



Steel Projects

WinSTEEL

V 6.50.7.xx

User Manual

July 2011

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1. Introduction

1.1 General Notes

Unlike other MIS software this is a truly flexible, user-friendly plug and play production software system, and does not require a software engineer to spend weeks or months to integrate the software into the Company's production processes and systems.

The **WinSTEEL** module links with WinSER and WinBAR to provide structural steel fabricators the very best Production Management software.

Direct importation of CAD files (DSTV, DXF, STEP, Tekla etc.) and contract phases into **WinSTEEL** allows for control and management of parts, profiles database, machine and tooling cycles to automatic part routing to machines, **WinSTEEL** is capable of automatic and manual input.

At all stages of Production the user is able to view a graphical representation of the parts or bars.

1.2 Useful Information

In this paragraph, we will give some general conventions used in **WinSTEEL**, to better understand the various operations and the interactive dialogue between operator and computer.

In this manual, the decimal point replaces the decimal comma. It is of fundamental importance to distinguish between the number "0" from the capital letter "O"; the number "1" from the letter "I", as these often generate errors.

1.3 Keyboard

In the manual, dialogue keys with the computer will be shown using: [...] The RETURN key, (or ENTER, according to the keyboard) will be symbolised by [ENTER].

The key ESC will be symbolized by [ESC].

The function keys (Keyboard top row) are shown using [Fxx] where xx represents values from 1 to 12. For example [F10] means "press the function key F10"

The function [Alt-A] means "**press the ALT key together with the A key**".

1.4 Move Functions

[FIG] or ⇐	Left Arrow
[FID] or ⇒	Right Arrow
[FIH] or ↑	Arrow Up
[FIB] or ↓	Arrow Down
[Home] or ⇐	Moves the cursor to the beginning of the line
[End] or [Fin]	Moves the cursor to the end of the line
[PgUp]	Page Up
[PgDn]	Page Down
[Ins]	Insert Mode
[Del]	Cancels the character in the current position
[Tab]	Tabulation
[BkSp]	Backspace (BackSpace)
[Esp]	Space

1.5 Move and Select in the application

To select and open items from the menu bar, File, Data, Selection, etc., the user must hold down the **ALT** key together with the first letter of the operation. The selection bar opens the first menu. The following move can be possible with the help of direction arrows.

The use of the mouse allows all moves without using secondary keys such as **ALT** or **CTRL**.

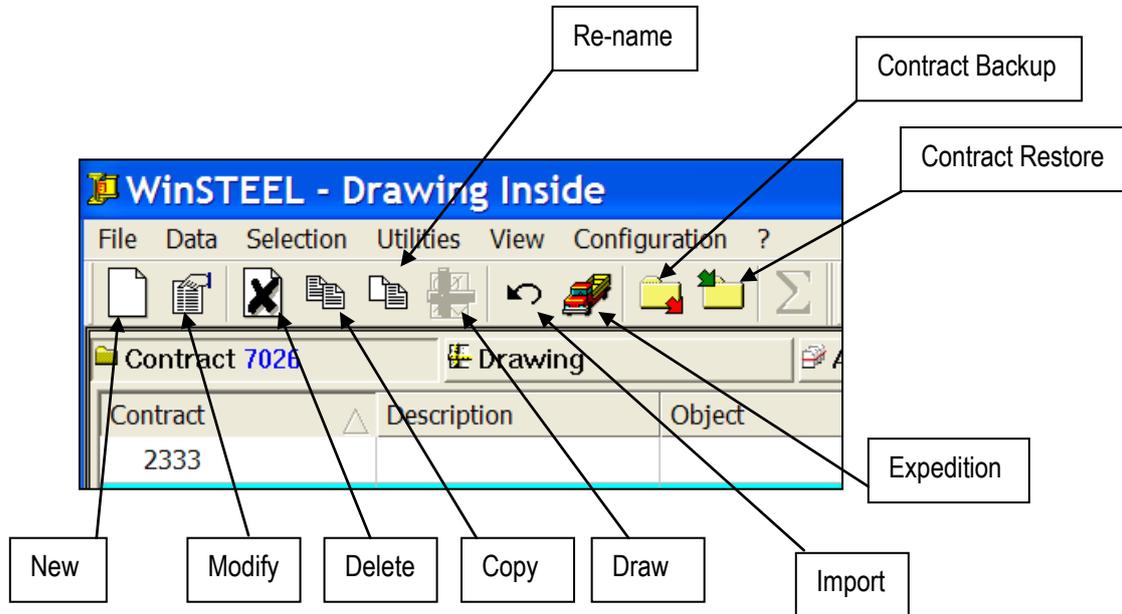


Fig 1-1 WinSTEEL Main screen icons

ALT-F	Open File Menu,
ALT-D	Open Data Menu,
ALT-S	Open Exit Menu,
ALT-U	Open Utilities Menu,
ALT-C	Open configuration Menu,
ALT-Q	Close and Quit WinSTEEL
ALT- ?	About WinSTEEL

1.6 General presentation of WinSTEEL

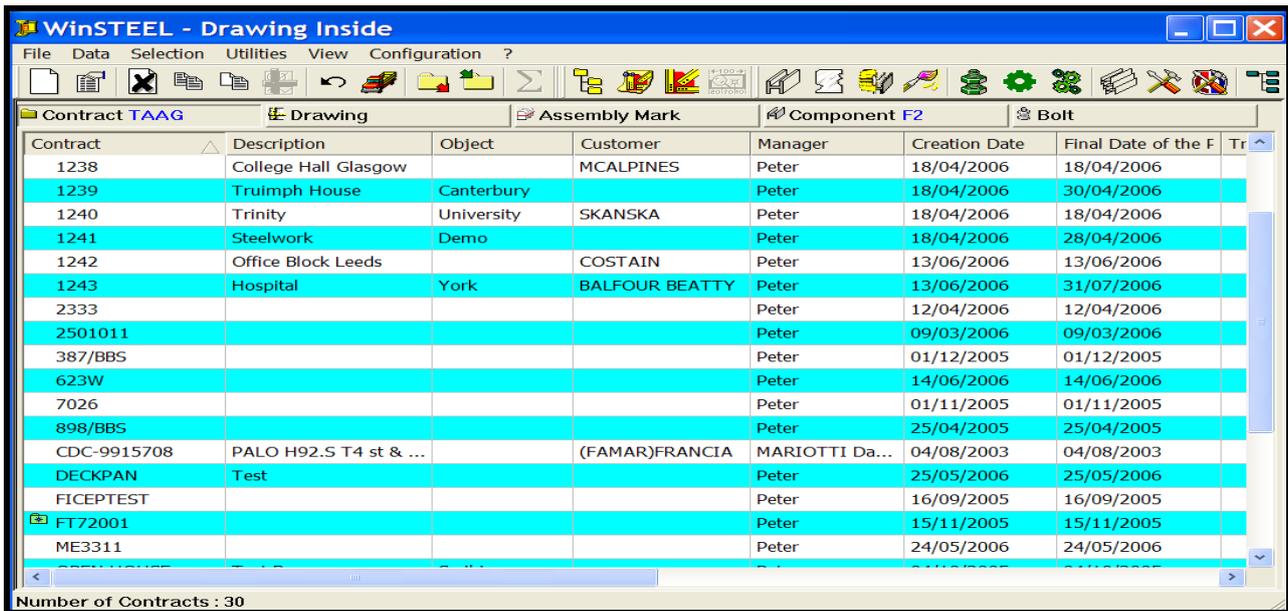


Fig 1-2 WinSTEEL Main screen

1.7 Drawing Preview

At every stage of the production process WinSTEEL will allow the viewing of the component in its current state. Simply use the down arrow keys to move from component to component and the drawing appears automatically.

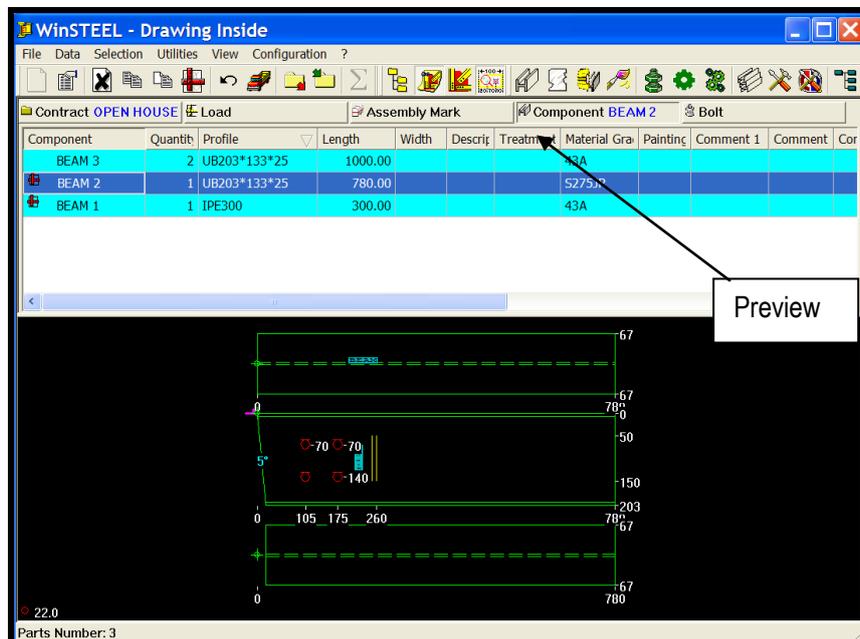


Fig 1-3 WinSTEEL with preview activated

2. Installation and Start-up

To be undertaken by a Steel Projects engineer only.

2.1 Minimum Hardware Requirements

WinSTEEL works on any PC using Intel Pentium microprocessors.

Actual configurations are powerful enough to allow WinSTEEL to run without any problem.

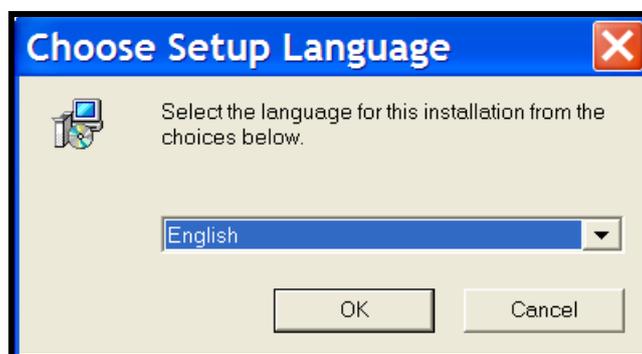
The OS has to be Windows (2000, XP, Vista, 7)

2.2 Installation

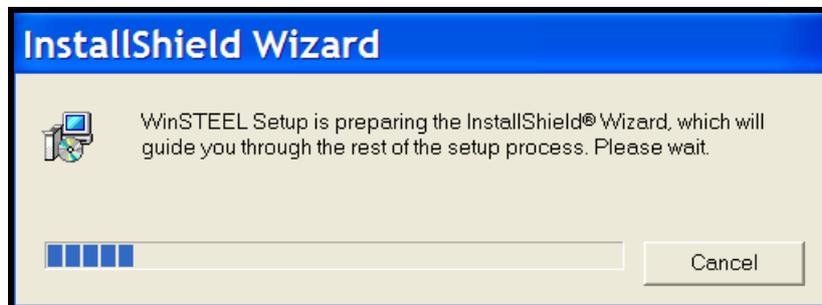
Insert the CD-ROM or disk supplied in the drive **A** or **D**

From the Start menu of Windows, select Run, locate the CD-ROM or disk.

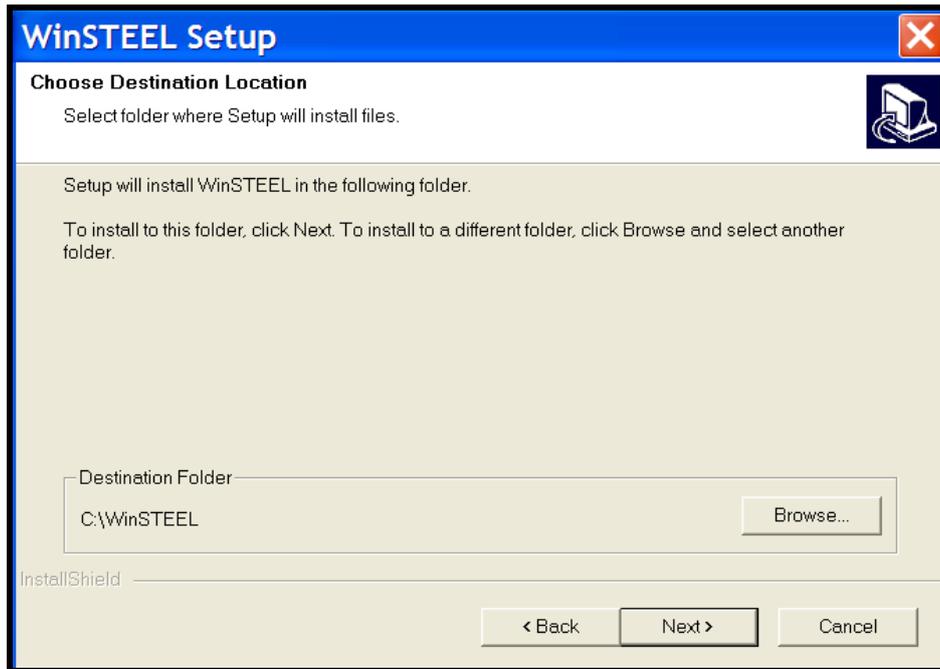
Follow the instructions in the disk **A** or **B** and start the **SETUP.EXE** application.



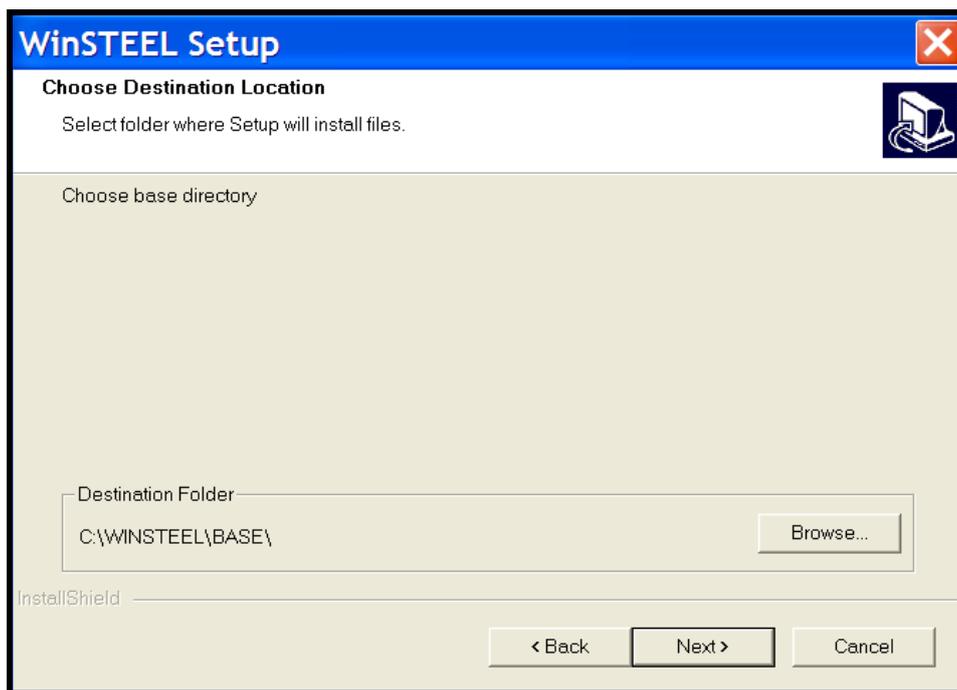
Click OK



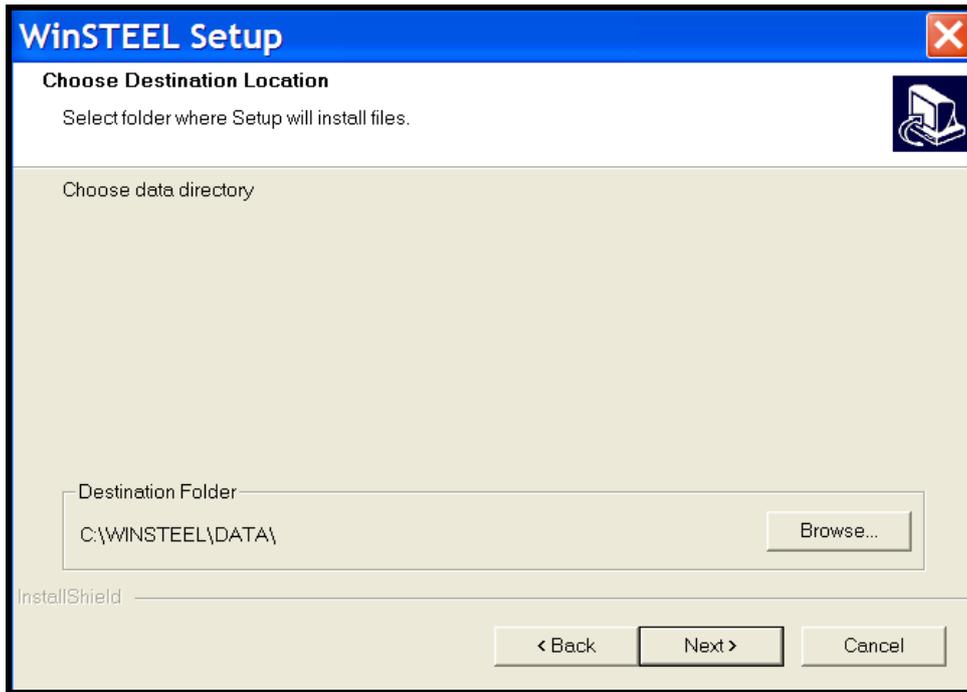
The installation procedure will execute a set of operations which take only a few minutes.



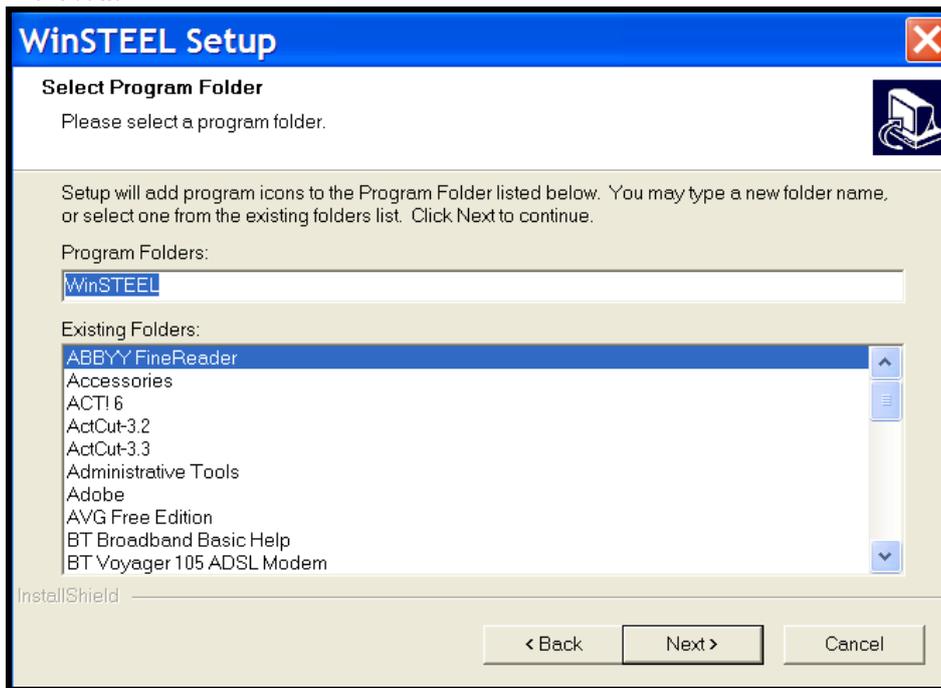
Click on Next button



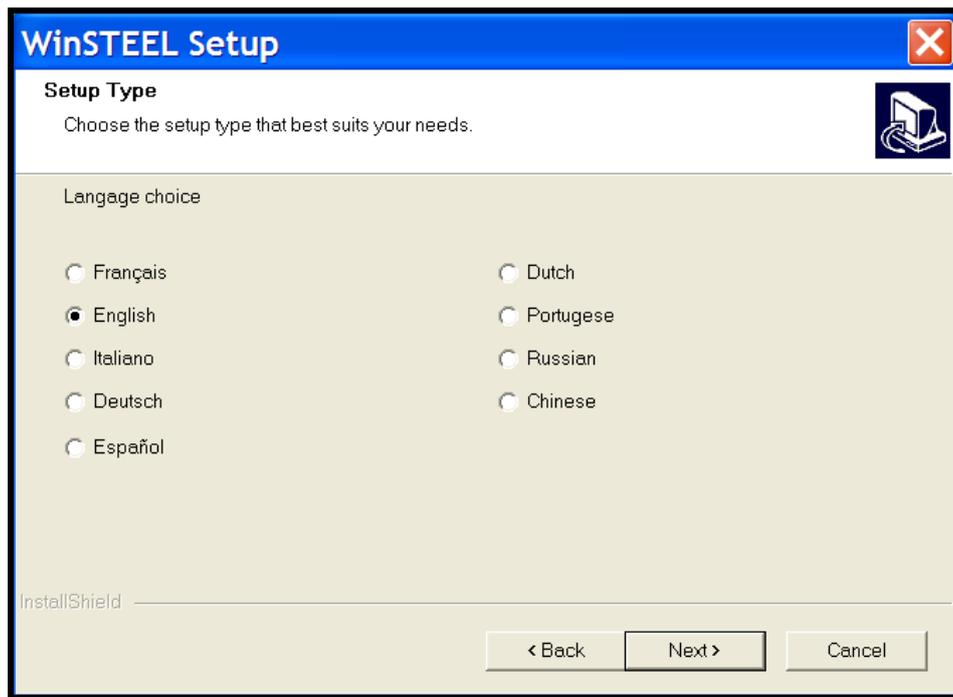
Click on Next button



Click on Next button



Click on Next button



Select the language of choice then Click on Next button.

2.3 Hardware Protection Key

The WinSTEEL program is fitted with a protection device, DONGLE (or key): the software will not operate unless the key is constantly connected to the computer.

Each WinSTEEL package is supplied with one protection key. Should this key go missing, lost, stolen or destroyed, a regular purchase order will have to be placed to get a replacement. Please insure the key for full replacement cost. Please call the Steel Projects office if more detail is required.

2.4 Protection key (Dongle) working

The protection key (Dongle) must be fitted to the computer's parallel port or USB port dependent upon the key supplied. Its operation does not absolutely affect the system, the printers or any other peripheral units. However, it will not allow the program to run if installed incorrectly. Should the protection key fail to operate immediately, make sure to apply power to the peripheral unit connected to the key (Dongle).

The protection key must be fitted on the correct side and directly into the computer. **This component has been uniquely coded for the computer.**

2.5 Used Directories

It is assumed that the program has been installed on the C Hard Disk. The Directories used for the program are the following:

C : \ WINSTEEL

_____	Base :	Data Base Directory, etc.
_____	Files :	Programs Directory
_____	Models :	Print Models Directory

2.6 Start the Program



Proceed as follows to start the **WinSTEEL** program:

Select Steel Projects Folder.
Select **WinSTEEL icon**.

3. Terminology

3.1 Marking

3.1.1 Object

An object is an elementary component of structural steel, a Part. This is a basic element for **WinSTEEL**. There are two basic elements for **WinSTEEL**:

- **The pieces or Secondary Marks**
- **The bolts and screws**

3.1.2 Secondary Mark or Component

This basic piece element is also the lowest level for **WinSTEEL**. It allows the user to define basic elements (Parts) during the preparation and assembly steps of the workshop.

There are other terminologies to define this element, for example:

- **Drilling cutting mark,**
- **Secondary piece, etc.**

In this manual it will be called Component or Secondary Mark.

3.1.3 Profile

WinSTEEL creates its own Data Base for profiles upon importation of the data; this allows the system to manage groups of profiles. (See Chapter 5, Data Profiles).

3.1.4 Main Mark or Assembly Mark

This is a set of pieces (parts) or secondary marks
There are two types of groups of assembly marks

a) The Finished Assembly Mark is comprised of a single element or secondary mark

The terminology "End of Preparation" is due to this kind of assembly mark which doesn't go through the assembly steps of the workshop; so it is finished after the cutting and drilling process.

b) The Composed Assembly Mark is comprised of various piece elements or secondary marks and also bolts and screws.

Contrary to the group Finished Assembly Mark, this kind of main mark goes through the assembly steps of the workshop.

There are other terminology's to define the assembly mark such as:

- **Expedition mark,**
- **Assembly mark (of gantry)**

In this manual it will be called Assembly Mark.

3.1.5 The Drawing

The drawing is a whole composed of two main elements:

- **Assembly Marks**
- **Bolts and Screws**

3.1.6 The Job

A job is a set of optional items (Drawing, Assembly or Components) which belongs to a same contract and which corresponds to a regrouping for production, expedition and assembly needs.

3.1.7 Contract

A Contract is a set of items which belongs to a customer order for the production of steelwork. It's a set of plans for the **WinSTEEL** application.

3.2 Miscellaneous Information

WinSTEEL contains a lot of information on the contract, phase, parts, material, etc. The information is used primarily for revision requirements. Here is a list of some items available:

Secondary Marks:

- Piece Description
- Piece Treatment
- Piece Material
- Notes
- Description
- Customer
- Responsible
- Assembly Date
- Treatment
- Material

Drawings:

- Description
- Treatment
- Responsible
- Assembly Date
- Material

Assembly Marks:

- Description
- Responsible
- Assembly Date
- Treatment
- Material

Contracts:

4. Configuration

4.1 Option

This sub-menu provides information on the operational parameters.

Prior to making any modifications to the configuration, it is recommended that all the necessary backups be completed to avoid any data loss.

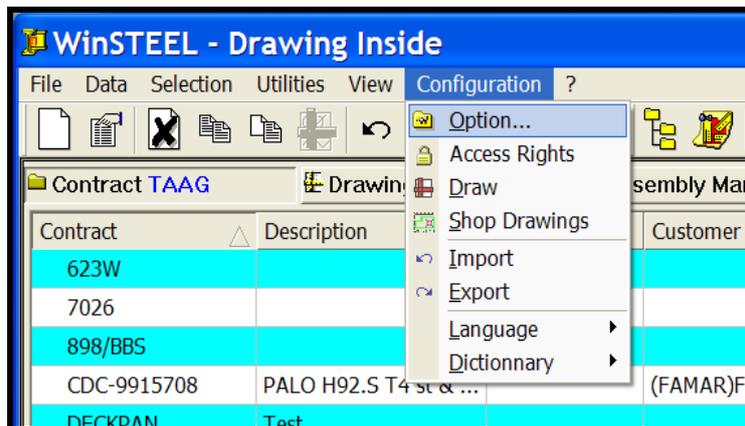


Fig 4-1 Sub-menu WinSTEEL configuration option

4.1.1 Directory

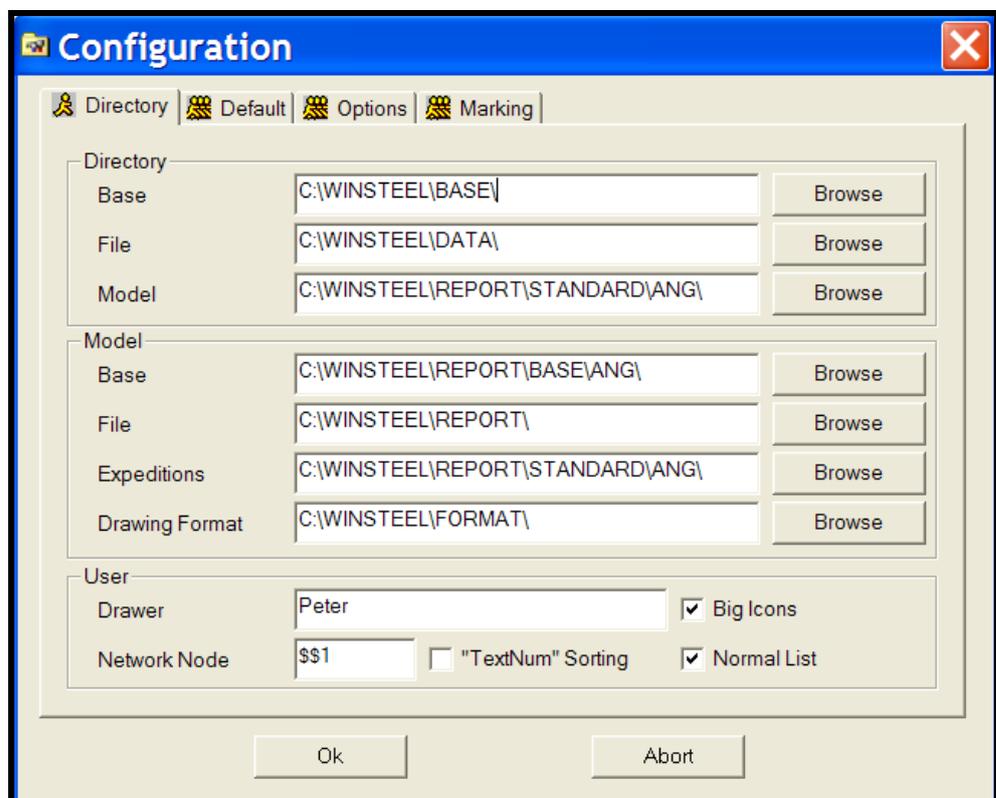


Fig 4-2 Configuration option directory

Base	Data Base Directory (Profiles, Materials, Groups, etc.)
File	User's Files Directory (Contracts, Jobs, Pieces, etc...)
Model	Print Models Directory which can be personalised.
Network Node	Temporary files for network use.

After each input, a control check is performed to see if that directory exists. The program will not allow any non-existing directories and will prompt the user to make changes.

4.1.2 Options

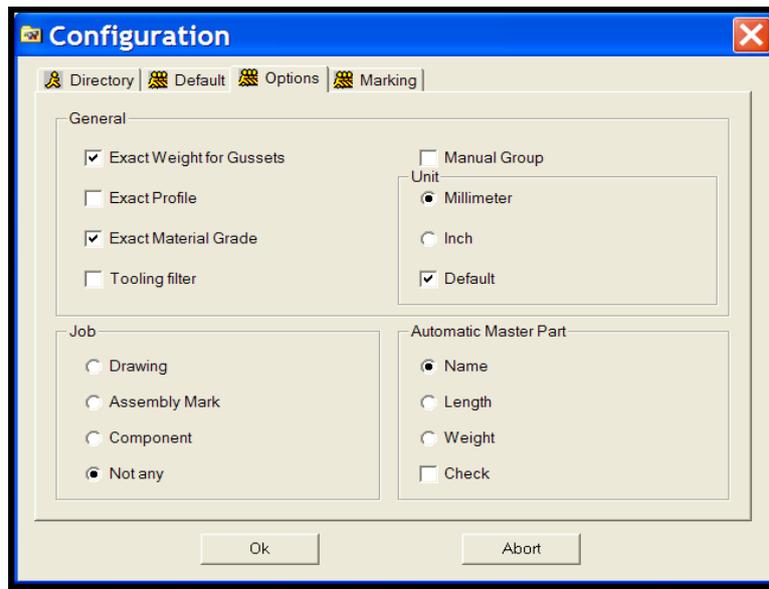


Fig 4-3 Configuration options

General	Check box to perform this check when importing.
Job	WinSTEEL can automatically generate a Job by drawing, assembly mark or single component according to the selected option.
Unit	It is possible to change the unit of measurement.
Automatic Master Part	Used to define the master part using the assigned field

4.1.3 Default

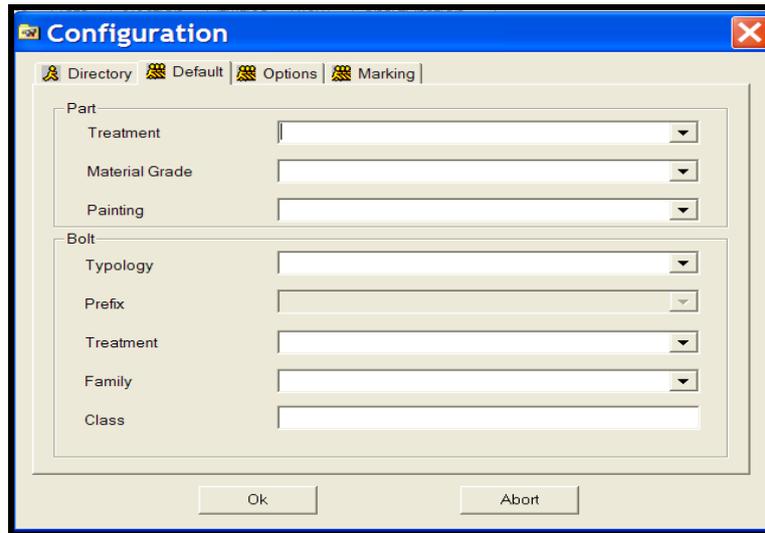


Fig 4-4 Configuration option default

Default Values	The option to define default values to assign to each part or bolt
-----------------------	--

4.1.4 Marking

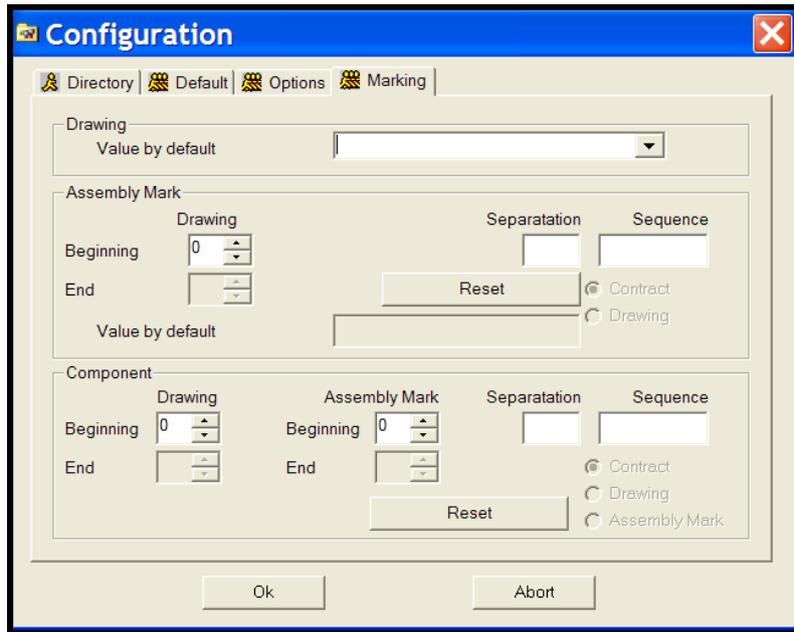


Fig 4-5 Configuration option marking

Marking Values	It is possible to assign marking values to assembly's and parts when importing
-----------------------	--

4.2 Draw

4.2.1 Drawing Options

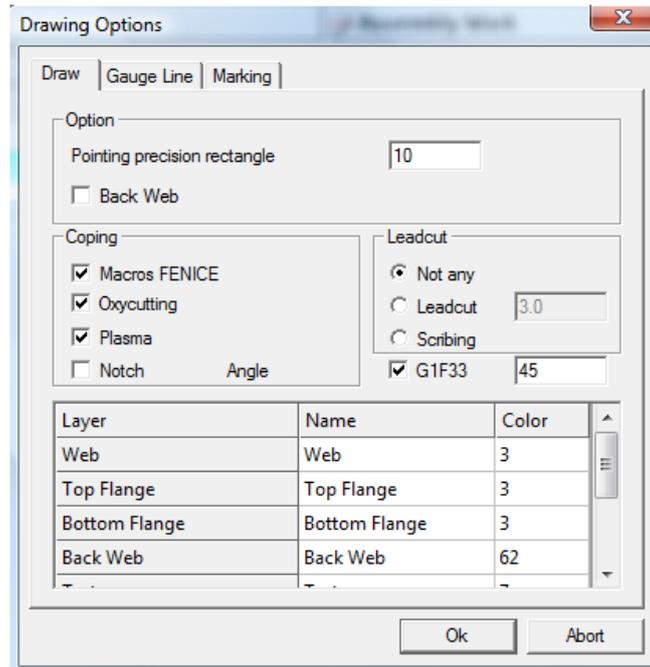


Fig 4-6 Configuration drawing options

Selection Resolution	This value allows defining the size of the selection rectangle during the selection of drawing elements. Default Value = 5.
Layer	WinSTEEL can manage a number of Layers. Each one has a description, a colour, a type of line and a parameter (Visible/Invisible). The layer names can be modified
Coping	Macros Fenice for all Fenice, Arianna and Minosse Robot. Must be untick if using a Ceptrol robot Oxycutting./Plasma : Some robots only have one torch (Filter the macros according to configuration) Notch angle to be tick for angle notch recognition during import.
Leadcut	LeadCut : if macro is not recognized create leadcut or scribing line instead. If the file robot.ini from the machine (d:\Minosse) is copied in WinSTEEL base directory, a filter is activated on input and recognition according to these macros. The value 0.1 represents the minimal distance between outline and the leadcut line creation.
G1F33	If ticked, the G1F33 macro (double cut) is transformed into one cut. If leadcut is set to scribing, the second cut will be scribed. The number represents the max angle that the saw can cut. For this option to run correctly, « outline regeneration » must be activated in import setup and « macros fenice » ticked in draw options

4.2.2 Gauge Line

This data is used for the generation of shape outlines according to the size of each drilling axis.

WinSTEEL proposes either a fixed distance relative to the size selected, or a coefficient to apply to the relevant size. Otherwise, the default coefficient will be applied.

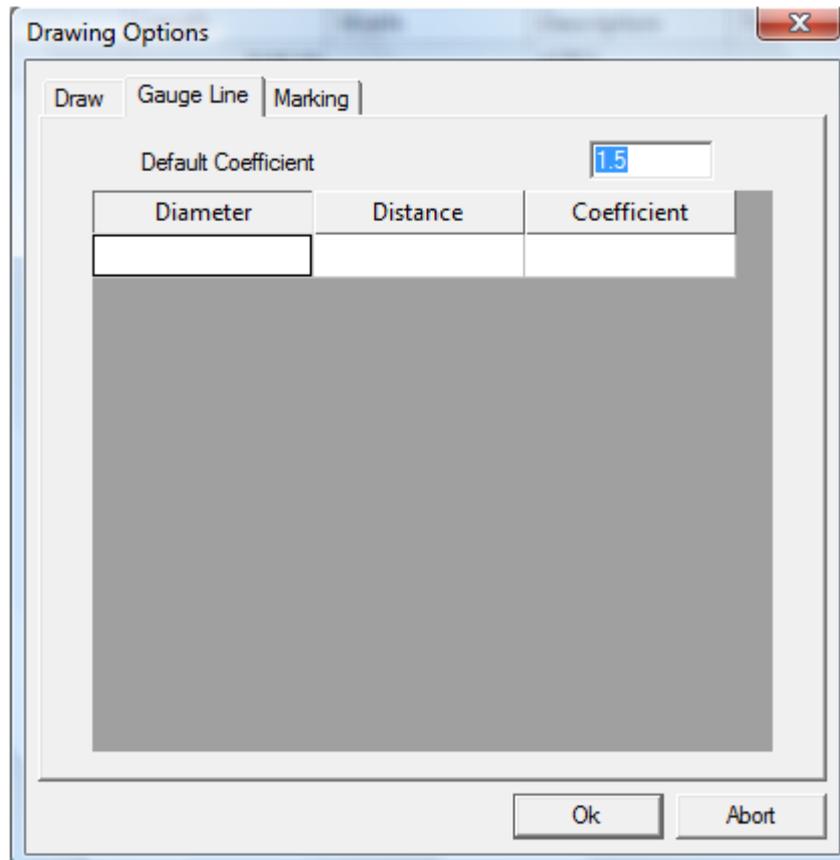


Fig 4-7 Configuration draw gauge line

4.3 Language

This option allows for alternate language choice. Just select the language and all the menus and messages are immediately translated. It is not necessary to restart **WinSTEEL** to activate the change.

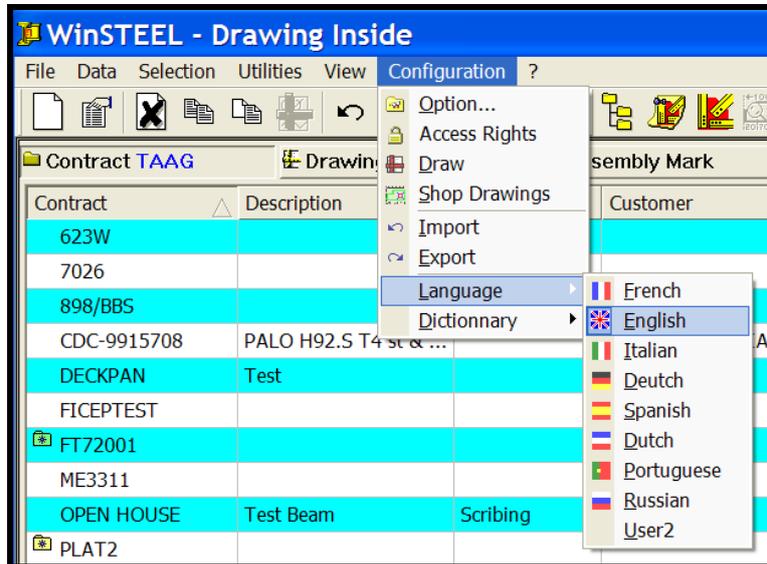


Fig 4-8 Configuration language

4.4 Dictionary

WinSTEEL has the possibility to be used in either Standard dictionary or the users personalised one, User. For further details on how to modify menus and customise WinSTEEL see Chapter 13.6 Utilities Translator.

NB: WinSTEEL must be in User Dictionary prior to opening the Utilities Translator. This option is prohibited in Standard Dictionary – greyed out.

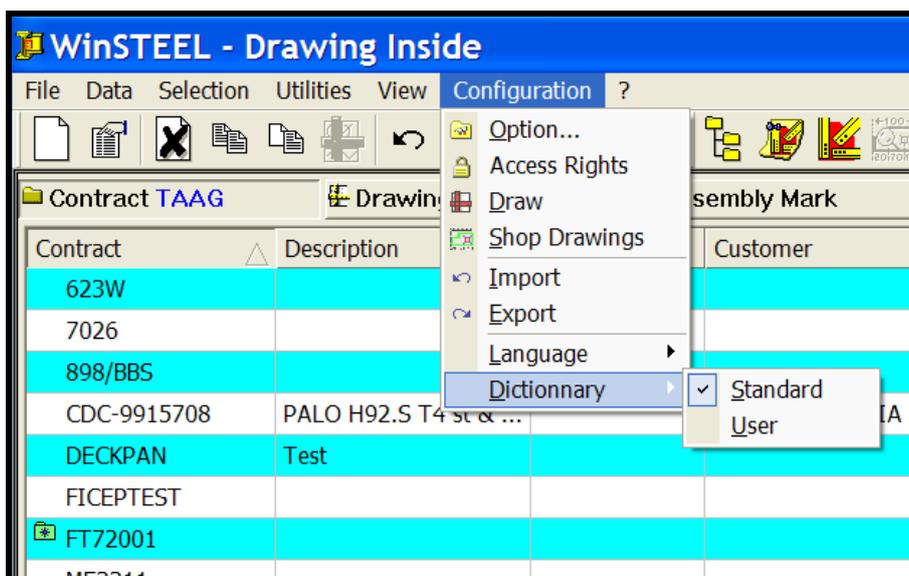


Fig 4-9 Configuration dictionary

4.5 Shop Drawing

4.5.1 Options

The shop drawing options allow the user to set-up the necessary formats, representation and parameters for the dimensioning text and lines, and the printers to be used.

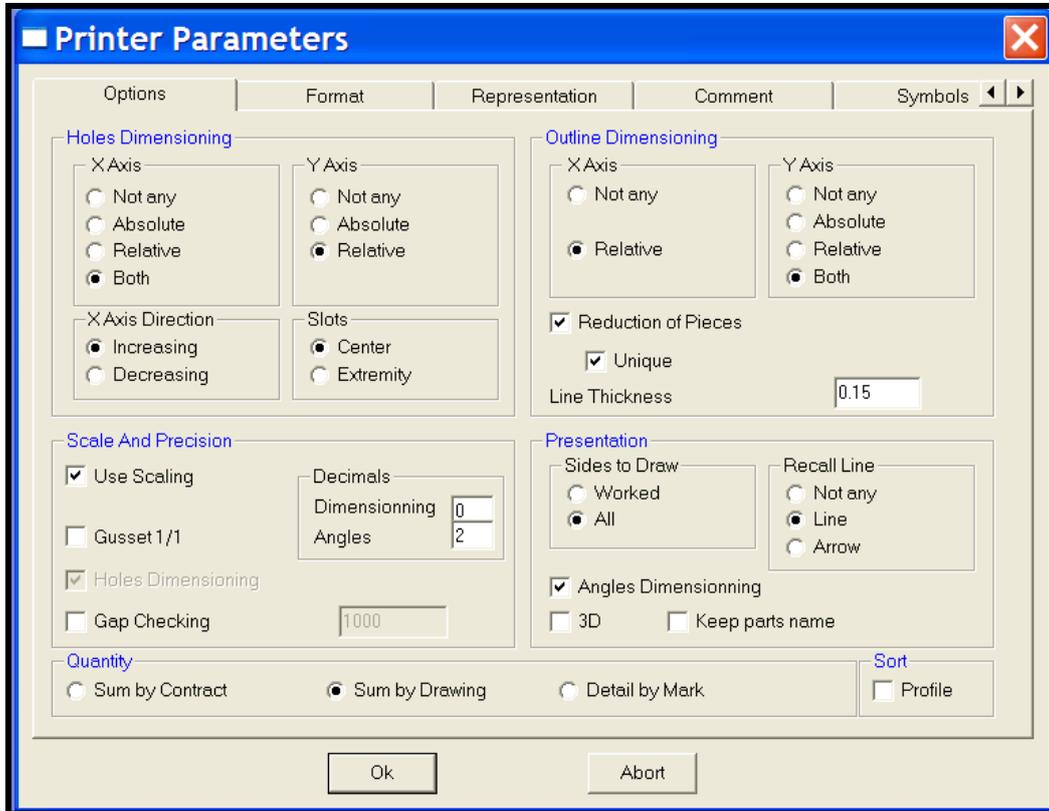


Fig 4-10 Configuration shop drawing options

Field	Designation
Holes Dimensioning	Selection of the type of dimensions for holes in the horizontal axis (X axis) and gauges (Y axis) for each side of the piece Not Any No Dimensioning Absolute Absolute dimension according to the reference point of the concerned side Relative The dimension of drilling is given in the relation to the previous one. The dimension of the first hole is relative to the reference point of the piece side Both Absolute and Relative dimensions
X Direction	This option allows to move the X axis zero point Increasing The zero point will be on the left The positive direction will go from left to right Decreasing The zero point will be on the right The positive direction will go from right to left
Slots	This option allows to place the slot holes relatively to the length Center The length will be calculated between the centers of the two half-circles Extremity The length will be calculated between the extremities of the two half-circles
Outline Dimensioning	Not Any No Dimensioning Absolute Absolute dimension according to the reference point of the concerned side. Relative The dimension of drilling is given in the relation to the previous one. The dimension of the first corner is relative to the reference point of the piece side. Both Absolute and Relative options
Reduction of Pieces	This option allows omitting some unnecessary zones to make the graphic view clearer. No No cut will be authorised. Yes Selected cuts will be carried out.
Line Thickness	Parameter which defines the line thickness.
Scale and Precision	Use scaling Authorisation to extend the piece in the X axis direction to avoid character superimposition. No In case of difference, outline lines will be continuous. Yes In case of difference, outline lines will be interrupted. Decimal Dimensions The dimension will be represented with the number of the chosen decimals. Decimal Angles The angles will be represented with the number of the chosen decimals.
Presentation	Worked Only the worked sides will be edited. All All sides of the piece will be printed.
Recall Line	Selection of the type of dimensioning line None No type of dimensioning line Line A 45 degrees dash as an end of the dimension Arrow A 30 degrees arrow as an end of the dimension line.
Angle Dimensioning	This option allows the activation or deactivation of angle dimensioning.

4.5.2 Format

The following screen gives the possibility to assemble all available prototypes for shop drawings. Each one will be assigned to a printer and its characteristics, a format of paper, an orientation, etc.

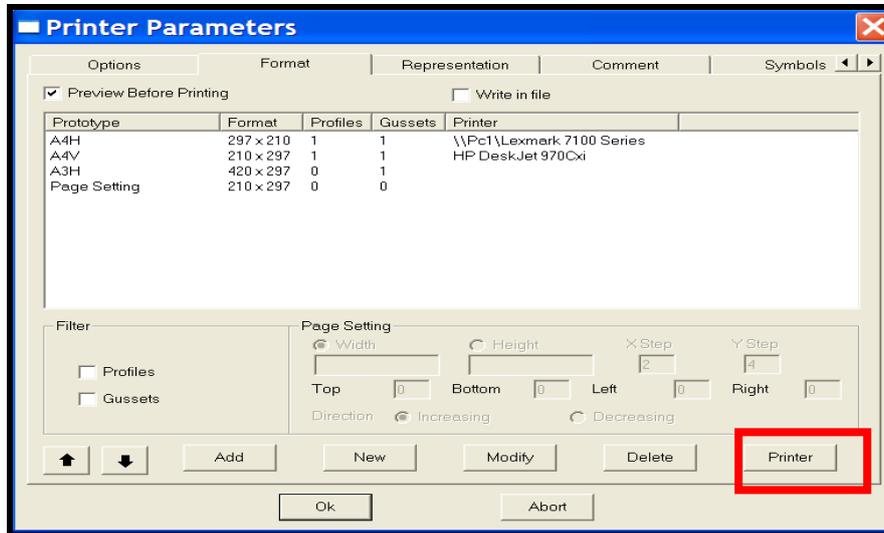


Fig 4-11 Configuration shop drawing printer parameters format

Format	Dimensions of Paper
Profiles	Authorisation to print log profiles (Beams, Angles, etc.)
Gussets	Authorisation to print profiles and gussets. Possibility to print with 1 scale and page setting.
Printer	Name of the printer configured in the system under Windows 95 or Windows NT or later.
Preview	Allows to view the shop drawing on the screen before printing
Prototype	Name of file which contains information of drawing sheet. This file is in the format DWG or DXF.

The Printer button accesses the configured printer in the system and allows modification of the characteristics, as on Fig 4-12 following:

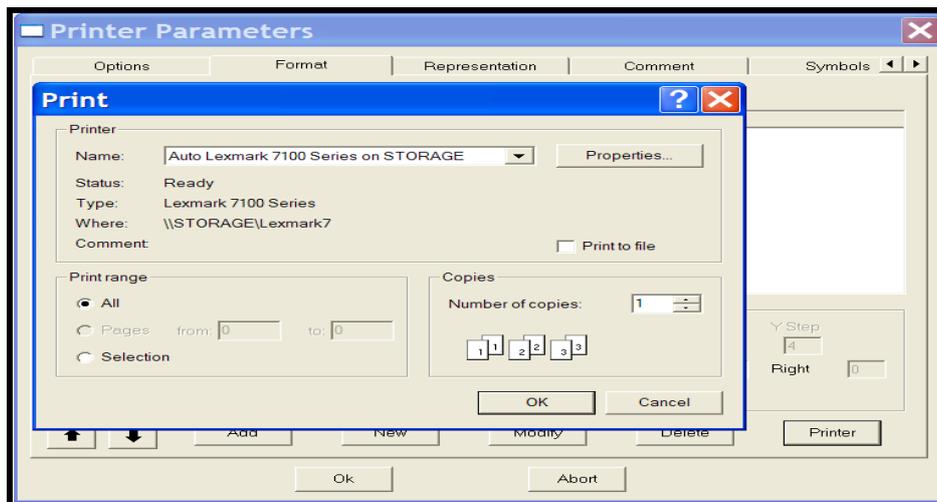


Fig 4-12 Configuration shop drawings printer settings

4.5.3 Representation

Selecting the type of representation for each profile.

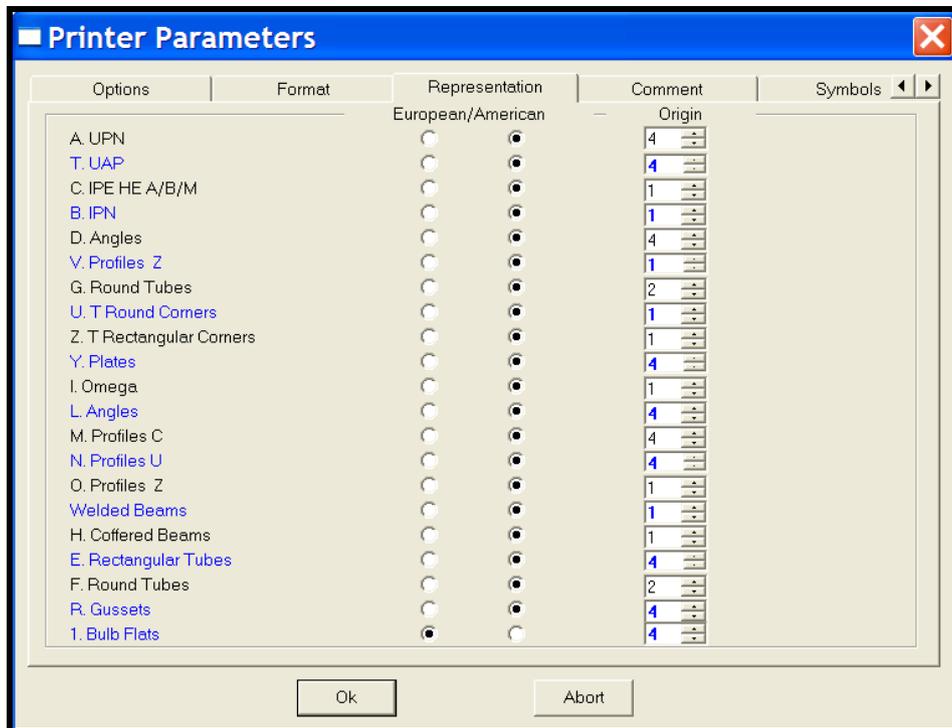


Fig 4-13 Configuration shop drawing representation by profile

Field	Designation
European	Top flange of the profiles drawn below the web
American	Top flange of the profiles drawn above the web
Origin	The reference origin of the piece which can be chosen on the table given in index

4.5.4 Comment

This section allows the user to personalise the shop drawing by inserting some comments.

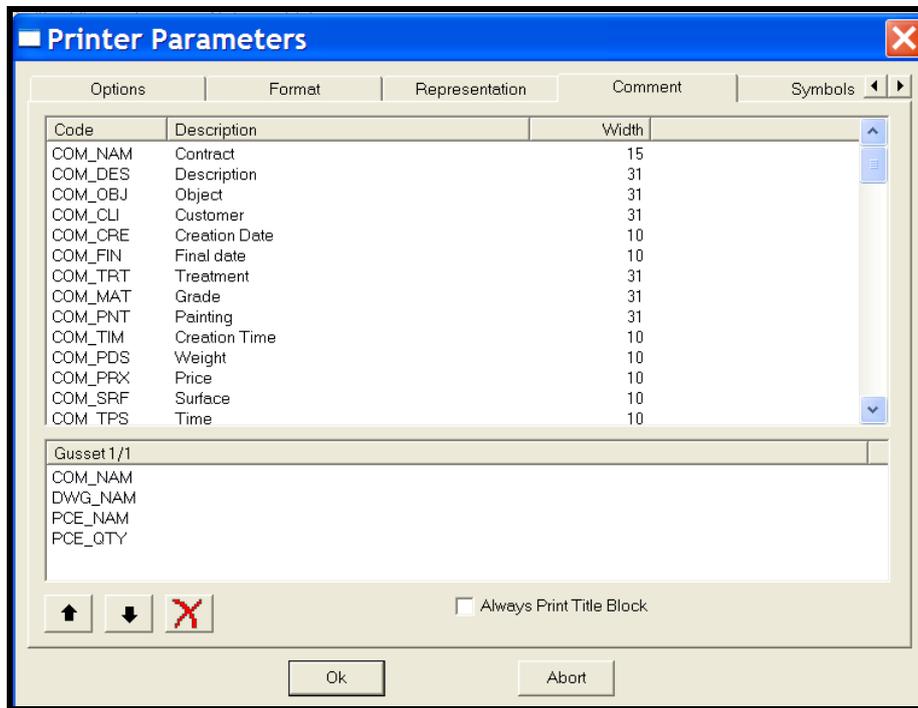


Fig 4-14 Key-words List

4.5.5 Symbols

Symbols are used to represent holes.

Every shown symbol is assigned to a diameter. The shop drawing will show the complete list of used symbols. It is possible to personalise these symbols when they are created. The user has a couple drawing tools to help generate basic geometrical elements.

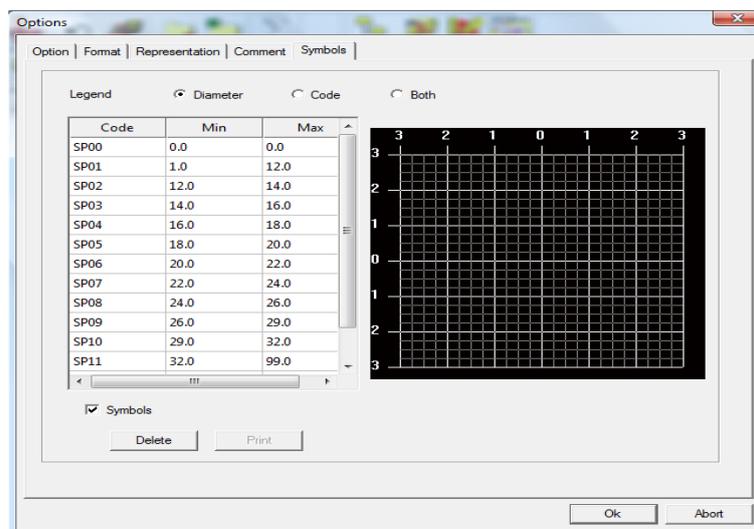


Fig 4-15 Symbol creation

4.6 Import

4.6.1 Parameters

WinSTEEL accepts all external data to insert them into the format used in WinSTEEL.

This menu is used to update the import configuration.

For each, it is necessary to specify the following information:

- **Name or Description** of the import source which will be on the lists.
- **Import type** (CAM Files, DSTV Files, DXF Files, etc.)
- **Directory** default directory to search for file types
- **Extension** for file type (NC1, XML, XSR, etc.)
- **Option;** for certain configurations.

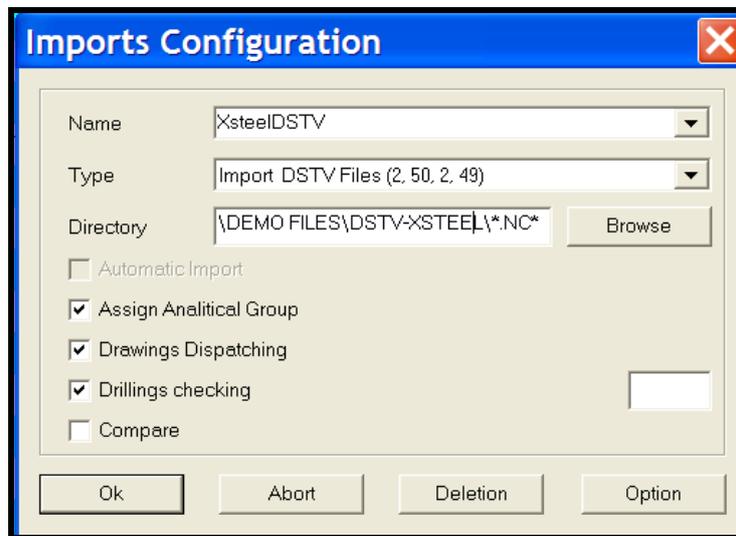


Fig 4-16 Configuration import parameters

4.6.1.1 Options

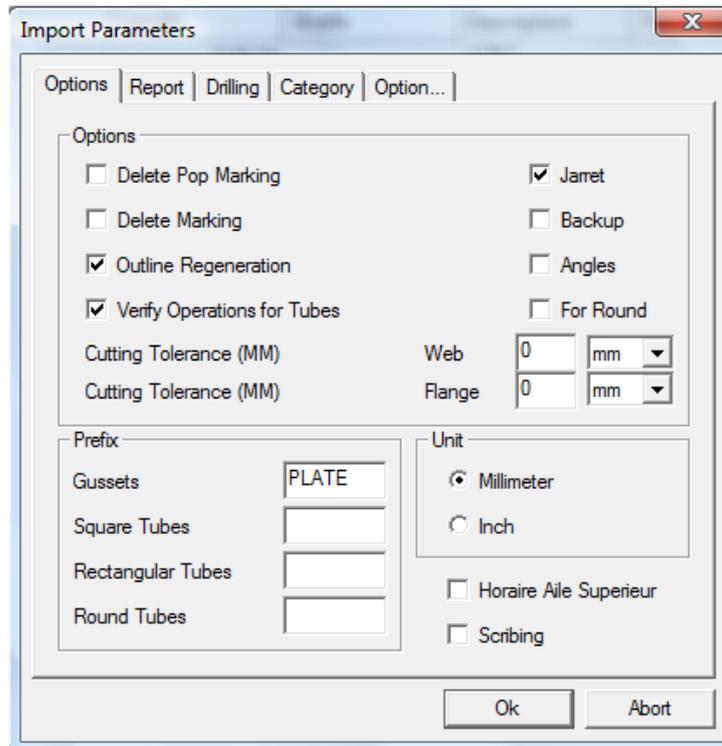


Fig 4-17 Import options

4.6.1.2 Report

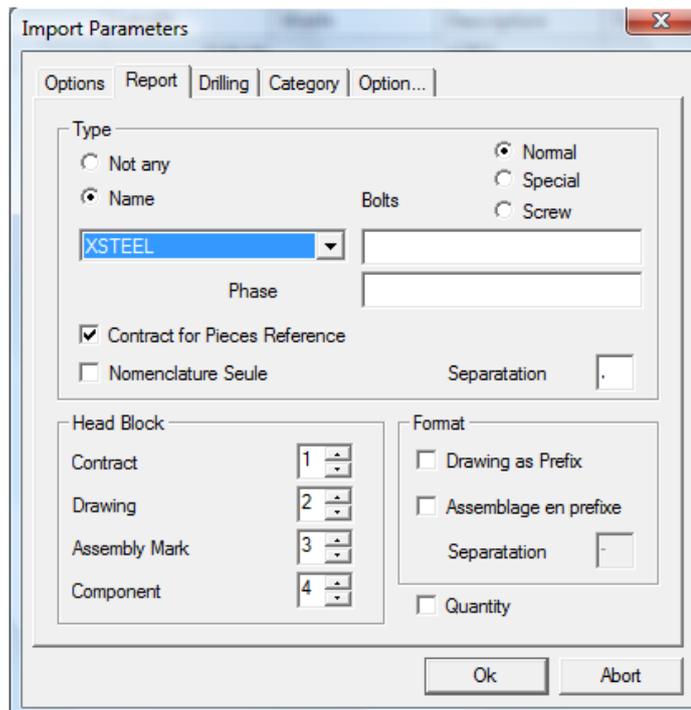


Fig 4-18 Import options report

4.6.1.3 Drilling

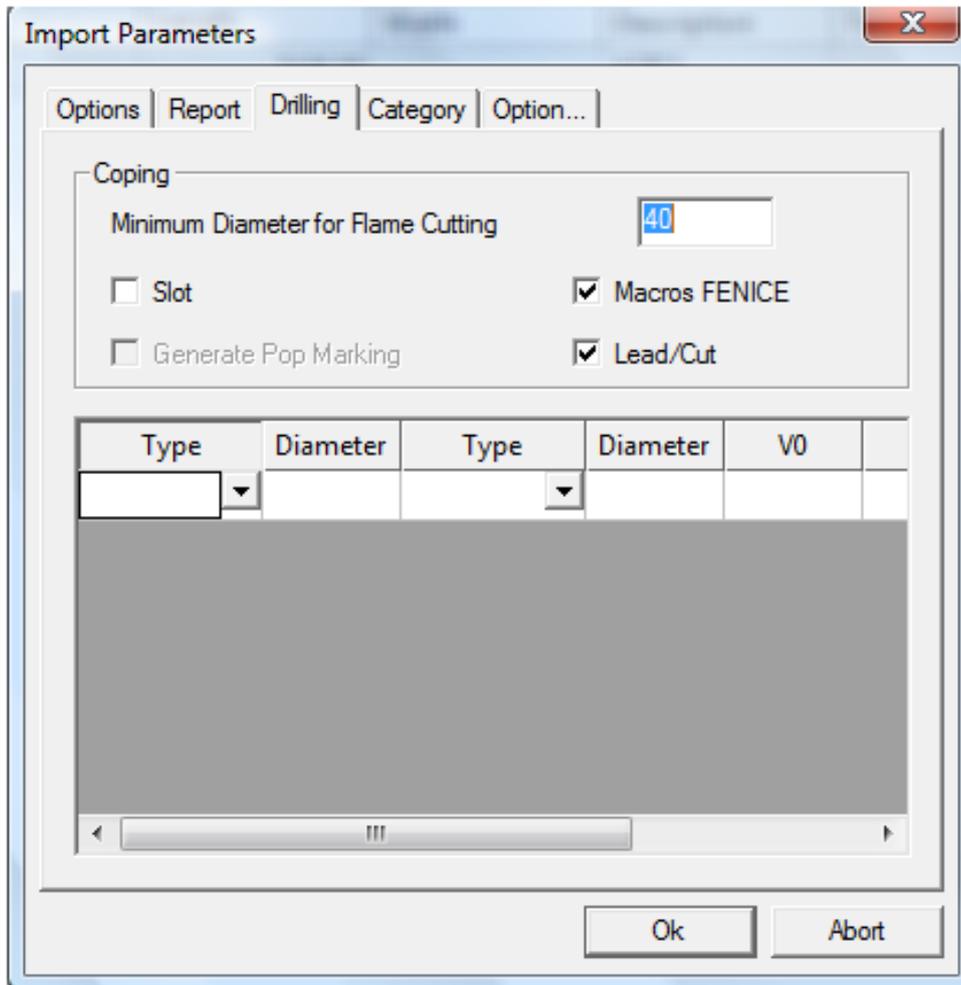


Fig 4-19 Import options drilling

4.6.1.4 Category

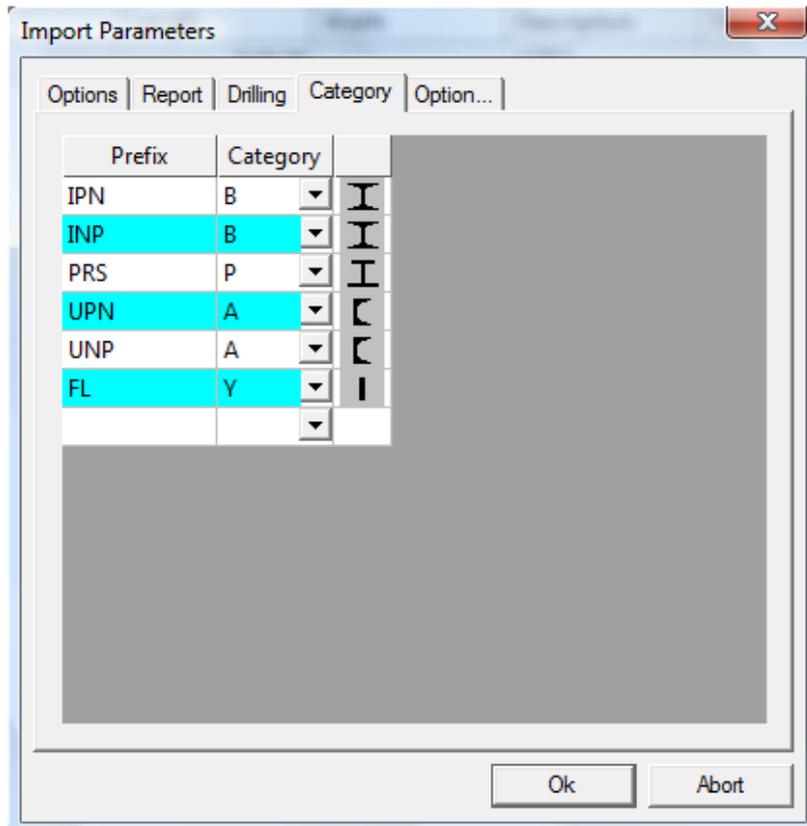


Fig 4-20 Import options category

4.6.1.5 Options...

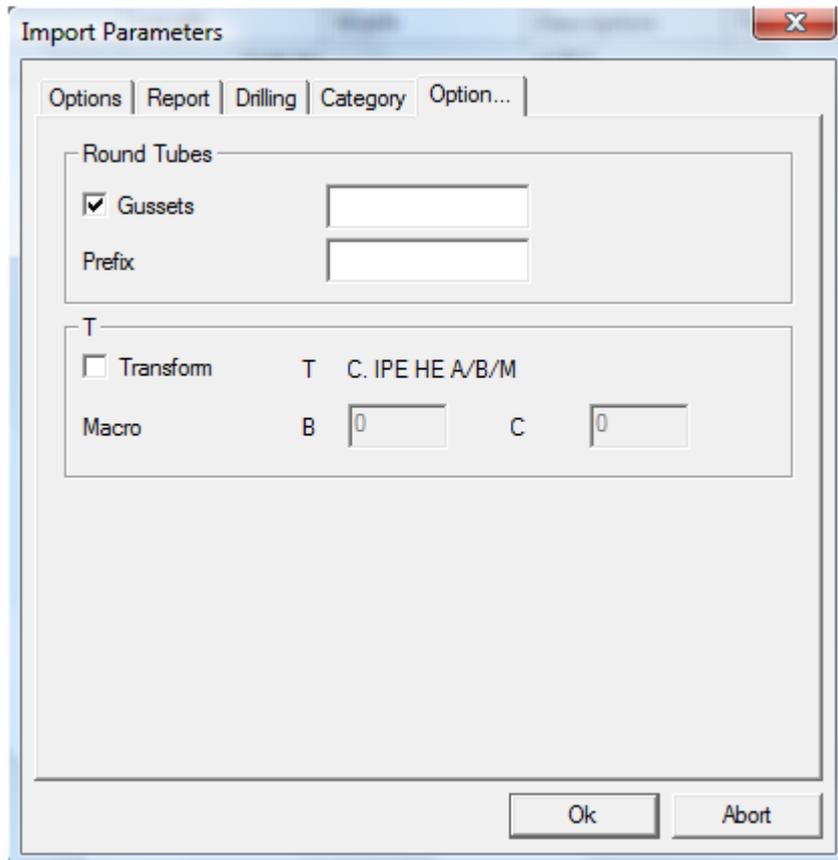


Fig 4-21 Import options for round tube and T

4.7 Export

4.7.1 Parameters

This section configures the export of **WinSTEEL** data to other applications.

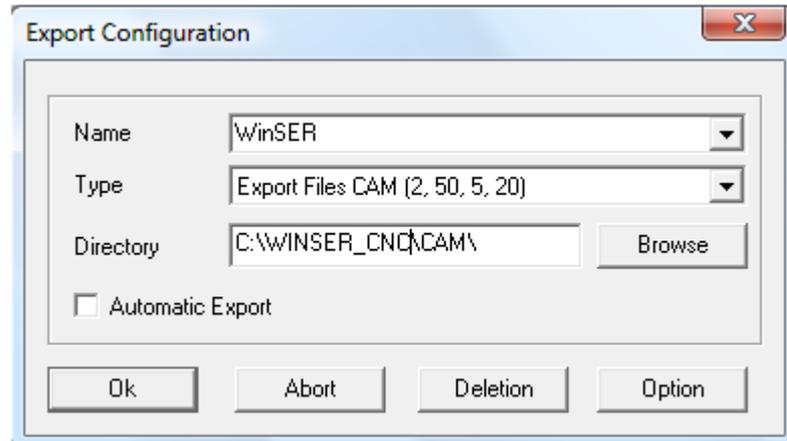


Fig 4-22 Export Parameters

4.7.2 Options

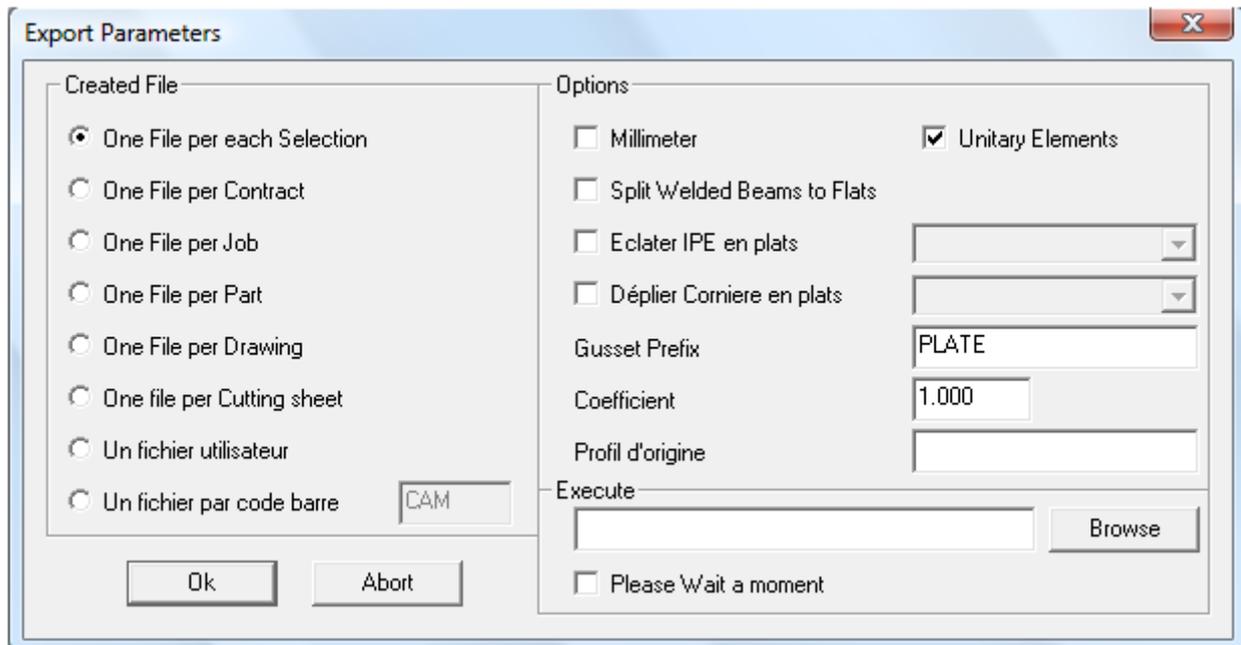


Fig 4-23 Export Parameters

5. Data

WinSTEEL software has its own Data Base and the data may be the same for several applications if the link to the directory is the same in all applications.

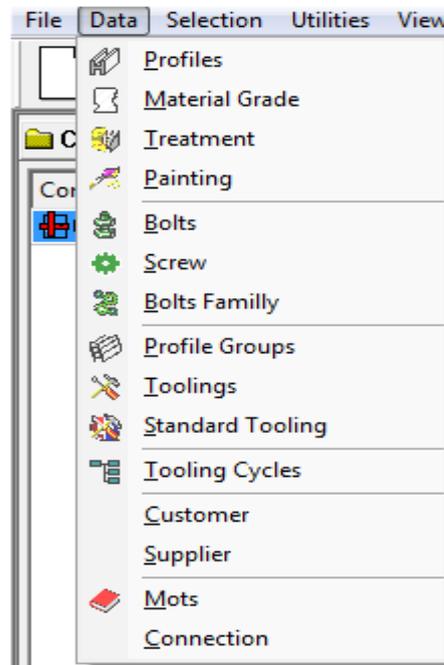


Fig 5-1 Program Data Base

5.1 Profiles

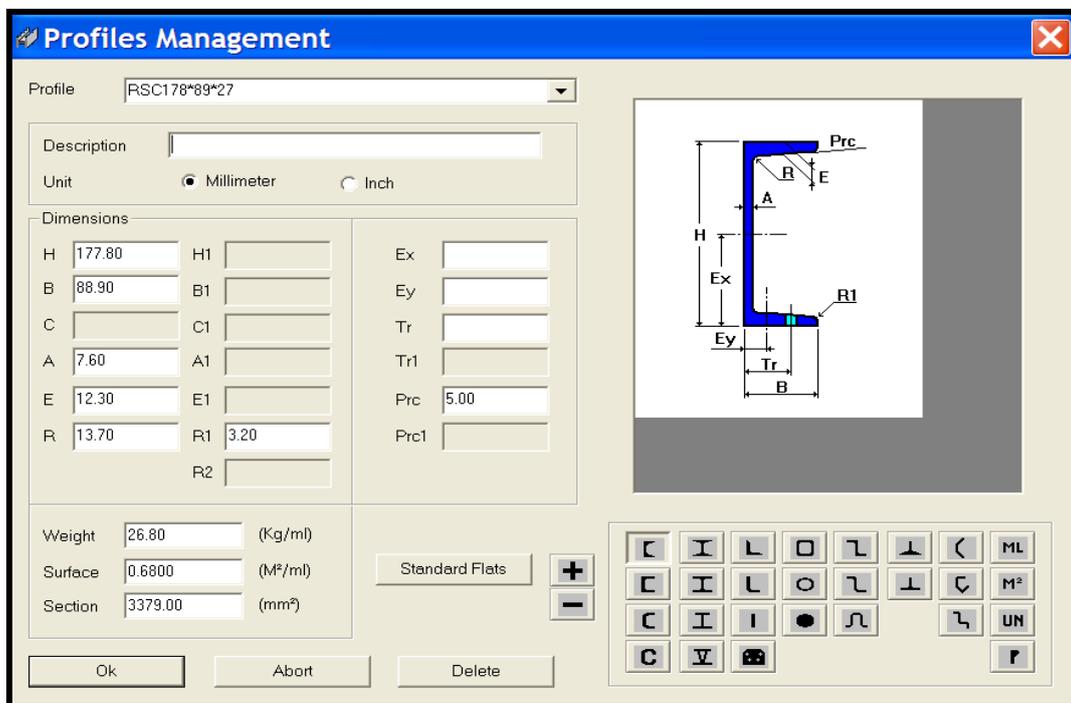


Fig 5-2 Profile parameters

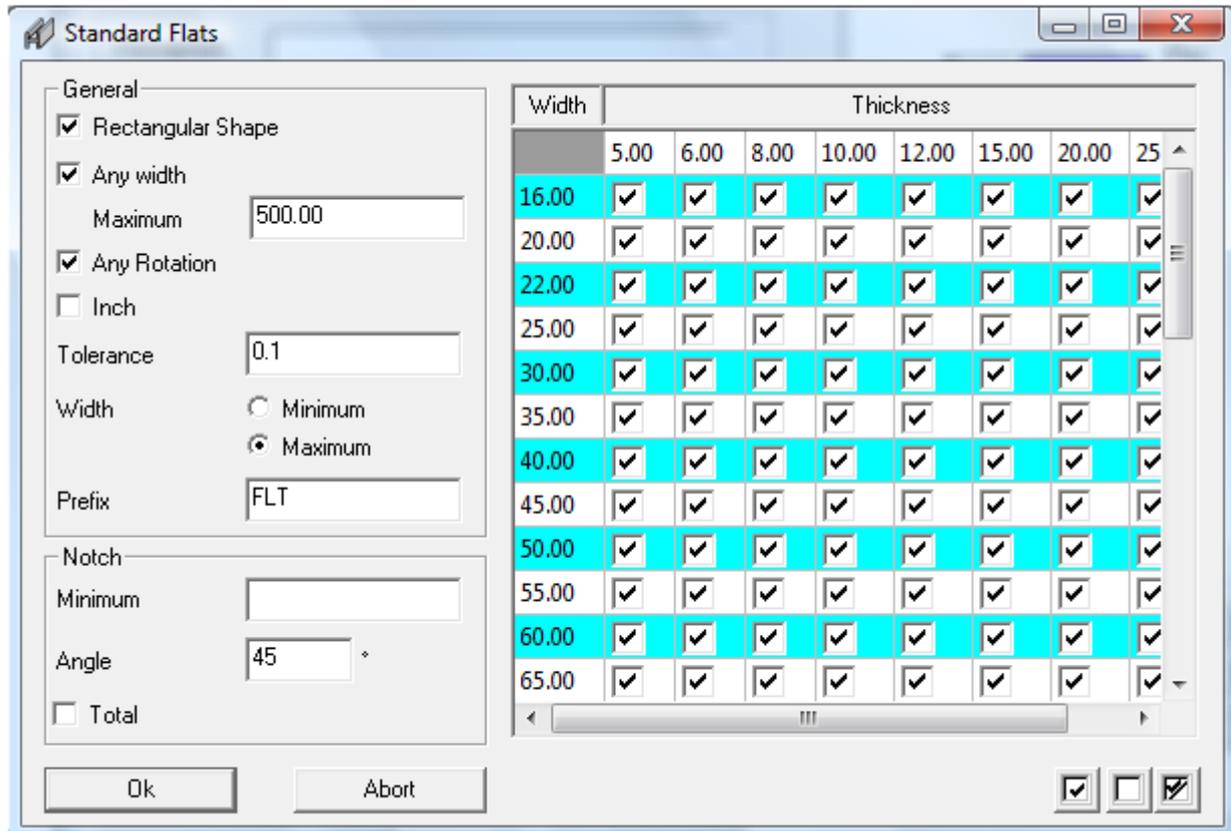


Fig 5-3 Profiles standard flats

This information on material profiles, their sizes and characteristics is used in various **Steel Projects** applications. The profiles are divided by categories according to their graphic view situated on the right of the screen. Fig. 5-2 above.

To select a profile category click on the corresponding icon, the graphic will change and the parameters can be modified.

5.1.1 Keyboard Use

For each profile type, just press <+> key.

The drop down field will list all the profiles available in the Data Base which correspond to the category (icon) selected.

The program allows the key-in of fields relative to the category selected.

Note that the labels of profiles are left to the user to determine.

This possibility allows the user to choose profiles codes corresponding to their use, however, it is recommended to standardize profile codes to ensure repetition like PLATE10*150 and PLATE150*10 do not occur.

Except Roll and Special Profiles, the program will automatically calculate all values relating to weight, and linear surface (m²/m), using a material density of 7.85.

The definitive calculation will be made corresponding to a selected material.

5.1.2 Major Profiles Types

5.1.2.1 Roll Profiles

The key-in of the weight and surface which is to be painted by metre.
The calculation will be done with the width of the secondary position.
Automatic calculation of the weight and the linear surface area.

5.1.2.2 Special Profiles

Linear weight and surface area must be inserted as for profile values.

5.1.2.3 Asymmetrical Beams (ASB)

Automatic calculation of the weight and the linear surface area.

5.1.2.4 Tubes

Automatic calculation of the weight and the linear surface area.

Search and Update Profiles

- 1st case :
 - Select profile type using the corresponding icon
 - Insert the first letters of the codes.
 - The program will list all profiles starting with chosen letters.

- 2nd case :
 - Insert a complete profile code.
 - The program will select automatically the profile type with corresponding figures and all relating values.

5.1.3 Automatic Profiles

This allows the user to insert "automatic profiles".
By "automatic profile" it is meant that all profiles whose code gives dimension values.

To allow automatic weight and surface area calculation, this profile can be part of all profiles types except roll and special profiles.

For each automatic profile, all codes must contain ? - question mark - at the end.

The input fields proposed by the program must contain increasing values starting by 1. This value sequence must also exist inside the automatic profile code separated by the following characters:

- * - star
- x - x lowercase
- X - X uppercase

5.1.3.1 Example: Flats creation

Select profile type **FLAT**
 Insert **FLAT? Or FLT? Or FL?**
 Insert value **1** into **H** dimension field,
 Insert value **2** into **A** dimension field,

When the program encounters FLAT150*10, it interprets this data as

- profile type FLAT
- H value dimension equals 150
- A value dimension equals 10

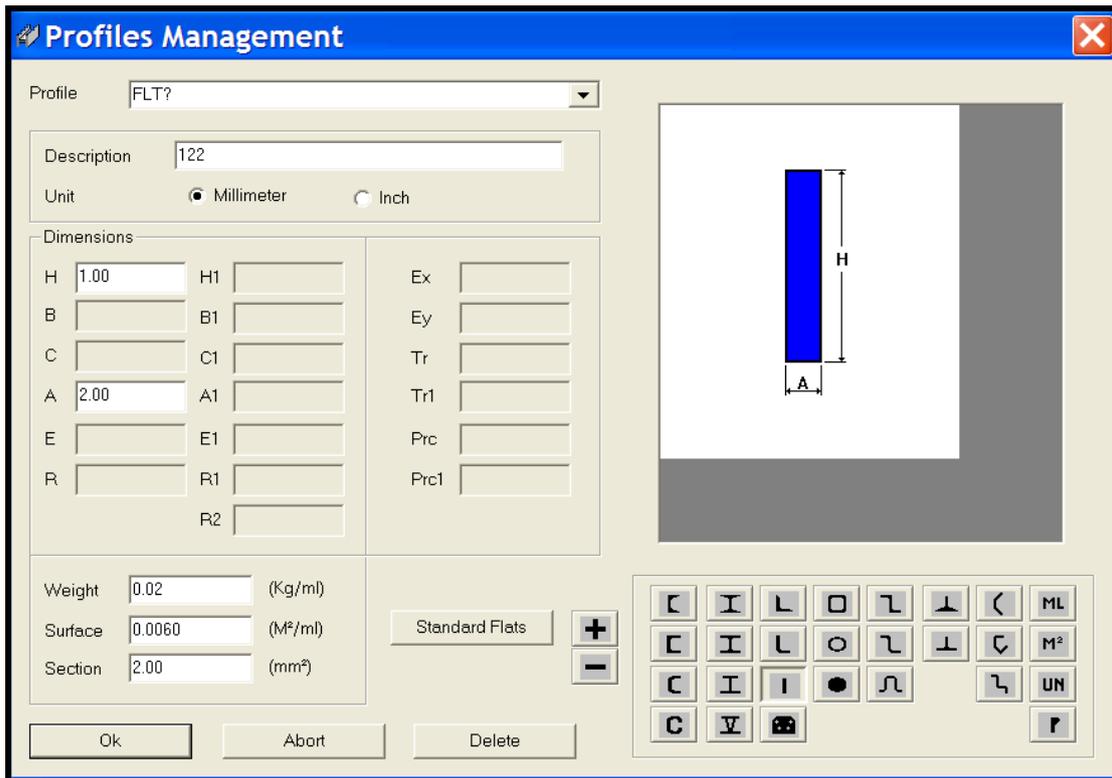


Fig 5-4 Example of automatic profile – FLT?

Modification and additions to the sizes of Standard Flats used by the client are handled by activating the Standard Flat icon on the above page, Fig 5-4, the following table opens.

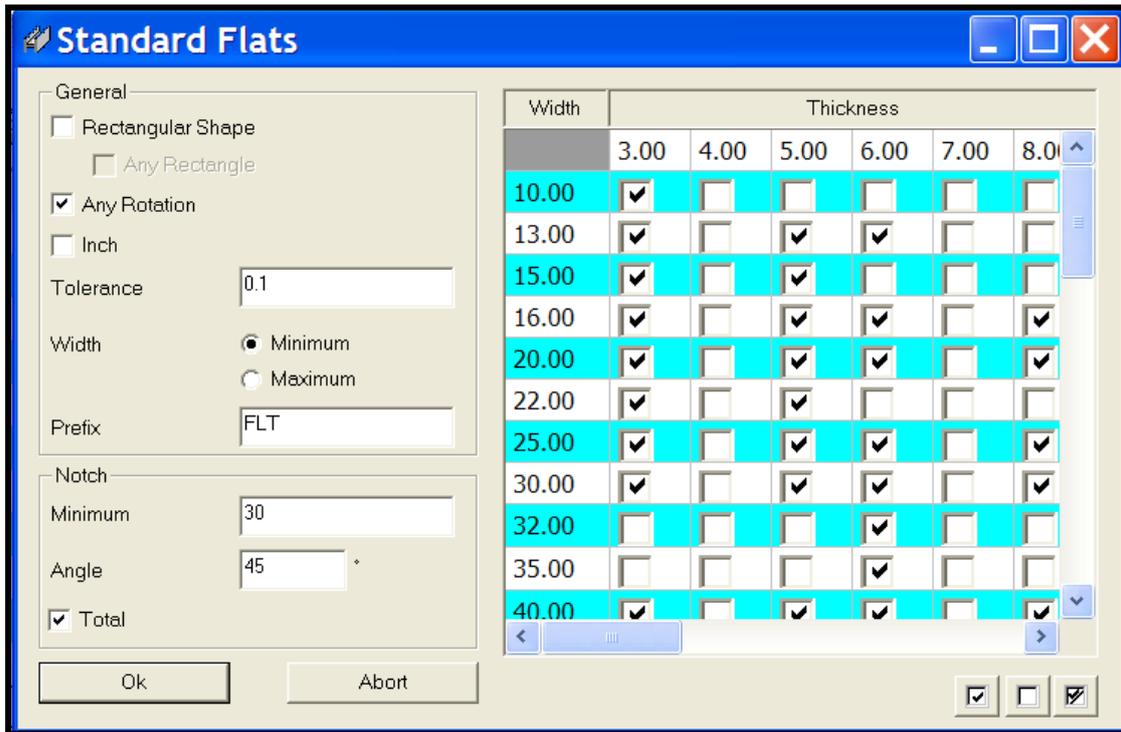
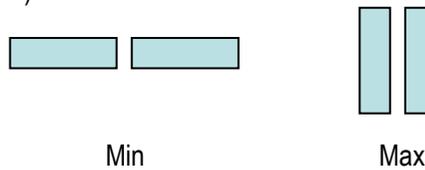


Fig 5-5 Standard flats - handling page

This screen above determines the selection criteria to be applied when flats are used. Fields include rectangular shape, any rotation, metric or imperial and tolerance. It determines if we are to nest flats along the narrow side (min) or longest side (max).



To add a standard flat simply tick the corresponding box. To add a new standard flat size to the table, simply scroll to the bottom of the page and double click in the left hand box (as shown below), type in the width and press enter/return on the keyboard. This will create a new field and tick the thickness to suit.

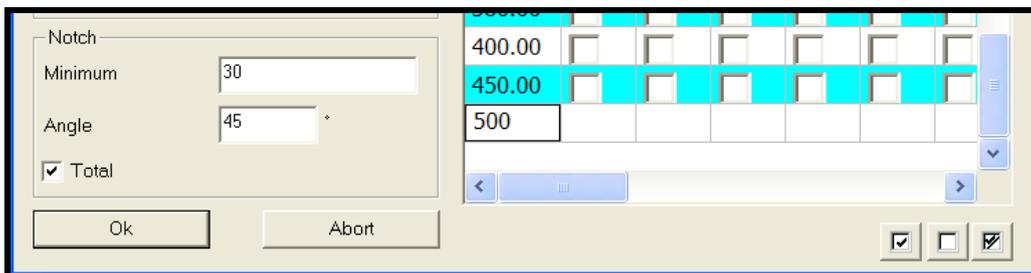


Fig 5-6 Standard flats – creation of new width flat - 500

In the case of Tipo D machines the degree of bevel cut can be inserted and this is particularly important when combined when the Total box is selected.

5.1.4 Total - FLAT and PLATES

This screen utilises the fields Prefix, Notch Minimum and Angle, and Total in order to perform a screening to determine how to categorise the parts. Even if the component is sized and named as a FLAT at importation or drawing, with Total activated (ticked) WinSTEEL will check that all of its cuts, punching and coping can be completed in entirety on the Tipo D. If it has any tooling requirement outside the limits of the machine the part will be re-named a PLATE and routed to an available plate machine, for example a Tipo B.

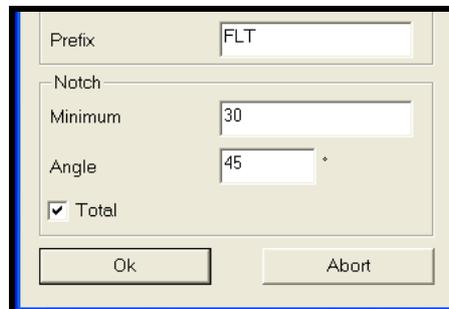


Fig 5-7 Total – FLATS and PLATES – selection

5.1.5 Asymmetrical Beams (ASB's)

The single difference between an automatic and semi-automatic profile is the possibility exist to set some constant values. This may be of use for ASB's and their profiles family.

5.1.5.1 Example semi-automatic profile: ASB?

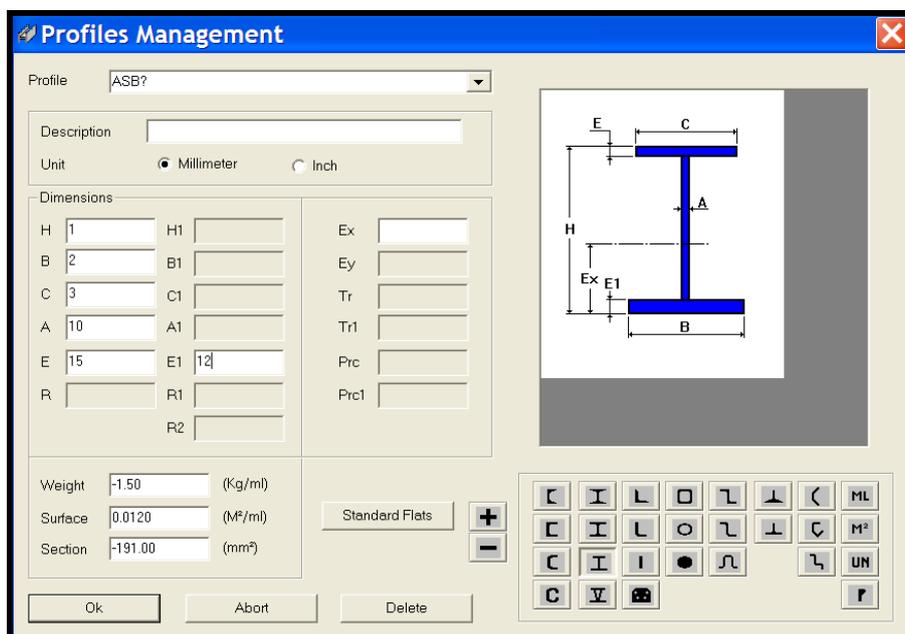


Fig 5-8 Example of semi-automatic ASB profile

In this example, all profiles starting with ASB will have the constant dimension values as follows:

- Dimension A equals 10 mm
- Dimension E equals 15 mm
- Dimension E1 equals 12 mm

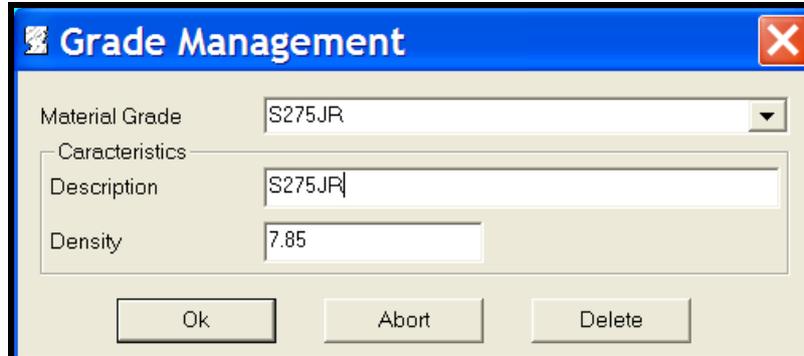
All other fields will be like code values with corresponding sequence as follows:

- H = Code Value 1
- B = Code Value 2
- C = Code Value 3

NB: When using ASB's it will only be possible to stand the beams in the vertical position for machine processing (clamping is the limitation here) and therefore the only fields to be used are H and B as C will not be used to process the part.

5.2 Material Grade

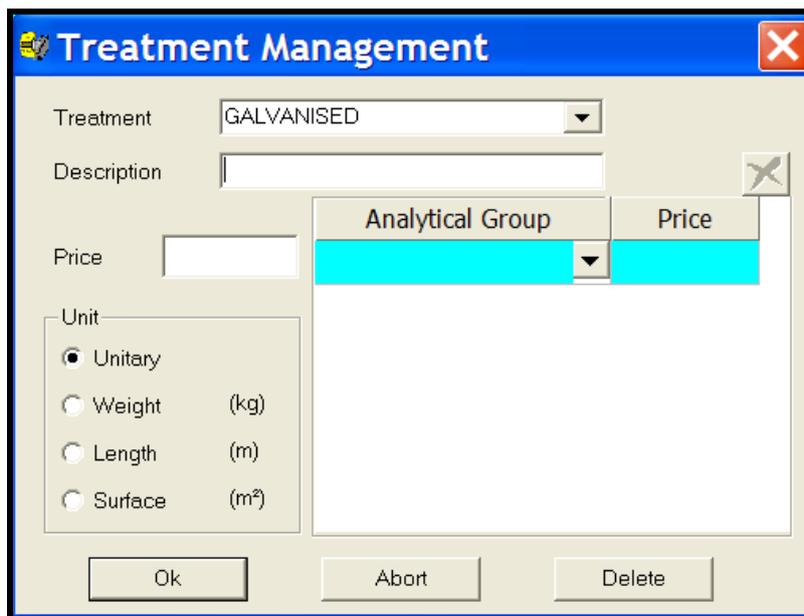
Each material corresponds to a description and a density. The density is used for the calculation of the components weight. Material management is not limited to steel (ALU, WOOD, etc.). Remember that profile linear weight will be calculated with a density of 7.85. A material will be inserted by default during the configuration.



The 'Grade Management' dialog box features a blue title bar with a close button. It contains a 'Material Grade' dropdown menu with 'S275JR' selected. Below it is a 'Characteristics' section with a 'Description' text box containing 'S275JR' and a 'Density' text box containing '7.85'. At the bottom are 'Ok', 'Abort', and 'Delete' buttons.

Fig 5-9 Data material grade

5.3 Treatment



The 'Treatment Management' dialog box has a blue title bar with a close button. It includes a 'Treatment' dropdown menu with 'GALVANISED' selected, a 'Description' text box, and a 'Price' text box. A table with two columns, 'Analytical Group' and 'Price', is visible. Below the table are radio buttons for 'Unitary', 'Weight (kg)', 'Length (m)', and 'Surface (m²)'. 'Unitary' is selected. At the bottom are 'Ok', 'Abort', and 'Delete' buttons.

Fig 5-10 Data treatment

Each treatment corresponds to a code, a description and a price by default according to the measurement unit. It is also possible to separate this treatment considering different prices by analytical groups.

5.4 Painting

This takes into account the thickness of the finishing layer for the calculation of piece lengths and screw positions.



Fig 5-11 Finishing layers management

5.5 Bolts

5.5.1 Create the bolt typology

The typology informs about the components of the selected bolts (norm and class).

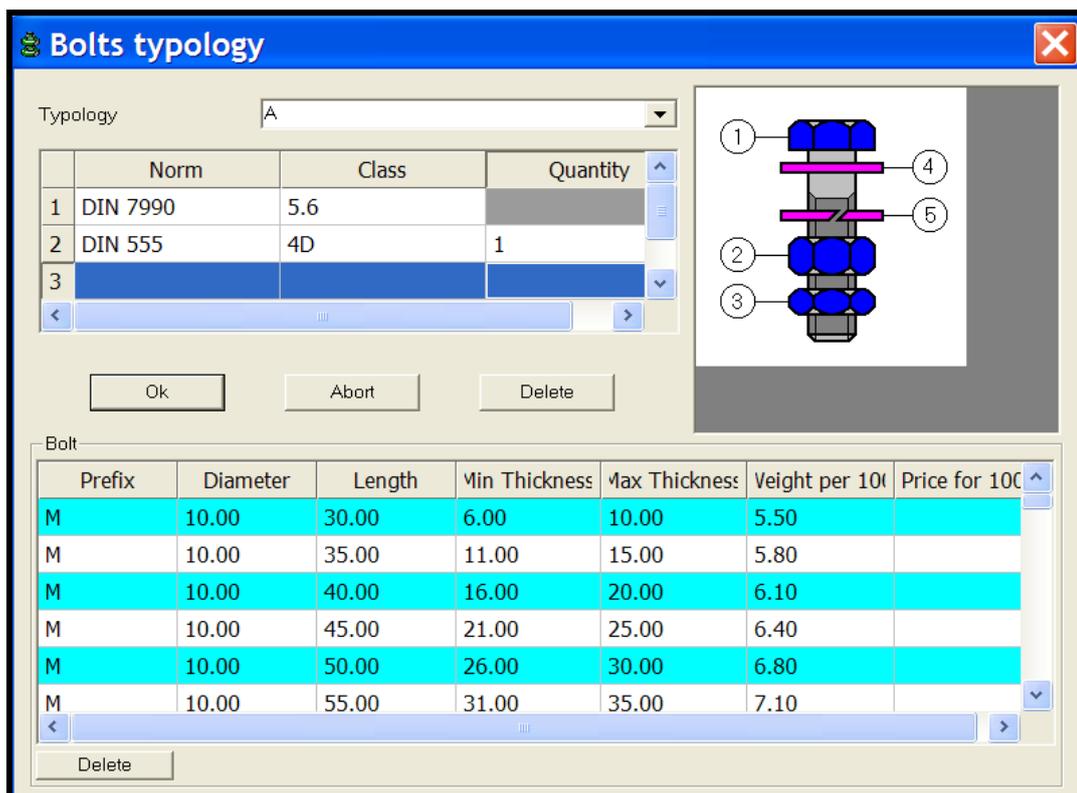
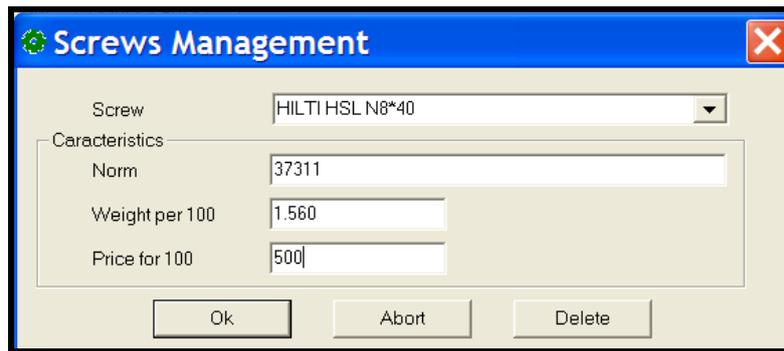


Fig 5-12 Bolts typology

Two main families compose a bolt:

- Nuts and lock nuts - **Norm and class are necessary**
- Washers flat and lock - **Norm necessary**

5.6 Screws



The screenshot shows a dialog box titled "Screws Management" with a blue header and a red close button. The dialog contains the following fields and controls:

- Screw:** A dropdown menu with the value "HILTI HSL N8*40".
- Characteristics:** A group box containing:
 - Norm:** A text input field with the value "37311".
 - Weight per 100:** A text input field with the value "1.560".
 - Price for 100:** A text input field with the value "500".
- Buttons:** "Ok", "Abort", and "Delete" buttons at the bottom.

Fig 5-13 Data screws

5.7 Bolts Family

In each contract call-off WinSTEEL provides the possibility to insert bolts which could be distinguished using the Bolts Family.

We can allocate various quantities according to the designation of these bolts (Workshop or Site).



The screenshot shows a dialog box titled "Bolts Family" with a blue header and a red close button. The dialog contains the following fields and controls:

- Family:** A dropdown menu with the value "WORKSHOP".
- Description:** A text input field with the value "Workshop Family".
- Percentage:** A text input field with the value "2".
- For Round:** A checked checkbox.
- Buttons:** "Ok", "Abort", and "Delete" buttons at the bottom.

Fig 5-14 Data Bolts Family

5.8 Profile Groups

This section permits the user to regroup one or more profiles within a set to enable the following:

- calculate material cost for each position, some modules only
- assign default tooling to each position of this profile group

5.8.1 General

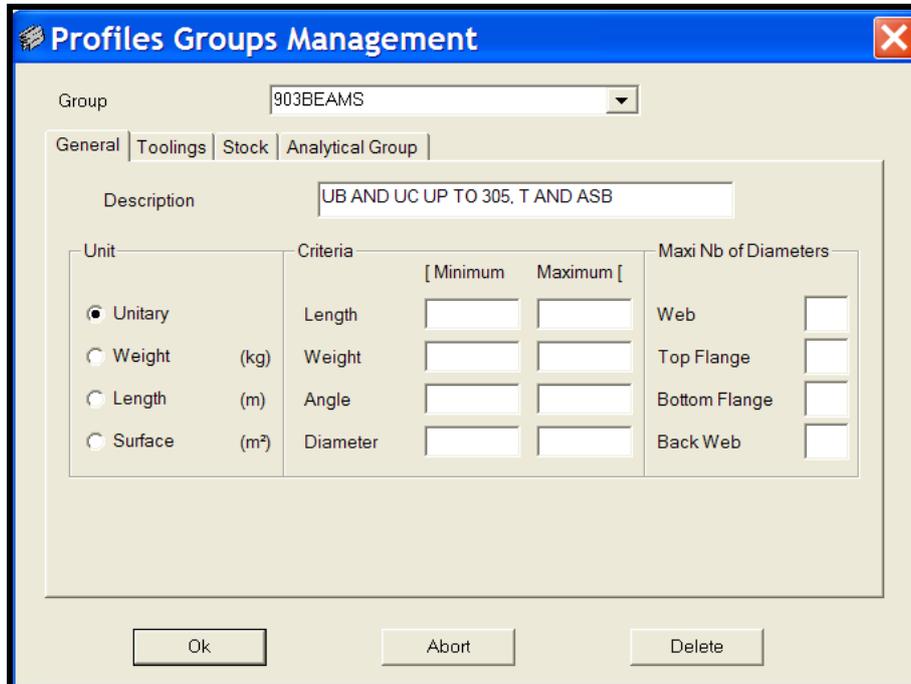


Fig 5-15 Profiles group management general

Group	Name of the Profiles group
Description	Description of Profiles group
Unit	Measurement unit used for this Profiles group
Min/Max length	Min/Max piece length to belong to this group
Min/Max weight	Min/Max piece weight to belong to this group

A piece can belong to various groups therefore, the user is required to insert sufficient criteria to assign pieces without any ambiguity in the profiles group.

5.8.2 Tooling

In this section, defining the tooling available in the workshop could be used to define limitations on the analytical groups.

Note that the criteria on the tooling are cumulated, if we select two needed tooling, the component must have both tooling to belong to the profile group.

For example to belong to a group which has cutting and drilling needed and marking forbidden, the component must have one or more cuts, one or more drillings and no marking

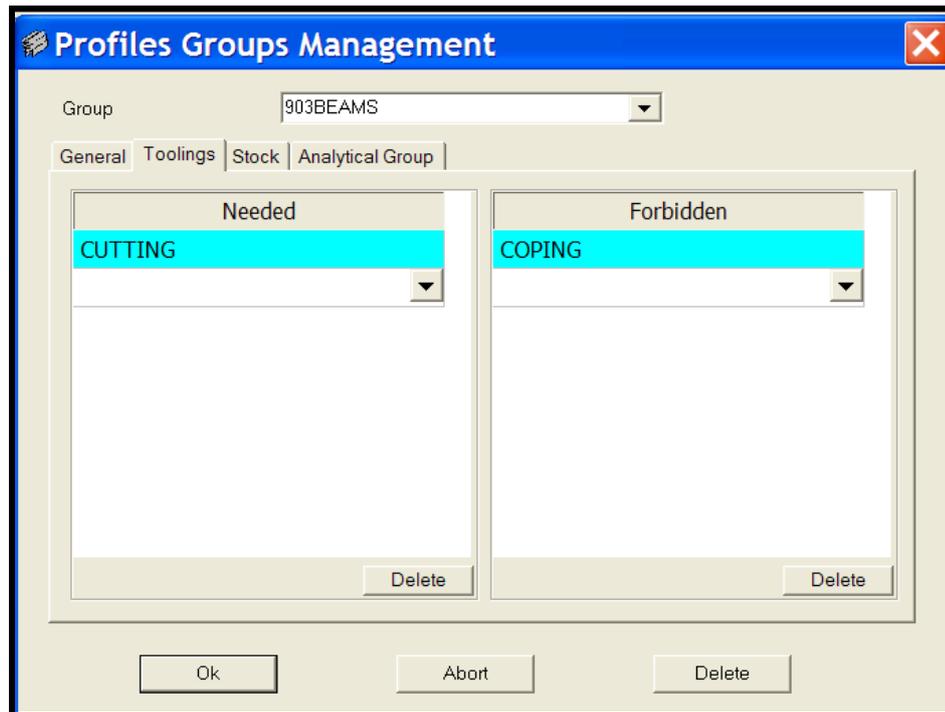


Fig 5-16 Profiles group management tooling

5.8.3 Stock

This page of the profiles group management is where the preferred stock lengths used for purchasing by the company is used. These lengths will be used for bar nesting purposes and material purchase reports.

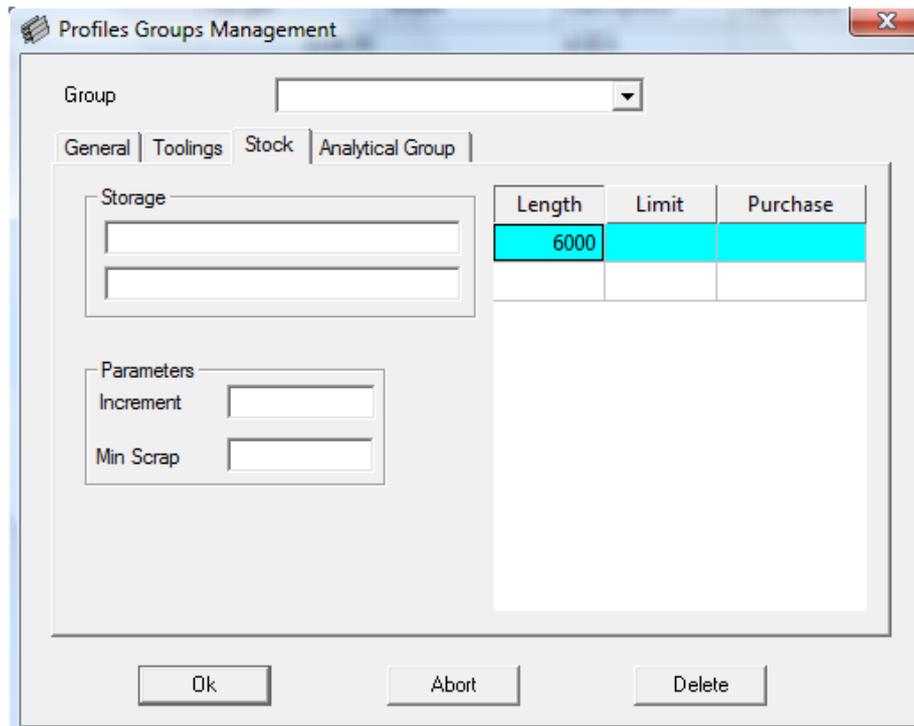


Fig 5-17 Profiles group management stock

Storage	Description of the site of profiles group storage
Increment	Elementary stocking length
Min scrap	Min stocking length
Length	Purchasing length
Limit	Quantity which will request a purchase
Purchase	Minimal quantity of purchase

5.8.4 Analytical Group

Within data profiles group it is possible to further specify Analytical Groups, these named groups are chosen by the user to best suit the combination of the machines and working preferences. These groups may contain several different profiles and may also have material size and grade limitations.

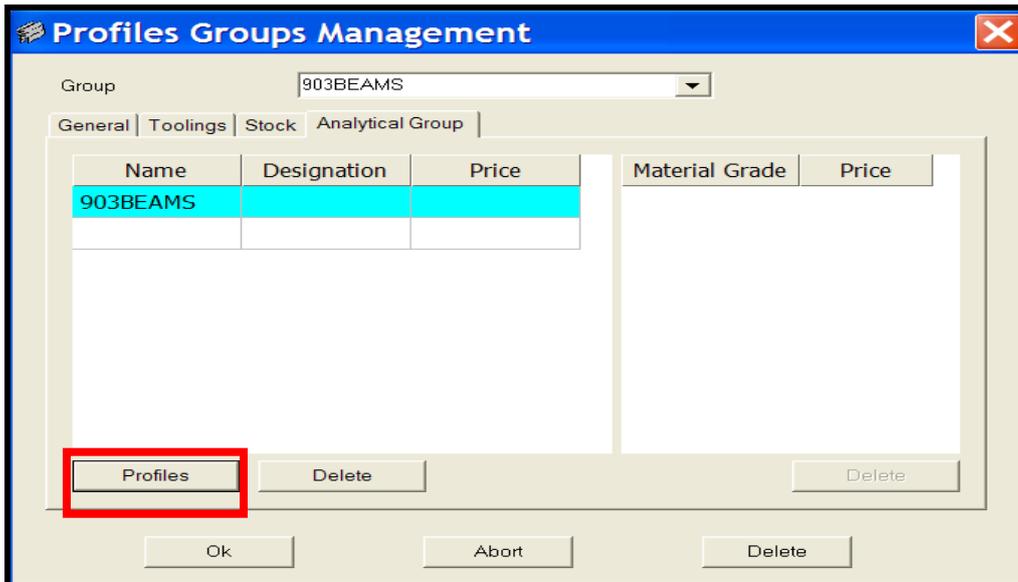


Fig 5-18 Profiles group management analytical group

When the Profiles button is clicked, a profiles parameters page is opened, as below. On this page the user can select the profiles and sizes that are to be contained within the selected analytical group. These size limitations can be min and max dimensions. In the following example this analytical group contains Beam and RSJ profiles up to a maximum of 304mm deep.

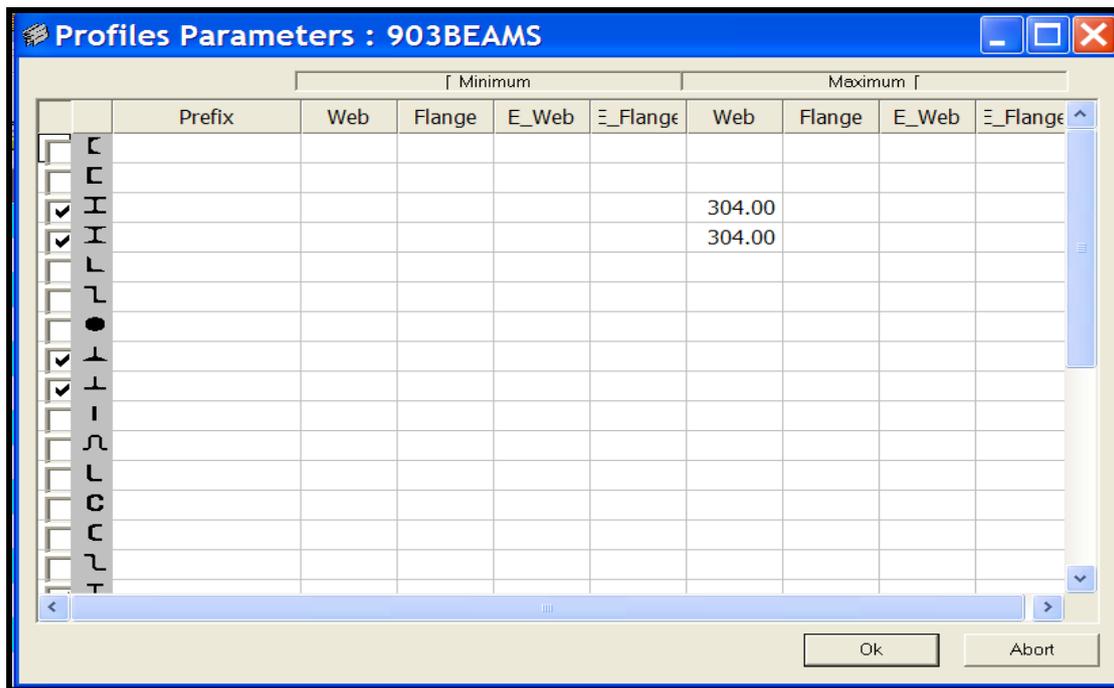


Fig 5-19 Profiles group management analytical group profile parameters

5.9 Tooling

The parameters entered in this table may be used for different factory information (for example production time, scheduling, etc ...) depending upon the modules installed.

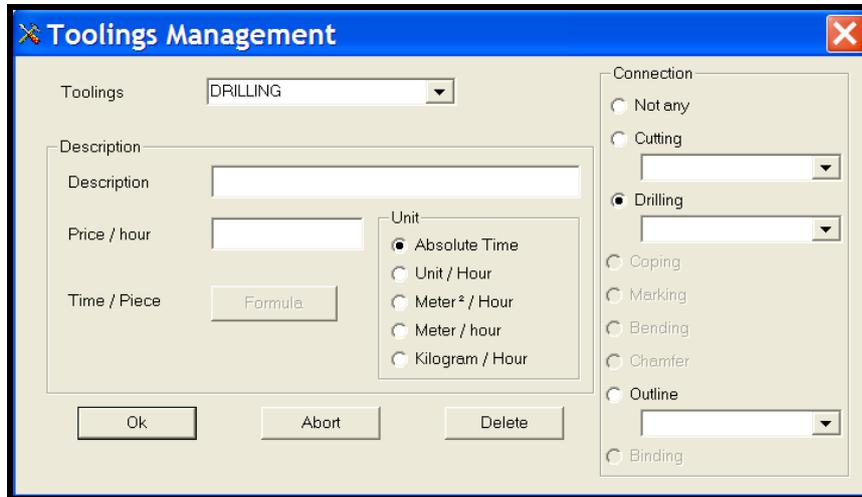


Fig 5-20 Data tooling management

The tooling cost per hour is used to calculate the global cost for a contract or factory job. The tooling quantity per hour is an indicative value to define the necessary time to produce each position with corresponding tooling, subject to certain modules being installed.

5.10 Standard Tooling

Group	Imported Process	Created Process	Formula	Parts	Comment
RHS		CUTTING	1	All	
PLATES		OUTLINE	4	All	
FLAT		CUTTING	1	All	
CHS		CUTTING	1	All	
CHANNELS		CUTTING	1	All	
ANGLES SMALL		CUTTING	1	All	
ANGLES LARGE		CUTTING	1	All	
903BEAMS		CUTTING	1	All	

Fig 5-21 Data standard tooling

5.11 Tooling Cycles

For each defined analytical group it is now possible to begin to format the preferred way of working. Chose the analytical group, select the first tooling activity, for example, cutting and then allocate the preferred machine to perform that task. Note that several machines may all perform certain activities; the order is top machine first choice.

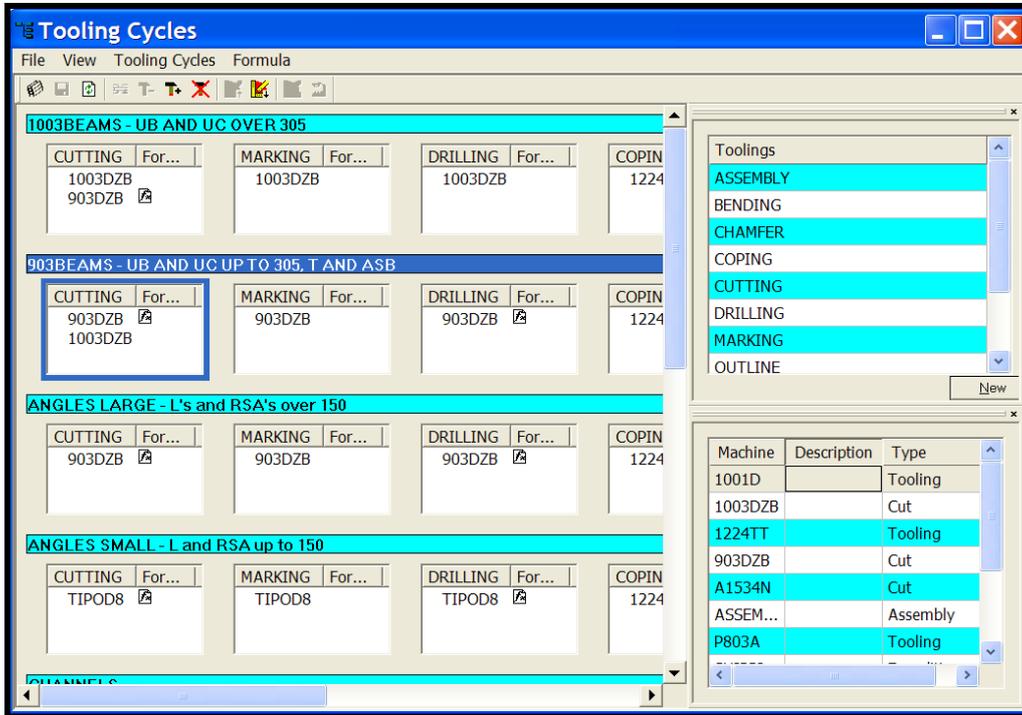


Fig 5-22 Data tooling cycles

5.11.1 Machines

In this section all the machines in the workshop are identified and all the relevant tooling process available on those machines is allocated.

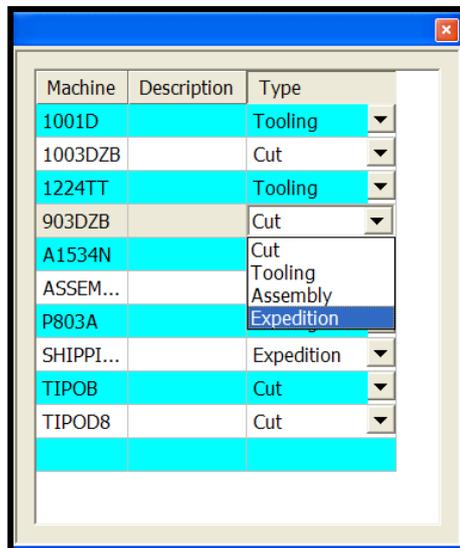


Fig 5-23 Machine parameters

5.11.2 Tooling

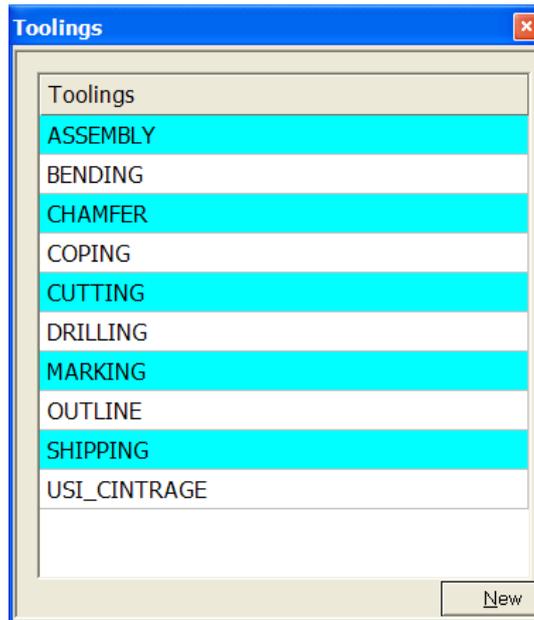


Fig 5-24 Machine tooling

5.12 Customers

Customers information stored in the system to be used to generate certain reports (Reports for customers, Purchases for suppliers), subject to certain modules.

The screenshot shows a software dialog box titled "Insert a new customer". It is divided into several sections:

- Informations:** Company Name (SKANSKA), Identification (SK001).
- General:** Description (Main Contractor), Address (Civil Road, Centeryvile), Zip Code (WE23 2AS), City (LEEDS), Country (UK).
- Telephone N*:** Telephone N* (01924 555 666), Fax (01924 555 667), E-Mail (sfr@civils.com).
- Payment:** VAT Code, Payment (dropdown), Condition, R.I.B., Bank.
- Others:** Delivery Date, Contact (dropdown with right arrow), Comment, Activity, Quality.
- Sub-Contractor:** A checkbox that is currently unchecked.

 At the bottom, there are "Ok", "Abort", and "Delete" buttons.

Fig 5-25 Data customers

5.13 Suppliers

Suppliers information stored in the system to be used to generate certain reports (Reports for customers, Purchases for suppliers), subject to certain modules.

The screenshot shows a software dialog box titled "Insert New Supplier". It is divided into several sections:

- Informations:** Company Name (NEW STEEL LTD), Identification (NS1).
- General:** Description (STEEL STOCKIST), Address (2 Mill Lane, Barker Town), Zip Code (HN13 2ED), City (Birmingham), Country (UK).
- Telephone N*:** Telephone N* (0125 652 987), Fax (0125 652 988), E-Mail (info@nstld.com).
- Payment:** VAT Code, Payment (dropdown), Condition, R.I.B., Bank.
- Others:** Delivery Date, Contact (dropdown with right arrow), Comment, Activity, Quality.
- Sub-Contractor:** A checkbox that is currently checked.

 At the bottom, there are "Ok", "Abort", and "Delete" buttons.

Fig 5-26 Data suppliers

6. Contract

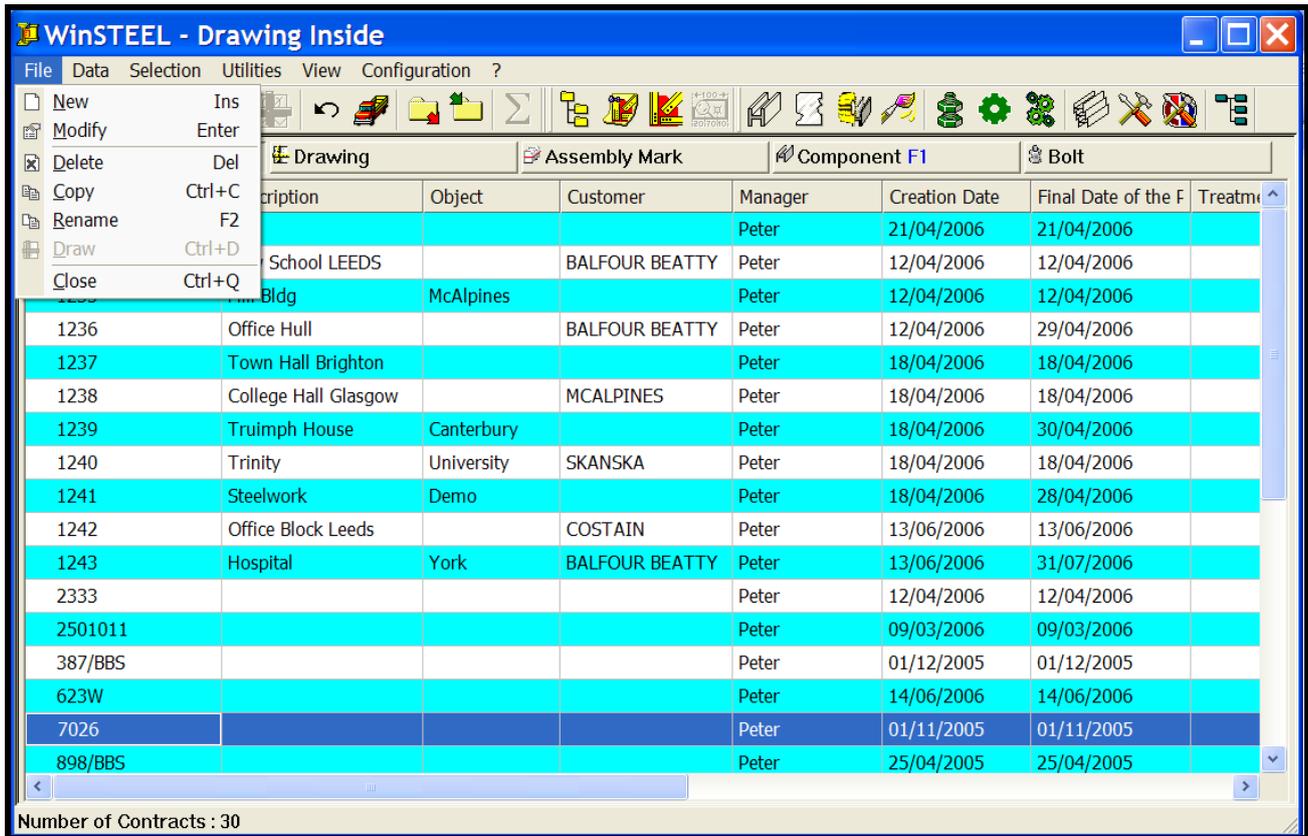


Fig 6.1 WinSTEEL Main screen

This page represents the main control point of **WinSTEEL**. It provides the link between the contract and all the various successive levels for production.

NB: It's important to remember that the drawing is dependent upon the contract and especially during its creation either automatically or manually.

Object	Content
Contract	Set of Drawings (Load or Phase), Assembly Marks and Components
Drawing	Set of Assembly Marks (Load or Phase), Bolts and Screws
Assembly Mark	Set of Secondary Marks, Bolts and Screws
Component	Set of Drawings, Assembly Marks, Secondary Marks, Bolts and Screws.

6.1 New Contract

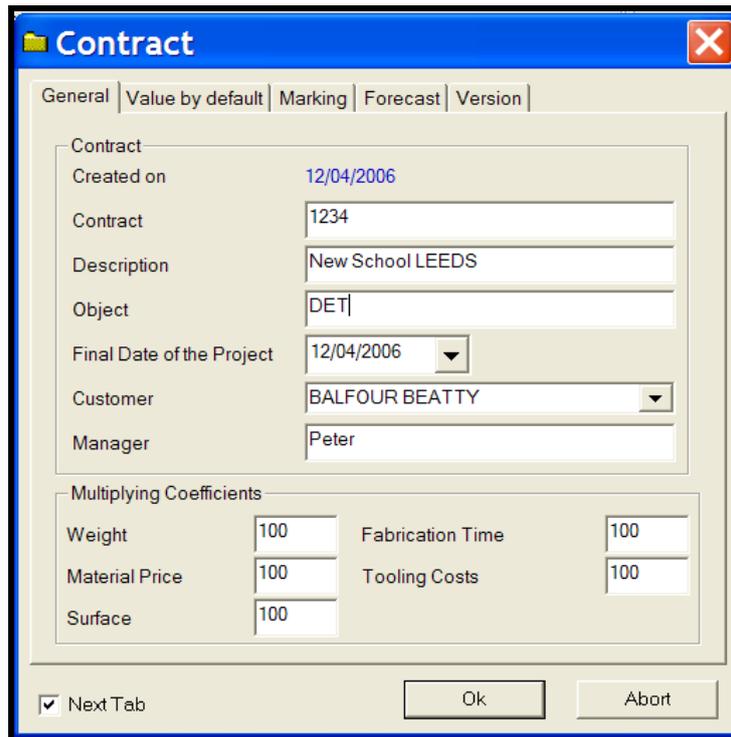


Fig 6-2 New contract data

6.2 Modify

Within the contract page the Version tab provides the opportunity to maintain version control of a contract for management reasons.

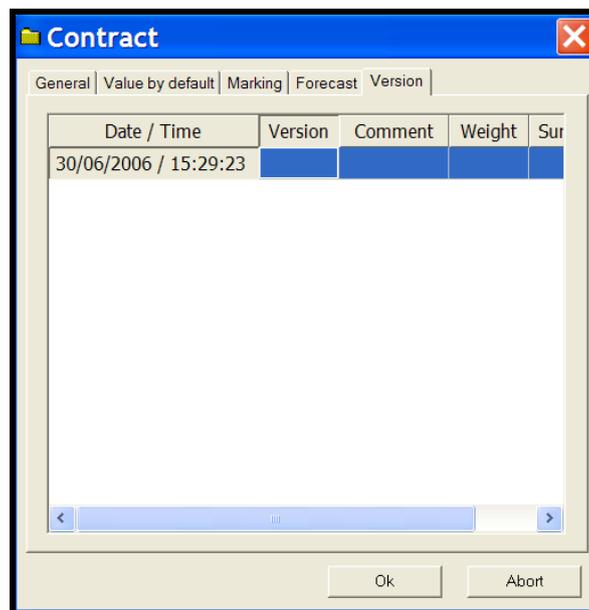


Fig 6-3 Modify contract version

6.3 Deletion



Fig 6-4 Contract deletion

Upon selecting contract deletion, it will delete all elements associated to that selected contract. It is impossible to undo this operation and therefore it is recommended that backups are performed on a regular basis.

6.4 Copy

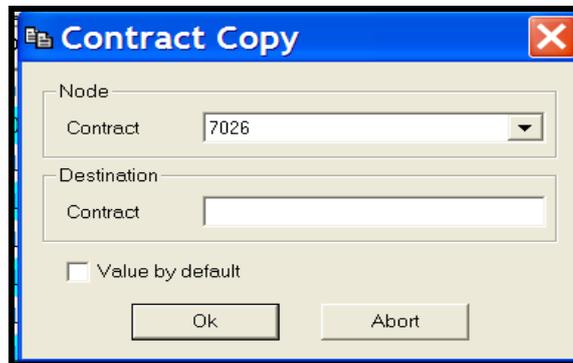


Fig 6-5 Contract copy

When selecting contract copy it allows the user to copy all the contract contents and rename them if required.

6.5 Rename

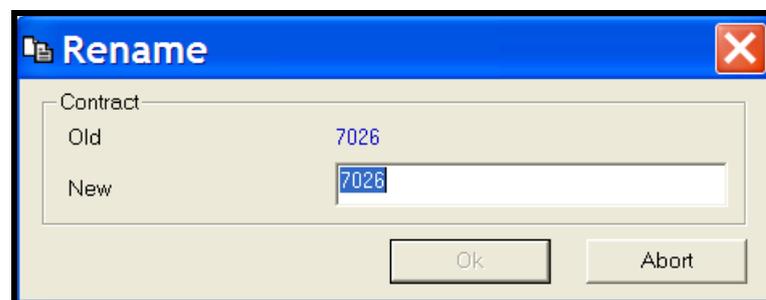
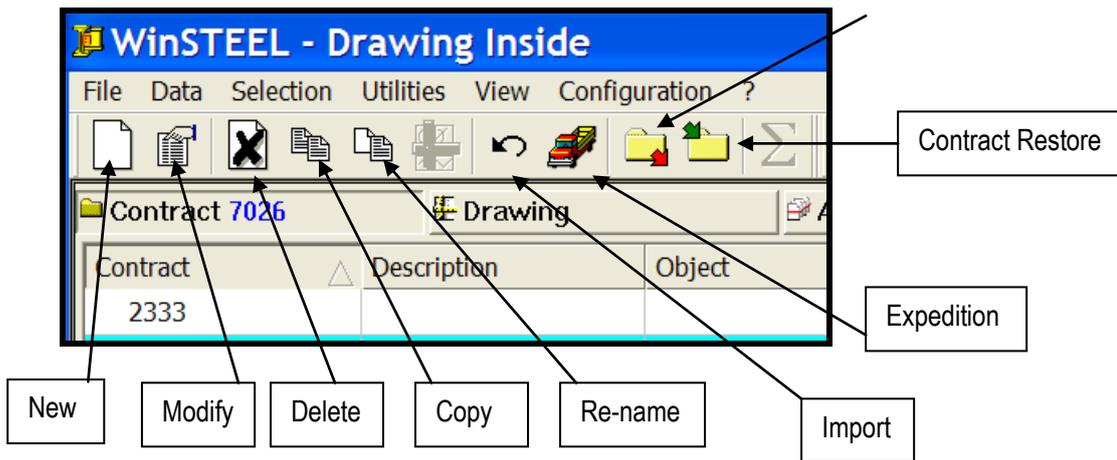


Fig 6-6 Contract rename

When selecting contract rename it allows the user to copy the contract and rename it if required.

WinSTEEL utilises icons at all levels as well as drop down menus.



7. Phase

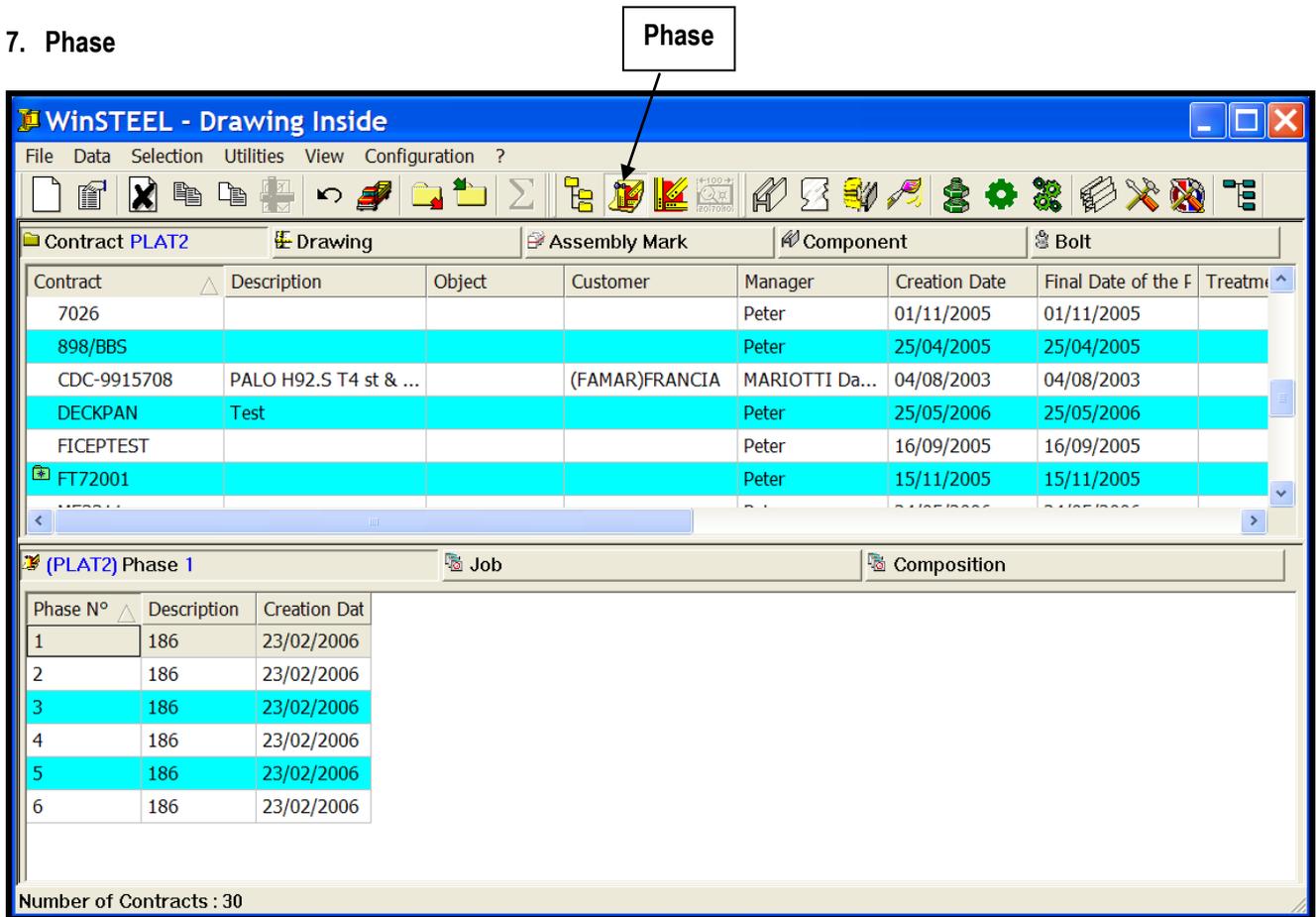


Fig 7-1 Contract phase screen

Phase = Set of Jobs which are composed with the main base elements (Drawings, Assembly Marks and Components). This can be 20T workloads and is often broken into phases in the drawing office. In Tekla Structures the Assembly Part List report assigns the correct number of parts per phase automatically. Sometimes the phase is arranged in “drawings” for 20T loads.

The phase is a supplementary level in WinSTEEL.

7.1 Job

Phase management is used to regroup jobs in a contract in order to organise the production, expedition and assembly. This screen indicates the phase, job and composition of the job.

Job = Set of the three main basic elements (Drawings, Assembly Marks and Components).

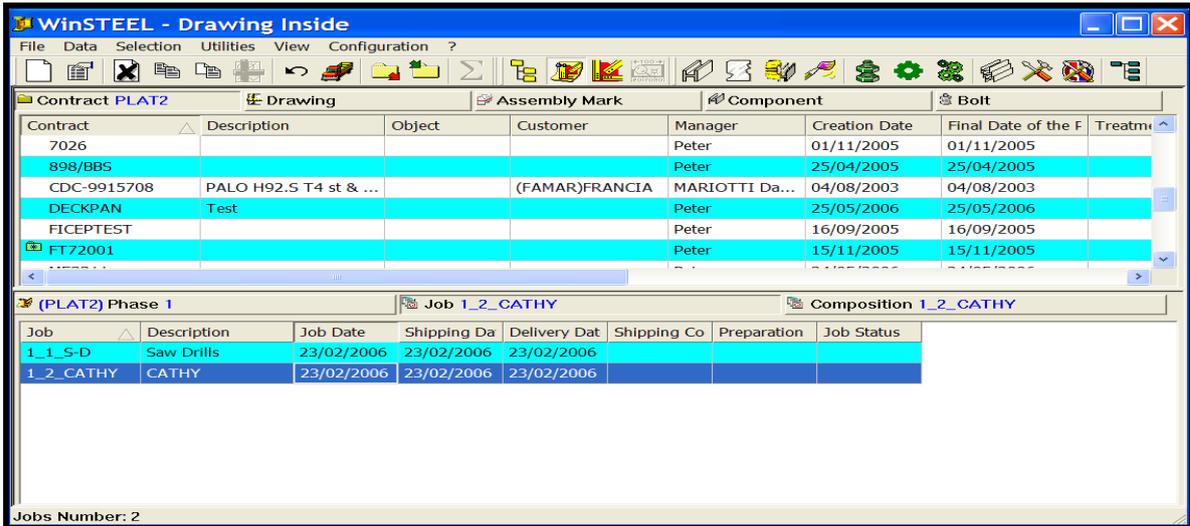


Fig 7-2 Job management information

Job management permits the creation of sets of elements in order to organise the breakdown of a steel structure and the necessary regrouping for production, expedition and assembly.

Job is a supplementary level available in WinSTEEL. It could be created at the end of the drawing/ detailing stage.

NB: We advise to manage the main and the component in a single way for a contract. When an assembly mark is present on various drawings and its composition is different from one drawing to another, the results can be inconsistent.

7.2 Control

Phase and job control are handled in a very similar manner using mouse right click screens to complete information and carry out actions.

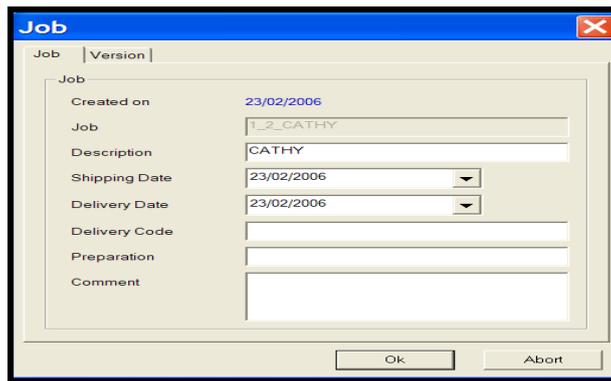


Fig 7-3 Job control

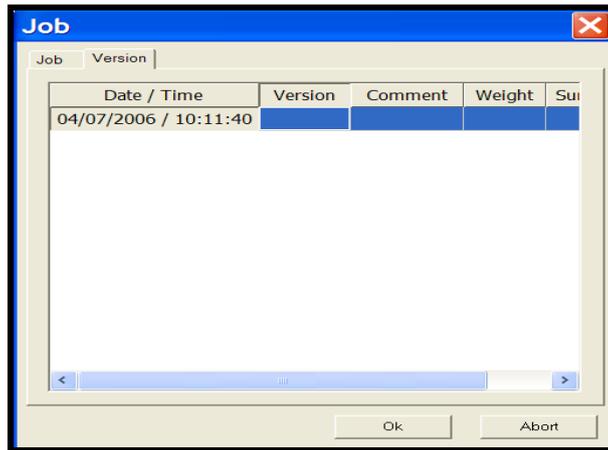


Fig 7-4 Job version control

7.3 Deletion

Job deletion is used to cancel the connection created between various entities but doesn't assign it.

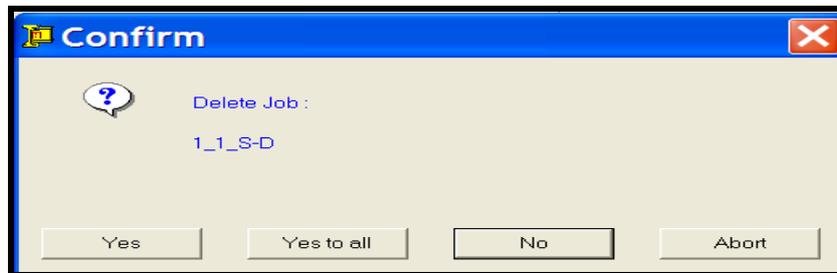


Fig 7-5 Job deletion

7.4 Copy

Copy is used to duplicate a job which exists when created (with a new name) in a contract, phase or job.

The elements which compose a start up are not duplicated. Only the nomenclature is recopied.

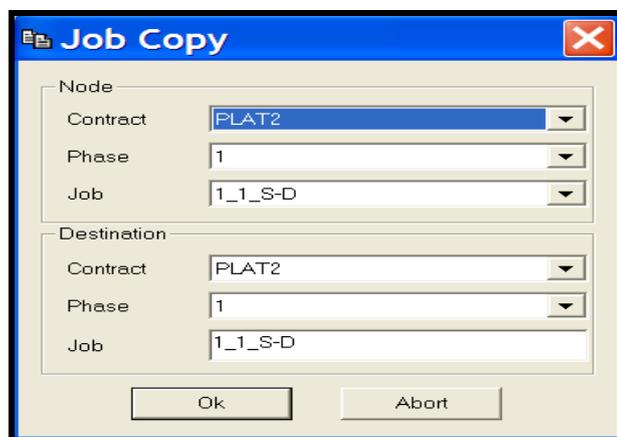


Fig 7-6 Copy

7.5 Composition

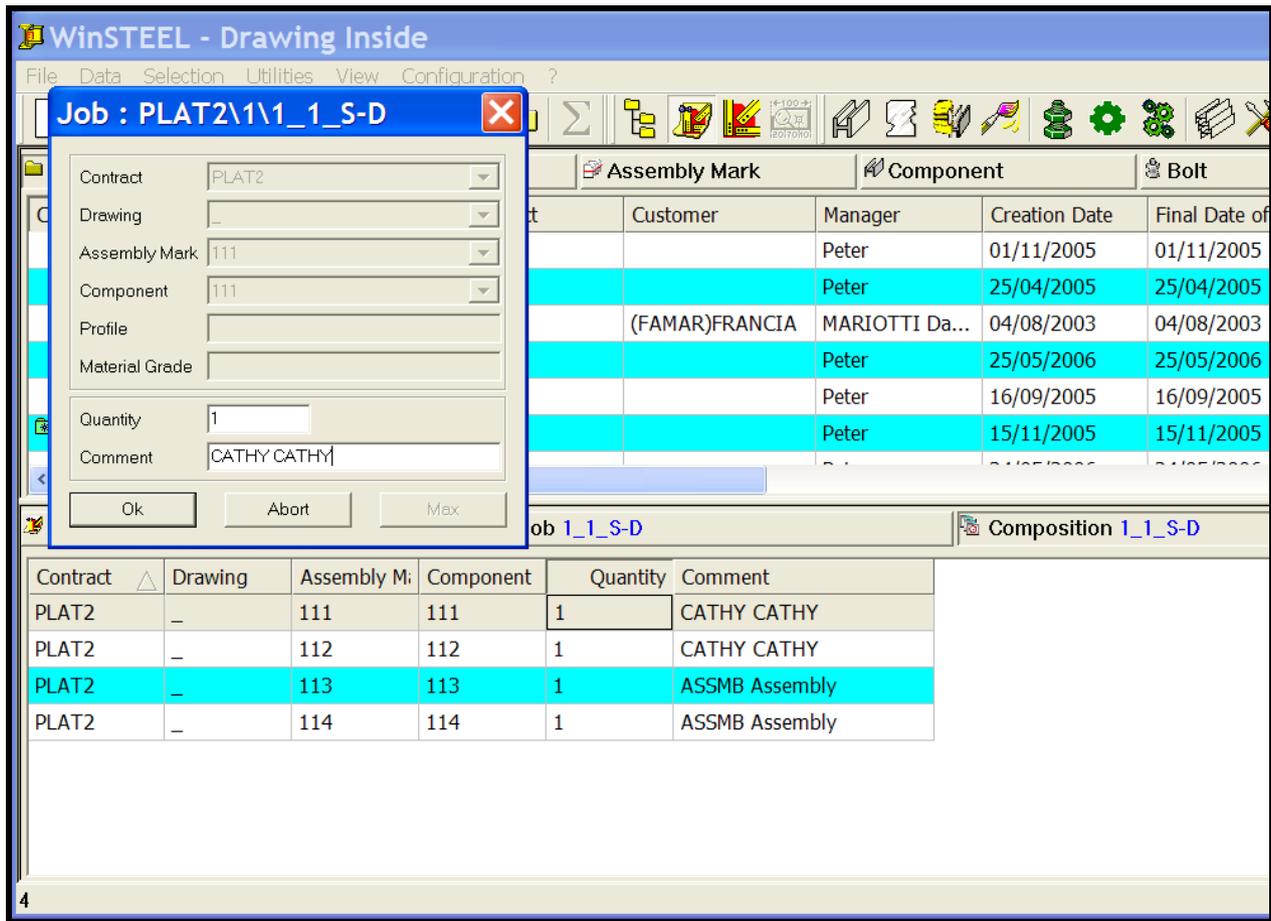


Fig 7-7 Composition quantity check

Conformity control will be done by WinSTEEL before validating the line which has just been created. This test will compare quantities launched with forecast quantities.

8. Drawings

8.1 Main screen

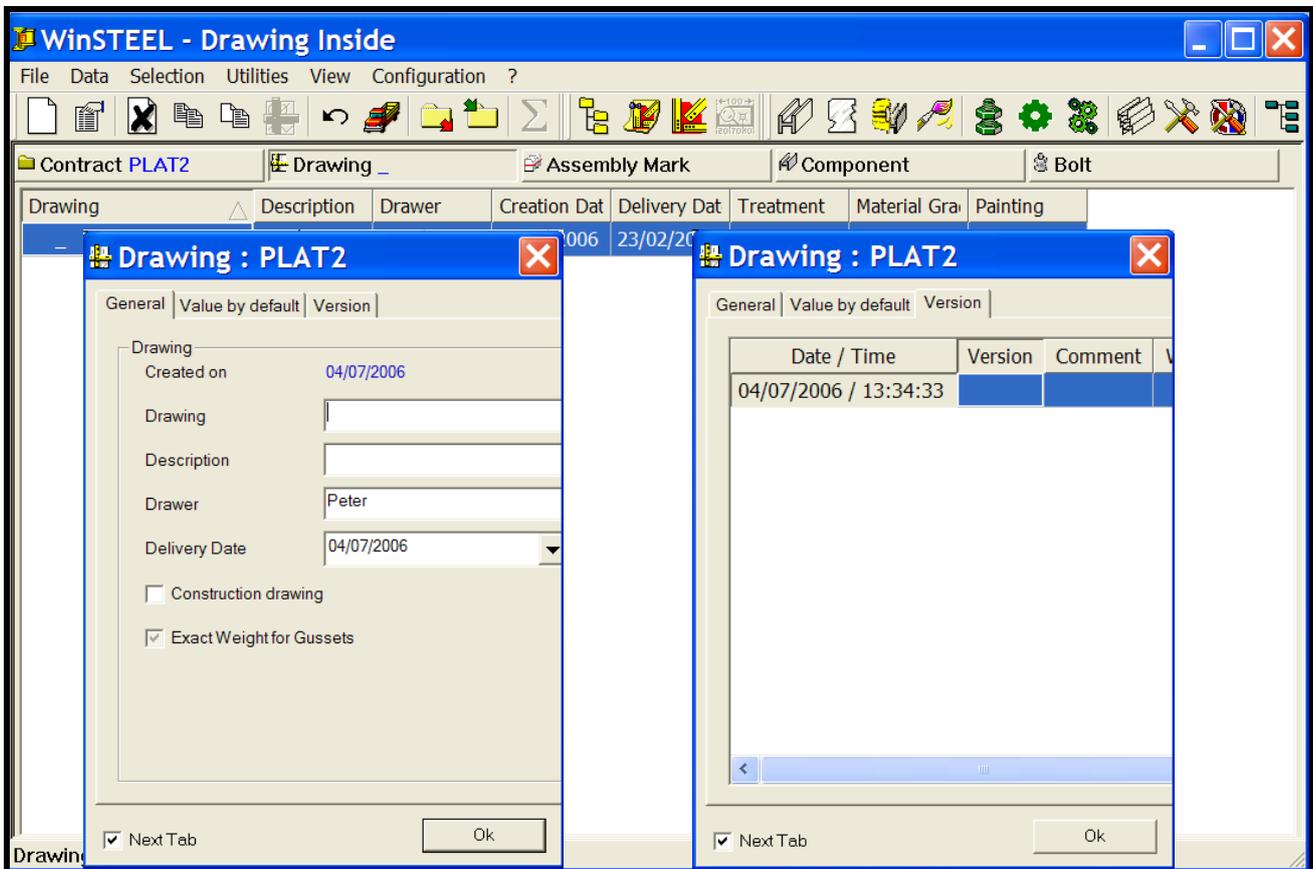


Fig 8-1 Contract drawings list with management screens open

Drawing = Set of main basic elements (Assembly Marks and Components).

The Drawing page is used for creation of sets of elements from drawing manual execution in order to organise the breakdown of a steel structure, and the regrouping necessary for production, expedition and assembly. Information on version and content may be accessed here.

NB: We advise you to manage the assembly marks and component on a single way in a contract. When the main mark is present in various drawings and its composition is different from one drawing to another, the results can be inconsistent according to the models.

8.2 Copy Delete

Copy and delete functionality is also provided for drawing and is accessed and used in the same way as contract, phase and job above.

9. Assembly Marks

9.1 Main screen

Assembly M	Quantity	Description	Treatment	Material Gra	Painting	Construction	Dimensions	Manager	Creation
101	2								23/02/2
102	1								23/02/2
104	1								23/02/2
105	1								23/02/2
106	1								23/02/2
107	1								23/02/2
108	1								23/02/2
109	1								23/02/2
110	1								23/02/2
111	1								23/02/2
112	1								23/02/2
113	1								23/02/2
114	1								23/02/2
115	1								23/02/2
116	1								23/02/2

Number of Assemblies : 15

Fig 9-1 List of contract Assembly Marks.

Assembly Mark = Set of main basic elements (Components).

Assembly marks management permit the creation of sub-set in a plan.

NB: We advise you to manage the assembly and the component on a single way in a contract. When an assembly mark is present on various drawings and its composition is different from one drawing to another, the results can be inconsistent.

9.2 Management

The screenshot shows a dialog box titled "Assembly Mark : PLAT2\'_". It has two tabs: "General" and "Version". The "General" tab is active and contains the following fields:

- Assembly Mark:** 101
- Description:** (empty text box)
- Quantity:** 2
- Typology:** (empty text box)
- Dimensions:** (empty text box)
- Value by default:**
 - Treatment:** (empty text box)
 - Material Grade:** (empty text box)
 - Painting:** (empty text box)
- Modified:**
 - The:** 23/02/2006 A 09:00
 - By:** (empty text box)

An "Ok" button is located at the bottom right of the dialog.

Fig 9-2 Assembly Mark management information

The screenshot shows the "Version" tab of the "Assembly Mark : PLAT2\'_" dialog box. It features a table with the following structure:

Date / Time	Version	Comment
07/07/2006 / 11:05:33		

Below the table is a scroll bar and an "Ok" button at the bottom right.

Fig 9-3 Assembly Mark version control

Field	Description
Assembly Marks	Codification of the Assembly Mark in WinSTEEL data base
Description	Assembly Mark Description
Quantity	Quantity of the Assembly Mark in the selected drawing
Typology	Free Field for typology description of the assembly mark
Dimensions	Theoretic sizes concerning the main mark for reason of packing and transport
Values by Default	Material, Treatment and also end layer are values by default proceeding of contract description and used to the follow of operations (Assembly Mark and components)
Modified	Last modification of Assembly mark
Version	Follow up of various assembly versions

9.3 Delete

Assembly Mark deletion cancels the link created between various elements, but doesn't assign them.

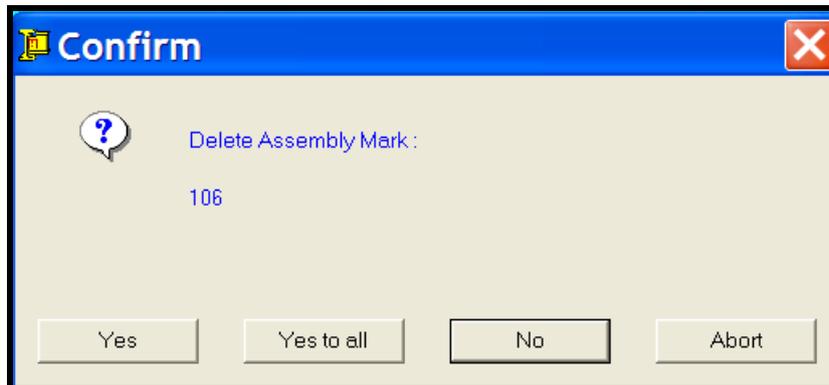


Fig 9-4 Assembly mark deletion

9.4 Copy

Copy function duplicates an Assembly Mark which exists (with a new name) in a contract.

The elements which composed an Assembly Mark are not duplicated. Only the listing is copied.

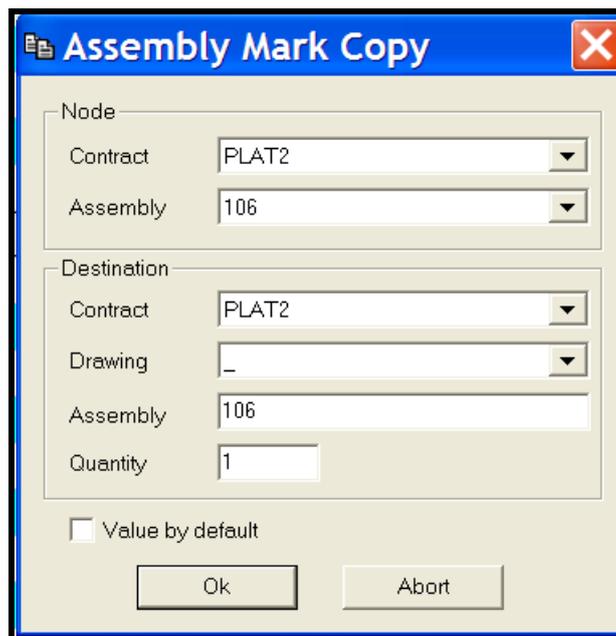


Fig 9-5 Assembly Mark copy

10. Component

10.1 Main Screen

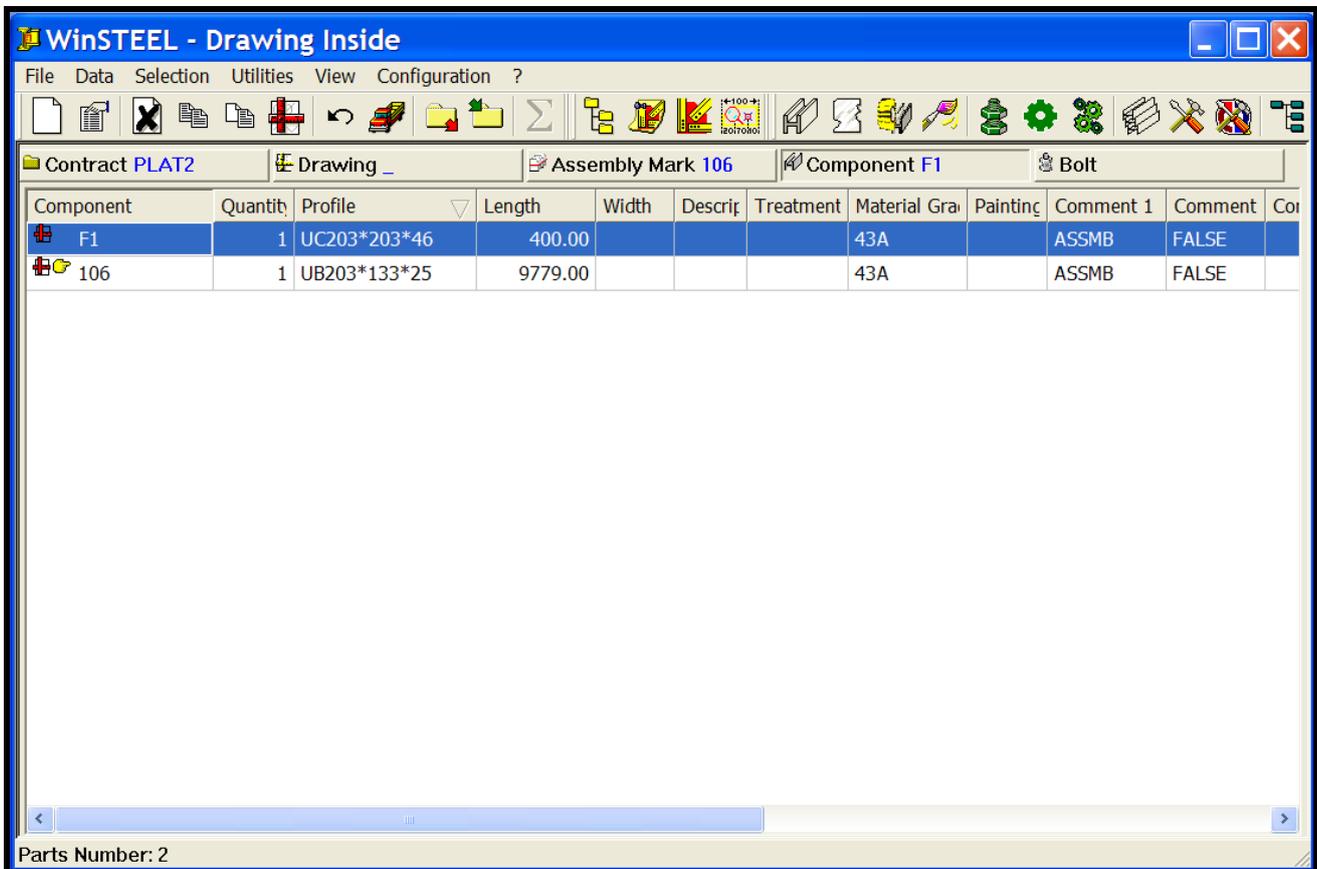


Fig 10-1 Components list

Components = Basic element for WinSTEEL. It describes the unit piece with its profile, tooling, etc...

NB: We recommend that you manage the assembly marks and the components in a certain manner in a contract. When the main mark is present in various drawings or components and its composition is different from one drawing to another, the results can be inconsistent according to the models.

10.2 Management

Component : PLAT2 _ \ 106

General

Created on: 23/02/2006 A 09:44:03

Component: 101

Quantity: 1

Profile: CHS76.1X3.0

Unit: Millimeter Inch

Length: 11703.00

Width: 0

Description: [] [X]

Analytical Group: CHS

Purchase: []

Treatment: []

Material Grade: 43A

Painting: []

Information | Toolings | Version

Modified: The 23/02/2006 A 09:44:03

By: []

Comment: ASSMB

FALSE

Information

Weight	38.3963	Kg
Material Price	0.00	
Surface	2.8090	m ²
Process Time	0.00	
Toolings Costs	0.00	

Draw Ok Abort

Fig 10-2 Components management information

Component : PLAT2 _ \ 106

General

Created on: 23/02/2006 A 09:44:03

Component: 101

Quantity: 1

Profile: CHS76.1X3.0

Unit: Millimeter Inch

Length: 11703.00

Width: 0

Description: [] [X]

Analytical Group: CHS

Purchase: []

Treatment: []

Material Grade: 43A

Painting: []

Information | Toolings | Version

Tooling	Quantity	1	2	3	4	Comment
CUTTING	1	0	0	0	0	
ASSEMBLY	1	0	0	0	0	
SHIPPING	1	0	0	0	0	

Delete

Draw Ok Abort

Fig 10-3 Components management tooling

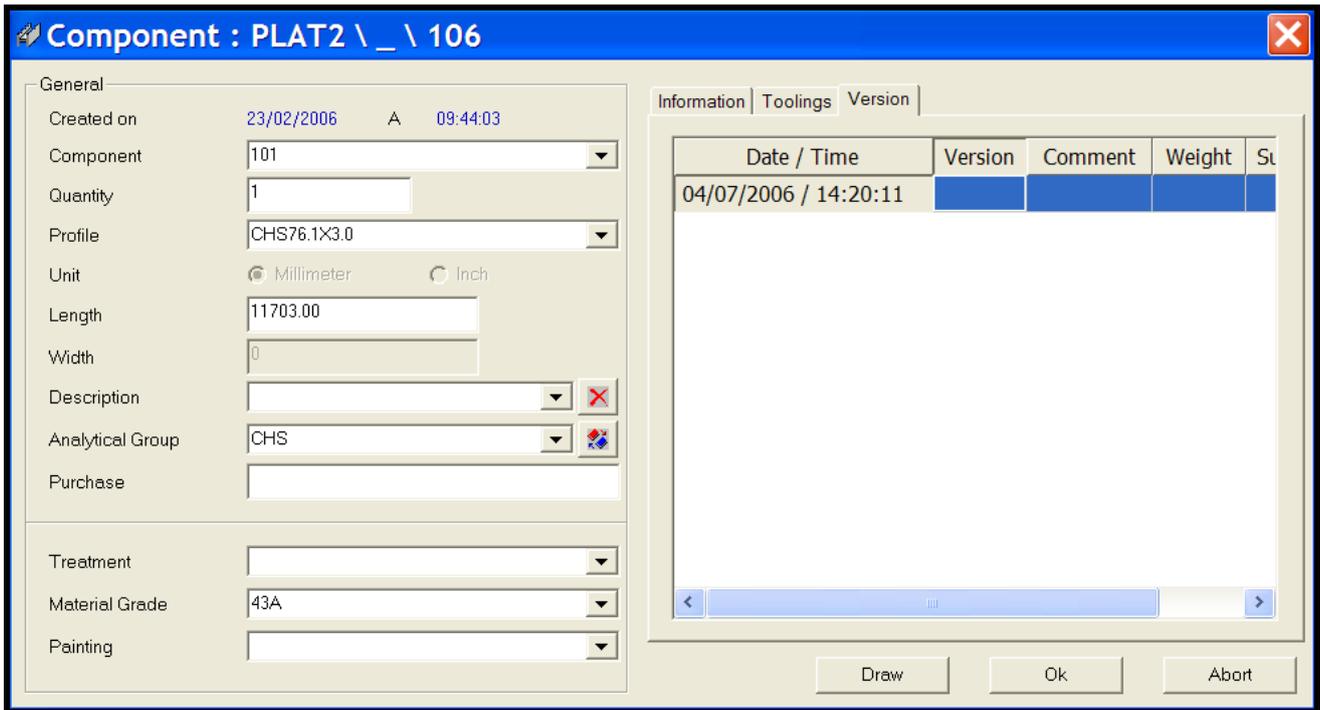


Fig 10-4 Components management version control

Field	Description
Component	Name of the Component in WinSTEEL data base
Quantity	Quantity of the Component in the selected drawing
Profile	Profile of the Component
Length	Component length
Width	Component width, if part is of type Plate
Description	Description of assembly mark
Analytical Group	Group that is assigned to the component
Supplying	Supplying information of the component
Comments	Free field for user's information
Values by Default	Material, Treatment and also end layer are values by default proceeding of contract description and used to the follow of operations (Component)
Modification	Last modification of Assembly Mark
Revision	Follow up of various plan update
Tooling	List of component tooling. They can be manually entered or automatically recuperated from the database

10.3 Delete

Component deletion cancels the link created with the assembly mark selected. The component will be definitively deleted if it has no link with the superior levels.

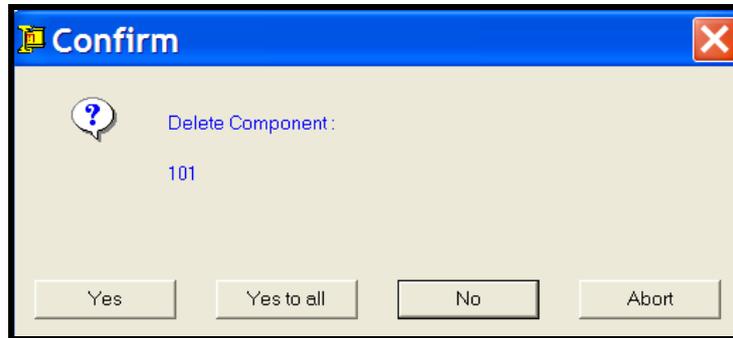


Fig 10-5 Component deletion

10.4 Copy

Copy duplicates a component which exists (with a new name) in a contract.

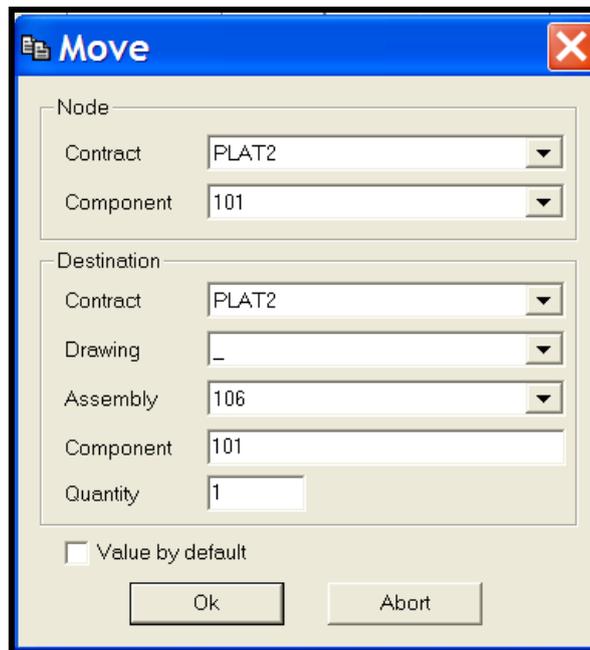


Fig 10-6 Component copy

11. Drawing



This function is activated using icon  in the main menu as indicated below. According to the type of part profile the tooling key-in is different in for linear profiles (Beams, Angles, etc.) and gussets.

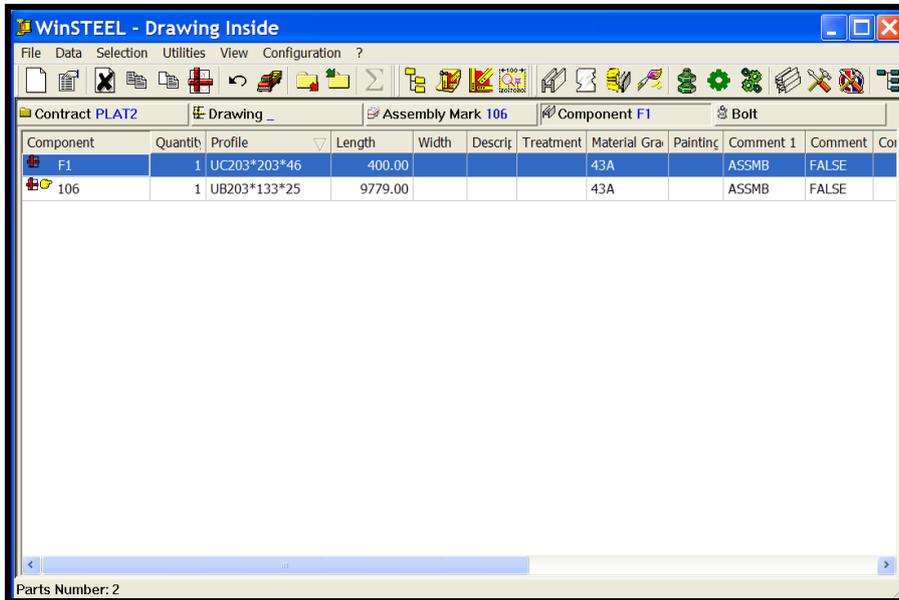


Fig 11-1 Component list – drawing icon shown top row

Please refer to document « WinSTEEL drawing » for complete documentation on the drawing feature

12. Selection - Workshop Output

12.1 Criteria

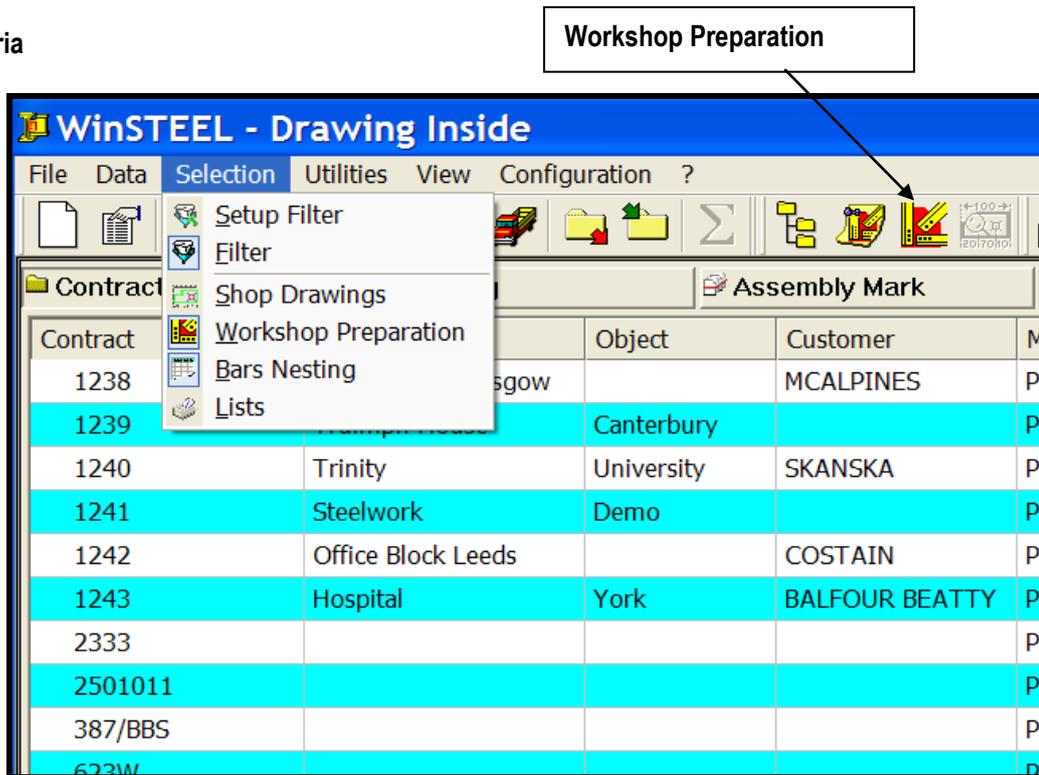


Fig 12-1 Selection menu – main screen

This menu of WinSTEEL is used to provide a logical and systematic work flow where all the information on the individual parts is collated into contract, drawing, assembly and component and then filtered according to the user's workshop requirements into a format ready for workshop preparation.

The outputs are in the form of:

- Shop Drawings, Workshop preparation – CAM files, Bar Nesting and Material lists

WinSTEEL will allow the following selections to be made and processed for workshop treatment:

12.1.1 By Contract

From the WinSTEEL main screen simply point the mouse cursor on the Contract to be selected. Now hold down the left button of the mouse and drag the mouse cursor towards the bottom of the screen, the workshop preparation / filter screen will open automatically and the selection can be dropped into this screen. (Drag and Drop).

If this was correctly performed, the screen should look like Fig 12-2 below.

12.1.2 By Phase

From the WinSTEEL main screen simply point the mouse cursor on the Phase to be selected. Now hold down the left button of the mouse and drag the mouse cursor towards the bottom of the screen, the workshop preparation / filter screen will open automatically and the selection can be dropped into this screen. (Drag and Drop).

If this was correctly performed, the screen should look like Fig 12-2 below.

12.1.3 By Assembly or Component

From the WinSTEEL main screen simply point the mouse cursor on the Assembly or Component to be selected. Now hold down the left button of the mouse and drag the mouse cursor towards the bottom of the screen, the workshop preparation / filter screen will open automatically and the selection can be dropped into this screen. (Drag and Drop).

If this was correctly performed, the screen should look like Fig 12-2 below.

12.1.4 By a combination

From the WinSTEEL main screen simply point the mouse cursor on any combination of Contract, Phase, Assembly or Component to be selected. Now hold down the left button of the mouse and drag the mouse cursor towards the bottom of the screen, the workshop preparation / filter screen will open automatically and the selection can be dropped this screen. (Drag and Drop).

If this was correctly performed, the screen should look like Fig 12-2 below.

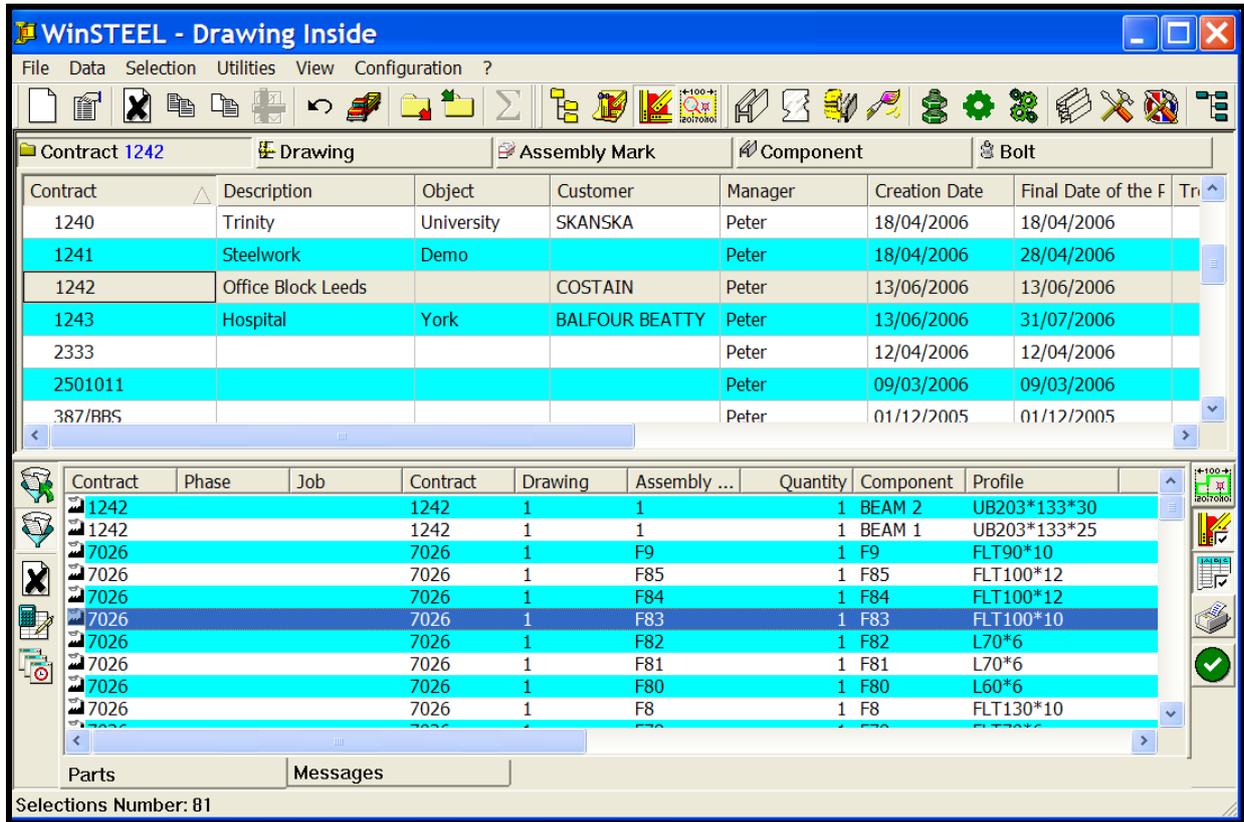
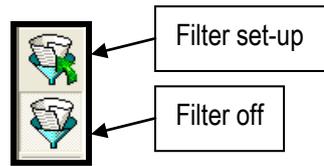


Fig 12-2 Workshop preparation screen – parts page

Field	Description
Contract	List of contracts concerned by the operation
Drawing	List of Drawings of each contract
Assembly	Assembly Marks selection criteria
Component	Component selection criteria

12.2 Set-up Filter

Using the following icons, the filters can be switched on and off.



It is possible to associate selection criteria such as profile, material or treatment and to perform filters on these. To set-up filters simply highlight any of the selections and apply. This will automatically filter out anything not complying with the active filter and only show the components meeting the criteria.

The range of filters is quite extensive and includes Analytical Groups and their inversion. It's possible to filter out all the Plates for a selection and process the Plates only. After, invert the selection to select and process everything except Plates.

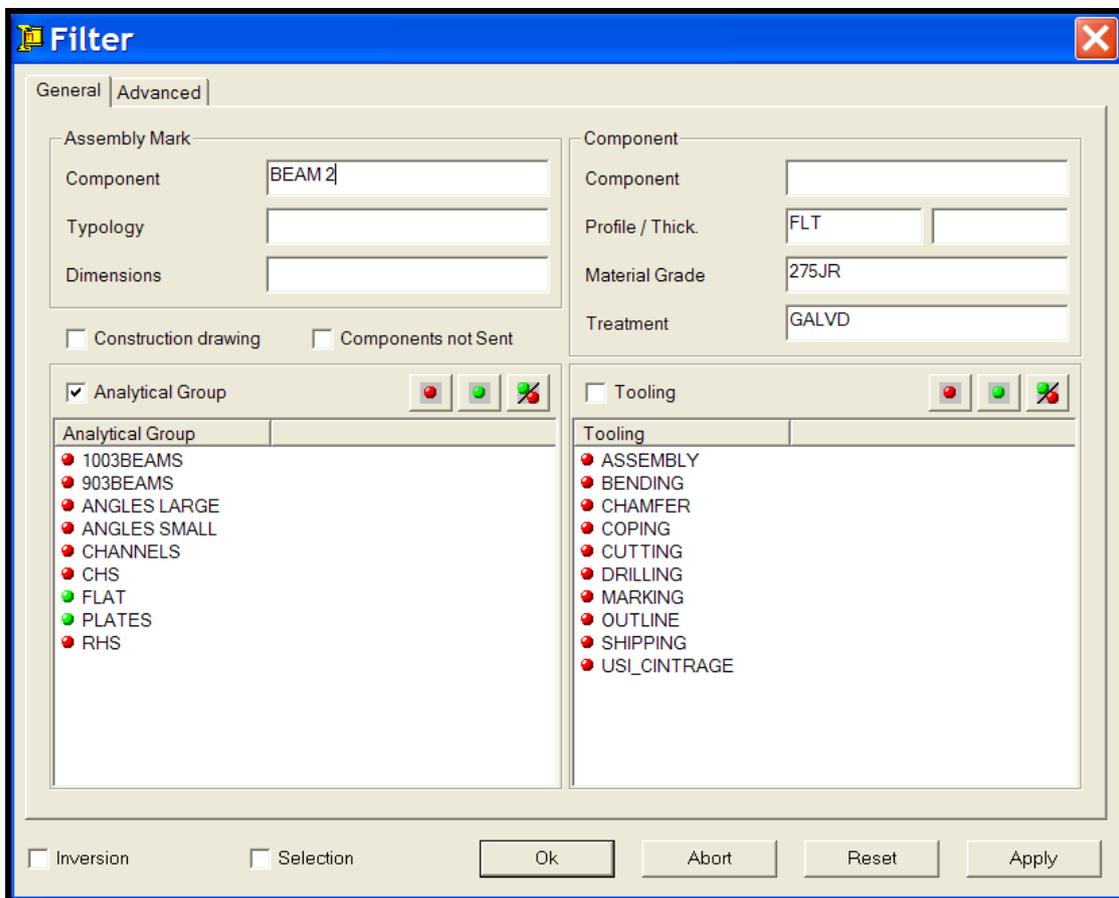


Fig 12-3 Filter options - pieces selection criteria

It is also possible to modify manually the list of pieces using the contextual menu (Right Button of the mouse).

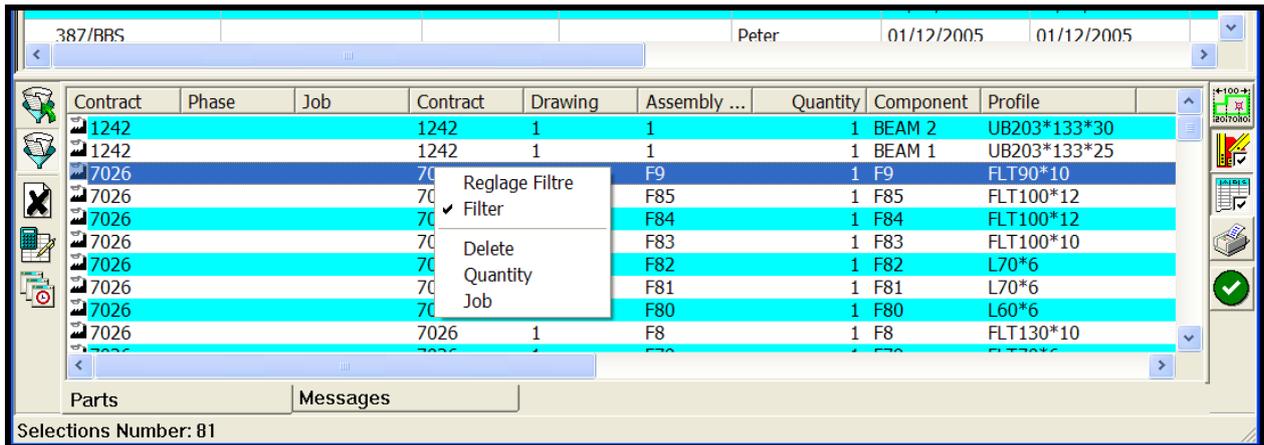


Fig 12-4 Modification of the selection

12.3 Filter

Selection filters can be made by tooling also. To remove filters click the off icon directly below the filter set-up icon. Check invalid parts for filtering.

Filters will also indicate on the message page if any parts (components) are invalid at selection stage. See below. The invalid parts do not fit the selection criteria.

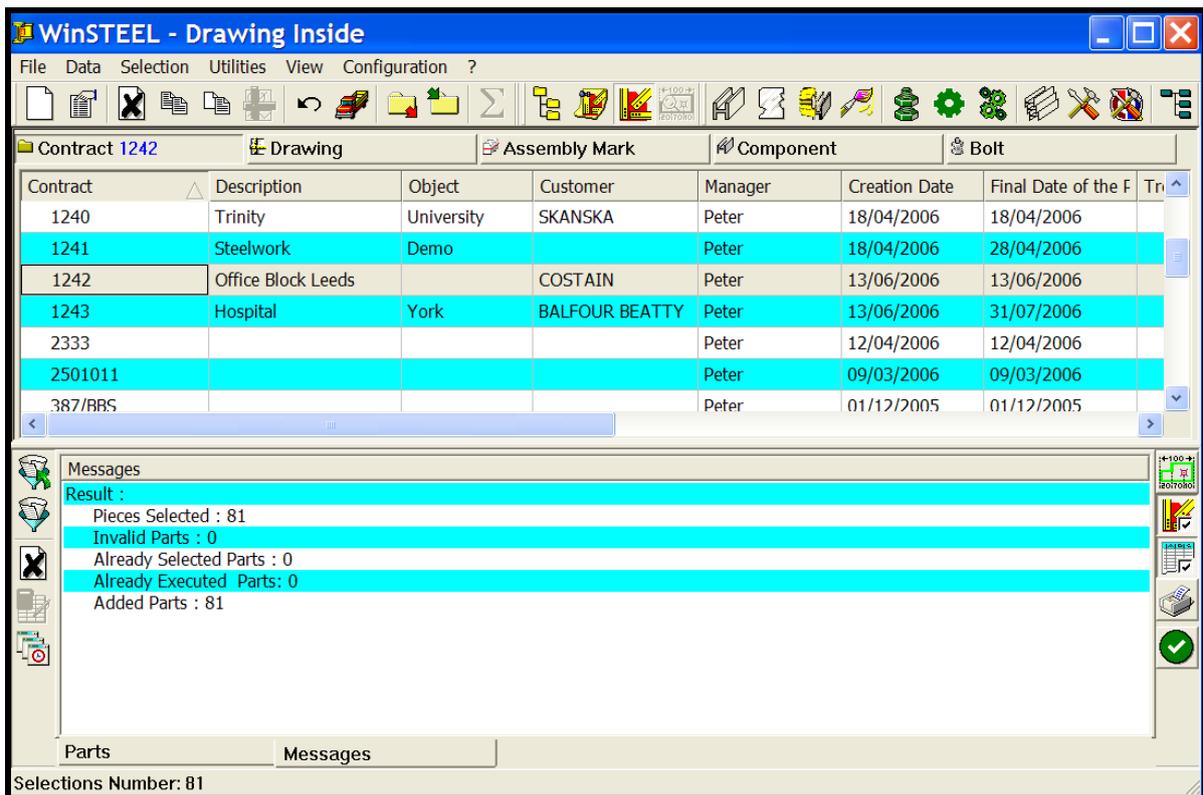


Fig 12-5 Messages page of the selection

12.4 Shop Drawings

Selecting shop drawing generation (tick the top icon on the right hand side toolbar) creates for the selected pieces a graphical view according to the parameters selected by the operator. This can be viewed either on the screen or sent to an external peripheral printer (parallel or serial port) for printing.

The shop drawing configuration requires prior configuration, without WinSTEEL it is not possible to print or preview.

12.4.1 Preview



Fig 12-6 Preview of a component prior to printing

You can select particular pieces to display.

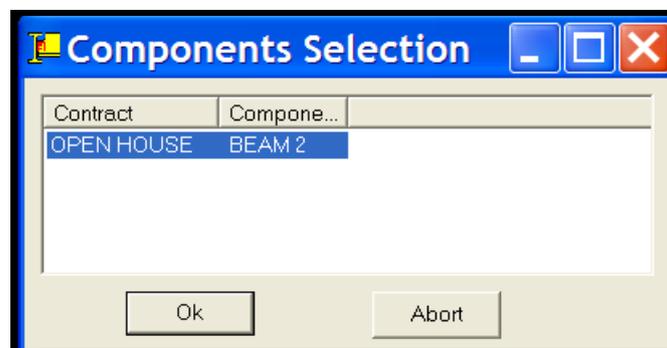


Fig 12-7 List of pieces

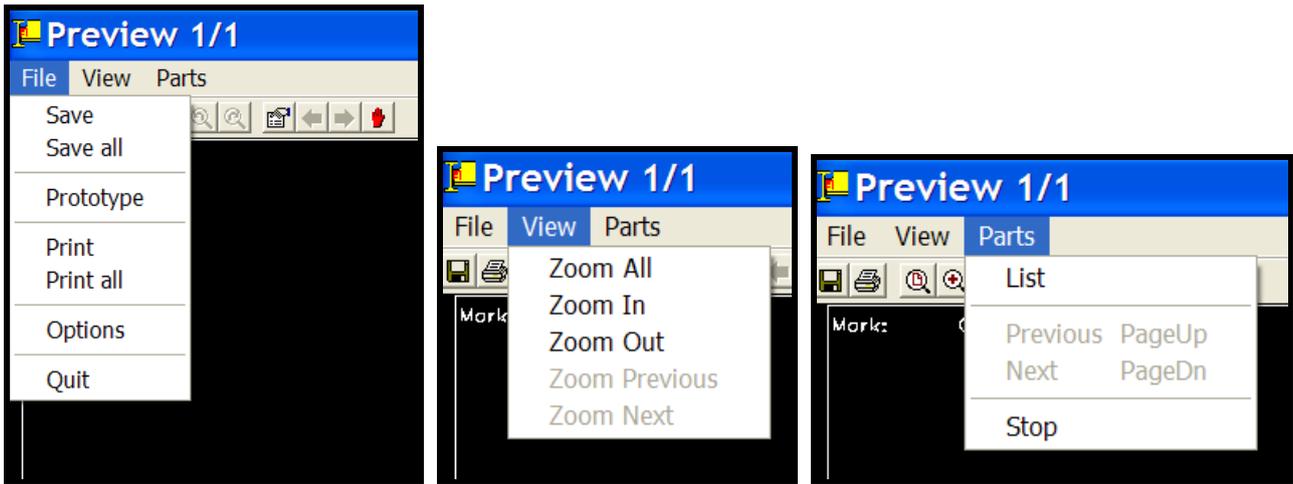


Fig 12-8 Preview menu

12.4.2 Save as DXF or DWG

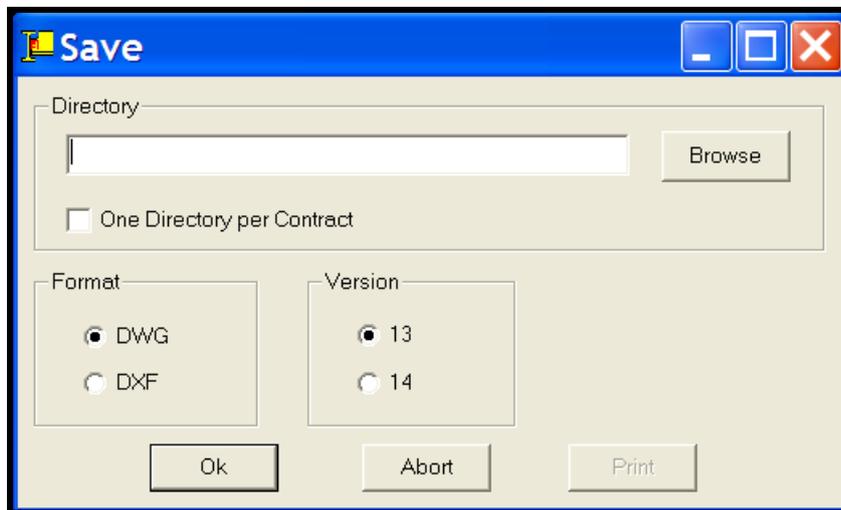


Fig 12-9 Save-as screen

Menu	Description
Format	Allows to save (under format DXF or DWG) or to print it
Directory	Browse to locate destination

12.5 Workshop Preparation

This can be selected using the Workshop Preparation icon as Fig 12-1 above or tick the icon on the right hand side of the screen.

Workshop Preparation output consists on file creation with CAM format (Steel Projects Files internal format) destined to the numerical control machine (WinCN for CNC).

These files are directly recoverable by others Steel Projects products, as follows:

WinBAR	Linear Bar Nesting
WinSER	Fabrication management module real time capture
WinPLAN	Production management time planning module
WinCN	Numerical control machine post processor

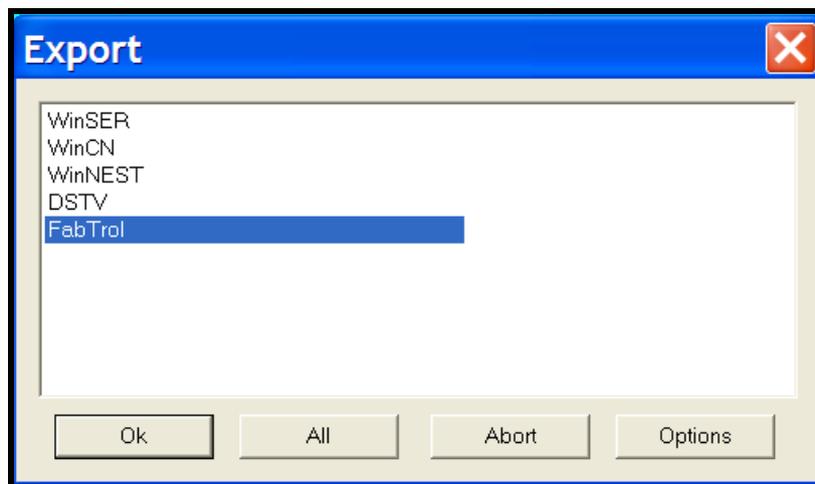


Fig 12-10 Workshop preparation export

12.6 Bar Nesting – WinBAR

This can be selected using the Selection, Bar Nesting drop down as Fig 12-1 above or tick the icon on the right hand side of the screen.

Bar Nesting will automatically launch the WinBAR product and process all the individual components to WinBAR where these parts may be linear nested to suit the client’s preferred stock lengths. This would need to be previously configured, see data, profile groups, stock.

The nested bars can be reported on and used for ordering and purchasing.



12.7 Lists

This can be selected using the Selection, Lists drop down as Fig 12-1 above or tick the icon on the right hand side of the screen.

Lists will automatically open the reports that have been produced for the client, these may contain generic reports and/or customized reports especially created for the client.

This menu of WinSTEEL offers the possibility to edit selected part lists using pre-installed reports (see Chapter Configuration).

These lists can be previewed, exported as excel spreadsheets or sent directly to the printer. Report may be customised to suit individual client requirements.

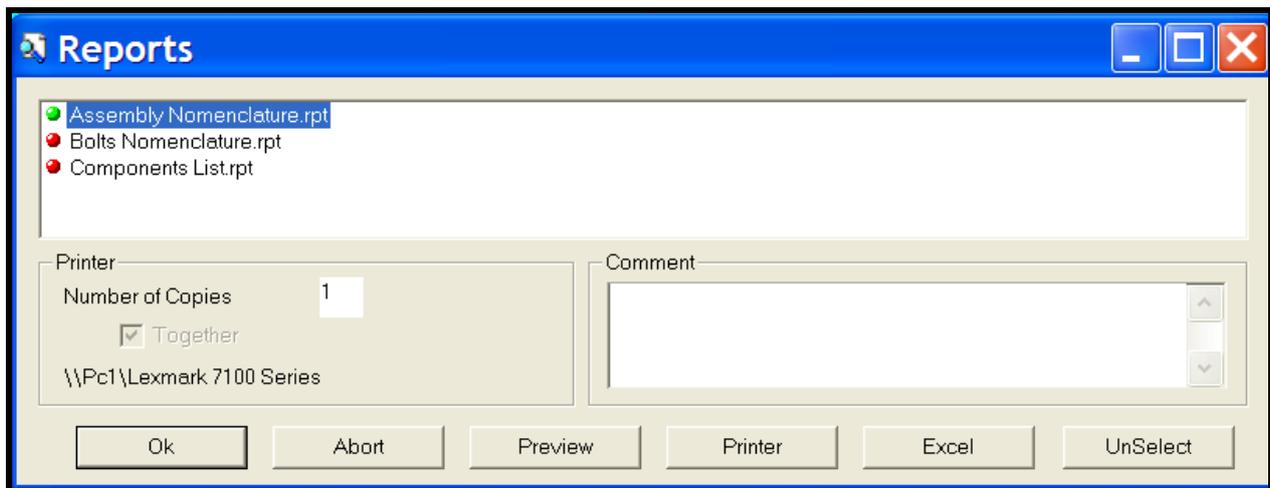


Fig 12-11 Reports list

Component	Description	Grade	U.Qty	T.Qty	Length	Width	U.Weight	T.Weight	Surface
1			1	1					
BEAM 1	IPE300	43A	1	1	300,000		12.67	12.67	0.35
BEAM 2	UB203*133*25	S275JR	1	1	780,000		19.58	19.58	0.71
							32.25	32.25	1.06
Drawing subtotal								32.25	1.06
Contract total								32.25	1.06

Fig 12-12 Assembly report

13. Utilities

An important function in WinSTEEL is the utilities drop down where the user's information may be saved and the data base files restored.

It is strongly recommended to use these save and back-up operations regularly in order to avoid any information loss.

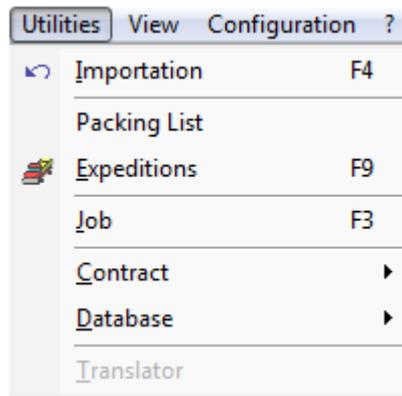


Fig 13-1 Main utilities drop down menu

13.1 Import

The import drop down menu of WinSTEEL provides a selection (depending upon import modules purchased) of import formats for the automatic recovery of data from others applications.

According to the upstream application to be imported from, WinSTEEL will create all the available trees in the data base to provide homogeneity with other imports formats. See Configuration Import.

The direct import defines all links and logic in order to determine the relationship and association of pieces, bolts, screws to a drawing, assembly or contract.

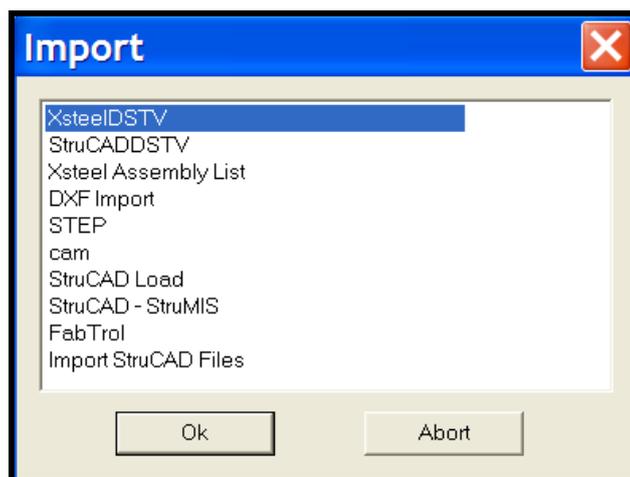


Fig 13-2 Utilities drop down menu import

After selection of an import type by default a parameters screen will be displayed. It is then possible to modify the various parameters to effectuate data recovery.

13.2 Expedition

This utility menu allows for the assignment of parts, by contract, job, phase, drawing or component into contract loads. The contract loads can then be designated to the carrier and truck allocated for the load. Weights are calculated automatically for the loads. Functionality is subject to certain modules being installed.

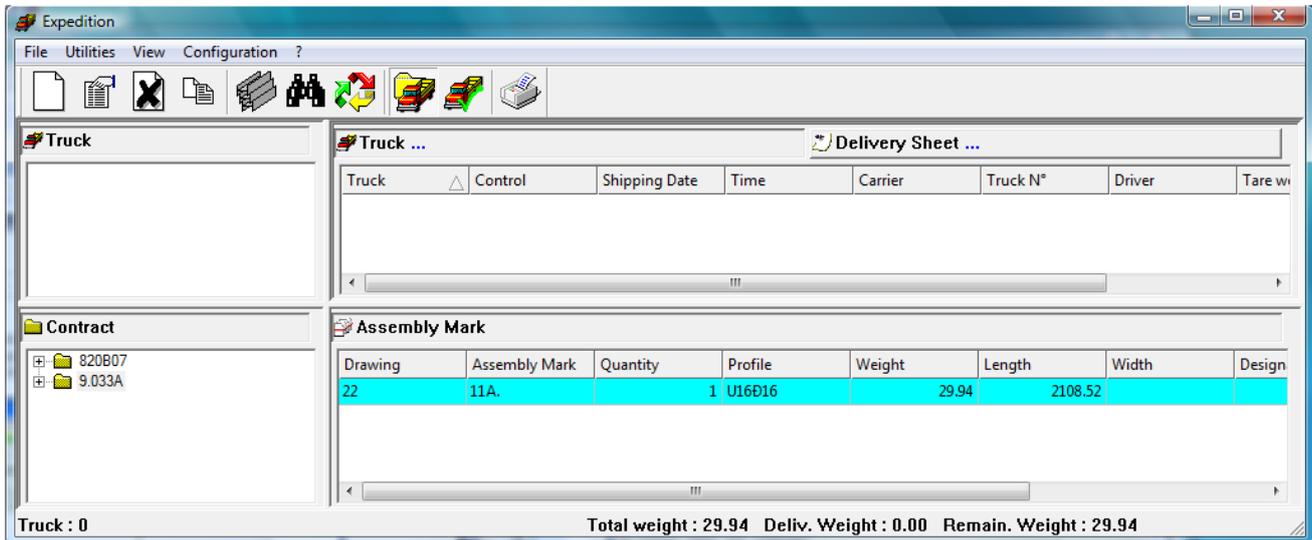


Fig 13-3 Utilities drop down menu expedition

13.3 Job

When activated this utility menu opens a default screen (see below) that will indicate for the contract (selection) highlighted all the relevant information on contract, drawing, assembly component and remaining number of parts.

Contract	Drawing	Assembly M:	Component	Remaining Parts	Job	Quantity
7026	1	F1	F1	2		
7026	1	F10	F10	30		
7026	1	F11	F11	4		
7026	1	F12	F12	2		
7026	1	F13	F13	2		
7026	1	F14	F14	10		
7026	1	F15	F15	20		
7026	1	F16	F16	6		
7026	1	F17	F17	2		
7026	1	F18	F18	16		
7026	1	F19	F19	4		
7026	1	F2	F2	2		
7026	1	F20	F20	2		
7026	1	F21	F21	379		
7026	1	F22	F22	56		
7026	1	F23	F23	8		

Fig 13-4 Utilities drop down menu job

13.4 Contract

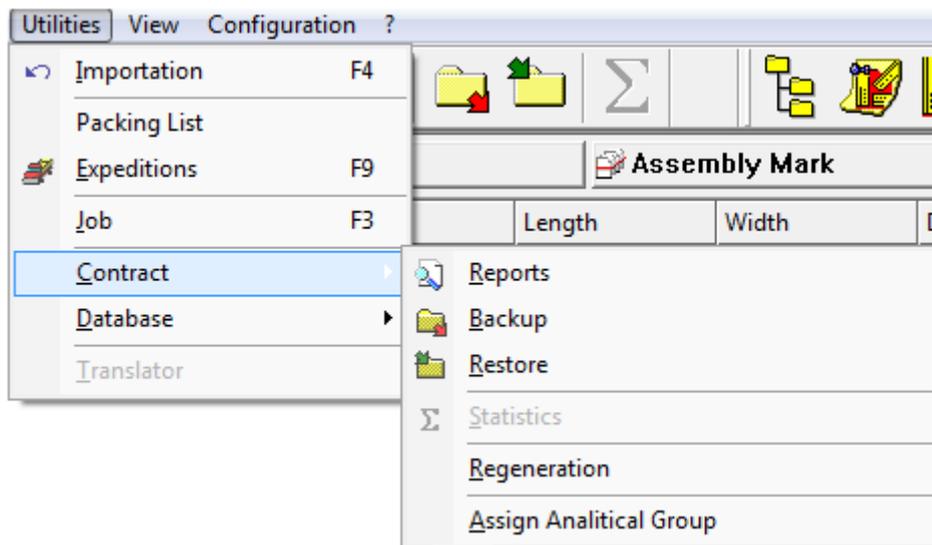


Fig 13-5 Utilities drop down menu contract

13.4.1 Reports

Subject to configuration and custom reports being installed, it is possible to run a report on the contract status. Consult local office if this is a requirement.

13.4.2 Backup

To perform a backup of a single contract or multiple contracts simply tick the left hand column and browse to assign the preferred directory for the backup file to be saved to. Press the OK button and a zip file of the backup will be created and saved automatically.

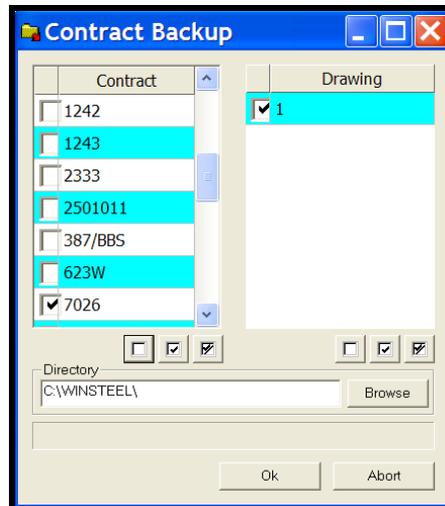


Fig 13-6 Utilities drop down menu contract backup

NB: If the selected contract for the backup already exists on the selected destination, WinSTEEL will replace it systematically. Therefore during a backup, the same version of duplicated data can be disposed on one or various disks.

In case of backup onto disks, it is possible that WinSTEEL needs to divide the contract to save onto one or more disks. We recommend that the disks are identified clearly in the order of generation because the restore operation will be done in the exact same order.

13.4.3 Restore

To restore a contract from contract backup simply browse for the directory where the contract zip file is located, highlight the file in the open window and select the open function. This will populate the screen below. Press the OK button and the zip file will now be restored automatically.

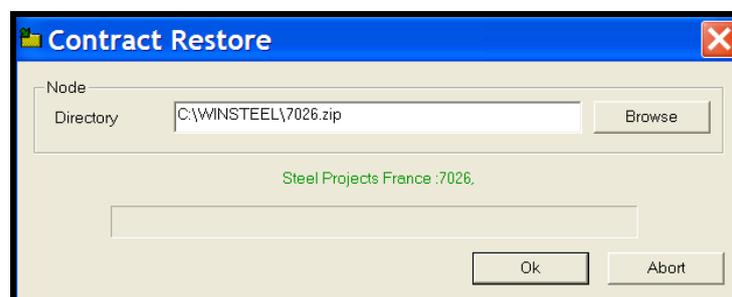


Fig 13-7 Utilities drop down menu contract restore

If the backup originally required several disks, WinSTEEL will prompt the user to insert the various disks successively.

NB: If the contract destined to be restored already exists in the Data Base, then WinSTEEL will avoid any deletion of data which is more recent than any similar data which is contained in the disk.

13.4.4 Regeneration

To perform database regeneration, select the drop down menu and press the Execute button at the bottom left hand side. This may take some time to run through all the processes. Wait for the entire process to complete before continuing with WinSTEEL.

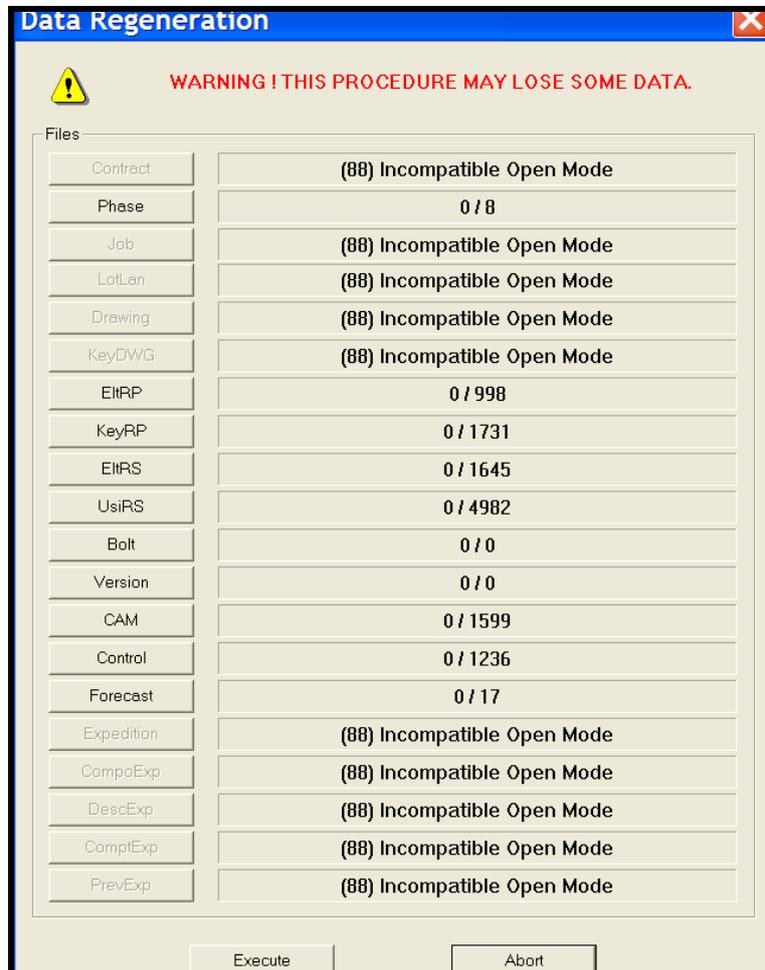


Fig 13-8 Utilities drop down menu contract regeneration

13.4.5 Assign Analytical Group

This function is used when the user has made changes to the analytical groups and requires these changes to be applied to all the contracts in the contract page. By selecting this option, WinSTEEL will automatically open the following screen and apply any changes made.

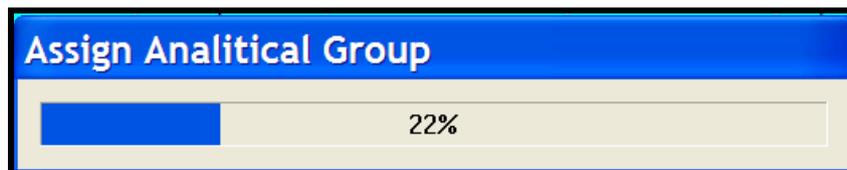


Fig 13-9 Utilities drop down menu contract assign analytical group

13.5 Database

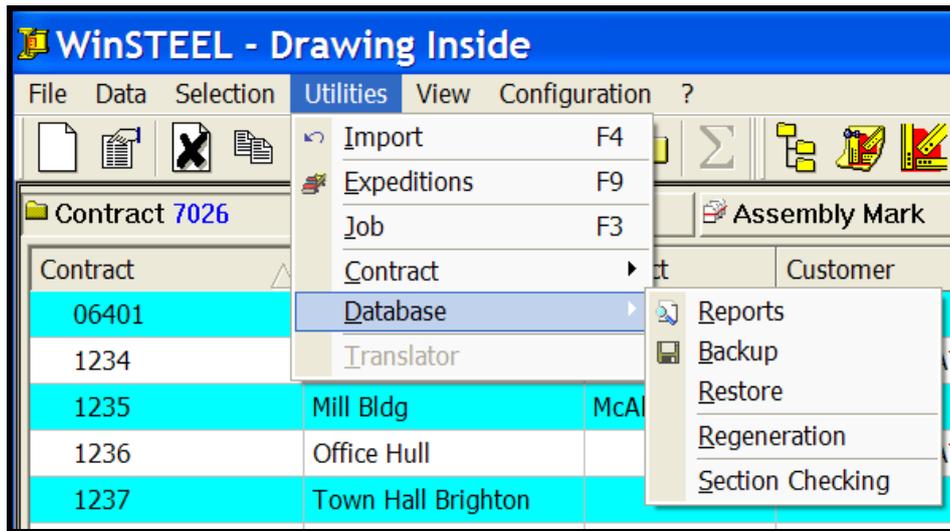


Fig 13-10 Utilities drop down menu database

13.5.1 Reports

Subject to configuration and custom reports being installed, it is possible to run a report on the database. Consult local office if this is a requirement.

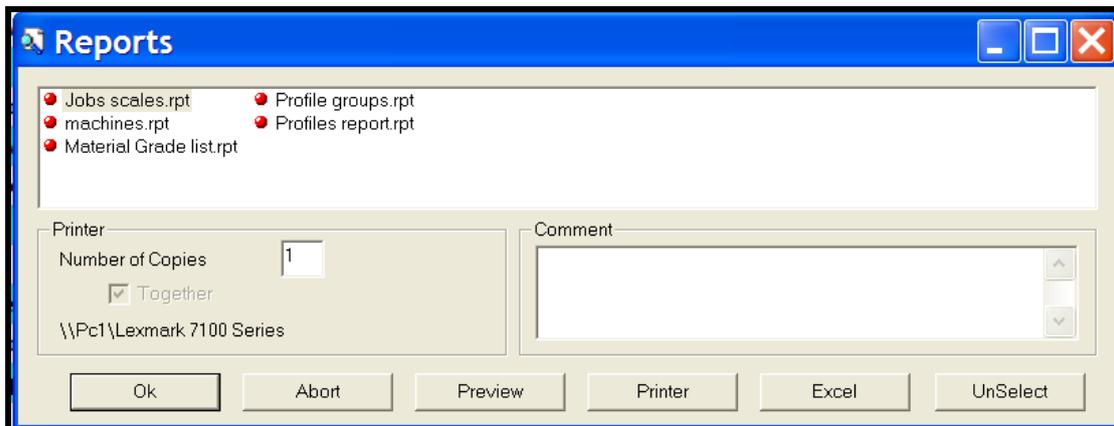


Fig 13-11 Utilities drop down menu database reports

13.5.2 Backup

To perform a backup of the database simply select the drop down from the menu and browse to assign the preferred directory for the backup file to be saved to. Press the OK button and a zip file of the backup will be created and saved automatically.

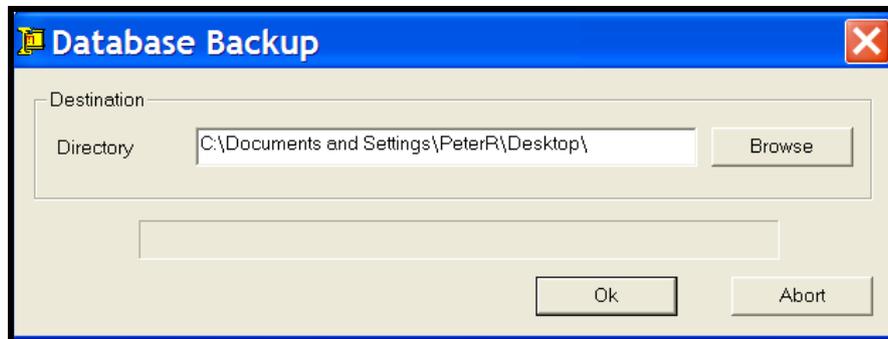


Fig 13-12 Utilities drop down menu database backup

NB: Subject to certain security and safety issues and where workstations may be stand alone and not on the network, we should be able to effectively restore the backup. It is strongly recommended that regular backups are performed and kept in a safe and secure location.

In the case of backup onto disks, it is possible that WinSTEEL needs to divide the database to save onto one or more disks. It is recommended that the disks are clearly identified in the order of generation because the restore operation will be made in the exact same order.

13.5.3 Restore

To restore a database from database backup simply browse for the directory where the base.zip file is located, highlight the file in the open window and select the open function. This will populate the screen below. Press the OK button and the zip file will now be restored automatically.

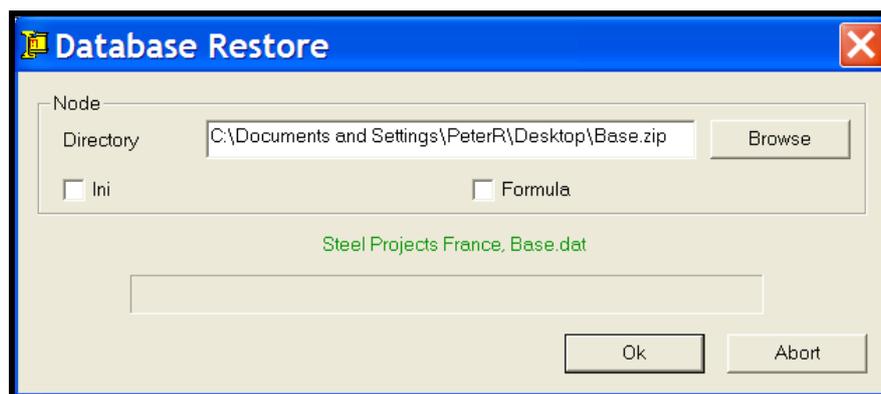


Fig 13-13 Utilities drop down menu database restore

If the backup originally required several disks, WinSTEEL will prompt the user to insert the various disks successively. In the same way as contract restore, basic files restoration will reload the complete data base with one or various disks. WinSTEEL will retain all active basic files during the restoration.

13.5.4 Regeneration

To perform database regeneration, select the drop down menu and press the Execute button at the bottom left hand side. This may take some time to run through all the processes. Wait for the entire process to complete before continuing with WinSTEEL.

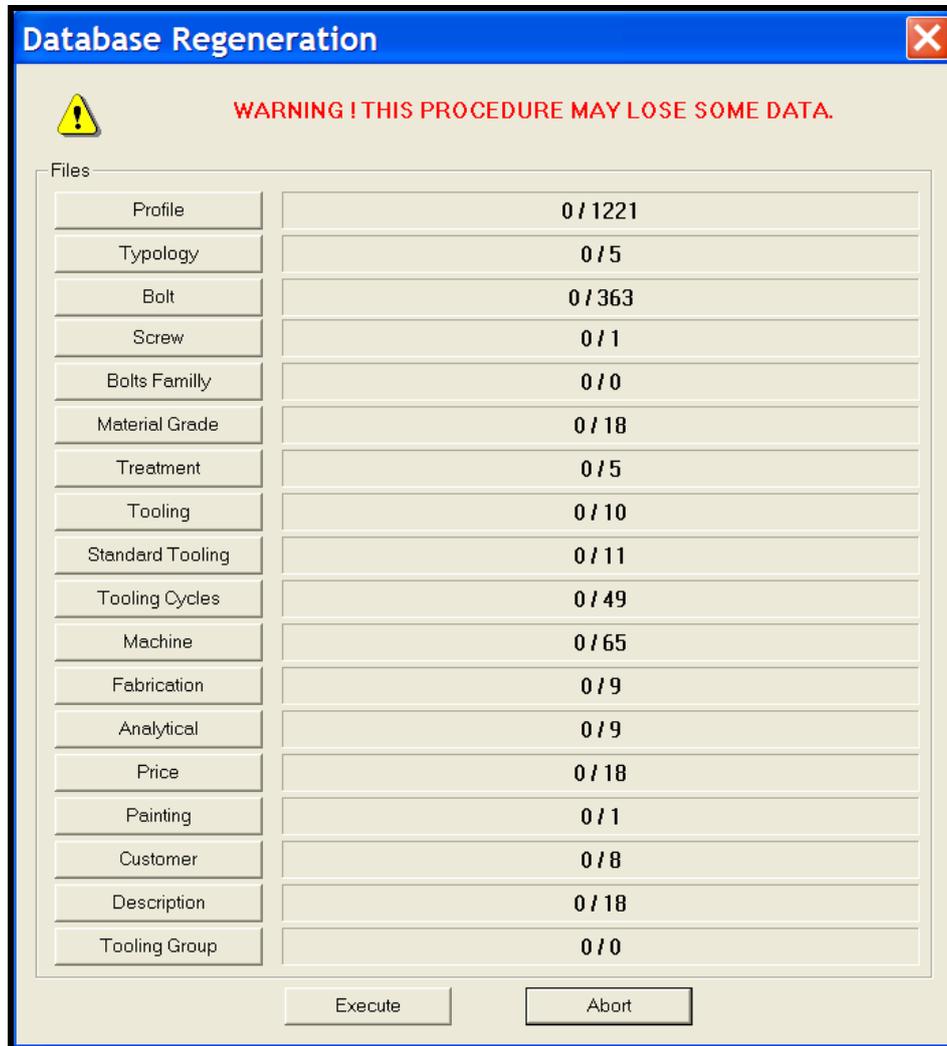


Fig 13-14 Utilities drop down menu database regeneration

13.5.5 Section Checking

By selecting this option WinSTEEL will automatically open the following screen and apply any changes made.

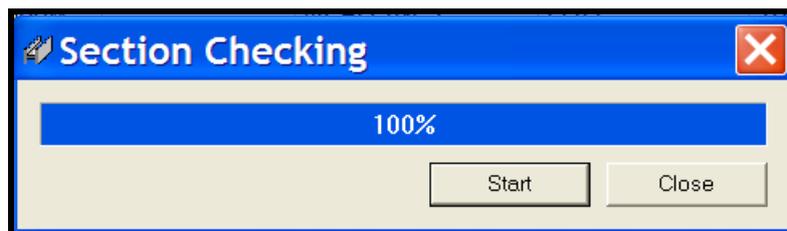


Fig 13-15 Utilities drop down menu database section checking

13.6 Translator

As previously stated in Chapter 4 on configuration dictionary, it is possible to personalize certain fields of WinSTEEL; personalize menus, reports and shop drawings. In order to do this, the user must switch from Standard dictionary to User dictionary (the user's own specific non standard dictionary).

NB. Any changes made by Steel Projects in future releases etc., will be made to the Standard dictionary only and the user must maintain its own specific user dictionary.

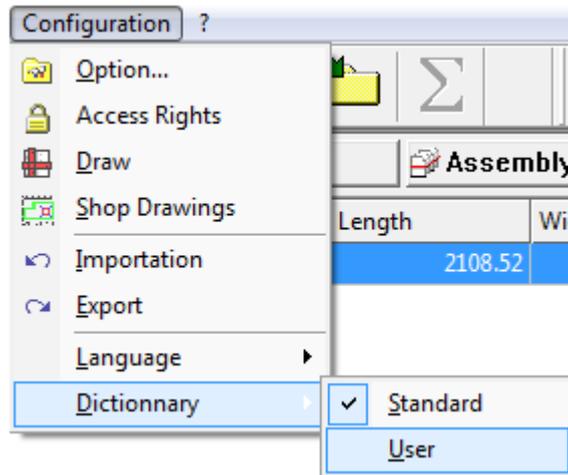


Fig 13-16 Configuration dictionary user

Once in Dictionary User setup, it is now possible to go back to utilities and select the drop down Translator.

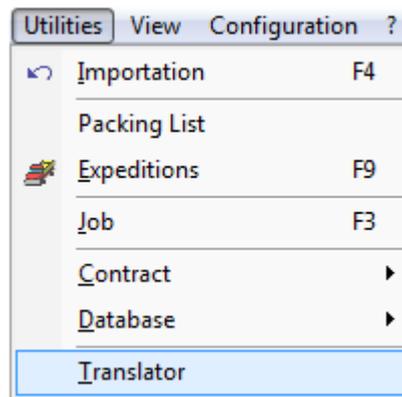


Fig 13-17 Utilities translator

To modify any text, first select a line in the list and modify the text in the language of the installation. If in English then only modify the text in the English column. Some users prefer to have Drawing called Load as an example, see below.

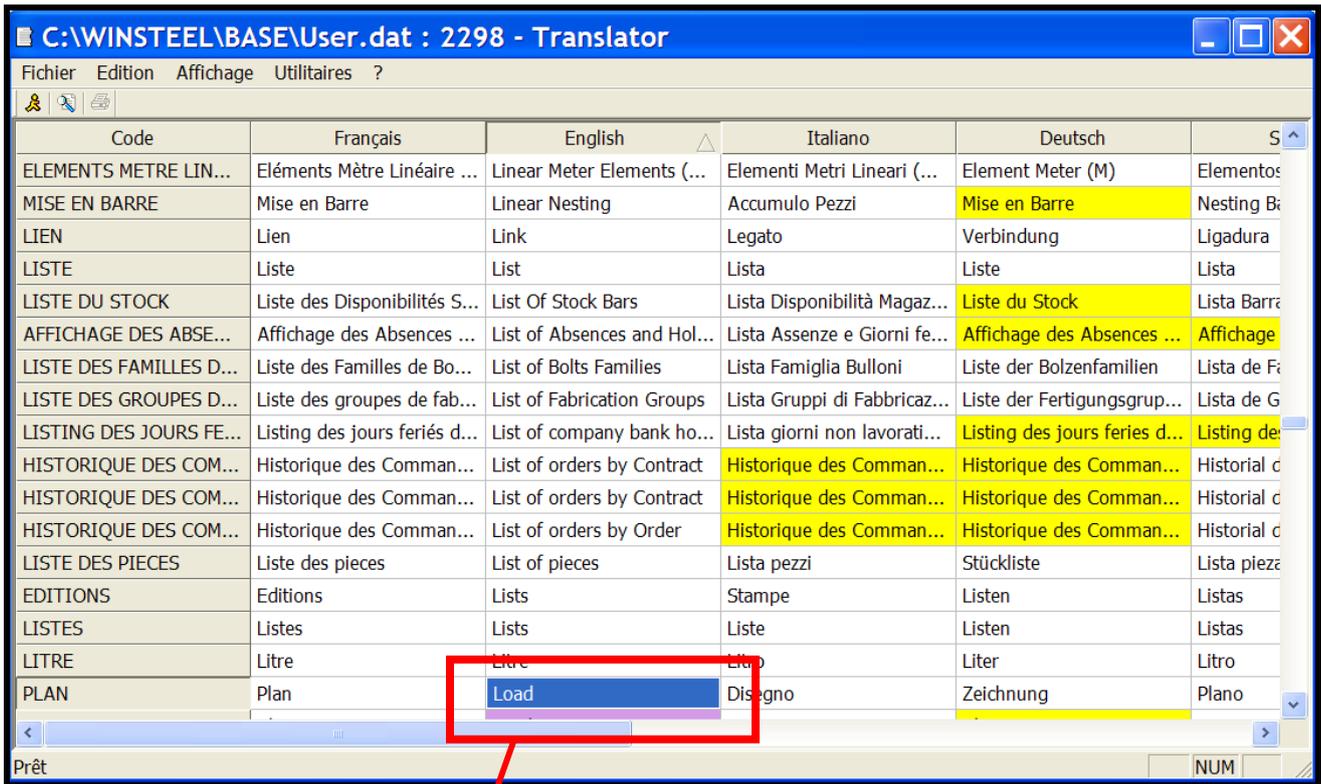


Fig 13-18 Utilities translator

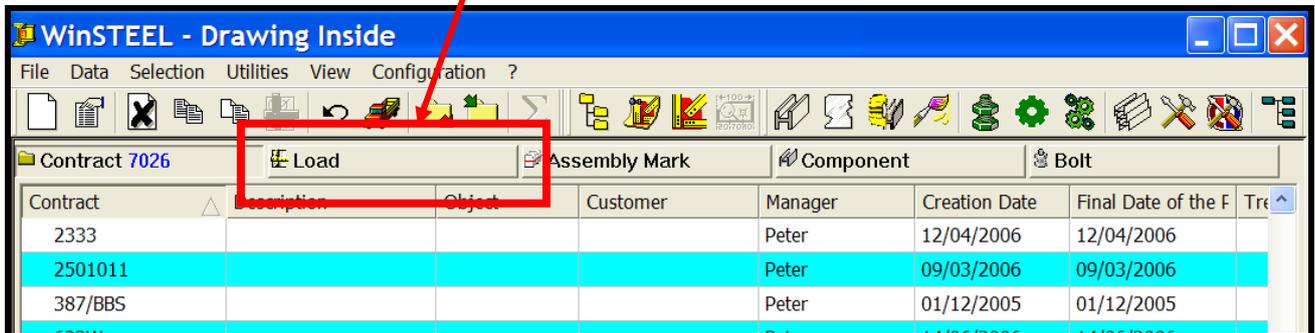


Fig 13-19 User dictionary with change applied



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