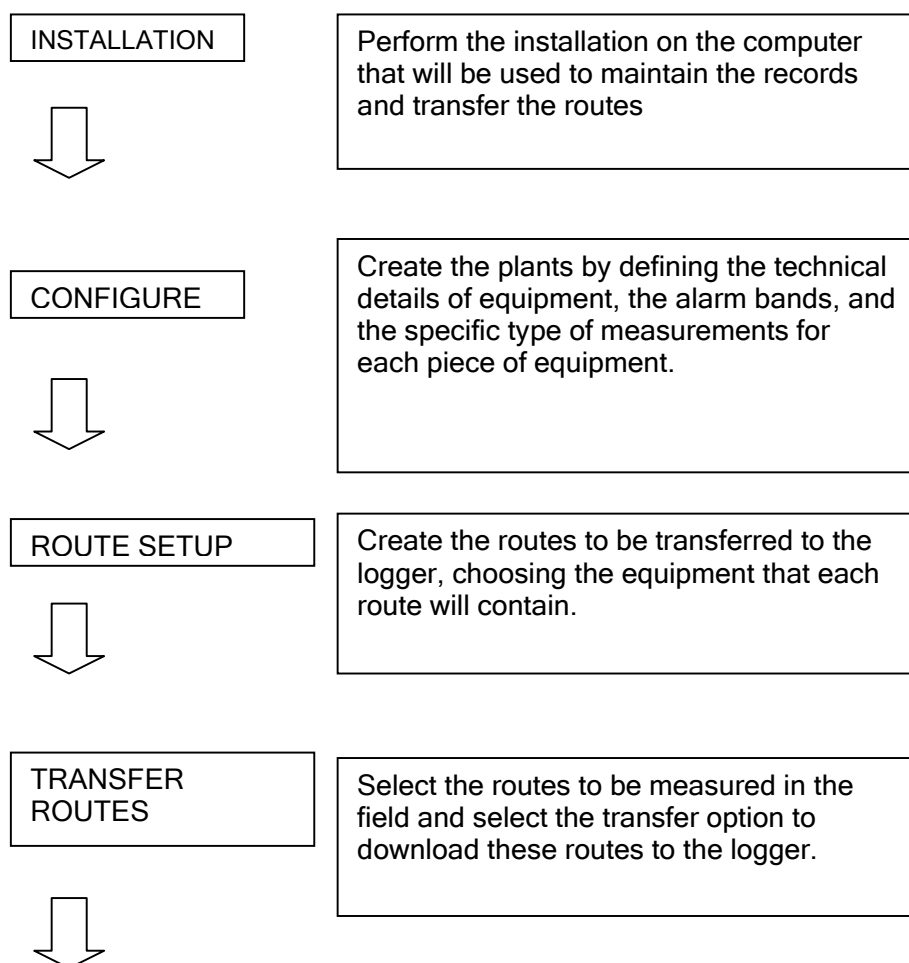
This key needs to be plugged into either the parallel port or USB port of the computer, depending on the model of key that was received.
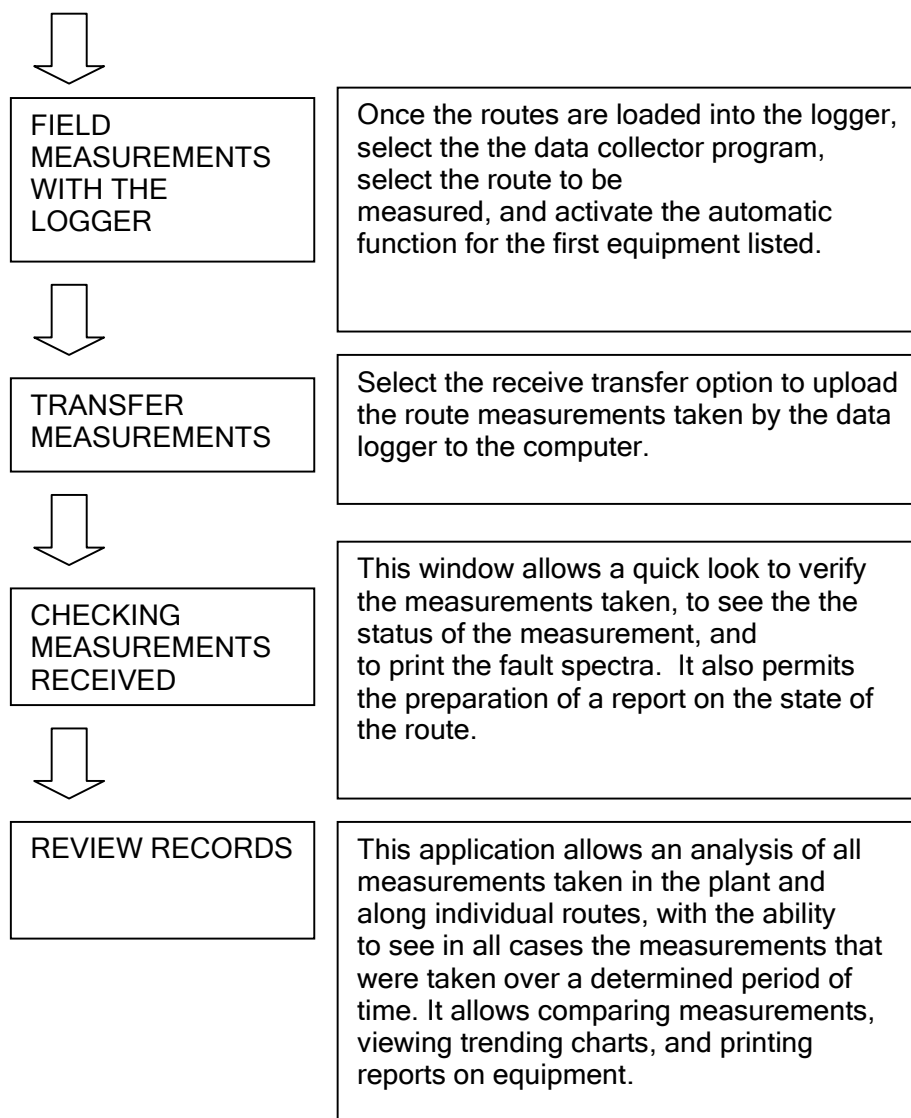
If DSP Data Management is to be used on a network, a separate key is required for each licensed terminal.

Running a file from the menu
SETUP/PROGRAMS/DSP DATA MANAGEMENT
enables the key and allows the software to run normally.

| DSP Data Management	▶
	🔴 01-Installation
	🔴 02-Configuration
	🔴 03-Routes and transferences
	🔴 04-Record
	🔴 05-Data Collector
	🔵 DSP Data Management
	🔵 Enable security key

Quick-Step Guide to Using the System:

INSTALLATION	Perform the installation on the computer that will be used to maintain the records and transfer the routes

⬇

CONFIGURE	Create the plants by defining the technical details of equipment, the alarm bands, and the specific type of measurements for each piece of equipment.

⬇

ROUTE SETUP	Create the routes to be transferred to the logger, choosing the equipment that each route will contain.

⬇

TRANSFER ROUTES	Select the routes to be measured in the field and select the transfer option to download these routes to the logger.

⬇

FIELD MEASUREMENTS WITH THE LOGGER	Once the routes are loaded into the logger, select the the data collector program, select the route to be measured, and activate the automatic function for the first equipment listed.
TRANSFER MEASUREMENTS	Select the receive transfer option to upload the route measurements taken by the data logger to the computer.
CHECKING MEASUREMENTS RECEIVED	This window allows a quick look to verify the measurements taken, to see the the status of the measurement, and to print the fault spectra. It also permits the preparation of a report on the state of the route.
REVIEW RECORDS	This application allows an analysis of all measurements taken in the plant and along individual routes, with the ability to see in all cases the measurements that were taken over a determined period of time. It allows comparing measurements, viewing trending charts, and printing reports on equipment.

DSP Data Management START window:

The START window is the main window of the DSP Data Management software. From here the ID and Password are entered to access the various listed functions.
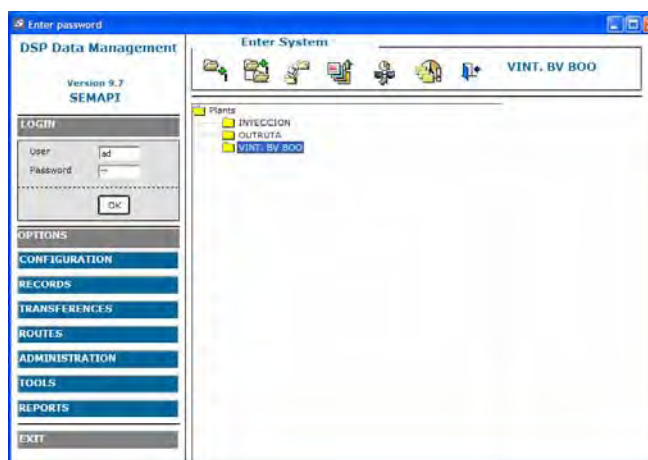
It is also from this window that plants and sub-plants are created to organize equipment records, to input configurations from other plants already created, to input equipment and their records, to assign measurements from OFF ROUTE plants to other plants, and to see the routes by date of inspections performed.

Main functions:

|	
ICON to create a new plant
ICON to import equipment configurations with or without their records from another plant in the system.
ICON to import equipment configurations with or without their records from another plant in the system.
ICON to export off-route measurements taken by the data logger.
ICON to access the list of routes already performed inside the selected plant
ICON to access the list of routes in all the plants existing in the system

Importation of plants:

From the START window the user can import data from plants that have already been established. The selection of which elements to import can be done before the operation and not only can the configuration of the points be copied, but also the records for each piece of equipment as well.

If the user wants to import data from the equipment, the system shows the tree diagrams of the plants and sub-plants.

To import data, select the plant that will receive the data and then activate the function with the import ICON.
A plant-selection window will open, from which the data will be imported.
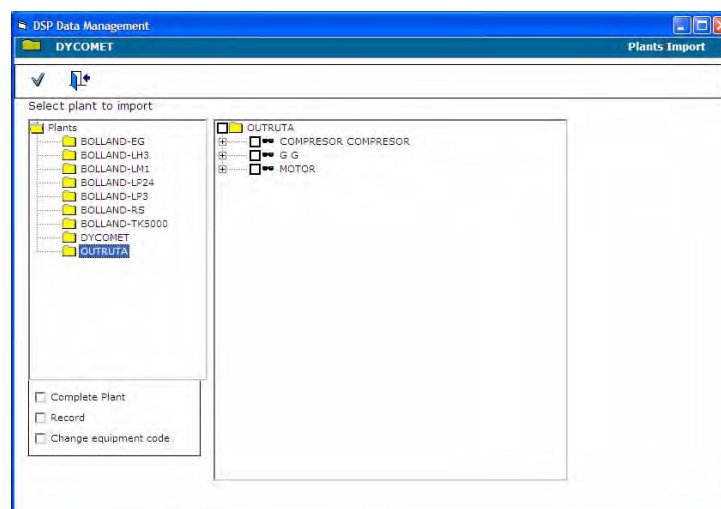
In this window there will appear a list of equipment and a selection box for which equipment is to be imported.
By selecting a piece of equipment, all of its corresponding points are likewise selected. These points can be de-selected manually.

Option of Importation:

Importing a complete plant allows the selection of all equipment in a single step. This command will copy the configuration of all equipment from one plant to another.

Importing records allows moving (not copying) equipment with its records from one plant to another. This is extremely useful when monitoring is required for equipment that, after being repaired, has been moved to a different location.

IMPORTANT!!!

When importing equipment together with its records, the imported equipment is erased from its original database.
THE DUPLICATION OF RECORDS HAVING THE SAME CODES IS NOT ALLOWED.

Changing the equipment code can be done automatically by activating the function.
This tool is very useful when a lot of equipment, or a sector that is identical to another, is imported and the only change is the system code.
When importing, the system will ask for a new code to correspond to each piece of equipment being imported.
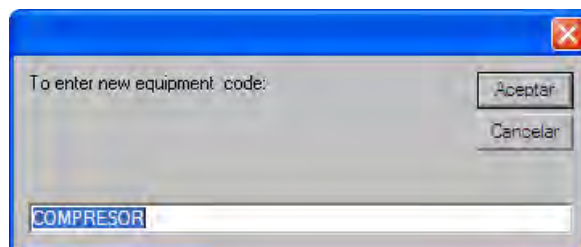
Exporting measurements:

Exporting permits the measurements generated by the data logger with its off-route program to be organized into the predictive maintenance system.

By activating this function from the ICON, the system will open the OFF-ROUTE plant, which is automatically created whenever the system receives files taken outside the route.

This OFF-ROUTE plant contains all of the measurements taken by the data logger, and they are arranged by

- EQUIPMENT
- POINT
- MEASUREMENT

In addition, the time and the spectral RMS value are also shown.

From the Export measurements window, in addition to the full use of all analysis toold, the spectra can be opened up and printed out

The process to carry out the Export function requires only knowing and defining the destination for each off-route measurement taken.

In the Export window, there appear two types of ICON that allow viewing or exporting the measurements from the grid.

Date	Hour	Value		
15/06/2006	04:20:31 p.m.	4,04		
15/06/2006	04:43:30 p.m.	7,12		
15/06/2006	04:49:38 p.m.	7,58		
15/06/2006	04:50:02 p.m.	2,17		
15/06/2006	04:18:29 p.m.	2,82		
15/06/2006	04:20:06 p.m.	2,58		
15/06/2006	04:40:36 p.m.	10,96		
15/06/2006	04:43:12 p.m.	10,59		
15/06/2006	04:41:01 p.m.	6,02		

ICON to view the spectrum of the measurement

ICON to export the measurement

The spectral measurement opened from the Export window has the same tools available to it as any RECORD, so it is recommended to see the corresponding chapter for more details.

Exporting measurements is performed via a window in this program that is called: Exportation of off-route data/Plant selection
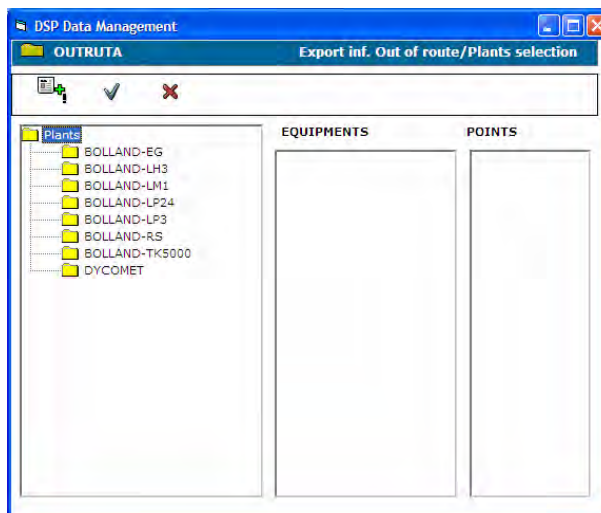
In order to enter these measurements, it is necessary to know the background scale of the measurement made off-route and that of the point where it is being entered, for if these do not coincide the system will reject the export.

Taking this into account, one must look through the list of the plant and/or sub-plants which will be the destination of the measurement. When the plant

or sub-plant is located, one must find the equipment for the measurement; and when the equipment is found, one must look at the associated point.

En cases where the off-route measurement belongs to a piece of equipment that does not have such a point already created, the point can be added at the same time the measurement is entered.

To perform this, select the plant, then select the equipment and open the window ENTER EQUIPMENT AND POINT with this ICON:
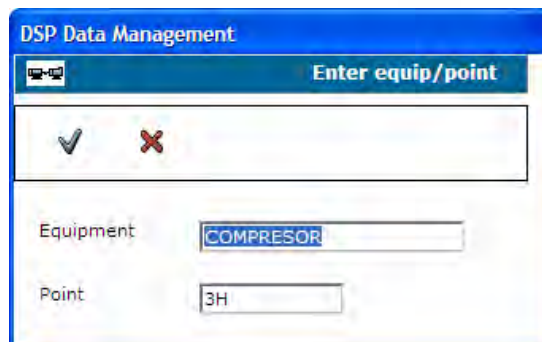
 The program will open a window to create the point on the selected equipment. The name of the equipment will appear as a fixed field, and only the code of the point whould be entered.

When this is done, the program will confirm the destination for the off-route measurement.

In cases of entering measurements when neither the equipment nor the point exists, one must select the plant, open the window ENTER EQUIPMENT AND POINT and fill-in both fields for the operation to be successful.

When this is done, the program will confirm the destination of the off-route measurement.

When this is finished, the measurements will no longer belong to the OFF-ROUTE plant, and as such cannot be re-exported nor reviewed from this plant.

Measurements taken off-route that are not exported to another plant will remain in the OFF-ROUTE plan and can be checked or reviewed from the RECORDS option.

Measurement routes performed:

By activating this function the system will show the measurement routes that have expired according to the control frequency entered, or in other words, that they were not measured inside of the defined period of time, in the selected plant.

The second option for this function is to activate the search for expired routes in all plants and sub-plants of the system.

When the expired routes are found, the transfer window appears for sending, and transfer to the logger can be undertaken.

Main Menu:
Opciones / Administración

Options/Administration

The Coupling Type, Bearing Type, Lube Type, Roller Type, and Alarm Bands are listed in the system to permit loading such data into the configuration.
To become familiar with these functions and details, refer to CHAPTER 2: CONFIGURATION.

Security:

DSP Data Management allows the creation of different users without any limits, but at the same time the system administrator can create
a given profile for each user, or create profiles with determined functionality.

Upon entering the Security function, the system administrator will see the users created during installation.
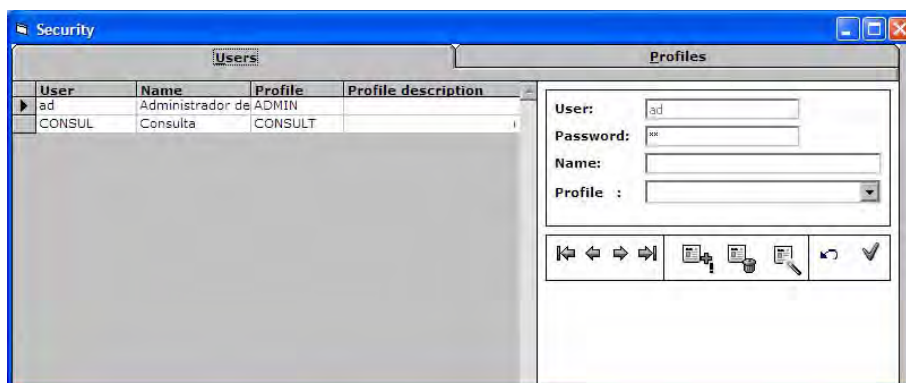
Each user will have an ID, name, profile, and password.

The following functions are also available to the system administrator:

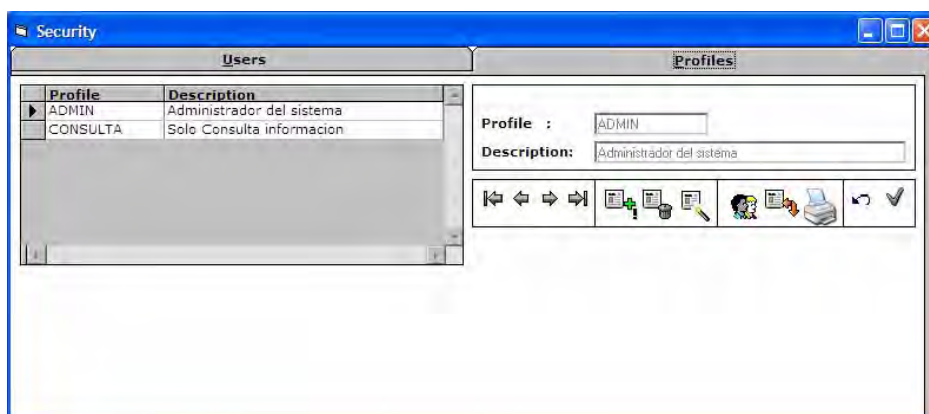|	
	ICON to add a new user.
	ICON to edit a existing user.
	ICON to delete a user.

From the user function, the system administrator will also have access to the profiles:

For the established profiles that appear on screen, each has a list of authorized commands for entering the system.

The system administrator also has available the following functions:

	ICON to add a new profile.
	ICON to edit a profile.
	ICON to delete a profile.

Create Profiles:

Each user must have an assigned profile from these types: Reviewer, Inspector, or Administrator.

The profiles can be modified to take away or to add system functions.

To modify a profile, one must activate this function with the
ICON:

When the command is activated a window from the menu will open to select functions to activate or deactivate. Each menu option has distinct, associated commands, and each command has associated actions.

The example shows the Alarm Band command and its associated actions as Add, Edit, and Delete.

These actions are deactivated for the selected profile when they are clicked and de-selected from the list.
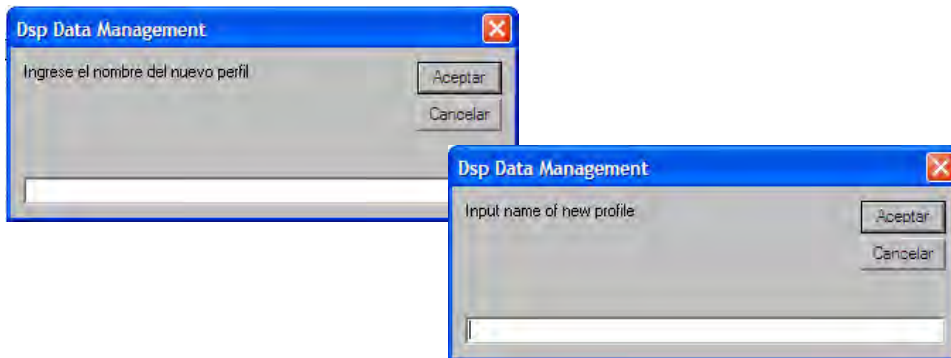
Upon finishing the modification of access privileges or upon selecting another command from the menu options, the system will warn of the changes made.

When a profile is configured, it may be copied or duplicated with another name, via the ICON:
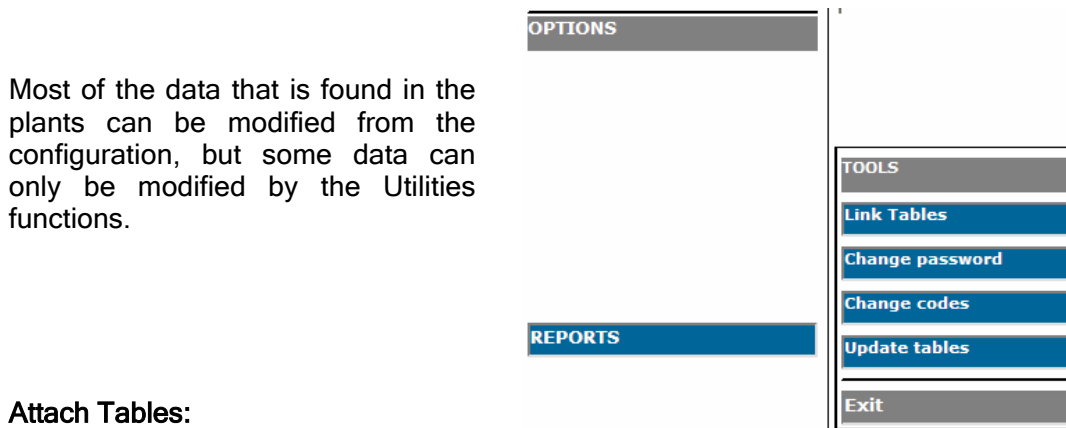
Activating this function, the selected profile will be copied and the system will ask for its new name or code:
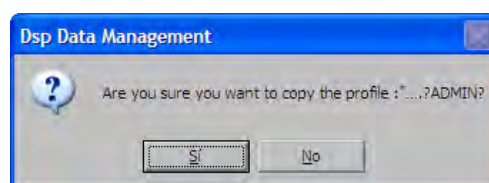
Options / Utilities

The functions found inside Utilities are associated with database tools. These operations allow more complex changes to the data for the plants.

Most of the data that is found in the plants can be modified from the configuration, but some data can only be modified by the Utilities functions.

Attach Tables:

The databases that work with the DSP Data Management system are addressed according to the specific installation of a terminal or network.
A conventional installation can address the tables in the following manner:

c:/dspdm/planta1/planta1.mdb

Nevertheless, a user may work with databases from other users that may not have a conventional installation on the C: drive and this would result
in a series of errors upon reviewing the data from the plant, including showing an empty database.

To resolve this problem, it will just be necessary to select the work plant, and then activate the Attach Tables function.
The delay caused by this function will be determined either by the speed of the network or by the local hard drive, but no action will be displayed onscreen at the moment of attachment.

The Attach Tables option also should be used when the system version is updated whenever the file DSPCON.MDB is updated from each plant.

DSPCON.MDB files:

Each database, whether a plant or sub-plant, contains two files. The file that carries the name of the folder or plant will have the extension .mdb, and will contain the tables with the data of the configuration and the records of the equipment. The other file will be called "dspcon.mdb".

As the file dspcon.mdb contains the information of the reviews and the address of the database, it will increase in size over time and with reviews.
In some cases it can grow to equal or exceed the data file. This increase in size could result in database-related reliability issues, so it is highly recommended that this file be replaced whenever problems arise in the reviews.

To replace this file it is necessary to look inside the system folder, called DSPDM, for the file dspcon.mdb; to copy this file; and to paste it inside the plant, replacing the existing file.
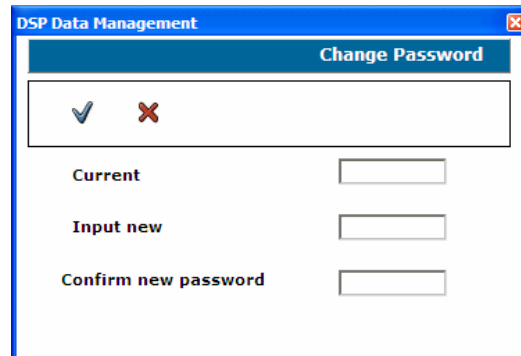
The file dspcon.mdb that can be found en the root or program folder is an empty file that will serve to replace those that may grow unwieldy or those that may generate problems.

Once replaced, the Attach Tables function should be activated.

Change Password:

This function allows changing the current user's password.

It is only necessary to input data into the fields indicated by the window, and the password will be changed without modification to the user's profile..
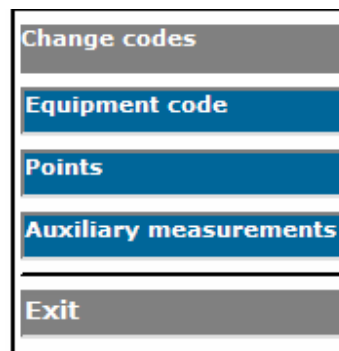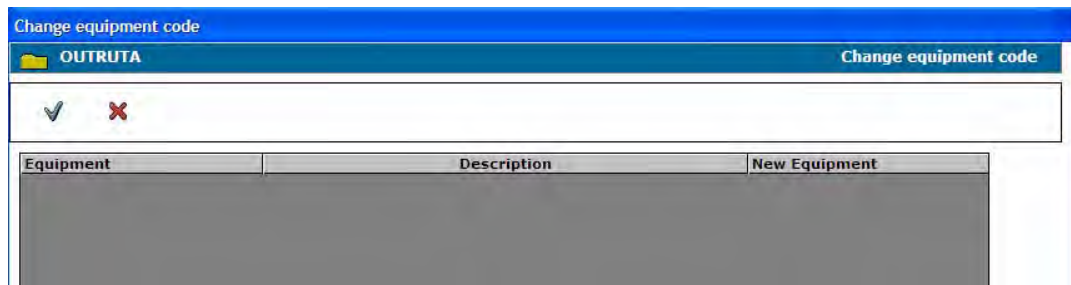
Change Codes:

The codes of equipment, points, and variables are unalterable fields in the DSP Data Management system, as they contain fixed references for the rest of the relational database.
As on occasion these names are modified and/or updated by other systems, the tool for changing codes allows the operator to update the names of these fields.

To make changes to codes, select a plant or sub-plant and the option.

For changes to equipment codes, a window will show the list of equipment and a box to enter the replacement code.
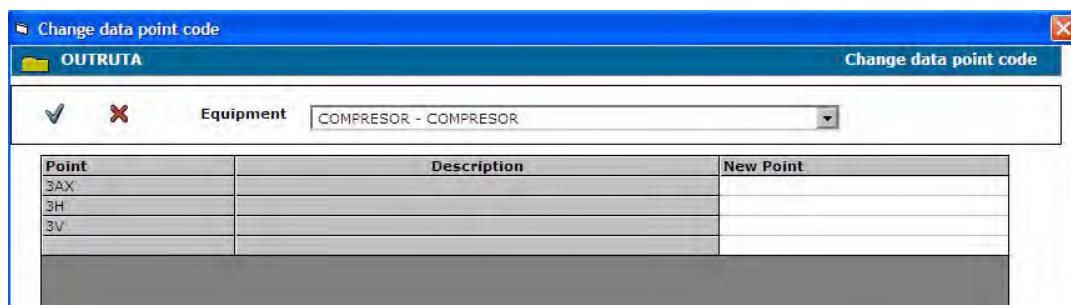
Change Codes: Points

The new codes can be entered one by one and updated all at once with this command:

Or canceled with this command:

In order to change the point codes, the equipment must first be selected, after which the point codes will appear and be ready for changing:

Change Codes: Auxiliary Measurements

The new codes can be entered one by one and updated all at once with this command:

Or canceled with this command:

In order to change the Auxiliary Measurements codes, the equipment must be selected and a window will show the measurements to be changed.

Update Tables:

The DSP Data Management system contains independent tables that hold data used to show results with different analysis tools.

Given that these tools can be applied in different versions, the tables from previous versions are left outdated in the plant databases. Additionally, there exist databases in different languages and even different definitions of measurements in the

language used. For these reasons, the tables that are not updated from a database or from an installation may generate serious operational errors that impede the correct operation of the principal functions of the program.

Whenever using databases from different versions of the software, or whenever using different languages, it is recommended that the Update Tabels option be selected.
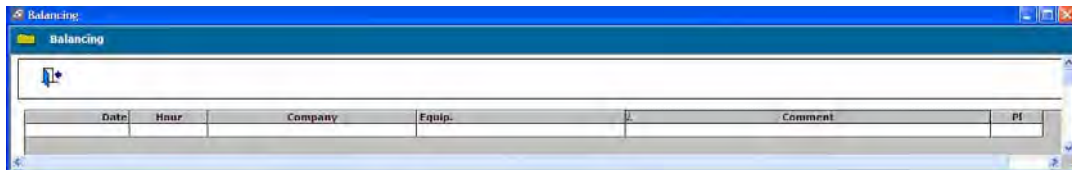
Options / Reports

Balancing Reports:

DSP Data Management organizes and files measurements and reports generated with the DSP Logger MX 300 hardware, whose balancing module generates a report with the initial and final balance values. These are stored in memory and can be transferred to the PC with any measurement route. DSP Data Management takes care of identifying what type of report is entered and storing it in the corresponding format.

The Balance Report option only allows access to the records of the reports, so they can be opened and printed out (to perform transfers see Chapter 3: Routes and Transfers)

When this option is selected, a window will be opened that shows the list of reports.

Whenever Balance Reports are entered, they will appear in the list, for review and printing.

To open it, click on the right-hand mouse button, and the window will be shown with the report.

The initial and final spectra options are not available, not even on the hardware.