



Steel Projects

WinBAR

V 5.130

User Manual

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1. Introduction

WinBAR software is a stand-alone application designed under the **Windows** environment which is dedicated to the raw material management. It integrates fully with WinSTEEL, WinSER, Stock and Purchasing modules.

WinBAR allows the user to create bars nesting before dispatching to workshop machines. This has benefits with material purchasing, and brings control from the shop floor to the office. This nesting reduces material waste minimizing the number of cuts hence optimizing machine efficiency.

Purposes

- Data import from any CAD system
- Manual Input for length bars and profiles
- Bars nesting
- Scraps optimisation
- Reduce tooling changes
- Recovery of stock bars

Description

- Import of lists from Technical Department
- Automatic generation of profiles at the import
- Optimisation of all nesting parameters
- Works list creation
- Manual input
- Different algorithms for optimisation
- Automatic/Manual nesting

Location

- Technical department
- Production department
- Workshop

1.1 General information

In this chapter, we will give some general conventions used in **WinBAR**, to facilitate the comprehension of 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 figure "0" from the capital letter "O"; the figure "1" from the letter "I", that could generate errors.

1.2 Keyboard

In the manual, dialogue keys with the computer will be : [...]

The RETURN key, (or ENTER, according to the keyboard) will be symbolised by [ENTER].

The key ESC will be symbolised by [ESC].

The function keys (Keyboard top) could be symbolized by [Fxx] where xx represents values from 1 to 12.

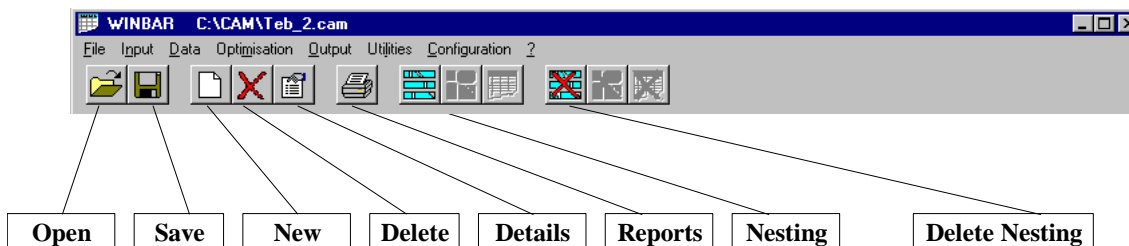
For example [F10] means " press the function key F10 "

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

1.3 Moves and Selection in the application

To select Items into the menu you have to push **ALT key**. 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**.



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 WinBAR
ALT- ?	About WinBAR

1.4 General Presentation of WinBAR

Contract	Component	Profile	Material Grade	Treatment	Length	Width	Qty	Qty BAR	Fabrication Group	Machine	Designation	Weight	Surface	Cut AV F1
5369-2	1R	UB203*133*25	S275JR		1103.00		4		BEAMS	SAWDRILL		27.69	1.01	7.34
5369-2	2R	UB203*133*25	S275JR		2004.00		4		BEAMS	SAWDRILL		50.30	1.83	37.66
5369-2	B13	UB254*146*37	S275JR		4963.00		1		BEAMS	SAWDRILL		183.63	5.32	
5369-2	B14	UB254*146*37	S275JR		4440.00		1		BEAMS	SAWDRILL		164.28	4.76	
5369-2	B15	UB203*133*30	S275JR		3218.00		1		BEAMS	SAWDRILL		96.54	2.97	
5369-2	B16	UB203*133*30	S275JR		3404.00		1		BEAMS	SAWDRILL		102.12	3.14	
5369-2	B17	UB203*133*25	S275JR		3265.00		1		BEAMS	SAWDRILL		81.95	2.99	
5369-2	B18	UB203*133*25	S275JR		2266.00		1		BEAMS	SAWDRILL		56.88	2.07	
5369-2	B19	UB178*102*19	S275JR		1166.00		2		BEAMS	SAWDRILL		22.15	0.86	
5369-2	B20	UB178*102*19	S275JR		1592.00		2		BEAMS	SAWDRILL		30.25	1.17	
5369-2	B21	UB178*102*19	S275JR		2366.00		2		BEAMS	SAWDRILL		44.95	1.75	
5369-2	B22	UB178*102*19	S275JR		936.00		2		BEAMS	SAWDRILL		17.78	0.69	
5369-2	C1	PFC150*90*24	S275JR		1144.00		1		BEAMS	SAWDRILL		27.34	0.69	
5369-2	C2	PFC150*90*24	S275JR		1144.00		1		BEAMS	SAWDRILL		27.34	0.69	
5369-2	C3	PFC150*90*24	S275JR		1398.00		4		BEAMS	SAWDRILL		33.41	0.84	
5369-2	C5	PFC150*90*24	S275JR		1021.00		2		BEAMS	SAWDRILL		24.40	0.61	
5369-2	P3	RHS150*100*5	S275J0H		3029.00		6		SECTION	SAWDRILL				
5369-2	P6	RHS150*100*5	S275J0H		3247.00		1		SECTION	SAWDRILL				
5369-2	P7	RHS150*100*5	S275J0H		3247.00		1		SECTION	SAWDRILL				
5369-2	P8	RHS150*100*5	S275J0H		3247.00		1		SECTION	SAWDRILL				
5369-2	P9	RHS150*100*5	S275J0H		3247.00		1		SECTION	SAWDRILL				
5369-2	R1	UB203*133*25	S275JR		5050.00		1		BEAMS	SAWDRILL		126.75	4.62	
5369-2	R2	UB203*133*25	S275JR		5050.00		1		BEAMS	SAWDRILL		126.75	4.62	
5369-2	R3	UB203*133*25	S275JR		4606.00		1		BEAMS	SAWDRILL		115.61	4.21	
5369-2	R4	UB203*133*25	S275JR		4606.00		1		BEAMS	SAWDRILL		115.61	4.21	
5369-2	S3	RHS150*100*5	S275J0H		3036.00		1		SECTION	SAWDRILL				

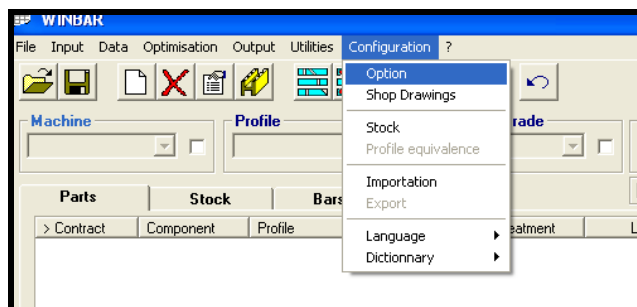
2. Configuration

Before any nesting can take place, the software needs to be set up and configured.

2.1 Application Configuration

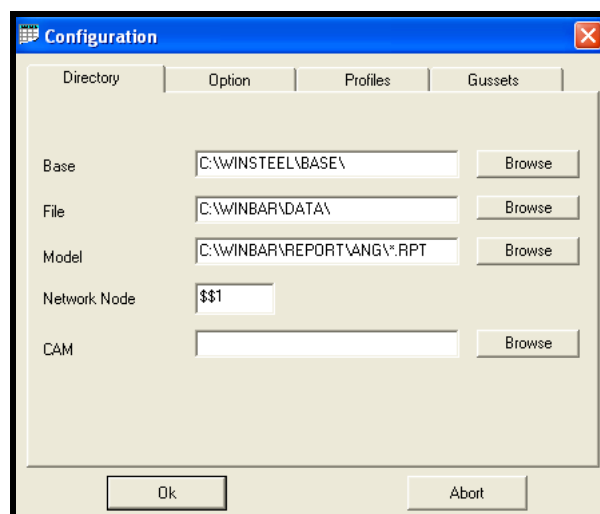
The application needs to be set up to run either as a standalone program, or to use the base settings for WinSTEEL if this is preferred.

The Options menu can be found on the top configuration menu.



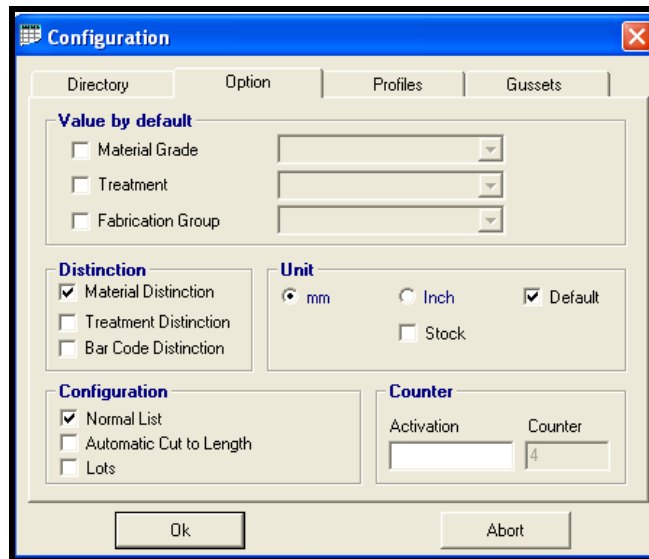
2.1.1 Directory

To set WinBAR to use the WinSTEEL settings, point the Base directory to this shared folder. Please note, WinBAR data menu should always be unique to this application, and it is recommended to keep as default. The model folder is where the WinBAR reports are. If you are setting WinBAR up as a standalone application, please add in the line CAM the directory where CAM files are to be exported as default.



2.1.2 Option

Default Values	Gives Default value for material grade and treatment.
Field	Description
Material Distinction	Two similar profiles with different material grades will be operated as two elements.
Treatment Distinction	Two similar profiles with different treatments will be operated as two elements
Fabrication Group	Use the Profile Group Item.
Counter	This shows the nesting number



The Option menu for Profiles and Gussets can be left unchanged for standard installations.

2.2 Imports Configuration

WinBAR accepts all external data to insert them on single information flow. If you are using WinSTEEL then this import process is not required

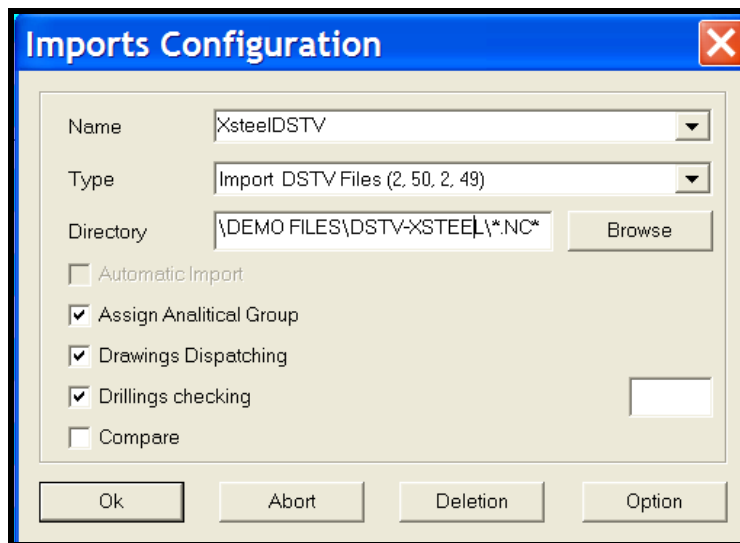
This menu point is used to update the import source.

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

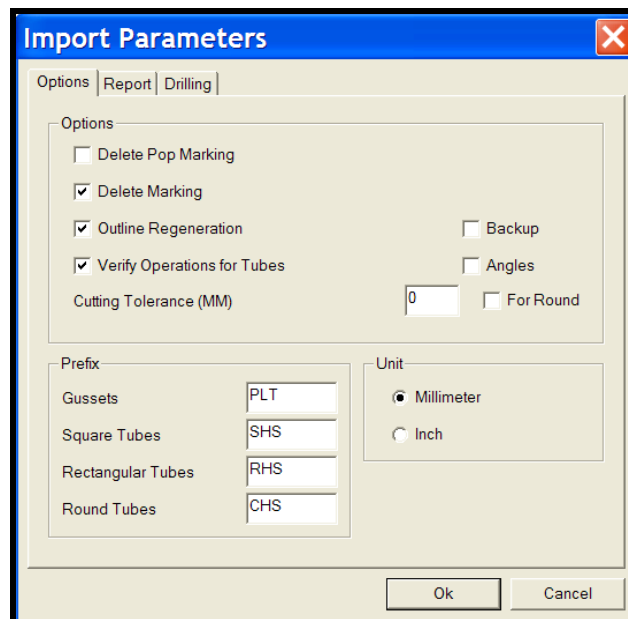
Name or Description of the import source which will be on the lists.

Import type (CAM Files, DSTV Files, DXF Files, etc...).

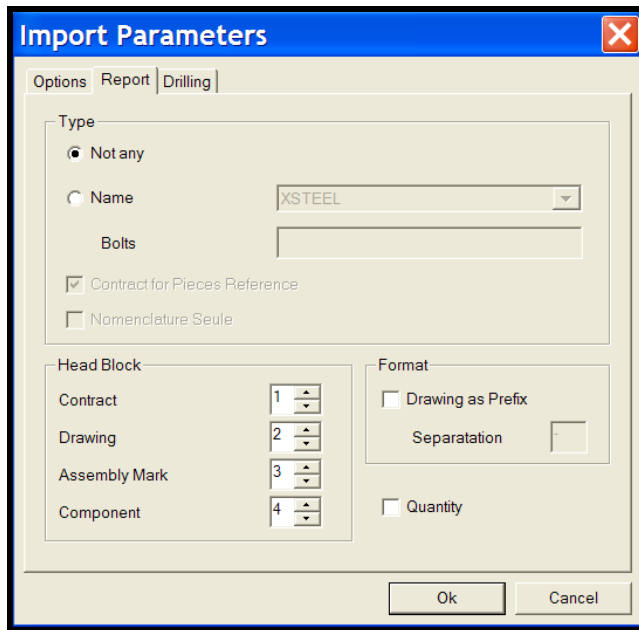
A necessary **Option**; for certain configurations.



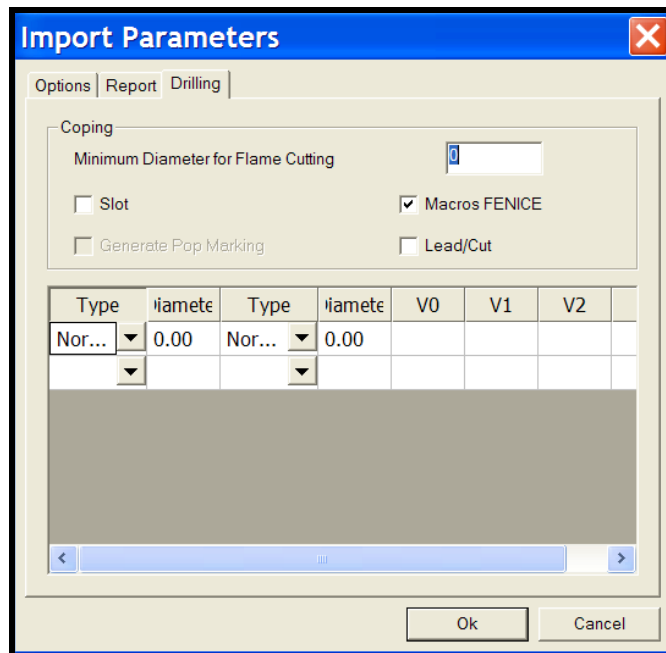
2.2.1 Options



2.2.2 Report

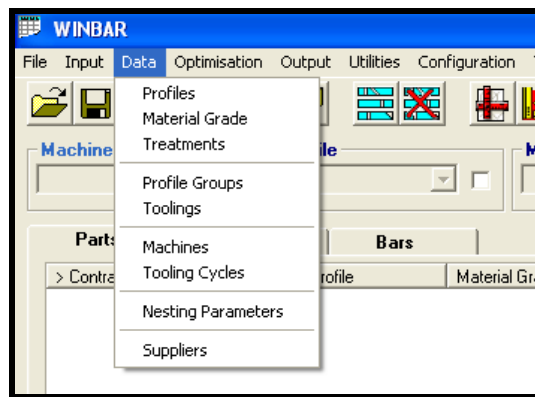


2.2.3 Drilling

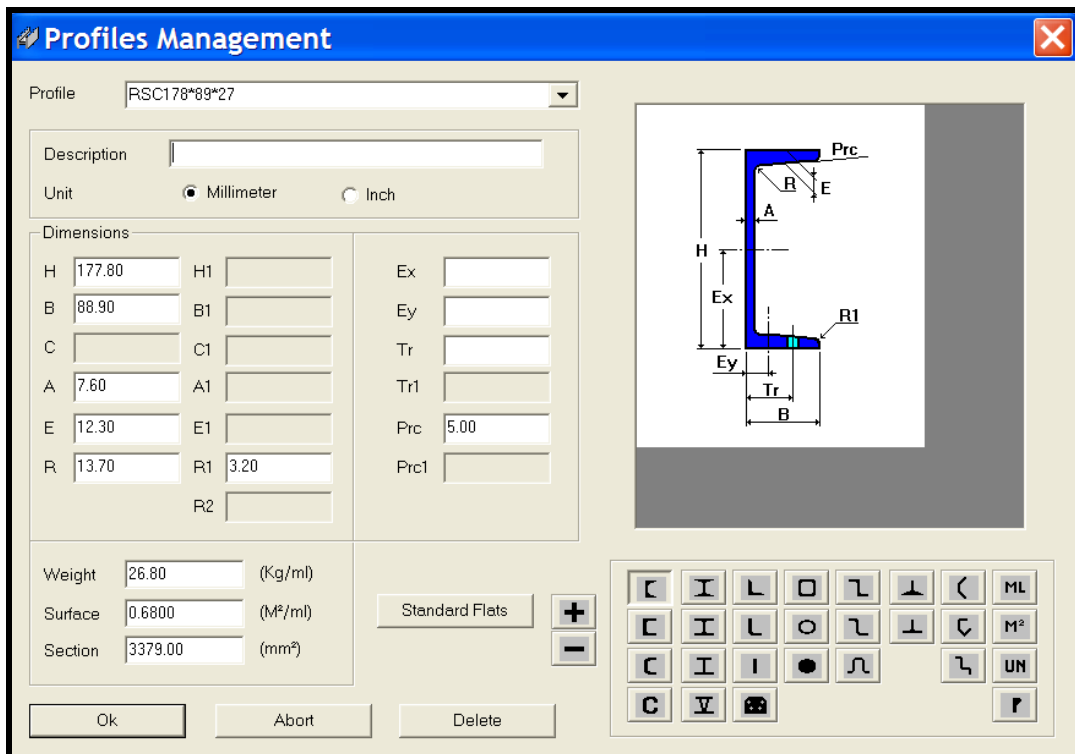


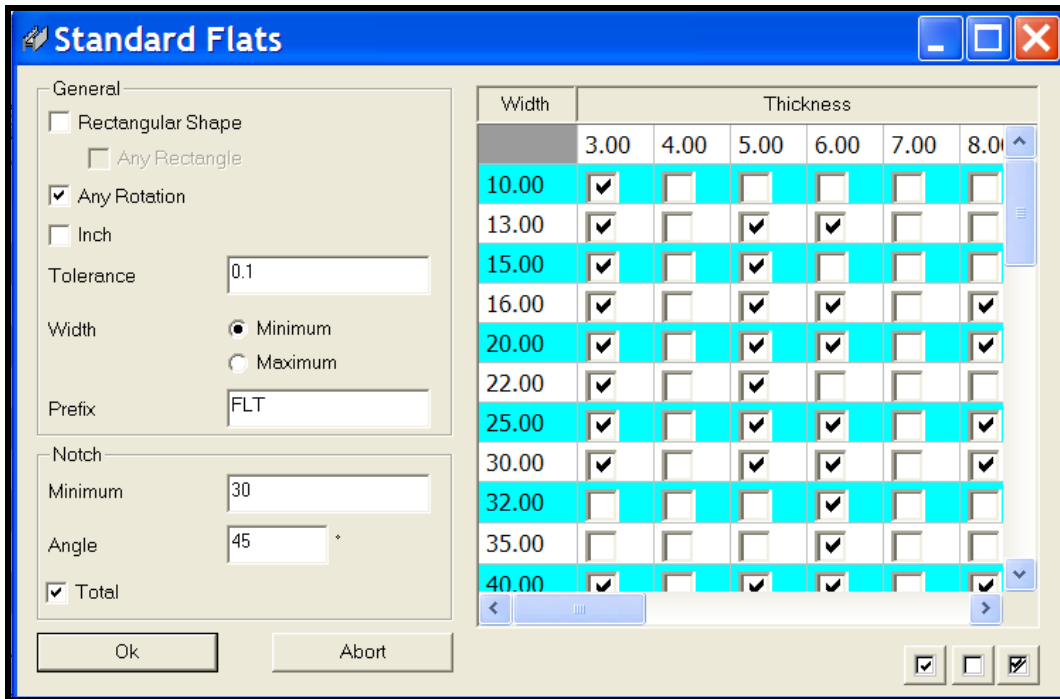
2.3 Database Configuration

WinBAR has its own Data Base and the data may be the same for several applications if the necessary link is enabled in all applications. For example, it is installed along with Win-STEEL, then all the following will be set up with options that are shared between the two modules.



2.3.1 Profiles





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.

2.3.2 Major Profiles Types

2.3.2.1 Hot Shapes

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.

2.3.2.2 Special Profiles

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

2.3.2.3 Asymmetrical Beams (ASB)

Automatic calculation of the weight and the linear surface area.

2.3.2.4 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.

2.3.3 Automatic Profiles

This allows the user to insert "automatic profiles".

By "automatic profile" we mean 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 hot and special profiles.

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

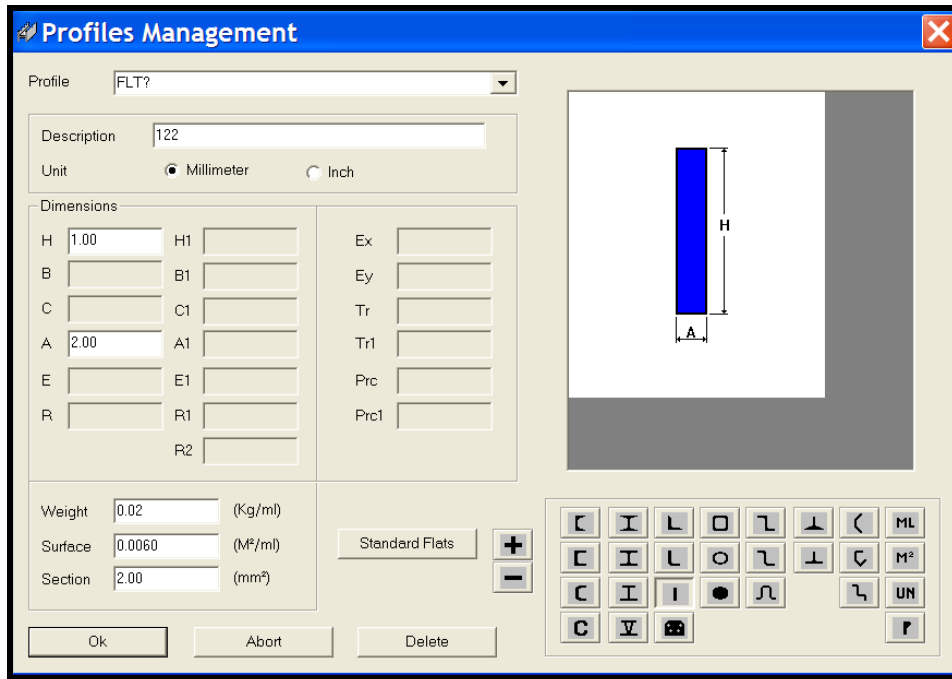
The input fields proposed by the program must contain increasing values starting by 1. This value sequence must also exist inside the automatic profile code separated by the following characters:

* - star
x - x lowercase
X - X uppercase

2.3.3.1 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, its interprets this data as
profile type **FLAT**
H value dimension equals **150**
A value dimension equals **10**



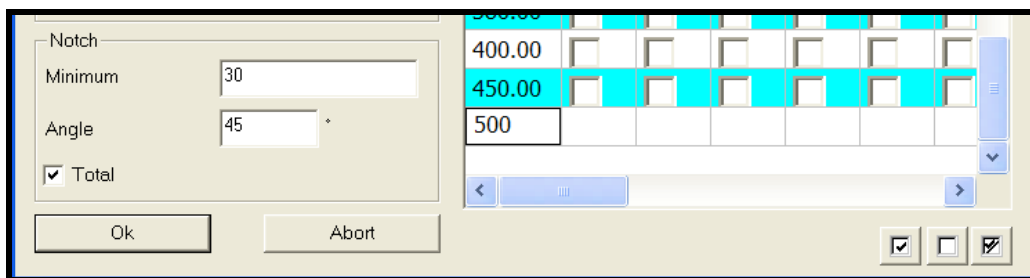
Modification and additions to the sizes of Standard Flats used by the client are handled by activating the Standard Flat icon on the above page, Fig 5-4, the following table opens.



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).



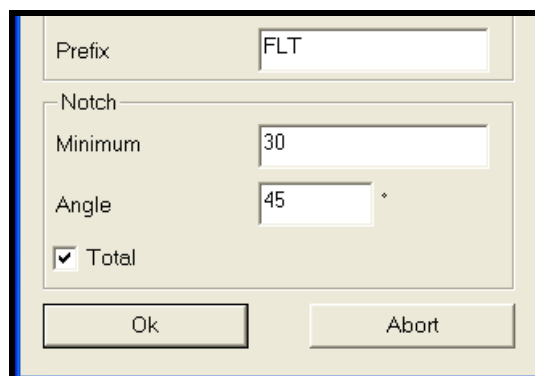
To add a standard flat simply tick the corresponding box. To add a new standard flat size to the table, simply scroll to the bottom of the page and double click in the left hand box (as shown below), type in the width and press enter/return on your keyboard. This will create a new field and tick the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



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

2.3.4 Total - FLAT and PLATES

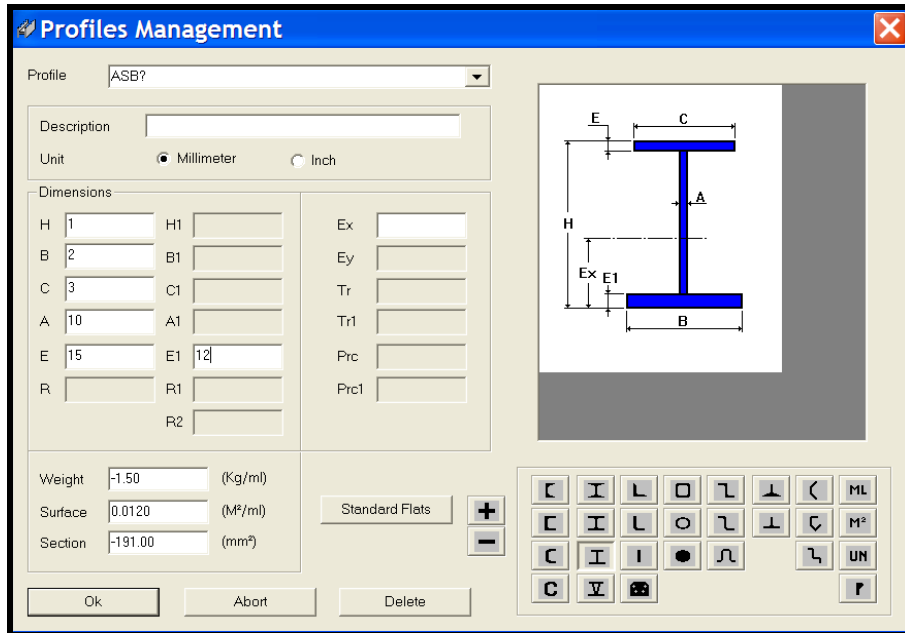
This screen utilises the fields Prefix, Notch Minimum and angle and Total in order to perform a screening to determine how to categorise the parts. Even if the component is sized and named as a FLAT at importation or drawing, with Total activated (ticked) WinSTEEL will check that all of its cuts, punching 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 renamed a PLATE and routed to an available plate machine, say a Tipo B.



2.3.5 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.

2.3.5.1 Example semi-automatic profile: ASB?



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,

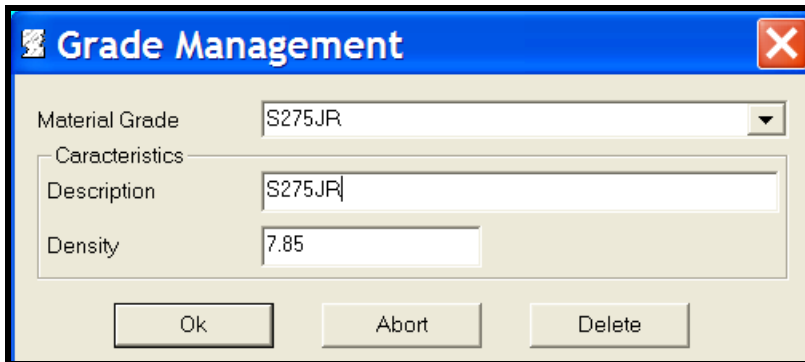
All other fields will be like code values with corresponding sequence as follows:

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

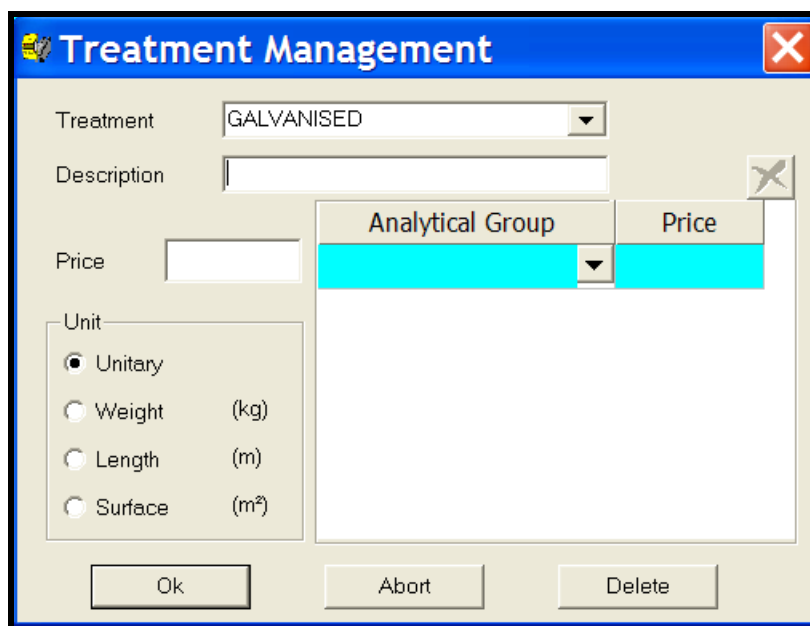
NB: When using ASB's it will only be possible to stand the beams in the vertical position for machine processing (clamping is the limitation here) and therefore the only fields to be used are H and B as C will not be used to process the part.

2.4 Material Grade

Each material corresponds to a description, and a density. The density is used for the calculation of the secondary position weight. Material management is not only for 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.



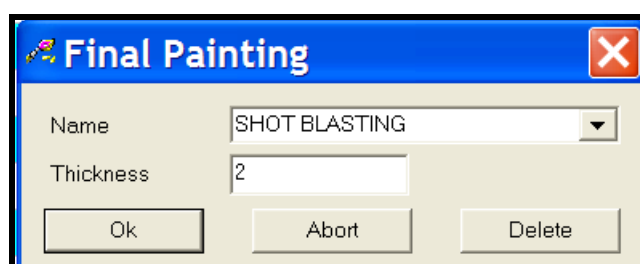
2.5 Treatment



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.

2.6 Painting

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

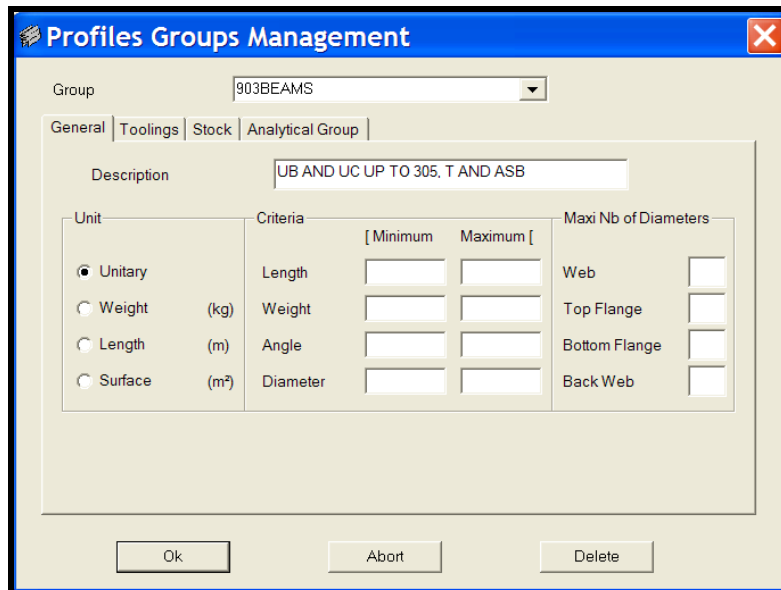


2.7 Profile Groups

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

2.7.1 General

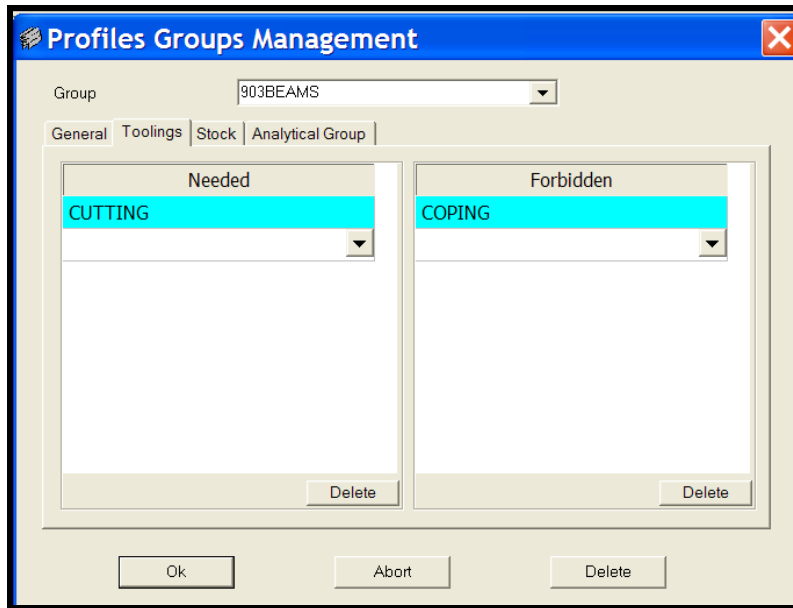


Group	Name of the Profiles group
Description	Description of Profiles group
Unit	Measurement unit used for this Profiles group
Mini/Maxi length	Mini/Maxi piece length to belong to this group
Mini/Maxi weight	Mini/Maxi piece weight to belong to this group

A piece given can belong to various groups and the user is required to select the sufficient criteria to assign without any ambiguity in the profiles group.

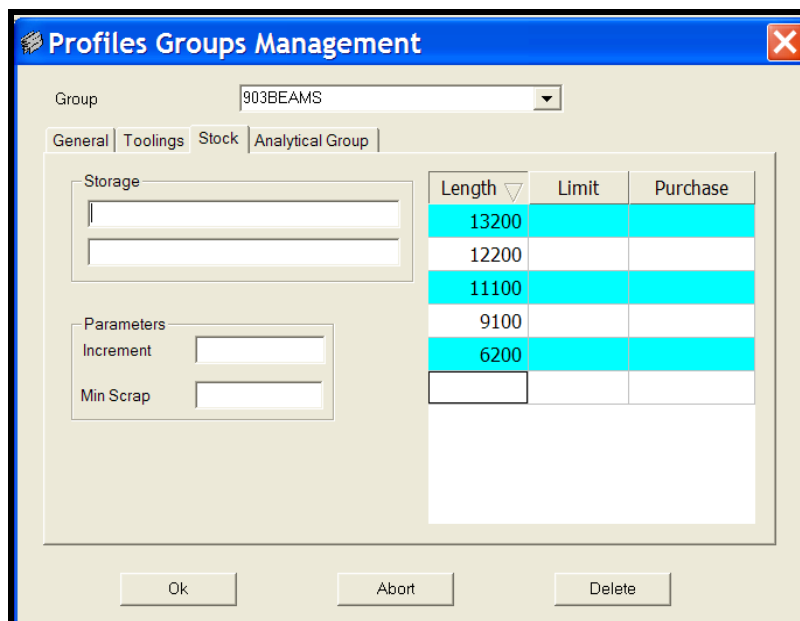
2.7.2 Tooling

In this section you may define how the tooling available in your workshop could be used to define limitations on the analytical groups.



2.7.3 Stock

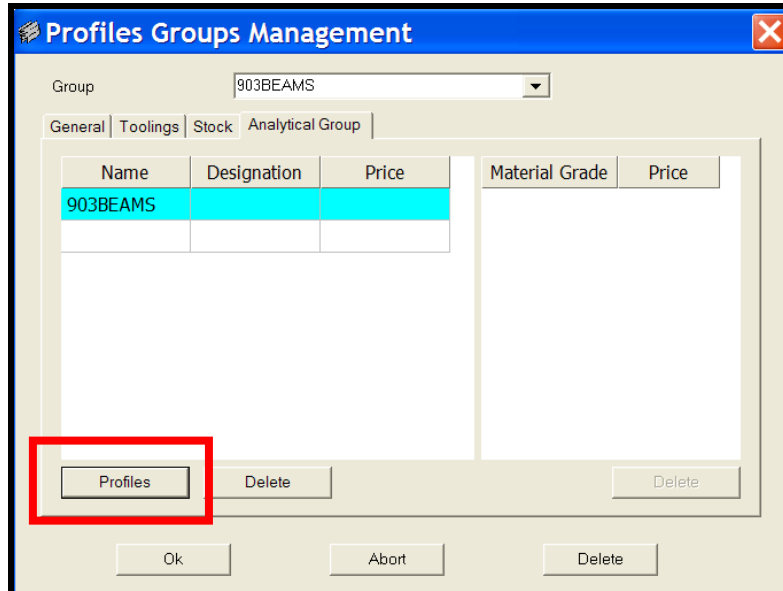
This page of the profiles group management is where we input the preferred commercial stock lengths used for purchasing by the company. These lengths will be used for bar nesting purposes and material purchase reports.



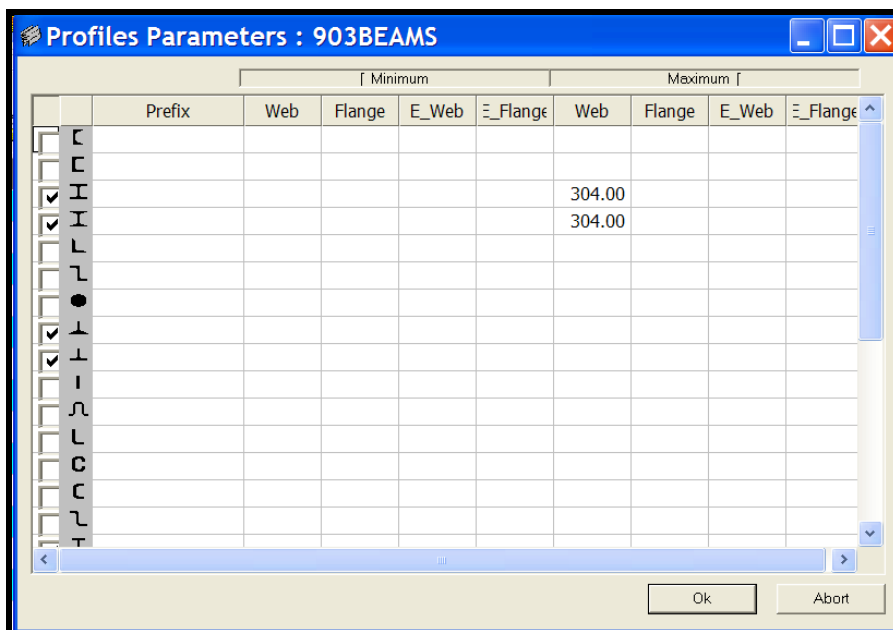
Storage	Description of the site of profiles group storage
Increment	Elementary stocking length
Mini scrap	Mini stocking length
Length	Purchasing length
Limit	Quantity which will action purchases
Purchase	Minimal quantity of purchase

2.7.4 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 his own machines and working preferences. These groups may contain several different member profiles and may also have material size and grade limitations.

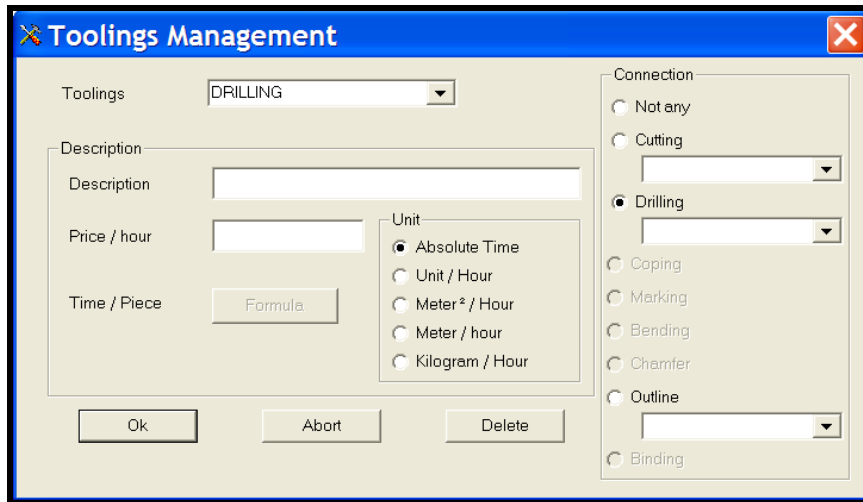


When the Profiles button is activated a profiles parameters page is opened, as below. On this page the user can select the profiles and sizes that are to be contained within the selected analytical group. These size limitations can be min and max dimensions. In the following example this analytical group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



2.8 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.



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.

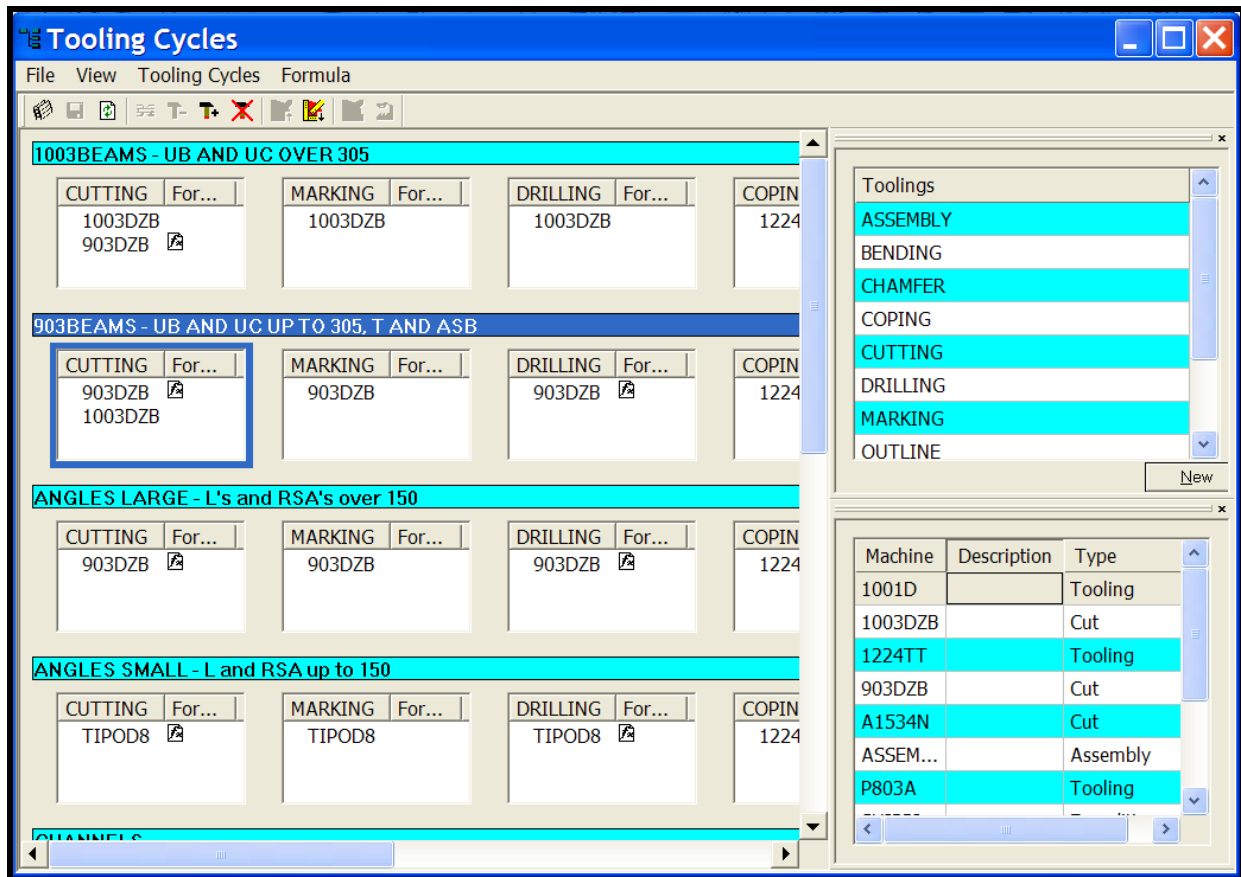
2.9 Standard Tooling

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	

Buttons: New, Modify, Delete, Quit

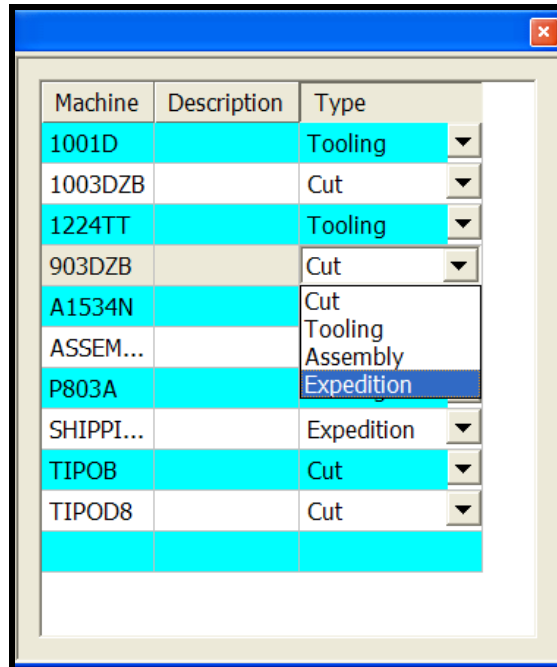
2.10 Tooling Cycles

For each defined analytical group we can now begin to format our preferred way of working. Chose the analytical group, select the first tooling activity, say 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.



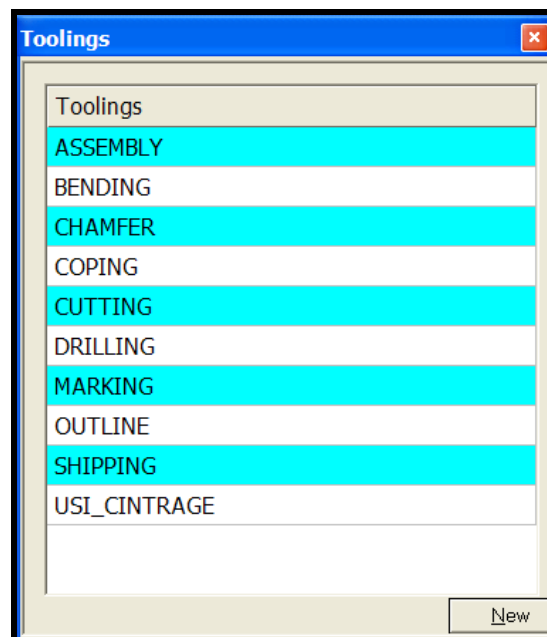
2.10.1 Machines

In this section we identify all the machines in the workshop and allocate all the relevant tooling process available on those machines.



Machine	Description	Type
1001D		Tooling
1003DZB		Cut
1224TT		Tooling
903DZB		Cut
A1534N		Cut
ASSEM...		Tooling Assembly
P803A		Expedition
SHIPPI...		Expedition
TIPOB		Cut
TIPOD8		Cut

2.10.2 Tooling



2.11 Customers

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

Insert a new customer

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

Sub-Contractor

Payment

VAT Code: []

Payment: []

Condition: []

R.I.B.: []

Bank: []

Others

Delivery Date: []

Contact: [] >>

Comment: []

Activity: []

Quality: []

Ok Abort Delete

2.12 Suppliers

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

Insert New Supplier

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

Sub-Contractor

Payment

VAT Code: []

Payment: []

Condition: []

R.I.B.: []

Bank: []

Others

Delivery Date: []

Contact: [] >>

Comment: []

Activity: []

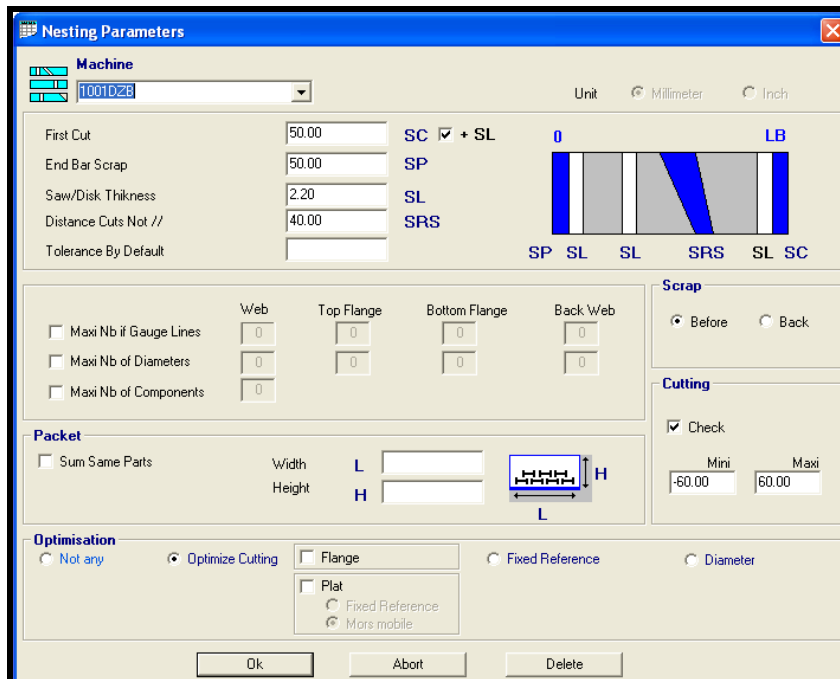
Quality: []

Ok Abort Delete

3. Nesting Parameters

This section defines all needed parameters for each cutting machine. You can also define default parameters if you don't cutting machines.

First Cut	Distance left before the first cut in the beginning of the bar
End Bar Scrap	Distance left for the first cut in the beginning of the bar
Saw thickness	Thickness of the blade or the band saw.
Distance cut Not	Distance left between two non parallel cuts
Tolerance	Distance must be taken in consideration for the length of the bar.
Maxi Gauge Lines Number	For each profile side, the greatest number of the gauge lines.
Maxi diameters Number	For each profile side, the greatest number of different diameters.
Nb Of Components	Maximum number of different components included in the same bar.
Scrap	Determine if the bar scrap should be at the front or the back of the bar
Cutting Check Optimisation	The angles the machine can cut bevels Leave as not any to not rotate parts, Optimise cutting to enable rotation of parts.
Flange	Tick to enable nesting of parts with bevel cuts in the flange
Plat	Tick to enable punching of notches in flat bar

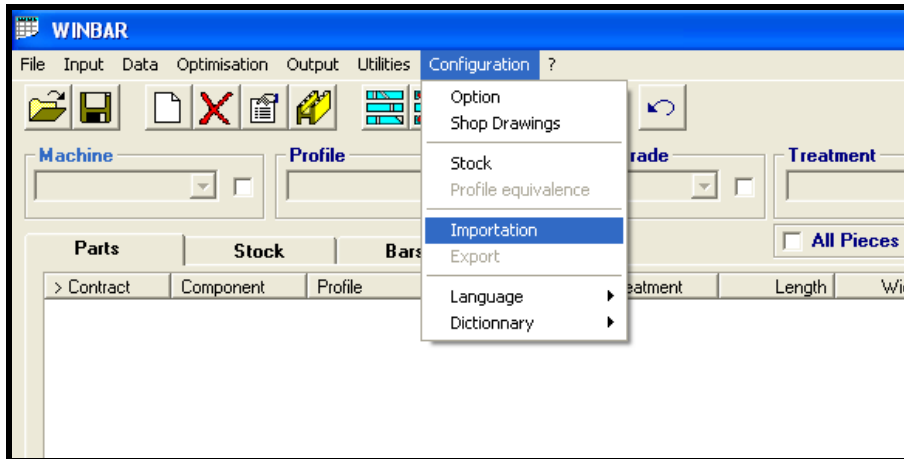


4. Import of Parts

Once the software has been configured, the first stage is to import or create the parts that you want to optimise. If you have WinSTEEL module, you will not need to do this step as the parts will be imported automatically.

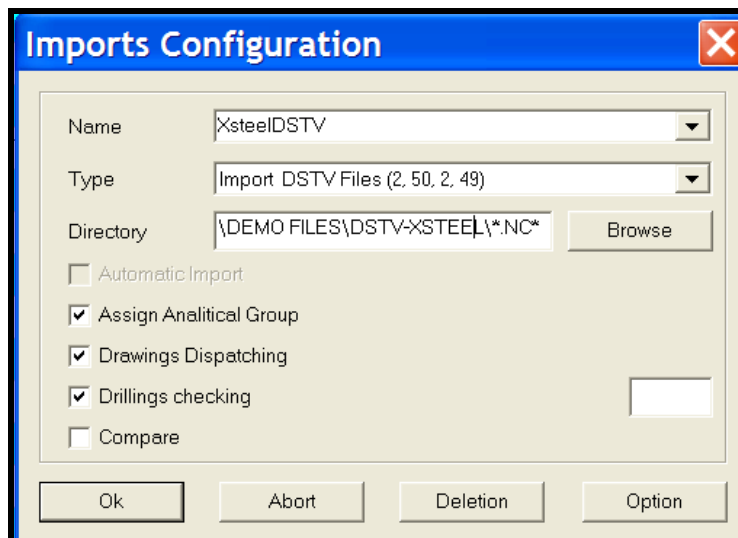
4.1 Import Configuration

To Set up an import, go to the configuration – import menu.



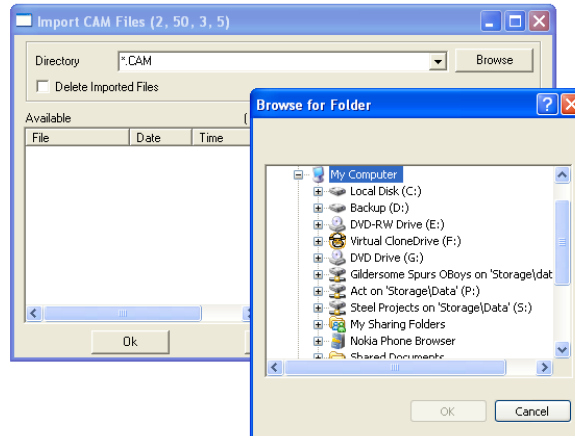
This menu is used to update the import source.
For each, it is necessary to specify the following information:

- Name or Description** of the import source which will be on the lists.
- Import type** (CAM Files, DSTV Files, DXF Files, etc...).
- A necessary **Option**; for certain configurations.



4.2 Import

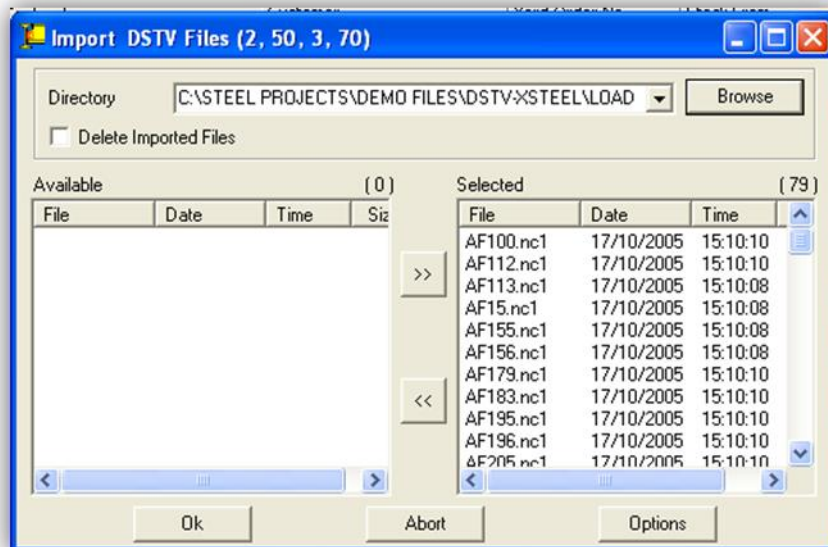
Click on the Import icon (see above Fig 1) this will launch the Import screen below



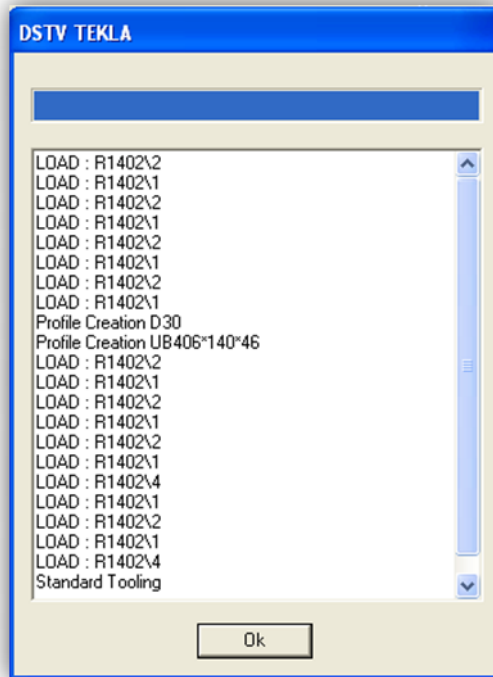
Select the file Import type that matches the NC file type you wish to Import and press OK.

The following screen appears. Press the Browse button to browse to your contract and select, the relevant NC files for the contract/load will appear on the right-hand screen.

All NC files on the right of the screen will be automatically imported into WinSTEEL when you select Ok. If you don't wish to import certain NC files then move them to the left screen by double clicking on them or select them and press arrows left.

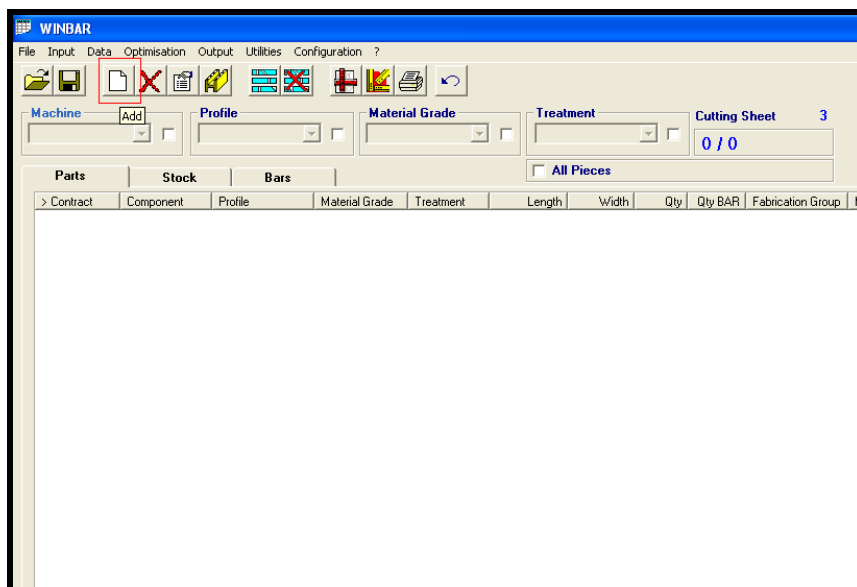


The following screen appears with the parts created, simply press the OK button and the contract will now be inside WinSTEEL.



4.3 Manual Creation Of Parts

Sometimes it may be necessary to add parts to nest with no nc data. To do this we can add them manually on the Parts Tab.



On the Parts tab, click on the top menu button “new. This will bring up the option box as per the screenshot below.

The image shows a software dialog box titled "Add" with a blue header bar. Below the header, the word "Part" is displayed in bold. The dialog contains several input fields and controls:

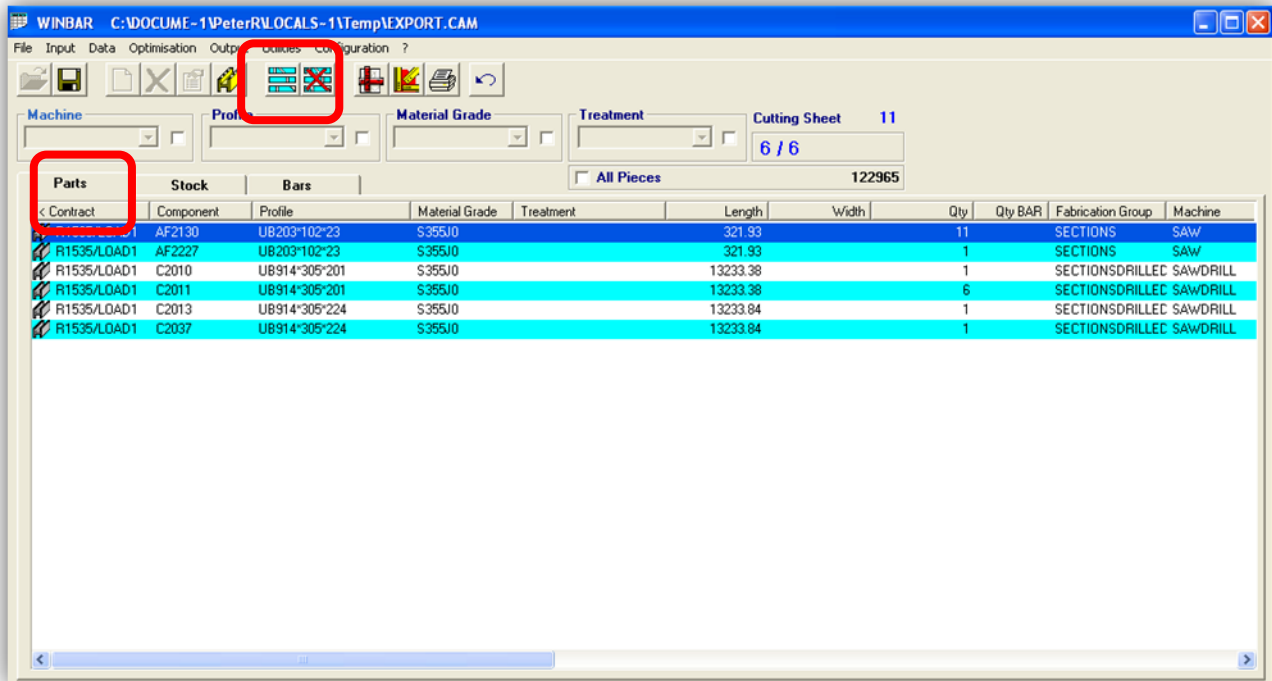
- Contract: Text input field.
- Component: Text input field.
- Profile: Dropdown menu.
- Unit: Radio buttons for "Millimeter" (selected) and "Inch".
- Length: Text input field.
- Width: Text input field.
- Quantity: Text input field.
- Material Grade: Dropdown menu.
- Treatment: Dropdown menu.
- Fabrication Group: Dropdown menu.
- Machine: Dropdown menu.
- Designation: Text input field.

To the right of the Length and Width fields is a bevel icon. At the bottom of the dialog are "Ok" and "Abort" buttons.

Add the part information for all of the available boxes. If the part has a bevel, click on the bevel icon to add to the part. Once all relevant data has been added, press OK, and then repeat for each of the parts.

5. Optimisation

From the main screen of WinBAR, when you have imported the parts from WinSTEEL / CAD system, you are able to see all the parts to be nested on the Parts tab. To perform a nesting you simply click on the bar nesting icon as shown in Fig 12 below.



To nest the parts into Commercial lengths simply click on the Bar Nesting icon shown above (the top row of icons).

The WinBAR software interrogates the parts (shown on screen when the Parts tab is selected) for comparable section size, material grade and tooling requirements (i.e. any drilling).

The comparable parts are then nested into your pre-specified commercial lengths for that section (Fabrication/Analytical Group) and at the same time they are routed to your machine of choice for fabrication (Machine above).

5.1 Adding None Standard Stock Sizes

If you know that you hold stock of bars (including offcuts) that are not commercial lengths for any of the profiles in your selection, you can make sure the nester takes these into consideration by manually adding them in the stock tab. Before doing the nest into commercial lengths.

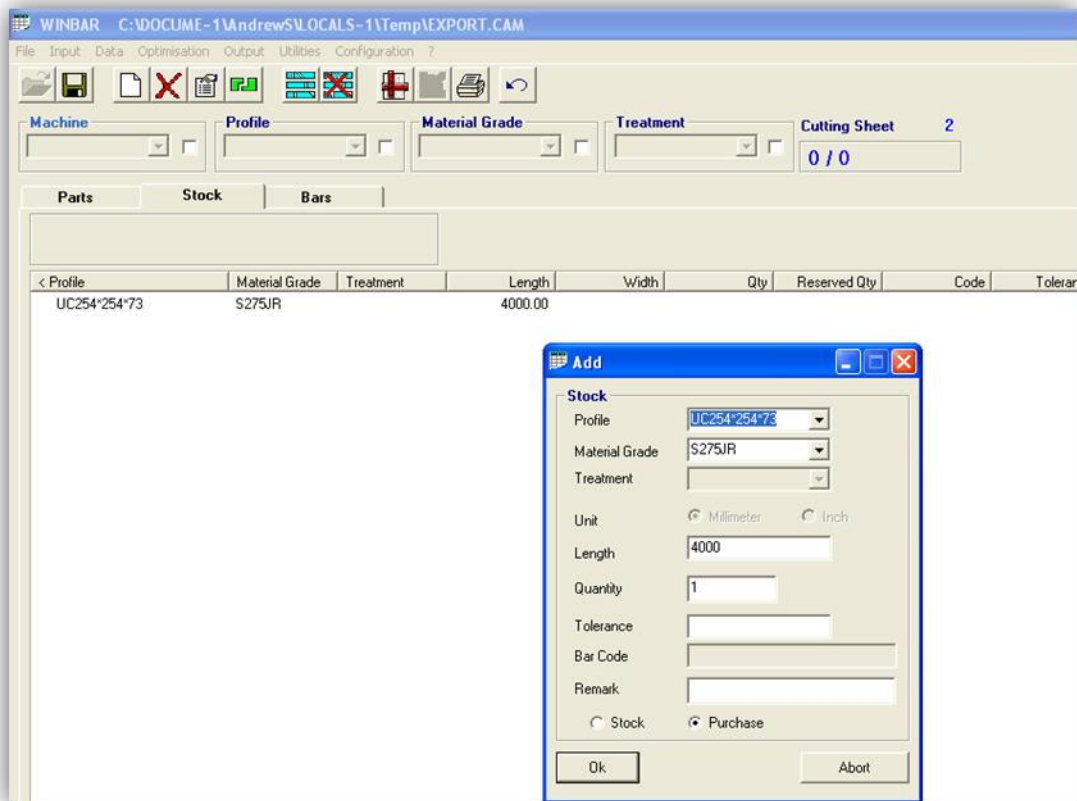


Fig 13

In the stock tab, double click anywhere on the main screen and an ADD box will open. In the drop down list next to PROFILE, it will give you a choice of the particular profiles that appear in the selection. Simply choose the relevant profile, then enter the grade, length and quantity information then press OK. This will add the bar to the stock list. Repeat this for all the sizes that are not commercial lengths.

Now when you do a nesting as before, the bars you added into the stock list will be used as priority, for any profile this list does not cover, commercial lengths will be used.

5.2 Nesting Options

The following screen appears. Select either standard type 1 (a quick nesting) or 2 (for a more thorough nesting) and then click on the Purchase/Stock Tab.

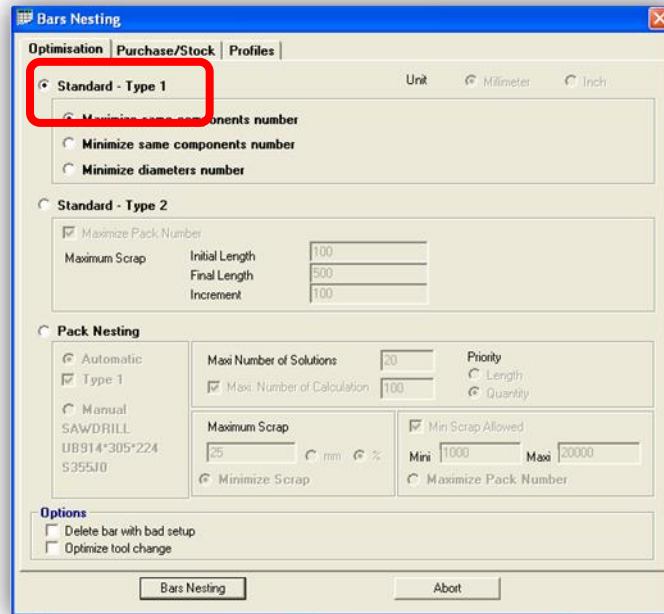


Fig 13

On this page, Fig 14, you are able to choose to nest into either Commercial Lengths or Value by default. For the bulk of the work use commercial length, if however you have certain lengths known to be in stock for certain items you can select Value by default. Select the Value by default circular button and then enter the lengths to be used in the Value by default fields to the right.

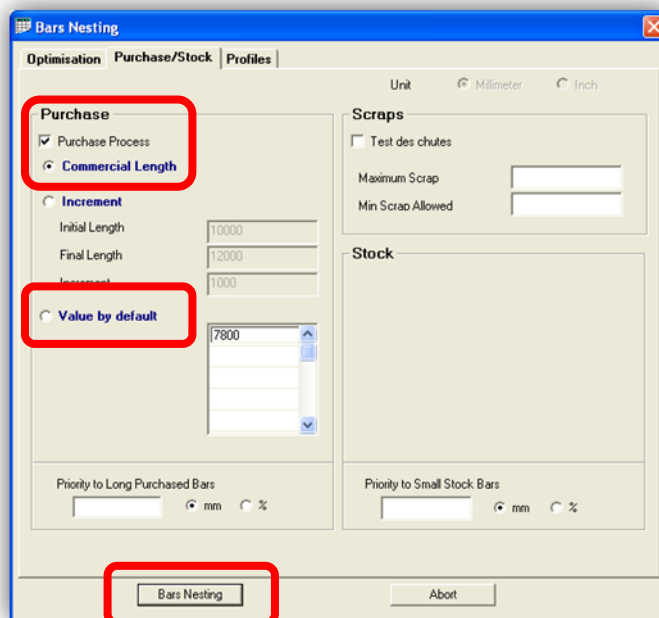


Fig 14

Press the Bars Nesting button and the parts will be nested into the selection you have made. Once you proceed with the bar nesting the following screen appears with the Bars Tab.

This screen provides you instant information on the bars required and the amount of scrap (waste) or off cuts together with a visual of the actual parts inside the bar.

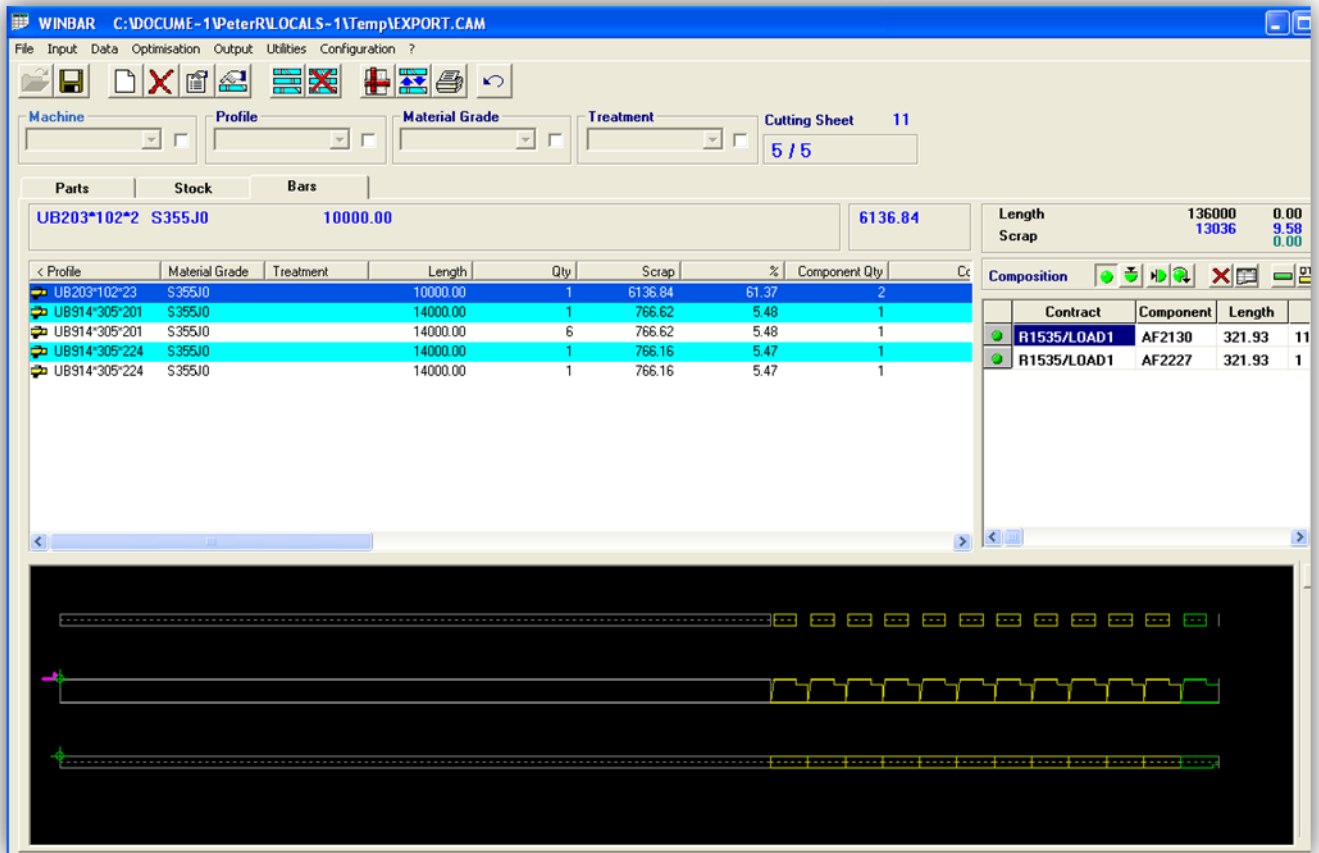


Fig 15

From the screen it is now possible to see the length and % of scrap.

Bars with excessive Scrap (waste) can be un-nested and then re-nested into stock off-cuts or ordered cut to length. See below for further information on how to un-nest a bar and re-nest cut to length.

5.3 Bars with excessive Scrap (waste)

To un-nest a bar with excessive Scrap (waste) in the main WinBAR page on the Bars Tab, simply select to highlight the bar then right click on it then from the pop up screen select Delete. Then from the confirmation pop up screen select Yes.

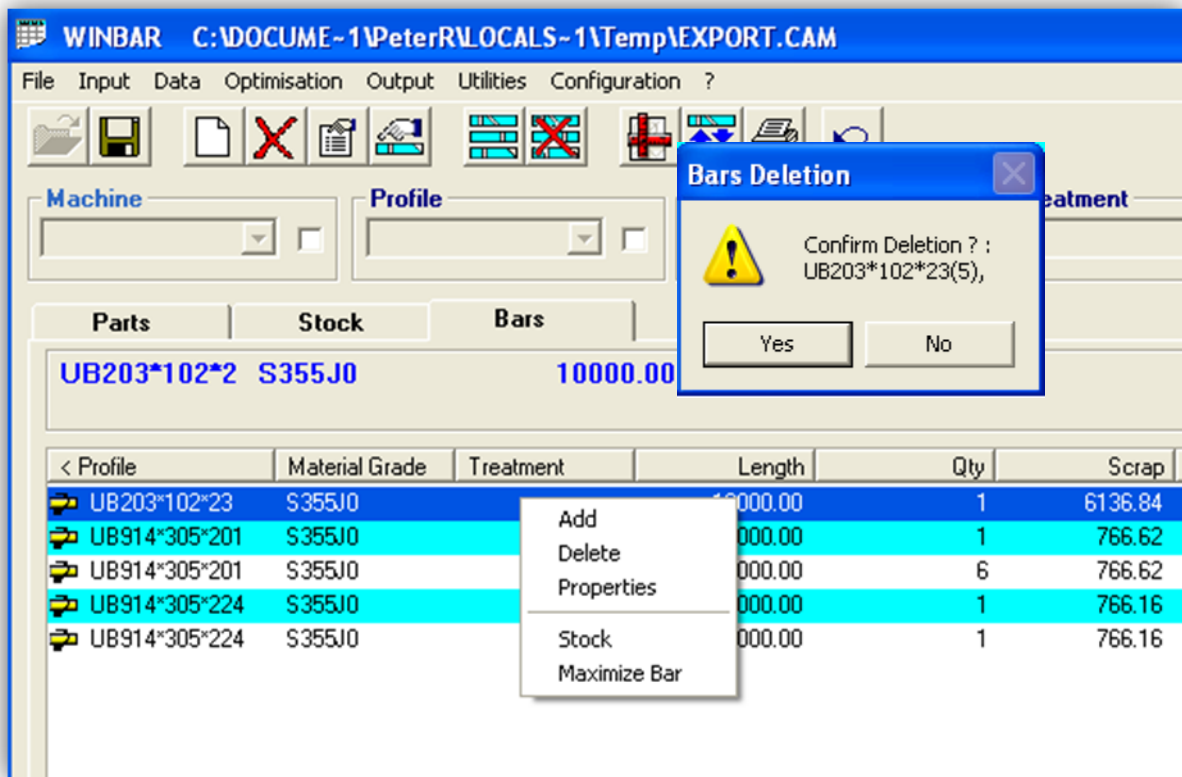


Fig 16

This converts the bar into parts and puts the parts back into the Parts Tab where they can be re-nested to suit the available material, this could be off-cut lengths or they could be ordered cut to length. To order cut to length. Simply select to highlight the parts and click on the cut to length icon shown below. The highlighted parts will now be converted to bars of their true length.

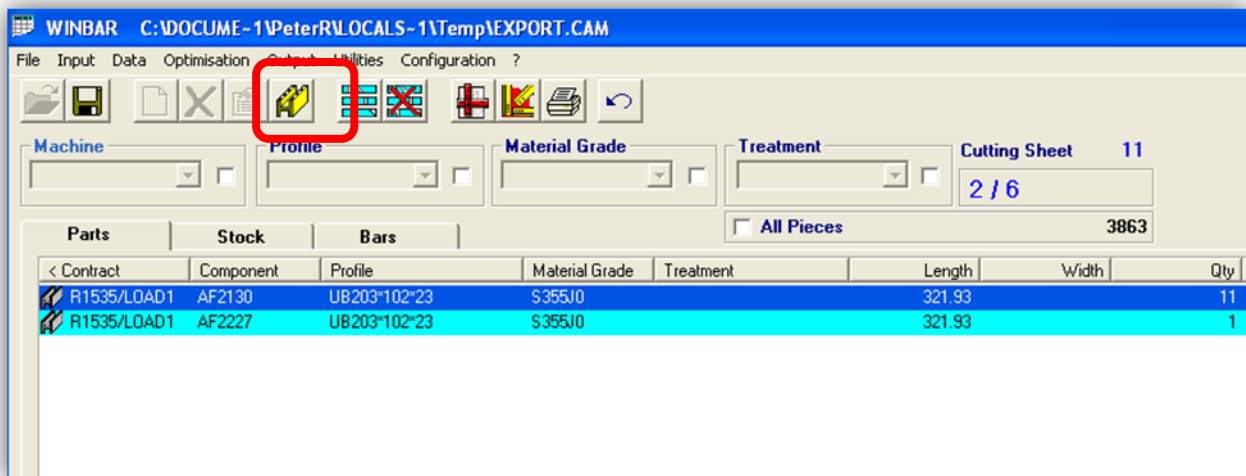


Fig 17

If you require to nest these parts into stock off-cuts then select the bar nesting icon to launch the bar nesting screen, as below and select the Stock/Purchase tab. Then select Value by default, this unselects commercial length and you are able to input the length to be used for nesting these parts. In the example it will be bars 7800 long.

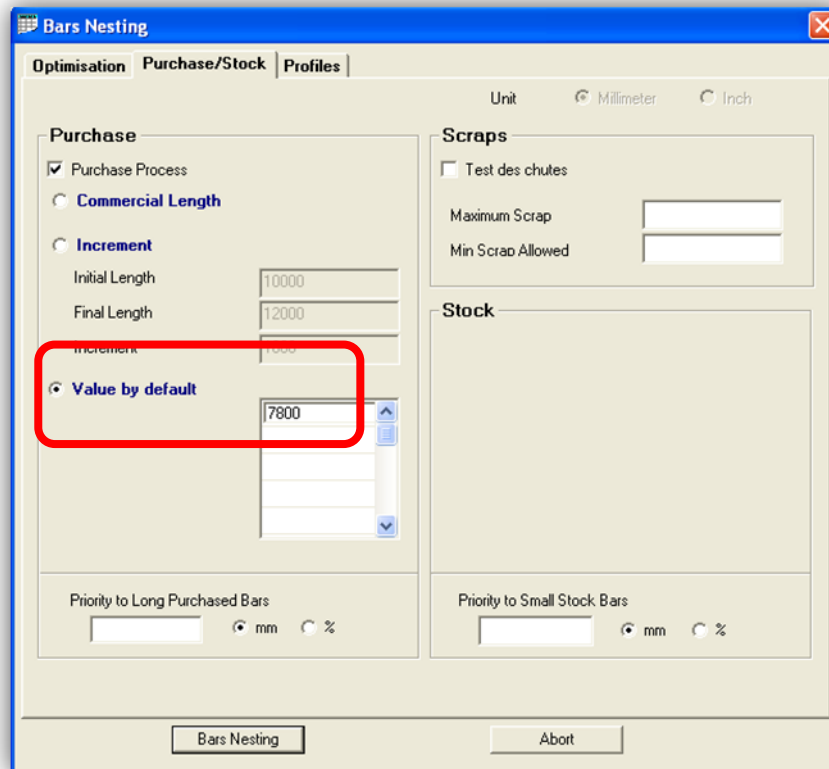


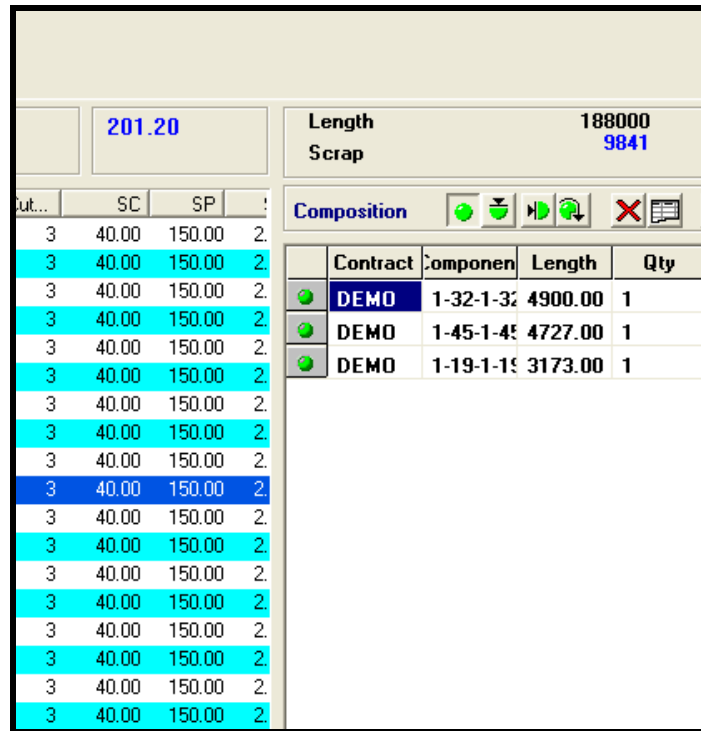
Fig 18

Press the Bars Nesting button for the nesting to take place. This new bar is placed alongside the already nested commercial lengths.

5.4 Manual editing of bars

WinBAR has the ability to alter the bars that have been nested by the optimizer.

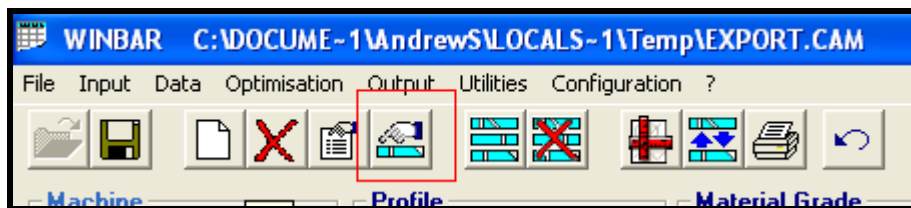
Once you have done a nesting, you can click on a bar and see the details of the parts that are nested inside of it.



The menu at the top of this screen allows you to make changes to the bar such as rotation, deletion or adding an un-nested part from the parts list.



To make more detailed changes to the bar use can also use the **modify bar** option on the top menu



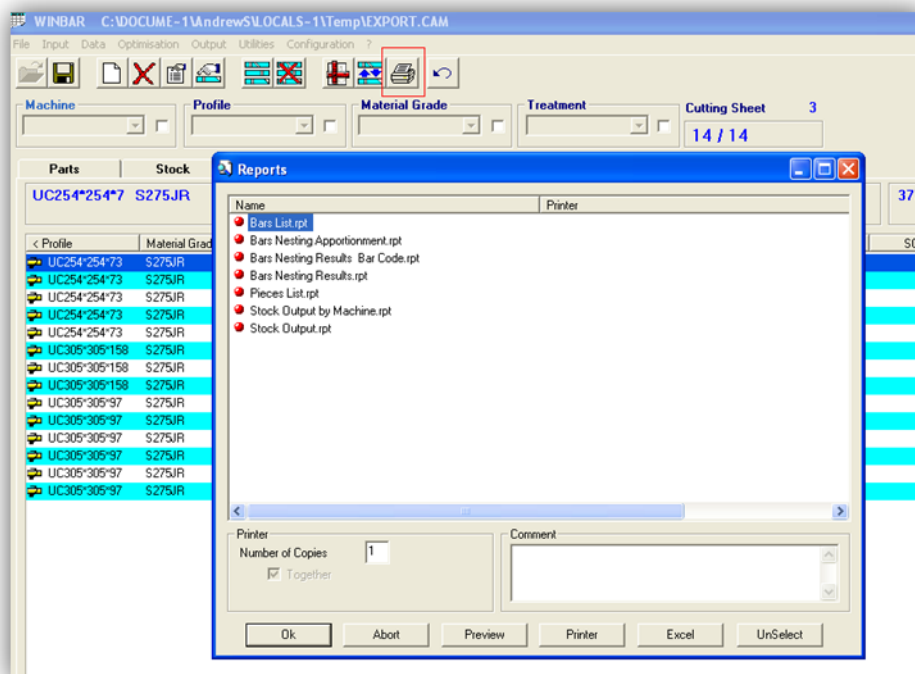
6. Creating reports

Once the nesting is complete, certain reports can be produced to aid with purchasing, and also the operation of the machines.

6.1 Bars Nesting Results Report

Once you are happy with your nesting you can create the bar nesting results report. This will give the machine operators and people on the cross transfer controls a clear indication of what is to be produced on each of the machines.

To produce the report, while still in WinBAR, click the printer icon at the top taskbar as shown in Fig 17 below. This will open a reports window. You need to make sure the “bars nesting results” is green by double clicking it, then press OK to send the report to the printer. If you would just like to look at the report without printing it yet, press Preview.



17/07/2008 2/2		BARS NESTING RESULTS PURCHASE			CUTTING SHEET : MACHINE :		3 SAWDRILL
PROFILE	MATERIAL C.	TREATMENT	QUANTITY	LENGTH	SCRAP	%	IDT
Contract		Component					
	UC305*305*97	S275JR	1	10000.00	377.00	3.77	1
1	TREAT	3-WC1	1	9623.00			
	UC305*305*97	S275JR	1	10000.00	602.00	6.02	2
1	TREAT	3-WC117	1	9398.00			
	UC305*305*97	S275JR	1	10000.00	602.00	6.02	3
1	TREAT	3-WC138	1	9398.00			
	UC305*305*97	S275JR	1	10000.00	777.00	7.77	4
1	TREAT	3-WC137	1	9223.00			
	UC305*305*97	S275JR	6	10000.00	777.00	7.77	5
1	TREAT	3-WC24	1	9223.00			
	UC305*305*158	S275JR	1	18300.00	73.34	0.40	6


The report shows you the cutting sheet number in the top right corner. These numbers are important as they are the unique reference numbers that the files will be sent to the machine by. In the example in Fig 18, the files will be exported to the machine in a folder called 3, and all the part and bar files will be in this folder.

The report also gives the part information coming out of each bar, the length, quantity, scrap etc. It also show a visual indicator about the part, i.e, if it has bevel cuts or drilling in it.

6.2 Bars List

This report will give you a list of the bars only, which is useful for purchasing decisions.

It can be created from the same menu as the bar nesting results, choosing bars list from the menu

12/09/2008				BARS LIST: LENGHT CUT			CUTTING SHEET : 1	
1/1								
PROFILE	MATERIAL G.	TRETEMENT	LENGHTH	WEIGHT	SURFACE	QUANTITY		
Affaire	Repere					Tot.	Util.	Dispo.
UB406*140*46	S275		6 000.00	555.86	16.08	2	2	
123456__	M5							
UB406*140*46	S275		5 985.70	277.26	8.02	1	1	
123456__	M4							
UB406*140*46	S275		4 000.00	370.56	10.72	2	2	
123456__	M3							
UB406*140*46	S275		792.22	36.70	1.06	1	1	
123456__	M6							
UB406*140*46	S275		550.61	25.50	0.74	1	1	
123456__	M7							
			27 328.53	1 265.88	36.62			
TOTAL			27 328.53	1 265.88	36.62			

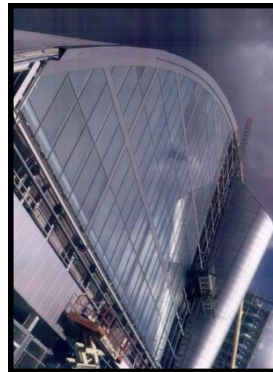
7. Export to machines

Once the nesting has been finalised and necessary reports created, WinBAR will send the nested bars to the machines as a cam file.

This process is automatic when the program is closed and saved. If used with WinSTEEL, the export path is as designated by this software. If used as a standalone module, the export path is as designated by the configuration option CAM.



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