GRAITEC
ADVANCE WORKSHOP

What's New in Advance Workshop Steel 2024-V20

29TH June 2023

GRAITEC
MODELING THE FUTURE

CONTENTS

WELCOME TO ADVANCE WORKSHOP 2024-V20

GRAITEC is pleased to present the latest version of our manufacturing execution system - **Advance Workshop 2024-V20,** part of the Graitec fabricate suite.

GRAITEC has continuously strived to provide first-rate advancements for innovative software solutions to its valued customers, and the recent launch of this new upgraded product range for 2023 is no exception, proving they are still top of their game in terms of providing top-level Construction, AEC, Building Design and Fabrication software solutions worldwide.

This version 2024-V20 of Advance Workshop is enhanced with a lot of user-centric new functionalities with high end benefits, and it's articulated around a few main subjects:

- **Steel Detailing**
  - The new detailing UI has been developed to meet the needs of service centres that do not have a design office and need to create their own steel elements quickly without external modelling software.
- **External Nesting Software**
  - Advance Workshop now offers the possibility to export and import to external nesting solutions to be able to accommodate steel fabricators with their current nesting software.
- **CAD Editor – Steel Part Editing Module**
  - The Cad Editor or Part Editor module is a new 3D CAD tool that allows you to view a part in 3D and add, modify, or delete features.
- **Steel Range Items**
  - This allows greater flexibility for the user by giving a designation of items that makes sense for the company and will also allow more detailed statistics on the type of items produced.
- **Steel Item Simplification:**
  - In our latest release, this new feature allows users to create multiple Steel items with ease.

Version 2024-V20 of Advance Workshop also comes with a vasty number of improvements and adjustments following the feedback received from thousands of users worldwide.

See below a list of new and improved features with descriptions.

1   STEEL DETAILING

The detailing screen has been developed to meet the needs of service centres that do not have a design office and need to create their own steel elements quickly without external modelling software.

1.1 DEFAULT VALUES
The UI uses default settings to display pre-defined values by default:

	Workflow				
	Steel				
345	Prefix to be used for plate naming		PL		PL
346	Prefix to be used for bolt naming		M		M
347	Elements to be displayed when importing 3D files		-1-2-10-5-		
380	Use the I-shape profiles for the production of the T-shape profiles		No		No
394	Steel detailing default product		Profile		Profile
395	Steel detailing default coating		RAW		
396	Steel detailing default standard		1		
398	Default item code for parts		SCPG		
399	Default item code for assemblies		SCAG		

- **394**: Default value for product column. In the first versions, only the profile will be available, other catologues will be added progressively.
- **395**: Default value for the coating (3.1.8. menu)
- **396**: Default value for the standard (3.1.6. menu)

1.2 INTERFACE

The interface consists of 5 independent, scalable, and hide able modules.

1. Generic information on the quote, order
2. Viewer auto-fed according to the defined Shape Code (in zone 4)
3. Legend
4. **input field in the form of a grid (see next title)**
5. List of operations according to the entry in field 4

See the images below:

1.3 LIST OF INPUT COLUMNS

- **Product**: Type of profile, configurable default value
- **Shape**: Type of shape, shape catalogue according to the selected product
- **Assembly Ref**: *Optional* free field, allows to fill in an assembly

- **Part ref**: Mandatory free field, reference of the document to be produced
- **Role Description**: *Optional* free field, allows to fill in a role description
- **Item**: Reference item to produce the element, mandatory
- **Item Ref**: Self-powered field. ItemRef of the Item previously selected. Field displayed in the Item sheet
- **Material**: Value list. Self-powered field. Material of the Item previously **selected**
- **Coating**: Value list. Coating of the element, configurable default value
- **Standard**: Value list. Standard of the element, configurable default value
- **Quantity**: Free field, numeric. Quantity to produced
- **A to I**: Free flied according to the Shape type, numeric. A check is made to verify that the entry is incorrect between the different columns. In this case, a correction or automatic entry can be applied.
- **Angle x, y**: Free flied, numeric. A check is made to verify that the entry is incorrect between the different columns. In this case, a correction or automatic entry can be applied.

1.4 PROCESS

Open the UI from the quote or customer order menus:
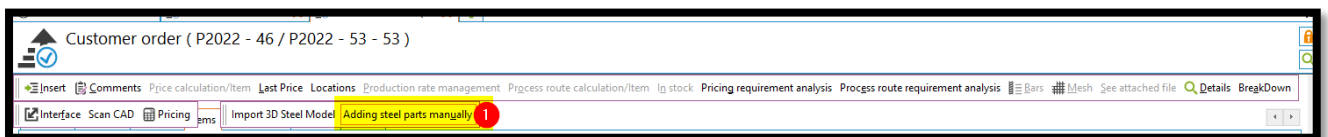
Fill in the grid, check that no errors have appeared:
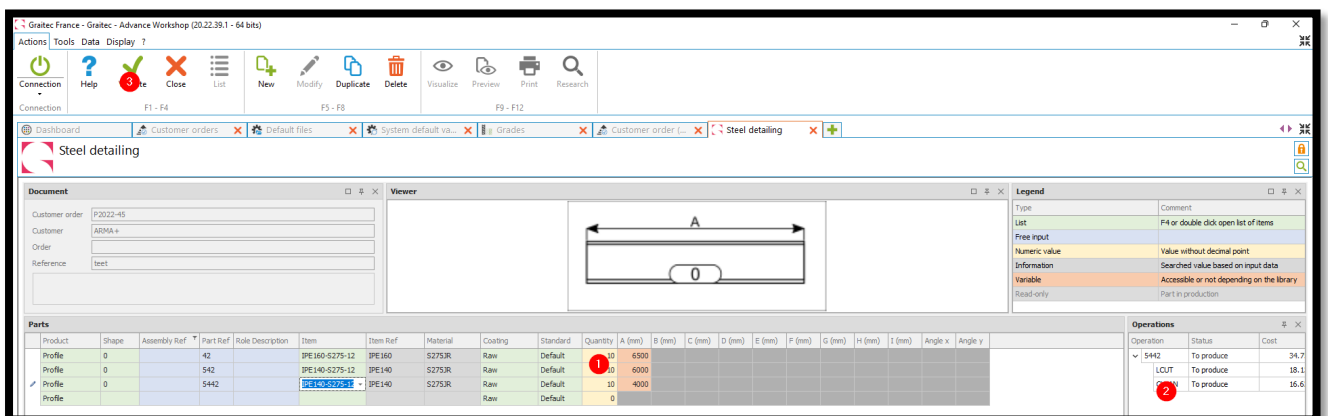
Please note that if an error occurs, check the message and the operations grid.

If an operation is not in a "To produce" status, it may be that the machine cannot perform the operation, check the dimensions of the bar to be produced or change the status to be subtracted.

If everything is valid, validate with the shortcut F2 Validate.

When all items have been imported into the grid, the BOM has been automatically generated for each item, a price can also be calculated according to the different prices (operations, raw material, or pricing).

The UI can be reopened at any time to display the items again, these can be modified at any time **unless the item is already in production**.
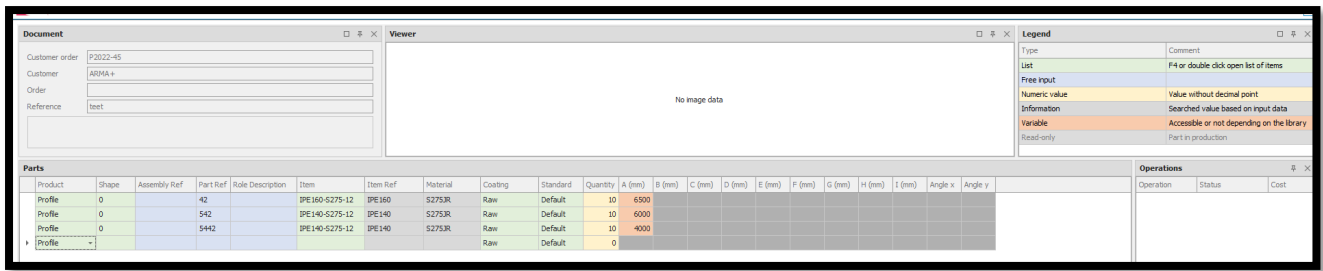
2 EXTERNAL NESTING – OPTIONAL AND TO CONFIGURE

Advance Workshop offers the possibility to link to an external nesting software to be able to nest all parts not nestable with Advance Workshop.

Thanks to these solutions, Advance Workshop can manage the optimisation of all parts in a production order.

Advance Workshop sends the **list of parts** and available **raw materials** to the third-party nesting software and, in return, **retrieves the results** to **update** the **production order and the inventory.**

Each software has a different linking procedure, so it will not always be possible to link without the purchase of a third-party module that opens the doors to the software.
In general, nesting software is associated with a type of machine or a manufacturer, so it is possible to find several nesting software. In this case, a parameter setting must be made for each case.

The process shown below is compatible with **ProNest** and may therefore vary depending on the solution. In all cases, specific parameterisation or development may be required to connect with the external nesting software.
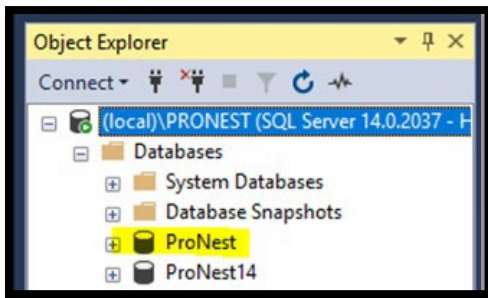
2.1 PRONEST – DATABASE ACCESS

Advance Workshop must be able to connect to the ProNest database to retrieve information related to the nesting, these connection parameters must be filled in the "_DBConnectionString_" machine parameter (see next section).

> **We recommend that you create a dedicated user associated with the ProNest database for Advance Workshop with read rights to retrieve the necessary information.**

Note that ProNest 2023 uses a different database than ProNest 2021. The default SQL Server database has changed as follows:

|	_ProNest 2021_	_ProNest 2023_
Instance:	**PRONEST**	**PRONEST**
Database name:	**ProNest14**	**ProNest**

The default database that is created by ProNest 2023 is named "ProNest". When installing ProNest 2023 or the ProNest Server 2023 standalone installer, if there is an existing ProNest 2021 database (ProNest14), that database will be copied and renamed "ProNest".

ProNest Server 2023 will automatically be pointed to the new "ProNest" database (in appsettings.json).

2.2 ADVANCE WORKSHOP – MACHINE PARAMETERS

The mechanism uses base-stored parameters associated with each machine that requires the use of external nesting software. The parameters are configurable in the menu 1.12.12, but only an authorised person can make this type of setting.
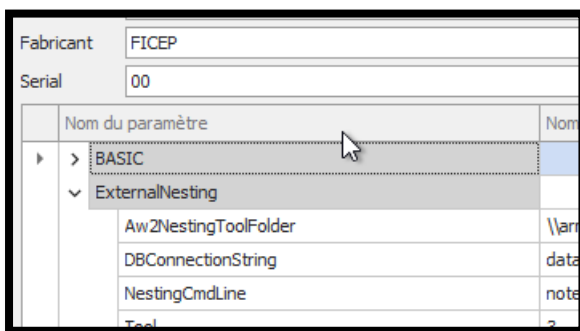

See the list below:

| PARAMETER NAME	DEFAULT VALUE	DSCRIPTION
DBConnectionString		Connection string to access tool DB. For some tools (like ProNest), results are read directly from DB and not from NestingTool2AwFolder & OutputXxxFile parameters
Aw2NestingToolFolder	Graitec/AW/Nesting/Input	Folder used for file exchanges from AW to the nesting tool (query)
NestingTool2AwFolder	Graitec/AW/Nesting/Result	Folder used for file exchanges from the nesting tool to AW (results)
Tool	0	External nesting tool used by this machine => used in the nesting wizard 0=None 1=Internal 2=Lantek 3=Pronest 99=OtherExternal1DNesting
NestingCmdLine		Exe automatically launched by AW to run nesting tool. Leave blank if manually launched
ConfigFile	C:\Lantek\System\Common\Exporter.Config	Path to a config file needed by some nesting tools (like Lantek)

OutputSheetsFile	SheetsFile.xml	Name of the file used to import sheets from external nesting tool (results)
OutputRemnantsFile	RemnantsFile.xml	Name of the file used to import remnants from external nesting tool (results)
OutputPartsFile	PartsFile.xml	Name of the file used to import parts from external nesting tool (results)
ToolUnitSystem	I	Length unit system used by the external nesting tool ("I" for imperial, "M" for metric)
AwUnitSystem	M	Length unit system used by AW. "M" is default, can be "I" for imperial units

2.3 ADVANCE WORKSHOP - PREPARATION PROCESS BEFORE USING PRONEST

From the production order planning screen (9.10), right-click on the production order and select External Nesting (1).
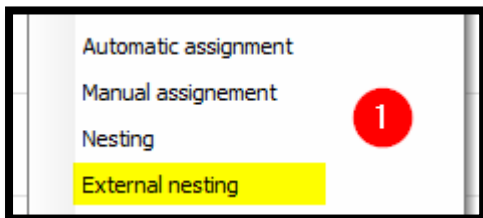
The first step is to select the Nesting software and the machine for which you want to nest (1).
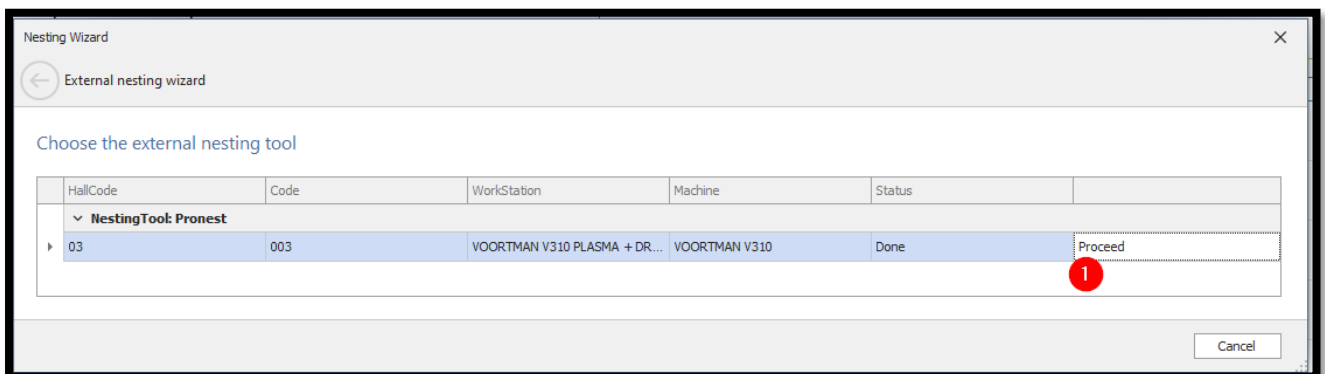

It is then necessary to check all the available raw materials in the stock, by default all the elements are selected with an available quantity recovered according to the available stock.

> (1) lists all section according to item group

> (2) list the different items available in stock

> (3) list of the different remnants available in stock

> (4) Lists the available stock for the nesting calculation, if the stock is 0, you must modify the quantity manually or select infinite

When everything is ok, proceed to send the data to the external software by clicking on next.
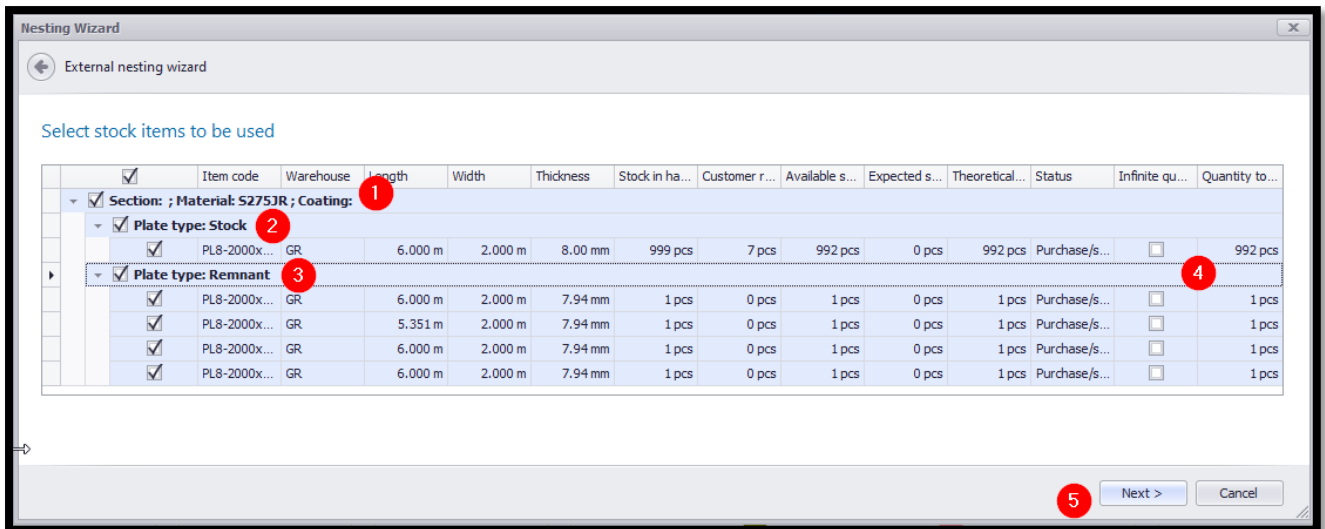
Data has now been generated and transmitted to the external Nesting software, according to the method a set of files has been generated including the definition of the parts to be made and the list of available raw materials.

The "Next" action checks the availability of the Nesting result if Nesting has not been performed the action will not work.
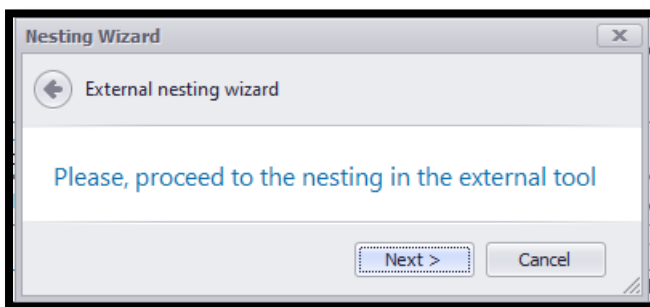
In the case of ProNest, NC files are generated for the definition of the parts as well as PNL and SNL files to list the parts and raw material.

Advance Workshop must at the same time open the software with the necessary information to proceed with Nesting. If this does not work, it is possible to force the launch with the following commands to be inserted in a batch:

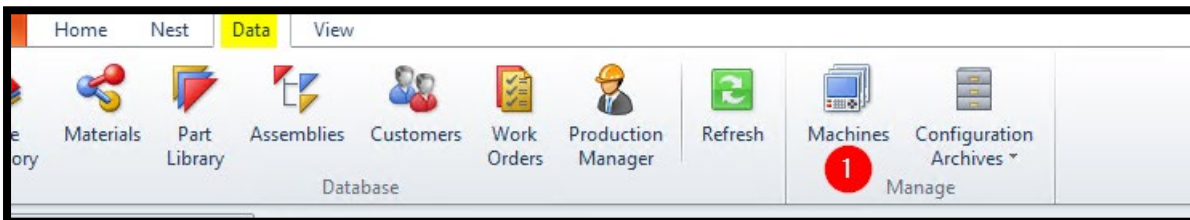| "C:\Program Files\Hypertherm CAM\ProNest 2023\ProNest.exe" "\\arma-pcd-dt\Nesting\Aw2Nest\BTR21_238.pnl" |
| --- |
| *the paths and file names are to be modified according to the user's directories* |
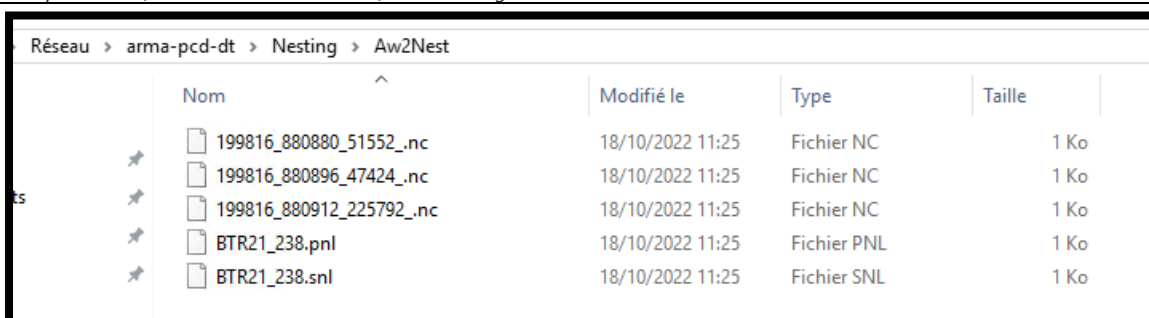
2.4 PRONEST PROCESS

In the case of material not found, map it to the corresponding material in ProNest.
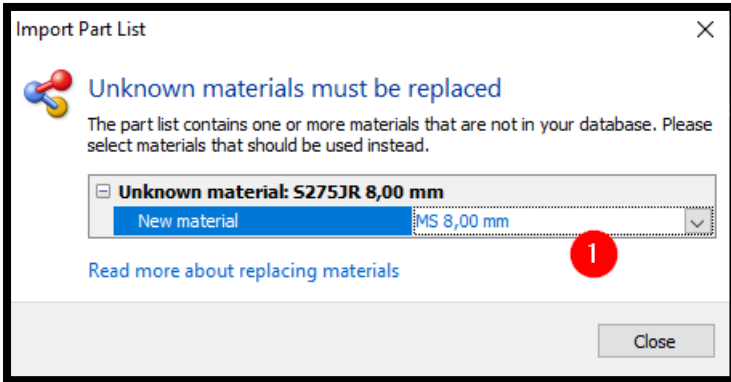
Select the machine for which the Nesting is to be done (Data tab)

Double click on the machine and in some cases, you need to map the material and the tool accordingly.
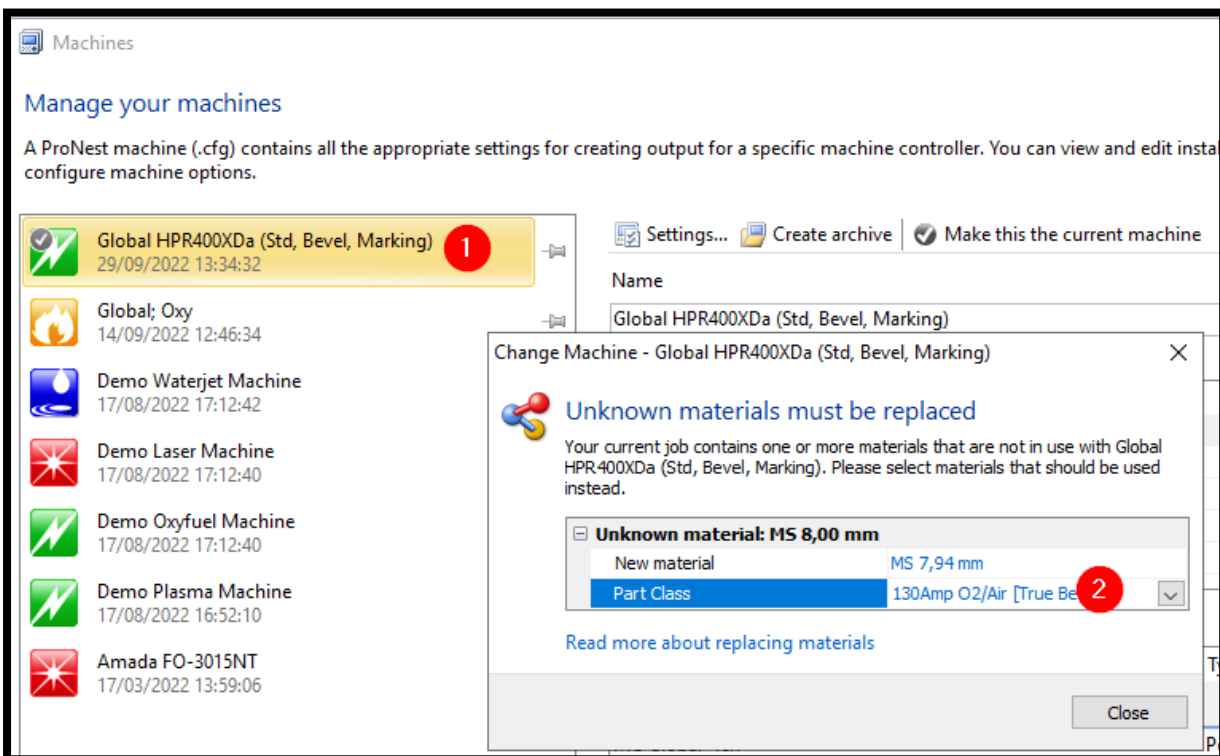
Now proceed to Nesting, you can do this by using the run button in the home tab. Other methods allow you to do it manually, in all cases, the client must refer to its internal procedure.
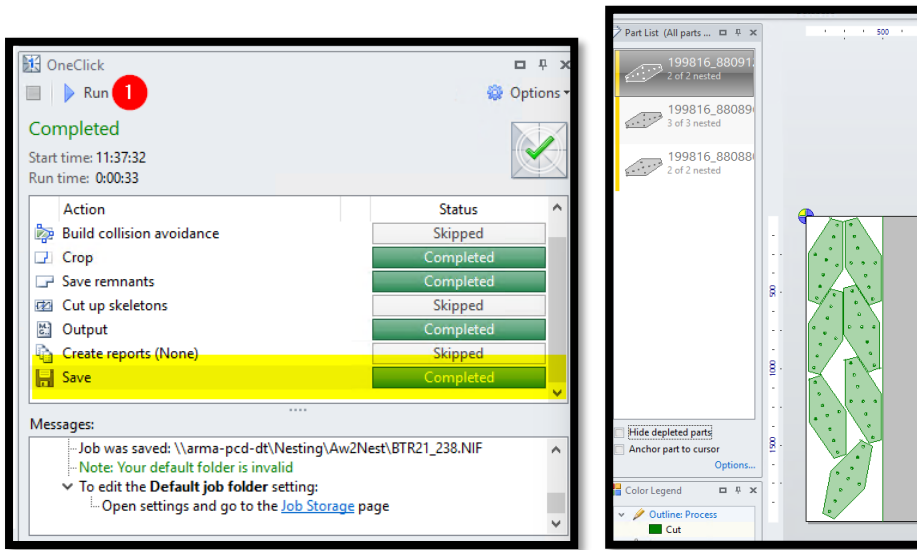
ProNest saves the Nesting result in a database and generates a set of files for the machines. For the remnants, ProNest saves files in a directory of its own, these files are to be kept and used as reference in Advance Workshop.
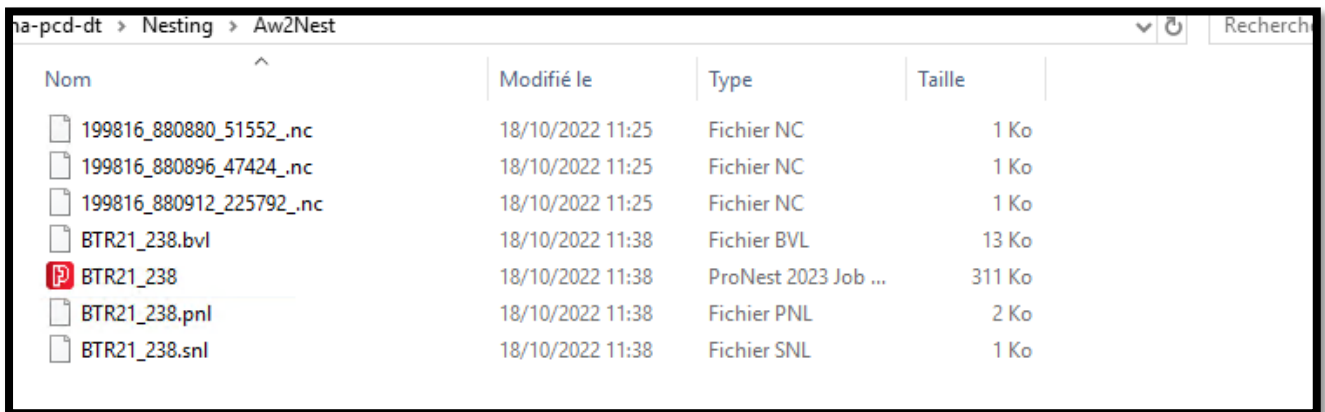
2.5 NESTING RESULT AND MANAGEMENT

First, return to Advance Workshop and click on next (1)
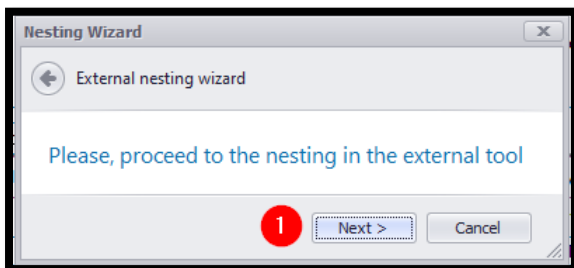
A summary of the nesting is now displayed with the following information:

(1) Information related to the production order

(2) Information related to the nesting number

(3) Information related to the raw materials taken for each machine with the associated properties, if it is a remnant (4) as well as the dimensions and weights

(5) List of the different interlocking parts with their properties.
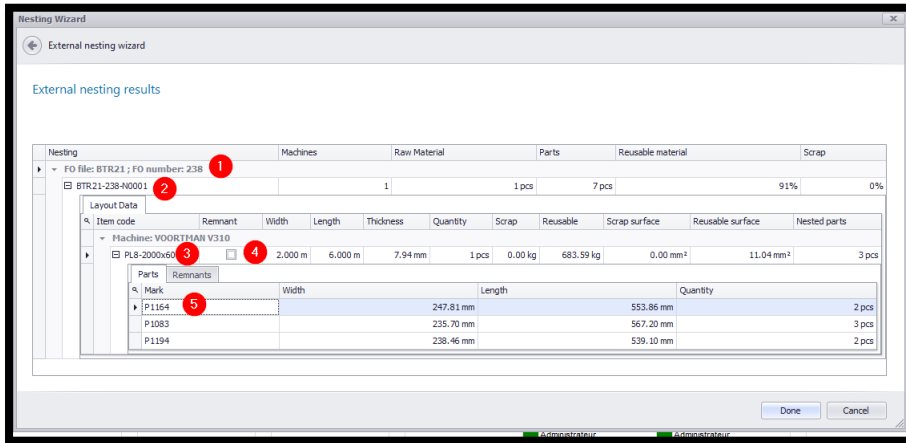
The remnants tab allows you to view the generated remnant with the associated ID

Note that the "**Serial number**" is an internal ID that will then be sent to **Pronest** for **reuse**. This number is different on the "**serial tag**" that will be **generated when the production order is validated**. This serial code can be retrieved via the reports associated with the Nesting2D (AWS_NESTING2D) or production tag (AWS_PRODUCTION_TAG).
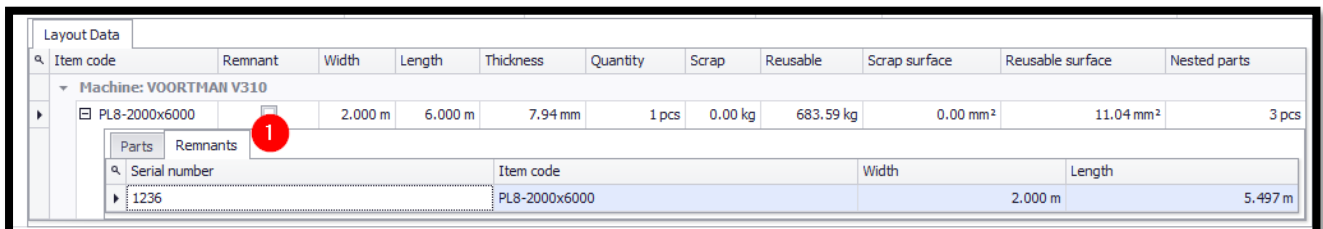
After validating, it is possible to reopen the external nesting option with the possibility of

- Review the nesting results (1)
- Delete a Nesting (2) to re-do it
- Perform another Nesting for another software and/or another machine.
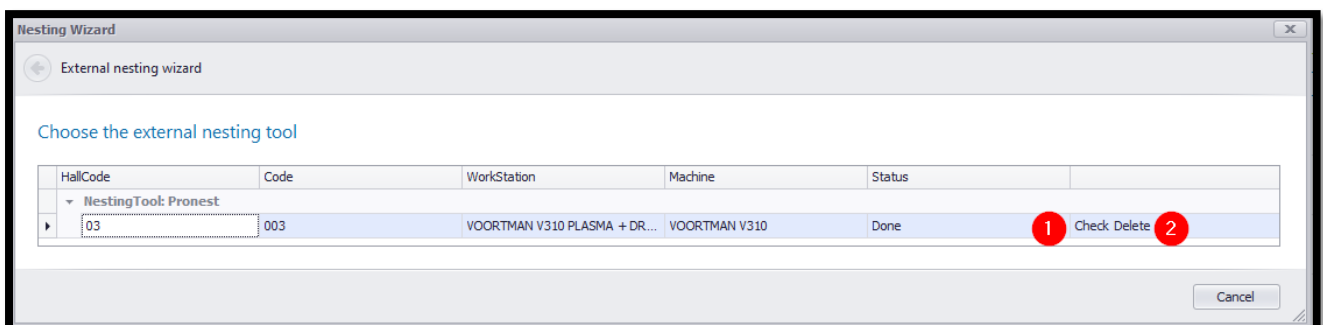
2.6 PRINTING PRODUCTION DOCUMENTS

From the fabrication orders production, right-click on the desired FO (1) and click on print reports (2).

The UI is like any report UI, you can access the list of available reports by clicking on report (1)(2).

See the list of steel reports below:

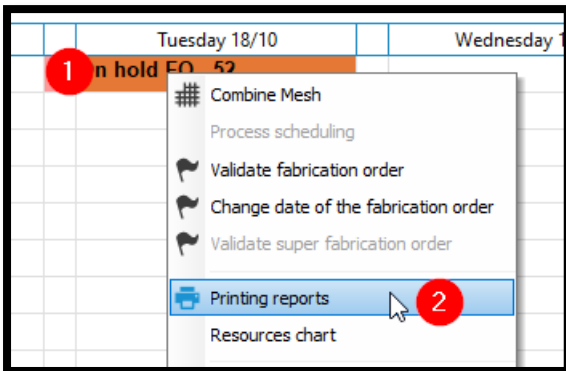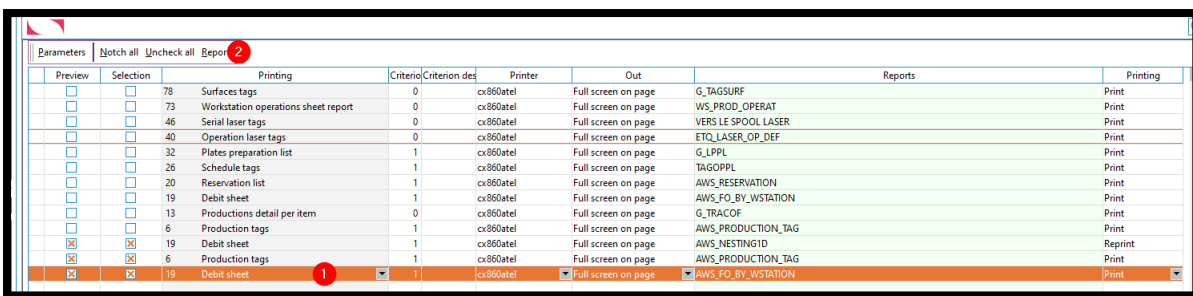| N°	HEADING	DESCRIPTION
20	AWS_RESERVATION	List of required raw materials
32	AWS_BOM_PLATE	List of plate type parts
19	AWS_BOM_PROFILE	List of profile type parts
21	AWS_BOM_ACCESS	List of accessory type parts
19	AWS_ASSEMBLY	List of assemblies with sub-parts
19	AWS_NESTING1D	Internal nesting result for bars
19	AWS_NESTING2D	Result of the nesting of the external software when the link is possible
19	AWS_FO_BY_WSTATION	Production order per workstation with barcode
19	AWS_BARCODE_ASSEMBLY	Production order with operation label for assemblies
19	AWS_BARCODE_ASSEMBLY_PARTS	Production order with operation label for assemblies and sub-parts
6	AWS_PRODUCTION_TAG	Final product tags, including remnants

3   CAD EDITOR - STEEL PART EDITING MODULE

The Cad Editor or Part Editor module is a 3D CAD tool that allows you to view a part in 3D and add, modify, or delete features. This module uses external components from the Graitec product, Bim Designer Modules for Steel.

See the list of operation that the Cad Editor can manage below:

- Holes (round, slotted, countersinking, counterbore)

- Notch
- Bevel Cut (for plate only)
- Shortening (for beam only)
- Cope

3.1 PREREQUISITES

The part editing module requires a version of BIM Designer adapted to the Advance Workshop version. It is possible that a manual installation of Advance Workshop is done, in this case, it is very important to ask the development support for help to download the right version in which case, a blocking can happen at the start of the application.

3.2 SETTINGS

The parts editing module uses the parameters associated with the BIM DESIGNER module; these parameters are stored in the global default settings (1.1.4).

Paramaters	
ShowFeatures	Active or not the display of features
ShowSystemLines	Active or not the display of system lines
ShowGaugeLines	Active or not the display of gauge lines
ShowHoles	Active or not the display of holes
ZoomFitElements	Zoom fit all elements at the opening of the UI
HolesRenderQuality	Quality of the holes definition
PlateRenderQuality	Quality of the plate definition
ProfileRenderQuality	Quality of the profile definition

Quality options	
Low	Low quality
Medium	Medium quality
High	High quality
HighWithoutArcs	High quality without arcs
HighWithArcs	High quality with arcs

3.3 PROCESS

The CAD EDITOR module can currently be opened at the quotation or order level. To do this, the part must be a steel part created using one of the two creation methods (Steel Detailing or import from a 3D file).

1. In Quote/Order, go to the Items tab.

2. Right click on a steel element (could be an assembly or single element)
3. Click on Edit Steel Element
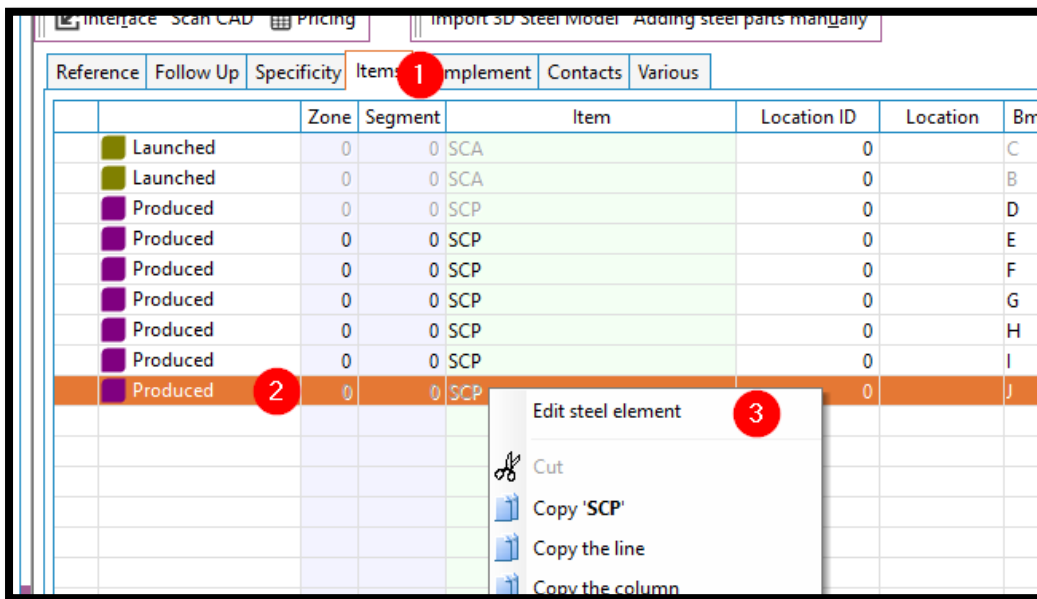
Note: Released, in production or completed parts are not modifiable.

3.4 USER INTERFACE

1. Shortcuts
   a. Validate will save all changes.
   b. Close will close the window and if changes have been made, will ask you for confirmation.
2. List of parts, by default the first one is selected, to change the part, simply click on another line.
3. Operation list lists all the necessary operations in accordance with the element's features and the assignment tree.
4. 3D part editor, 3D modification display screen.
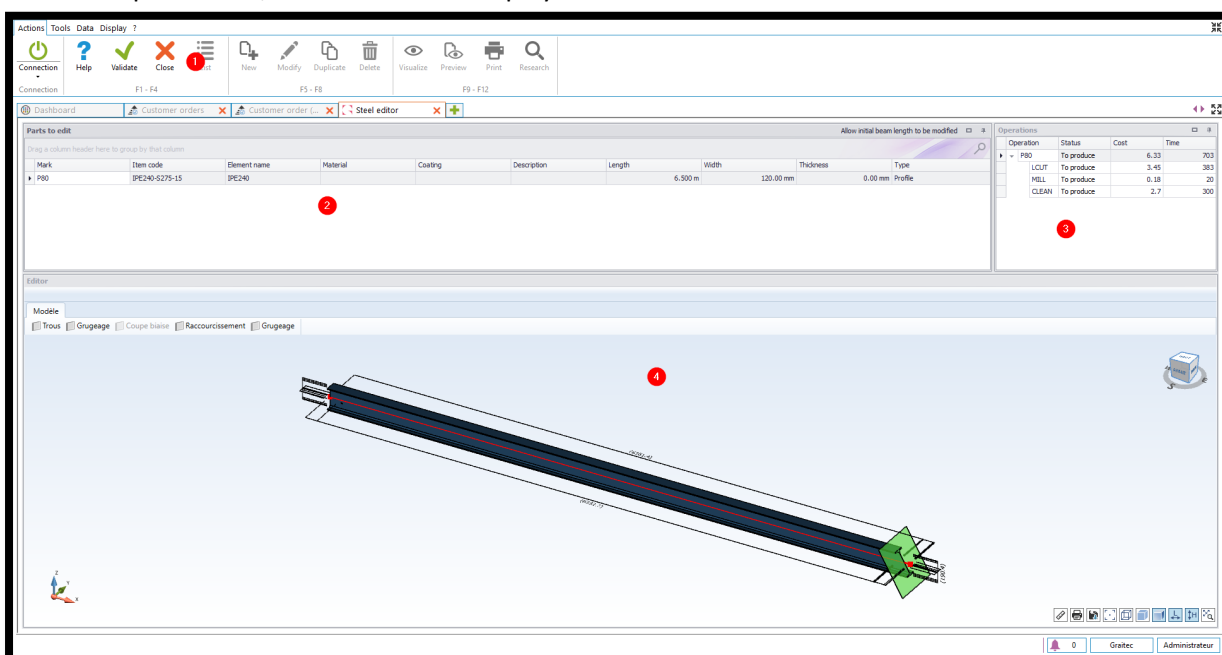
4 STEEL RANGE ITEM

Advance Workshop Steel must have a minimum of two item types to generate the steel gamma items, representing the two product types that Advance Workshop Steel manages:

- Single part articles which must be associated with the SCP [1] range.
- Assembly type items which must be associated with the SCA [2] range.

Historically, SCA & SCP items were often present in the generic databases to facilitate association with the corresponding ranges, this is no longer necessary.

This allows **greater flexibility** for the user by giving a designation of items that **makes sense** for the company and will also allow more **detailed statistics** on the type of items produced.

This association is now managed by the script present in the SCA & SCP generic ranges (see corresponding chapter).

However, if no match is found, the default values are automatically retrieved.

4.1 STEEL ITEMS (DEFINITION AND SETTINGS OF STEEL ITEMS)

4.1.1 Default Values (1.1.4.)

To manage the default item used, two default parameters exist and must be associated with a gamma item with the appropriate part type:

398	Default item code for parts	SCP
399	Default item code for assemblies	SCA

4.1.2 How to Define a Generic Item for Steel

This example below shows how to have a generic item for IPE140 profiles (European standard I-profile) and for single items (not assembled).

4.1.2.1 Check the Variables in SCP Range

The default routing for single items should follow the recommendations below to retrieve the reference item mapped by the user to search for the corresponding item. If for some reason the user wants to change this logic, it is quite possible to change the script and modify it according to the request.

See the example below:

```
res is string
gpGPC:gcXMLVarCode="A01"
gpGPC:gbXMLItemsWithOperation=True
gpGPC:bGetTarifDiscount=True
gpGPC:bGetTarifOnRealCuts=True
res=WAS:g_def_value

// Determines the item code, tries to find a match, or retrieves the default value
xmlName est une chaîne="XMLItemCode"
xmlContent est une chaîne=res
itemCode est une chaîne
```

```
WL.XMLDocument(xmlName,xmlContent)
XMLRacine(xmlName)
XMLRecherche(xmlName,"Item",XMLBalise+XMLSousElément,XMLExact)
SI XMLTrouve(xmlName) ALORS
 gpGPC.gTempXmlDocument=XMLOuvre(res,DepuisChaine)
 itemCode={"gpGPC.gTempXmlDocument"+Remplace(XMLPosition(xmlName),"/",".")+".ItemCode",indVariable}
FIN
XMLAnnuleRecherche(xmlName)
XMLTermine(xmlName)

SI itemCode<>"" ALORS
 qItem est un rSQL
 qItem.cCommande ="SELECT ITREF.ITEM_CODE"
 qItem.cCommande+=" FROM "+SQL_c:ReqBase("ITEM")+" IT"
 qItem.cCommande+=" INNER JOIN "+SQL_c:ReqBase("ITEM")+" ITREF ON ITREF.ITEM_CODE=IT.ITEM_REF"
 qItem.cCommande+=" WHERE IT.ITEM_CODE="+SQL_c:ReqQuote(itemCode)
 qItem.cCommande+=" AND ITREF.GAMP_CODE is NOT Null AND (ITREF.GAMT_CODE is NOT Null OR (ITREF.GAMT_CODE is
Null AND ITREF.GAM_ONLYONE=1))"
 SI qItem.Exec() ALORS
  SI PAS qItem.Outside() ALORS
   WAS:g_Item_Code=qItem.ColC(1)
  FIN
  qItem.Close()
 FIN
FIN

RESULT res
```

4.1.2.2 Check the items mapped by the user have a generic reference item.

In the example below, the stock item is managed as a physical bar and with the item code IPE140-S275-12. The generic item corresponds in some way to its commercial designation. So, each similar item with a different length should have the same and unique generic reference article (1).

4.1.2.3 Create a new article with the name of the generic item.

Create a new article with the name of the generic article (1). Leave the Generic reference item (2) field empty so as not to disturb various processes such as Nesting which also uses this kind of information to retrieve all the different bar lengths managed in the stock.

In the other tab, change the product type to "Steel range Item" (1) to tell the system that this item type is specific to the steel process. Define the item as a BOM item (2), associate the common GAMSCP production range for single items (without assembly) (3) and tick the checkbox (4) if you want the pricing range to be done as well.

Now, when the user goes to associate an article with article with generic reference IPE140, an automatic association will be made with item IPE140.

4.2 MANUFACTURING SEQUENCES (1.13.3)

The Steel module uses standard production ranges that allow the various imports to function correctly.

Two types of routings are required.

- A production range/ sequence for assemblies "GAMSCA"
- A production range/sequence for parts "GAMSCP"

4.2.1 SCP ITEM (Steel Connexion Part)
Commercial Description:

```
title is string
name is string

xmlName est une chaîne="XMLItemMark"
xmlContent est une chaîne=WAS:API_SetXMLConstruitChaine(gpGPC.gXmlDocument)
WL.XMLDocument(xmlName,xmlContent)
XMLRacine(xmlName)
XMLRecherche(xmlName,"Item",XMLBalise+XMLSousElément,XMLExact)
SI XMLTrouve(xmlName) ALORS
 name={"gpGPC.gXmlDocument"+Remplace(XMLPosition(xmlName),"/",".")+".ItemMark",indVariable}
FIN
XMLAnnuleRecherche(xmlName)
XMLTermine(xmlName)

IF NoSpace(name)="" THEN name={"gpGPC.gXmlDocument.XMLDatas:Name",indVariable}
title="Part: "+name

RENVOYER title
```

Variables script:

Value script:

```
res is string
gpGPC:gcXMLVarCode="A01"
gpGPC:gbXMLItemsWithOperation=True
gpGPC:bGetTarifDiscount=True
gpGPC:bGetTarifOnRealCuts=True
res=WAS:g_def_value

// Determines the item code, tries to find a match, or retrieves the default value
xmlName est une chaîne="XMLItemCode"
xmlContent est une chaîne=res
itemCode est une chaîne
WL.XMLDocument(xmlName,xmlContent)
XMLRacine(xmlName)
XMLRecherche(xmlName,"Item",XMLBalise+XMLSousElément,XMLExact)
SI XMLTrouve(xmlName) ALORS
 gpGPC.gTempXmlDocument=XMLOuvre(res,DepuisChaine)
```

```
itemCode={"gpGPC.gTempXmlDocument"+Remplace(XMLPosition(xmlName),"/",".")+".ItemCode",indVariable}
FIN
XMLAnnuleRecherche(xmlName)
XMLTermine(xmlName)

SI itemCode<>"" ALORS
 qItem est un rSQL
 qItem.cCommande ="SELECT ITREF.ITEM_CODE"
 qItem.cCommande+=" FROM "+SQL_c:ReqBase("ITEM")+" IT"
 qItem.cCommande+=" INNER JOIN "+SQL_c:ReqBase("ITEM")+" ITREF ON ITREF.ITEM_CODE=IT.ITEM_REF"
 qItem.cCommande+=" WHERE IT.ITEM_CODE="+SQL_c:ReqQuote(itemCode)
 qItem.cCommande+=" AND ITREF.GAMP_CODE is NOT Null AND (ITREF.GAMT_CODE is NOT Null OR
(ITREF.GAMT_CODE is Null AND ITREF.GAM_ONLYONE=1))"
 SI qItem.Exec() ALORS
  SI PAS qItem.Outside() ALORS
   WAS:g_Item_Code=qItem.ColC(1)
  FIN
  qItem.Close()
 FIN
FIN

RESULT res
```

gpGPC:gcXMLVarCode="A01"

- ▪ Default Variable Code: do not change

gpGPC:gbXMLItemsWithOperation=*True*

- ▪ True = Retrieves the operations in the XML fed by the assignment tree

gpGPC:bGetTarifDiscount=*True*

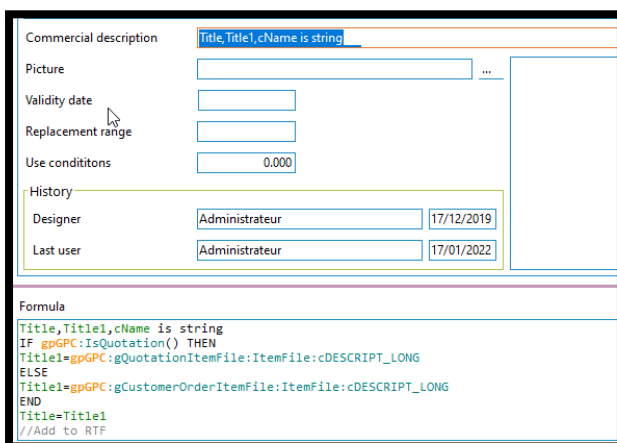- ▪ True = Retrieves the price from the price list and applies it to the gamed item

gpGPC:bGetTarifOnRealCuts=*True*

- ▪ True = Retrieves the weight of the item to calculate the price of the item based on the pricing

Item matching: The script uses the name of the item to search for a similar item. If it does not find one, it takes the system default value.

4.2.2 SCA ITEM (Steel Connexion Assembly)
Commercial Description:

```
Title,Title1,cName is string
IF gpGPC:IsQuotation() THEN
Title1=gpGPC:gQuotationItemFile:ItemFile:cDESCRIPT_LONG
ELSE
Title1=gpGPC:gCustomerOrderItemFile:ItemFile:cDESCRIPT_LONG
END
Title=Title1
//Add to RTF
cNom_CHAMP_RTF est une chaîne=MDIMère()+".RTF_MENU"
{cNom_CHAMP_RTF,indChamp}=Title


xmlName est une chaîne="XMLTemp"
xmlContent est une chaîne=WAS:API_SetXMLConstruitChaine(gpGPC.gXmlDocument)
WL.XMLDocument(xmlName,xmlContent)
XMLRacine(xmlName)
XMLRecherche(xmlName,"Assembly",XMLBalise+XMLSousElément,XMLExact)
SI XMLTrouve(xmlName) ALORS
cName={"gpGPC.gXmlDocument"+Remplace(XMLPosition(xmlName),"/",".")+":Name",indvariable}
FIN
XMLAnnuleRecherche(xmlName)
XMLTermine(xmlName)

IF nospace(cName)="" THEN cName={"gpGPC.gXmlDocument.XMLDatas:Name",indvariable}
Title="Assembly: "+cName
gpGPC:cITEMDESC_ORDER=""
RENVOYER Title
```

Variables script:

	armark	Description	Value	Cooperation
	A01	XML	res is string	☐
	A02			☐

Value script:

```
res is string
gpGPC:gcXMLVarCode="A01"
gpGPC:gbXMLItemsWithOperation=True
gpGPC:bGetTarifDiscount=True
gpGPC:bGetTarifOnRealCuts=True

res=WAS:g_def_value

// Determines the item code, tries to find a match, or retrieves the default value

xmlName est une chaîne="XMLItemCode"
xmlContent est une chaîne=res
itemCode est une chaîne
WL.XMLDocument(xmlName,xmlContent)
XMLRacine(xmlName)
XMLRecherche(xmlName,"Item",XMLBalise+XMLSousElément,XMLExact)
SI XMLTrouve(xmlName) ALORS
 gpGPC.gTempXmlDocument=XMLOuvre(res,DepuisChaine)

itemCode={"gpGPC.gTempXmlDocument"+Remplace(XMLPosition(xmlName),"/",".")+".RoleDescription",ind
Variable}
FIN
XMLAnnuleRecherche(xmlName)
XMLTermine(xmlName)
```

```
SI itemCode<>"" ALORS
 qItem est un rSQL
 qItem.cCommande="SELECT IT.ITEM_CODE FROM "+SQL_c:ReqBase("ITEM")+" IT"
 qItem.cCommande+=" WHERE IT.ITEM_CODE="+SQL_c:ReqQuote(itemCode)
 qItem.cCommande+=" AND IT.GAMP_CODE is NOT Null AND (IT.GAMT_CODE is NOT Null OR (IT.GAMT_CODE
is Null AND IT.GAM_ONLYONE=1))"
 SI qItem.Exec() ALORS
  SI PAS qItem.Outside() ALORS
   WAS:g_Item_Code=qItem.ColC(1)
  FIN
  qItem.Close()
 FIN
FIN

RESULT res
```

gpGPC:gcXMLVarCode="A01"

- ▪ Default Variable Code: do not change

gpGPC:gbXMLItemsWithOperation=*True*

- ▪ True = Retrieves the operations in the XML fed by the assignment tree

gpGPC:bGetTarifDiscount=*True*

- ▪ True = Retrieves the price from the price list and applies it to the gamed item

gpGPC:bGetTarifOnRealCuts=*True*

- ▪ True = Retrieves the weight of the item to calculate the price of the item based on the pricing

Item matching: The script uses the description of the main part of the assembly to search for a similar item. If it does not find one, it takes the default value in the system.

Please note: Graitec offer services to modify and or customize SCP (Steel Connection Part) and SCA (Steel Connection Assemblies) XML scripts.

5 STEEL ITEM SIMPLIFICATION

Because of the options available in the creation of an item record, the specificities related to Steel make the creation of this type of item difficult for the user.
The main idea is to add an overlay that allows the user to feed and create a set of metal stock items such as profiles or plates.
The purpose of this new layer is to simplify the creation of items and not to replace the existing interface.
The creation by the "standard" method must also function as well as the detailed consultation of the item record.
Also, in the interest of being able to sort and display steel items more easily, adjustments will be necessary to facilitate the search for item types.

To summarize, two new user stories have been created with the same idea of being able to easily create and search for steel items:
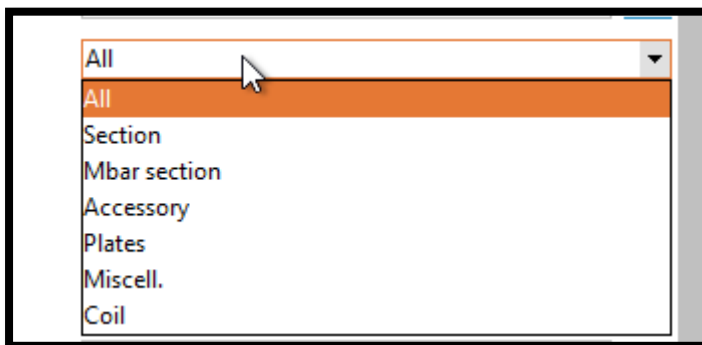1. Added search criteria for items.
2. Added a simplified process for steel items.

5.1 (1.10.4) ITEMS

5.1.1 New organisation of the search filter

To meet the need and the particularity of Steel, an organisation of the search menu is applied when the Workshop module is activated (steel module).


1. Item Nature - Filter by nature, Section = profile, Plates = Sheet

2. Item Code
3. Description
4. Generic Item Reference
5. Material
6. Grade – Grade of the Item = Finishing
7. Thickness – Only for sheet or plate
8. Length – For Sheet/Plate/Profile/Section = Length of the item

5.1.2 New action to create a steel Item.

From the item screen, a new action allows to open a window to create dedicated Steel items. This new process requires the Workshop module to be activated (Steel base module).
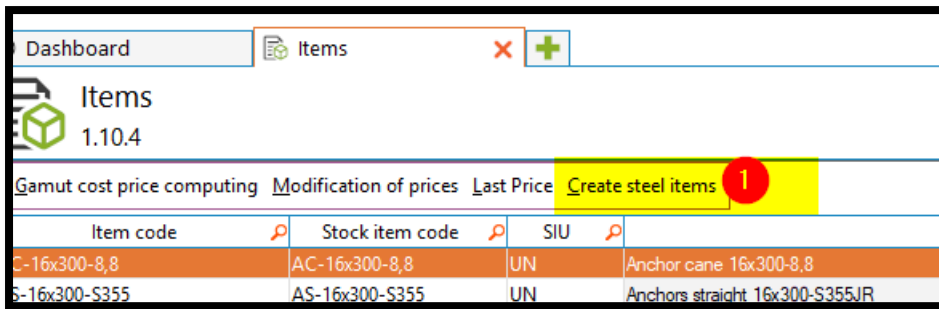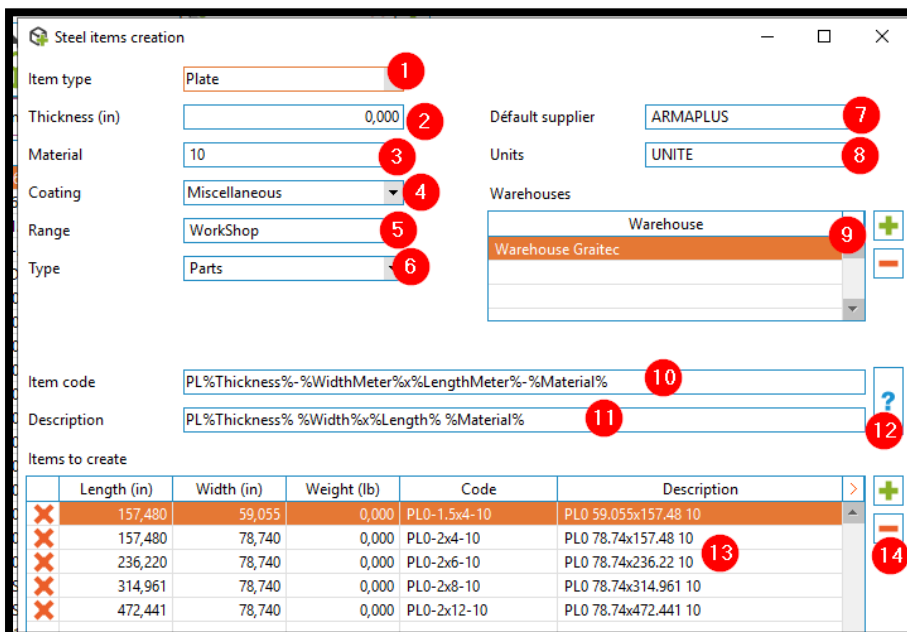
5.1.2.1 Options for profiles

1. Item Type: Plate = Sheet or profile
2. Profile ID: Profile type ID (click on the ... to open the profile selection screen)
3. Material: Material of the item (3.1.31.)
4. Coating: Coating/Finishing of the item (3.1.8.)
5. Range: Range/type of the item (1.6.2)
6. Type: Subfamily of the range (1.6.2)
7. Weight: Linear weight of the article, calculates the total weight based on the length entered
8. Default Supplier
9. Units: Base Management Unit (can be changed later directly in the item card)
10. Warehouse: list of depots that manage this item (Click on the + or - to add or remove a warehouse)
11. Script that allows the Item to be created dynamically (to see the available options click on 13)
12. Script that allows the Description to be created dynamically (to see the available options click on 13)
13. List of options available for the script
14. List of Items. This table editable shows all the items already available and those to be created. The icon on the left allows to see dynamically the information:
    a. if a cross is present, it means that the item is already created and or that an information is incorrect. In any case, the cross will have no impact on the addition of new articles.
    b. If it is green arrow, the item can be imported
15. Add or delete line button
16. Imports all items with a green arrow
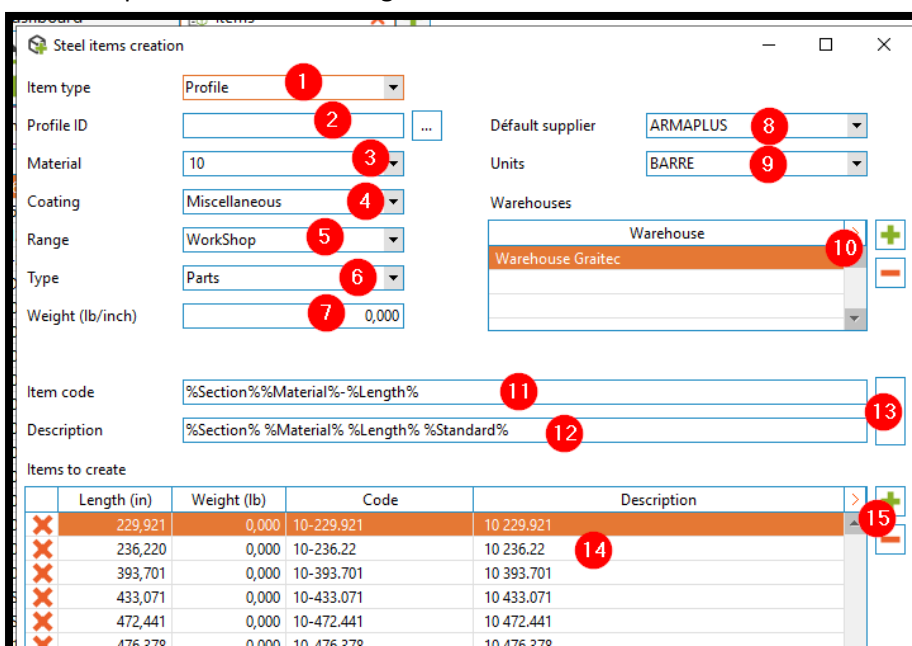
5.1.2.2 Options for sheets/plates

1. Item Type: Plate = Sheet or profile
2. Thickness: Thickness of the sheet
3. Material: Material of the item (3.1.31.)
4. Coating: Coating/Finishing of the item (3.1.8.)
5. Range: Range/type of the item (1.6.2)
6. Type: Subfamily of the range (1.6.2)
7. Default Supplier
8. Units: Base Management Unit (can be changed later directly in the item card)
9. Warehouse: list of depots that manage this item (Click on the + or - to add or remove a warehouse)
10. Script that allows the Item to be created dynamically (to see the available options click on 12)
11. Script that allows the Description to be created dynamically (to see the available options click on 12)
12. List of options available for the script
13. List of Items. This table editable shows all the items already available and those to be created. The icon on the left allows to see dynamically the information:
14. if a cross is present, it means that the item is already created and or that an information is incorrect. In any case, the cross will have no impact on the addition of new articles.
15. If it is green arrow, the item can be imported.
16. Add or delete line button.
17. Imports all items with a green arrow.

Info.advanceworkshop@graitec.com