ADVANCE STEEL

TRAINING GUIDE

GRAITEC

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BOM Editor

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BOM Editor

Introduction

Advance Steel has a powerful module for reports such as material lists, plate lists, cut lists, assembly lists, bolt lists etc. The preset templates for these reports are available in the **BOM Editor**.

This tutorial describes the **BOM Editor** components and explains how to customize the templates for content and format.

Accessing BOM Editor

1. On the **Advance Steel** ribbon, *Output* tab, *Document Manager* panel, click to start the BOM editor.

BOM Editor Components

The preset templates tree for material reports is in the right panel of the BOM Editor window. The tree is divided into three groups of templates.

- **Advance Template**: includes all BOM templates from Advance. Their properties cannot be modified.

- **User Template**: includes a copy of all the BOM templates from Advance that can be modified.

- **Project Template**: can be used to copy templates for project specific modifications.

Derived documents
These lists are related to the created drawings and their status.

List on drawings
These reports are the BOMs inserted in the drawings.
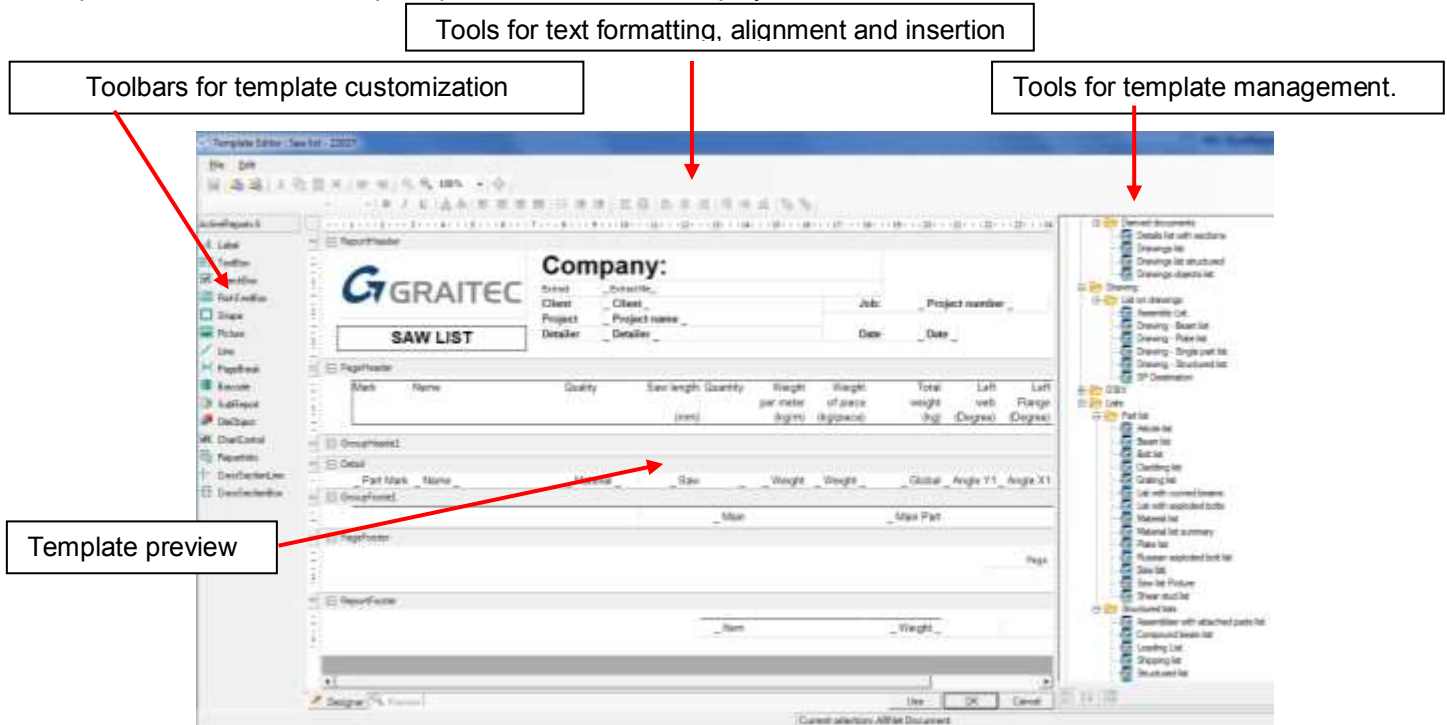
Lists
These lists are for quantity take-off, material loading or shipping. Divided between Metric and Imperial lists, they are based on:
- Single parts for **Part list**
- Assemblies for **Structured lists**

The extracted reports can be printed or exported in different file formats such as PDF, XLS and others.

Template modification tools

The right panel of the BOM Editor window displays the selected components in the template tree. When you select, for example, Saw Cut list, the template preview of this list is displayed.

Tools for text formatting, alignment and insertion

Toolbars for template customization

Tools for template management.

Template preview

Functions for template management

The toolbar on the right side of the BOM Editor contains different tools for template management.

If you click on RMB on a list, the

	Save template: save modifications to the edited template.
	Copy template: copy an existing template to the user / project database within the same category.
	Delete selected template.
	Export selected templates as *.temp files.
	Import *.temp files as templates.
	Template units: set up the units for the template.
	Setup of Page: opens the "Report settings" dialog box for page and printer setup, and styles.
	Reports content: when a template is selected, it displays the list of objects whose related information from the model is used in the report
	Select XSL file.
	Properties, can assign the selected list on **Quick Document**

Tools for text formatting, alignment and insertion

Most of the icons are for text formatting, alignment and insertion are positioned on the Left area :

Icon	Description
$\mathcal{A}$	Label the template.
abX	Create a Text Boc area
☑	Create a checkbox inside the template preview.
	.
🖼	Insert a picture from the template preview.
☐	Create a shape in the template preview.
/	Draw a line inside the template preview.
‖‖‖	Draw a barcode inside the template preview for report identification.

Other toolbars for template customization:

| Icon	Description
甘 ⊞	Align/ size to Grid: turn . used to align cells inside the template.
⑦	On right mouse button, on a label, offer the access to the field content and can be a user text or an attribute from the list whose values are taken from the model.

Example: Field content

When a template is selected, it displays the list of objects whose related information from the model is used in the report.

1. On a Label, click Right Mouse Button and click ⑦ .

.
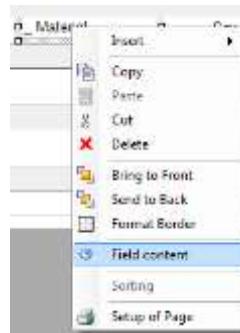
The list of objects is displayed
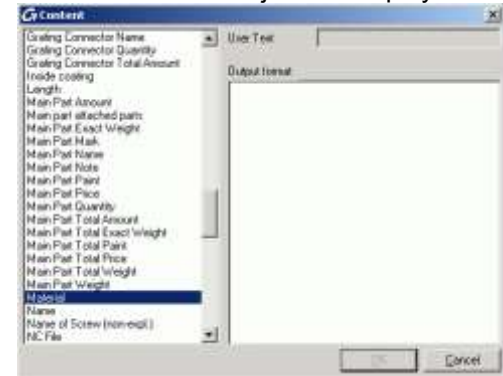
Note: You can edit the list of objects only for the BOM templates from the User template and Project template groups.

Buttons for applying or canceling the modifications

The three buttons at the bottom of the BOM Editor window have the following functions:

Button	Description
Use	Applies the selected template. The BOM Editor closes and the list creation begins.
OK	Saves any modifications and exit the BOM Editor.
Cancel	Exit the BOM Editor without saving any modifications.

Template customization

Template customization can be easily done by modifying an existing template. We will explain the template preview components, how to edit the template for format and content modifications and how to insert a new logo in the report header.

Template preview components

The template preview represents how and what type of information is displayed in the report.

Here is an example of a template preview that has the following blocks:

1. ReportHeader - ReportFooter

The **ReportHeader** displays the company and project information.

The **ReportFooter** summarizes some of the data included in the report such as the total weight.

2. PageHeader - PageFooter

The **PageHeader** represents the header line that is displayed at the beginning of each page. It contains User text describing the data listed in the report.

The **PageFooter** displays the page number.

3. GroupHeader1 – GroupFooter1

The **GroupHeader1** displays the title of the group data that are described in the next level.

For example, for **Structured list**, the **GroupHeader1** displays the Assembly main part name for the single parts that are listed in the next level.

4. Detail

The **Detail** contains the attributes for the data that is listed in the report according to the header line of the **PageHeader** block.

The data inside the Detail block can be listed based on selected criteria: for example, if sorting is based on Weight, the heaviest piece is listed first in the report.

To establish your own criteria, right-click over the **Detail** block and select **Sorting** from the list to display the **Template sorting** window:

You can select the sorting criteria from the **Source** panel and move them to the **Result** panel with the arrow icons. You can also modify the sorting order with these icons.
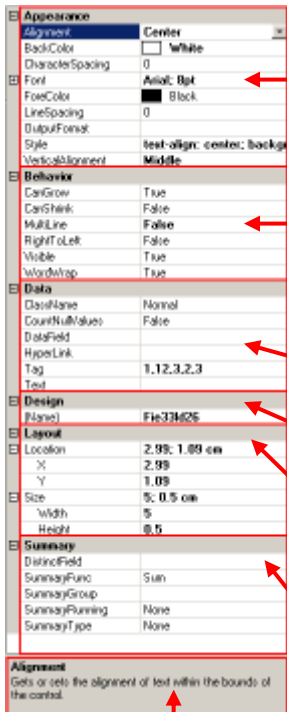
Template editing

Template blocks contain fields that can be edited for content and format. A field is an area inside the block that can have a user text or attribute tag.

1. Click a field to modify its properties.

2. Select the Categorized presentation:

The field properties are divided into six categories:

Appearance

This property is used to edit the field content for alignment, font, color and style.

Behavior

This property is used to adjust the field content regarding the field dimension.

−   **True**: if the field content is longer than the field dimension, then the content in the report is shown in multi-lines to fit inside the field.

−   **False**: only part of the content is shown if it is longer than the field dimension.

Data

This property describes the content and the text format.

Design

This property is used for field identification.

Layout

This property identifies the field location and size in the report.

−   **Location** provides the field coordinates (X, Y) at the top-left corner.

−   **Size** provides the field dimensions.

If two fields have to be aligned horizontally, for example, their X coordinates should be equal. Therefore, the field location is very important to have a correct presentation of the report.

At the bottom of the editing categories, the properties of the selected field are explained through a **Contextual description** window.

Summary

This property sets function type and parameters for the selected field.

Next, modify the content of the list, add borders, insert an image and turn on/off the grid lines from the template, report contents.

Example 1: Modifying the content of the list

1. Select a field in the template.

2. Right click and select **Content** from the context menu.

3. Click **OK**.

4. Select the suitable field content from the list.
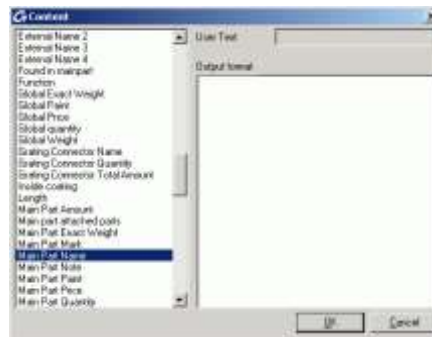
5. Click **OK**.

Note: *The field content can be a user text or an attribute from the list whose values are taken from the model.*

Example 2: Editing borders of a field

1. Right-click a field and select **Borders** from the context menu.

The "Format Border" dialog box appears.
2. Select a line style from the **Line Styles** list or use the available **Presets**.

Inserting an image

1. On the toolbar from the left, click .

2. Select a start and end point in the **ReportHeader** to insert the picture field.

3. Select the picture field, go to the field properties and make the following settings:

   − Adjust the field location and layout to have the same size as the logo.

   − In the **Data** category, in the **Image** field, click ... to open an image. Select the image file and click **Open**.

The logo is inserted.
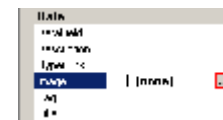
Chapter 2
Steel Workflow

Following the steps described in this chapter you will get the model used in the Connection chapter. Also, you can use it as guidelines in approaching an Advance Steel project.

Web   http://www.graitec.com/En/
Email   support.americas@graitec.com

- Set up the drawing prototypes
- Select a template
- Save the drawing
    - Select the correct osnap
    - Management Tools – Drawing Presentation
- Colors / Dim Style / Font /General look and feel of drawings
- Job Setup – Project data
    - Set all project information and units

Open Project – Begin Modeling

1. Set UCS to world

2. Draw grid lines – start @ 0,0,0 – use grid by distance

3. Place required Level Symbols

4. Create a Compass symbol

5. Copy grid lines up to 0,0, TOS of next level if necessary

6. Use the frame tool to draw columns and beams in a frame plan; or create them from the beam object.

7. Set beam shape and position

8. Create connecting beams between frames - *Save*

9. Create bracings - *Save*

10. Set the required "model roles" to all profiles

11. Check all information in the Model Browser (Material, Coating, Lot/Phase, Model Role, etc.)

12. Start connections

13. Base plates all columns - *Save* (Grout / Anchor holes)

14. Cap plate if required – *Save*

15. Beam to column – *Save*

16. Beam to beam – *Save*

17. After all the connections are made – run collision check

18. Check the collision report, if errors

19. Check, locate and fix collision – *Save*

20. Audit checking

21. Purge Advance Steel objects

22. Assign welds – if additional are required – *Save*

23. Shade, rotate, check & review

24. Check the prefix settings

25. Number the model with the numbering tool – *Save*

26. Begin drawings – single part

27. Do all single part drawings or by selection with filter

28. Begin assembly drawings

29. Do all main part drawings

30. Or by selection for Column, Beams, Misc.

31. Or by selection of phase

32. Create elevations view – *Save*

33. Create plan view - *Save*

34. Create anchor bolt plan - *Save*

35. Create 3D view and node as required

36. Details of bolts

37. Clean up drawings

38. Create external project lists

39. Create NC files

40. Batch plot / Explode drawings