# GRAITEC  MODELING THE FUTURE

# **What's New**

## Advance Workshop Rebar 2025

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# 1 PREFAB DETAILING (MAO)

An improved **Prefab detailing** has been developed, packed with new features and a User Interface. This is to allow users to assemble rebars with more efficiency and control. The *Prefab detailing* will now be able to show the assembly in 3D view and process to manufacturing.

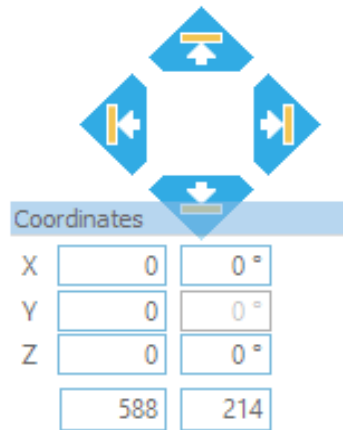Below are the main features updated within Prefab Detailing (MAO):
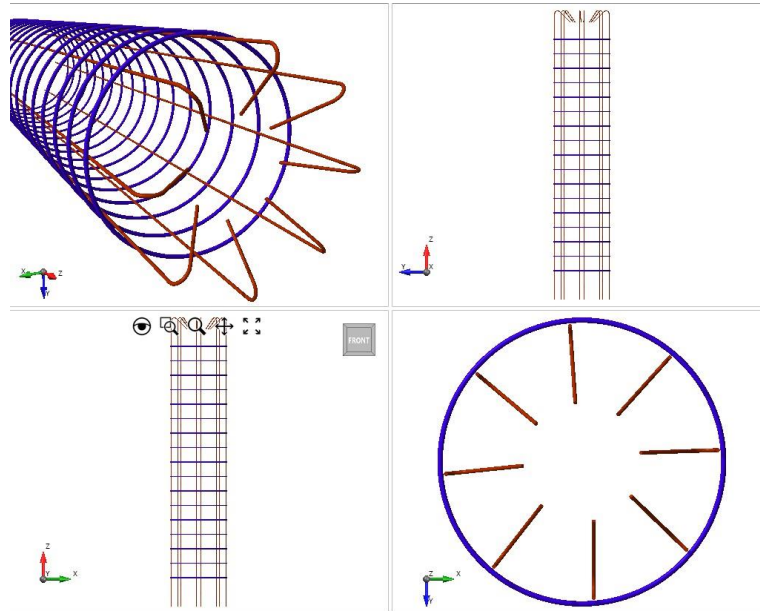


## 1.1 CUSTOMISABLE VIEW

You can organize your screen to your own needs. Panels can be placed where you like and even superimposed. At any time, you can modify this organization by drag and drop.
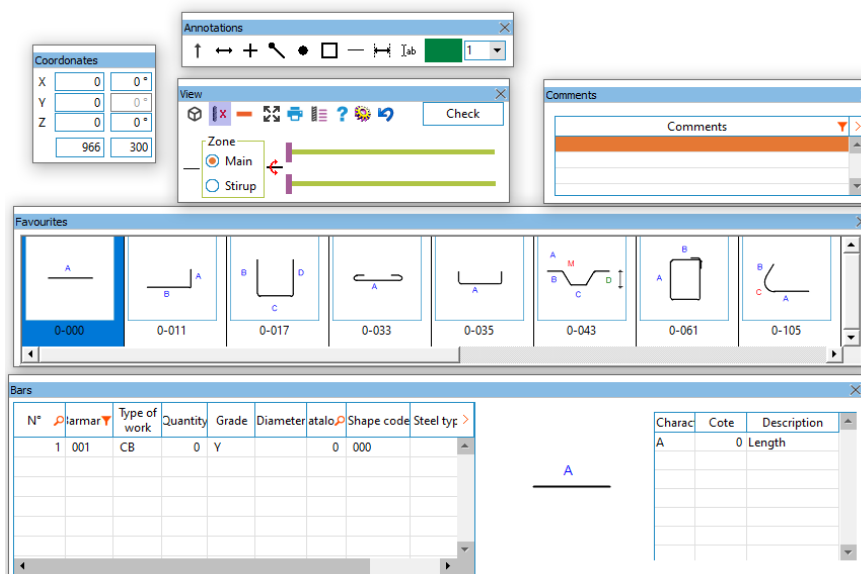
During this process place the panel on the arrows:



Click right anywhere and select *Menus...* it opens this window that lets you show/hide the panel, and lets you save or load previous configurations. You can store different configurations, according to your needs.
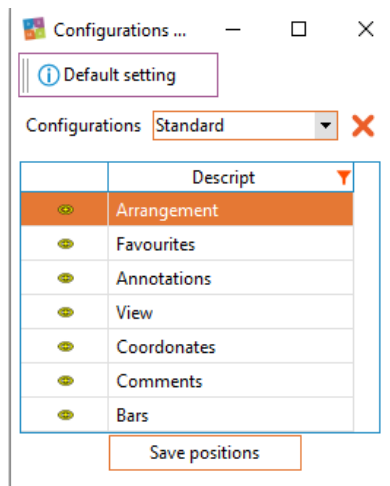


## 1.2 DETAILING

The method of **Detailing** has been improved. Users now can use a favorite list of shape codes, and drag, and drop the shape code as a Main Bars or as Stirrup.

Users will now be able to place the main bar automatically on the *Stirrup* angle and segments.
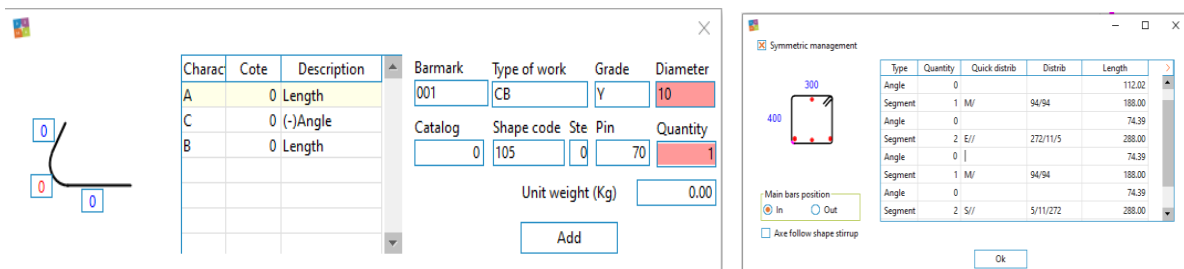


Users can formulate the distribution of Stirrup on the main bars and Advance Workshop will show a preliminary view of the distribution.
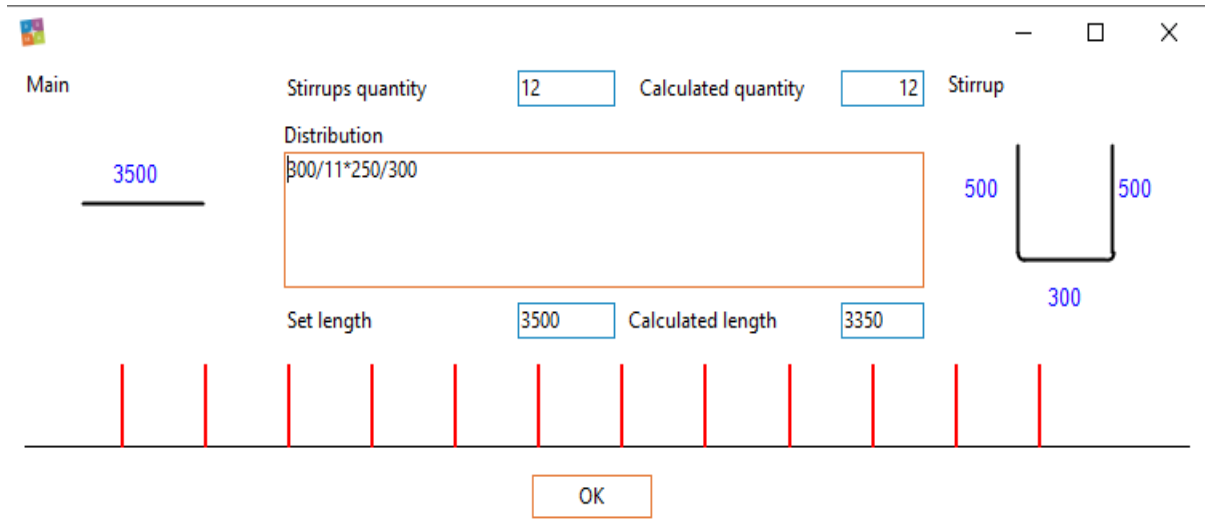
## 1.3   METHOD OF MAIN BAR PLACEMENTS

Users can now attach additional support main bars to the main bar itself, by simply dragging and dropping on the main bar already in place for assembly.

The software will automatically suggest a locking position (Left, Centre, or Right) of the bar to place to the bar reference (already in place). The user can shift the bar from the locking position.

Once placed the bar to place will be locked to the reference bar and will move in accordance with the reference bar.
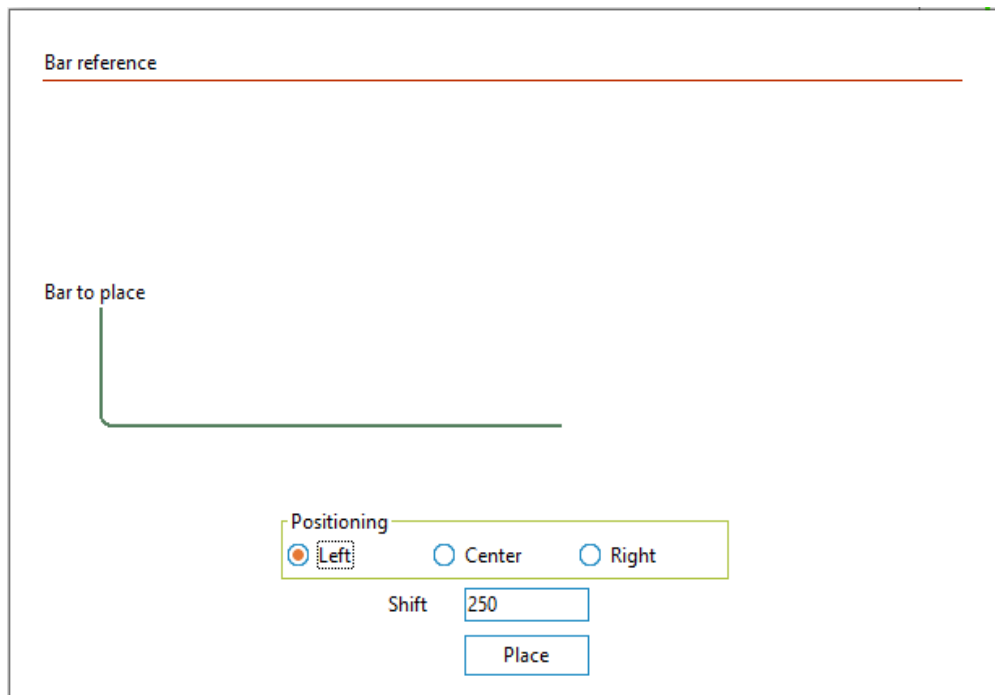
## 1.4 PILE CAGE DETAILING

When using a circular stirrup bar, the user will have an automatic of the main bar distribution dedicated to the circular profile. This helps improve and increase the efficiency of detail design.
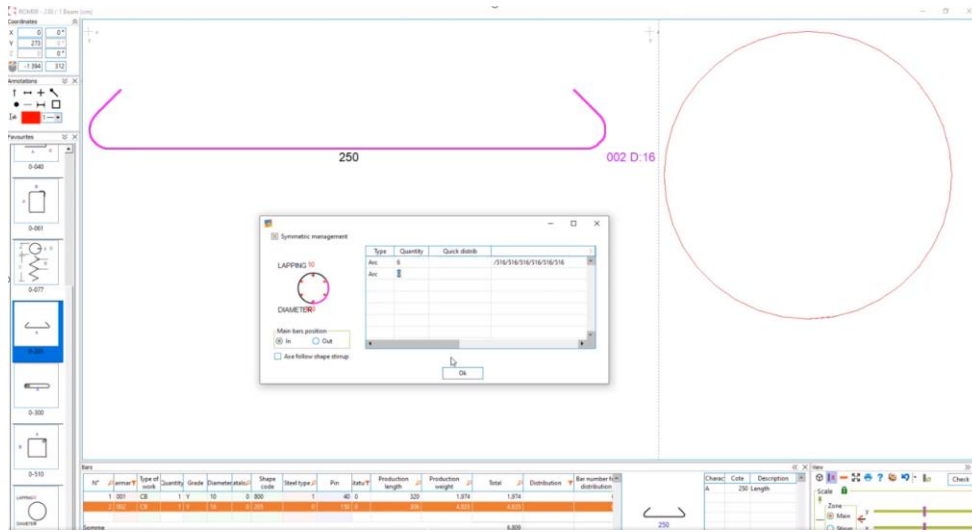


## 1.5 SPIRAL PILE CAGE DETAILING

When using a *Spiral shape code*, the user can place the spiral shape rebar onto the main bar view, and this will automatically place a view on the stirrup view. The user can then follow in inserting the main bars around the spiral-shaped rebar.
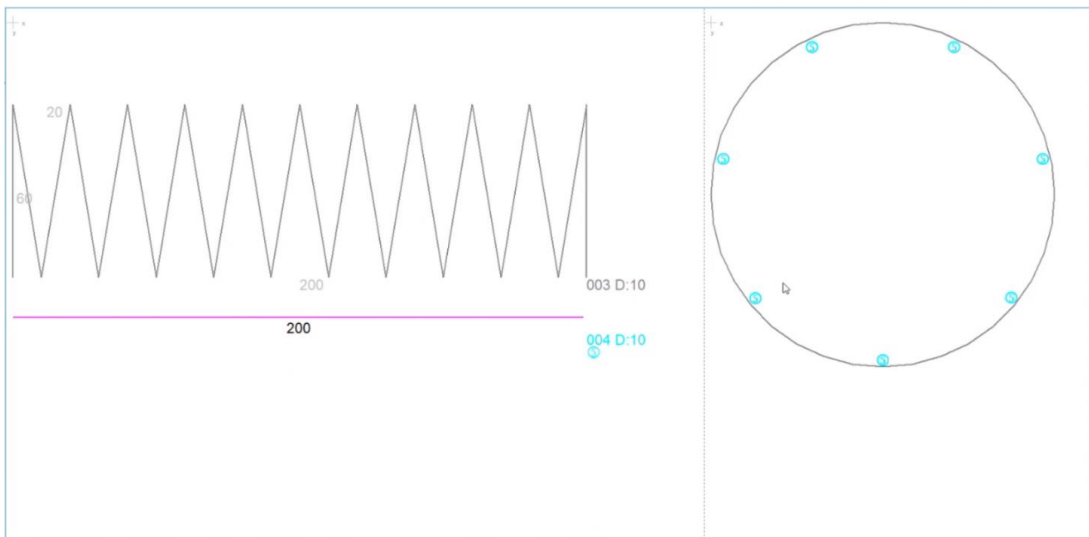
## 1.6 2ND TYPE OF DISTRIBUTION (SPANISH)

The user can now use a 2nd type of distribution method. This method now meets multiple regional needs. Instead of typing the formula methods (as stated before), the user can use columns to identify the spaces and type of stirrup /main bars used for the distribution.
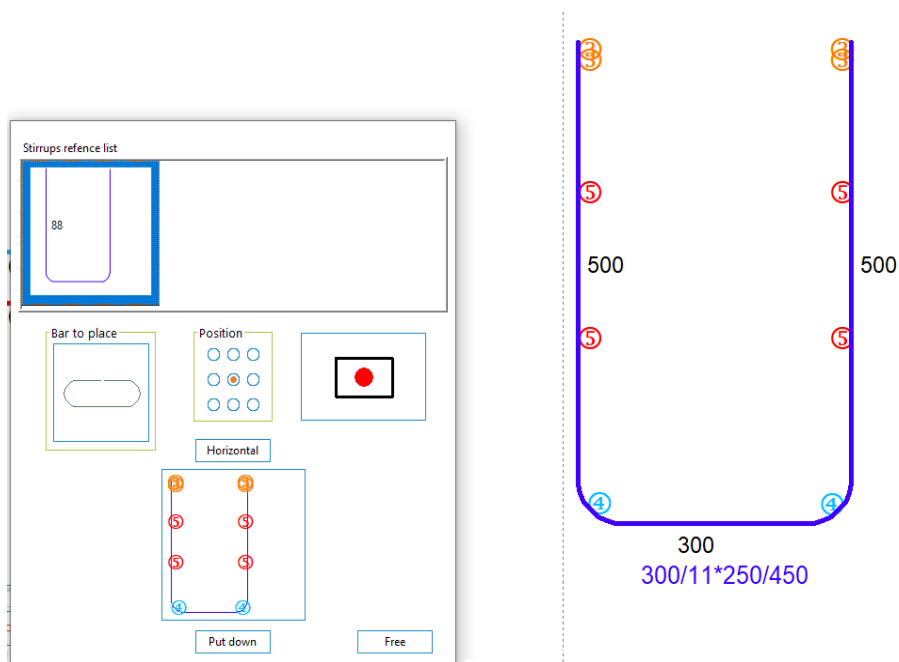


## 1.7 ADDITIONAL STIRRUP METHODS

When there is at least one stirrup on a sketch, when you drop another stirrup, it opens this window to help you place it. It automatically selects the stirrup according to the current shape dimensions. But you can change it manually.

Click on the main wire you want to place the current shape, then [Put down].

Main wires ⑤ are selected, therefore stirrups are automatically placed like this:
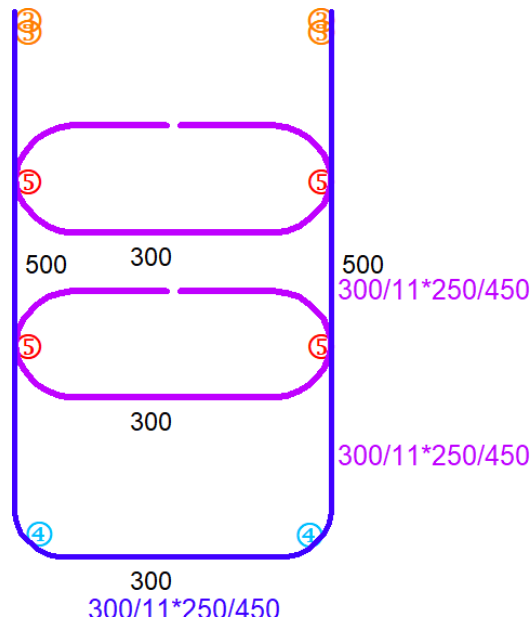


*The distribution of target stirrup*
*is automatically applied to placed stirrups*

## 1.8 MULTIPLE MAIN BAR INSERTION

Users have now the ability to select multiple rebars from the list of tables and insert it into the detailing view. Users can also select multiple rebars on the detailing view and add segments/distributions.
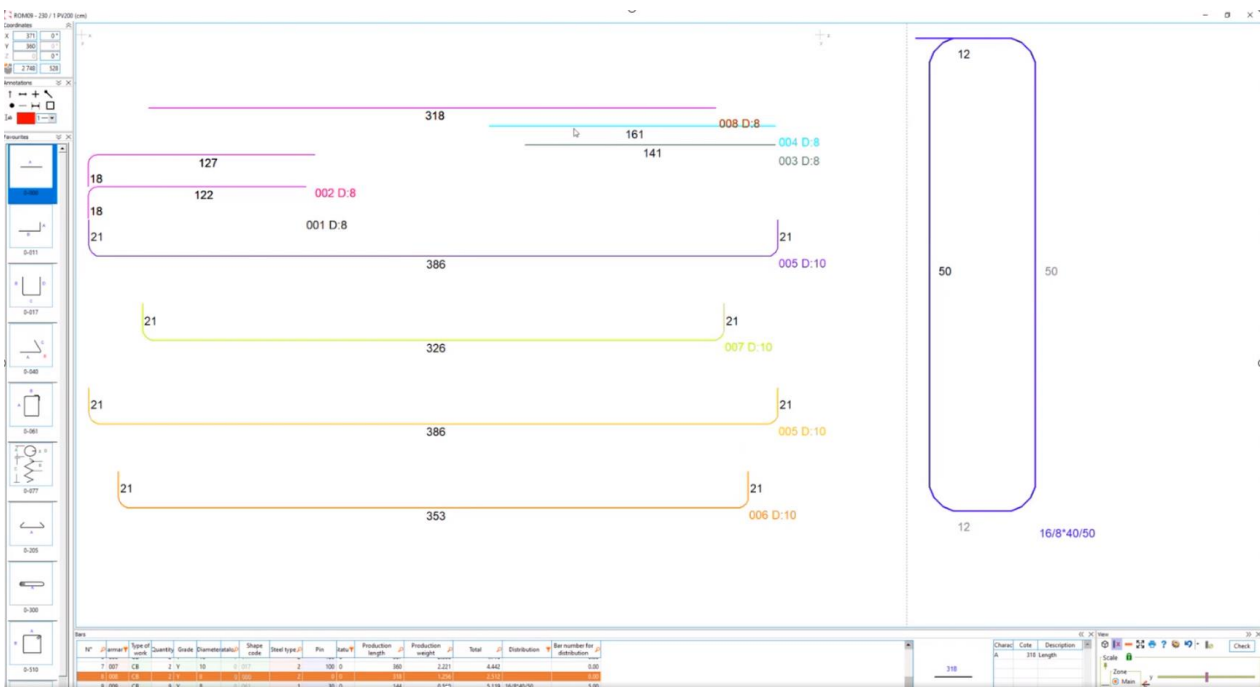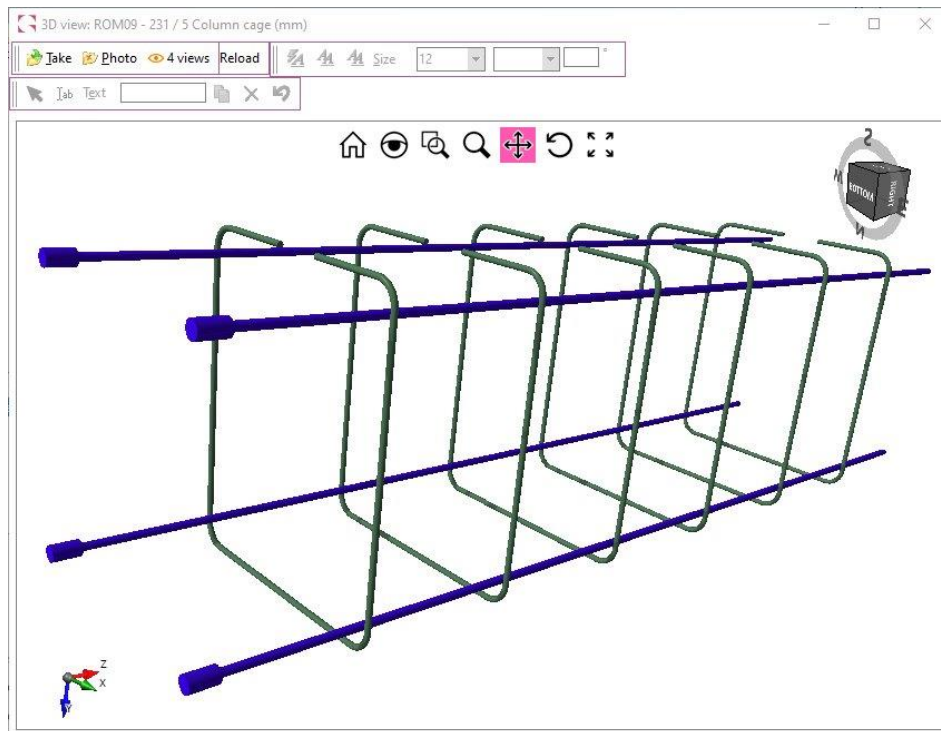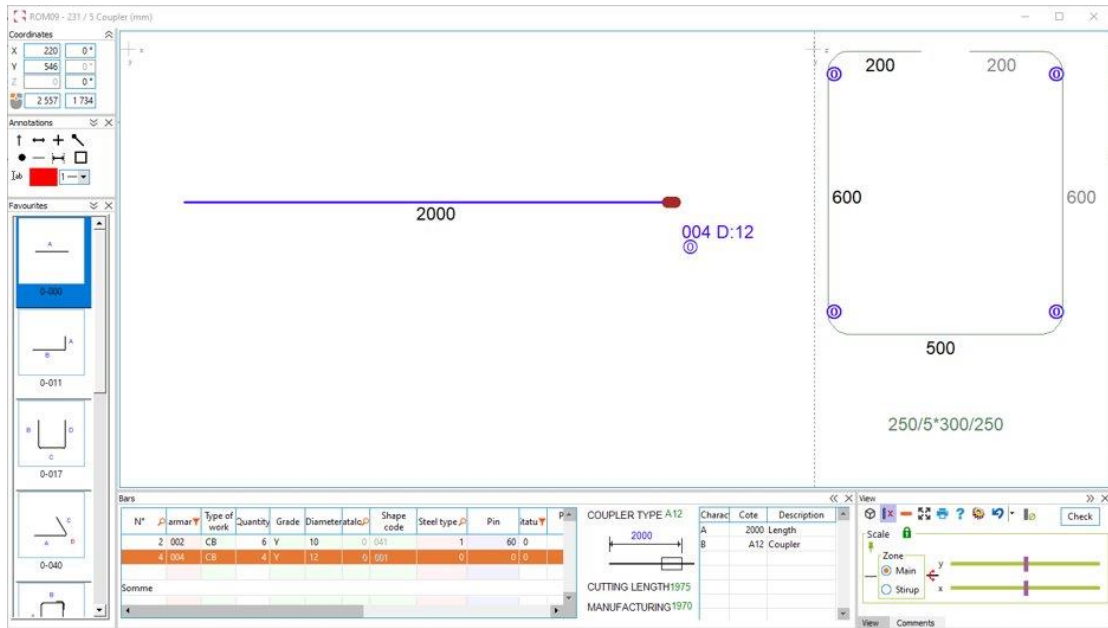
## 1.9   DETAIL PRINT

Users can print the 2d detailing with detail annotation and as well print the 3D assembly view within the same report. The user can take snapshots of the 3D and the module will allow users to text annotation onto the 3D view.
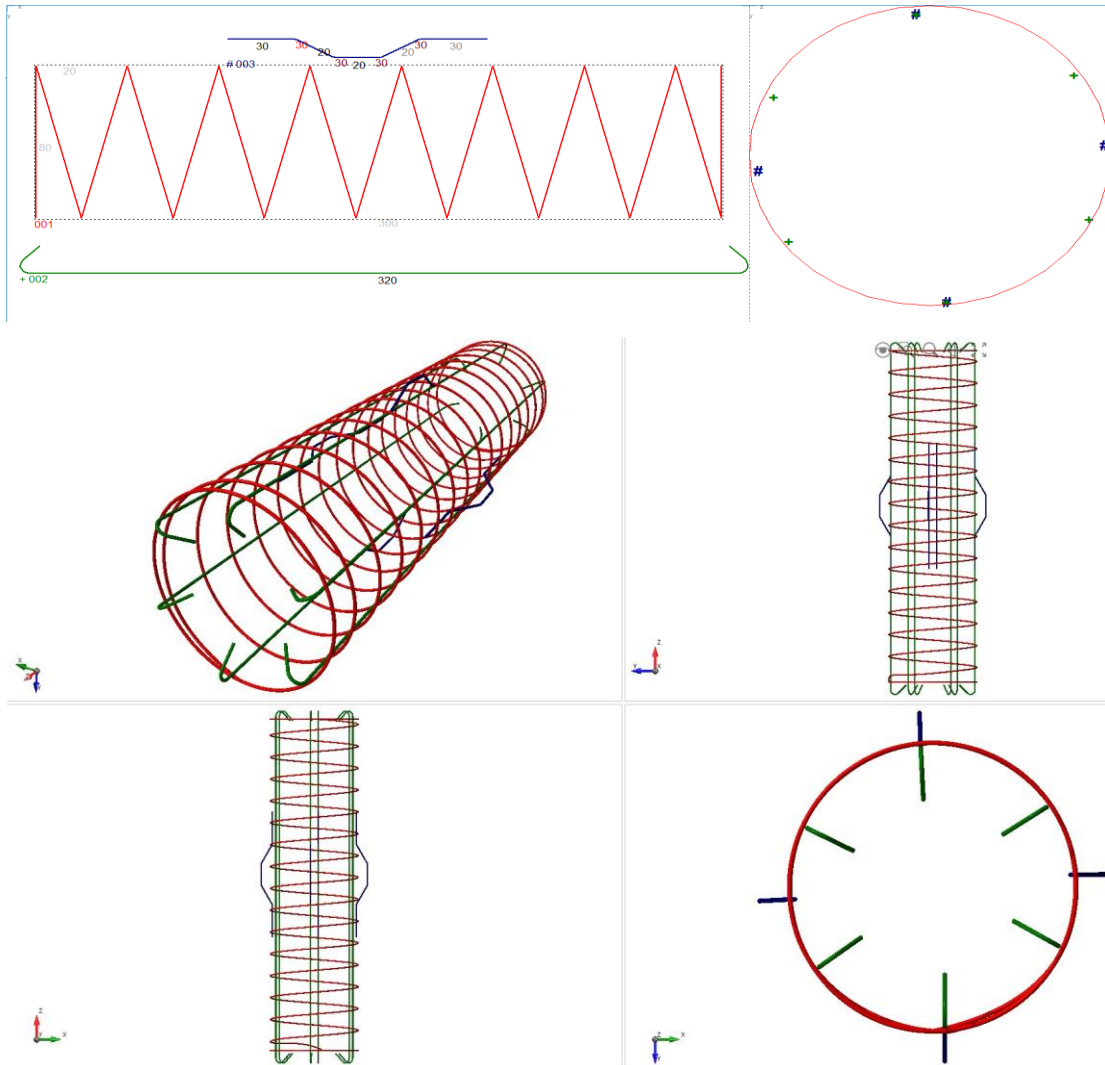


## 1.10  COUPLER DETAILING

Users can insert couplers to the assemble and it will display both on 2D and 3D view.

## 1.11 NEW ASSEMBLY ARRANGEMENT MODULE

Advance Workshop has now added a new module for Prefab Detailing, this module allows user to create their own template of assemblies, that can be reused multiple times when detailing. This will exceptionally reduce time when assembling rebars using the Prefab detailing tool.

Users can create standard and or formulated macro variables of the assembled rebar templates. To which the user can adjust and reuse whenever creating a new rebar assembly. As also this will allow users to add additional rebars to the template during Prefab detailing.
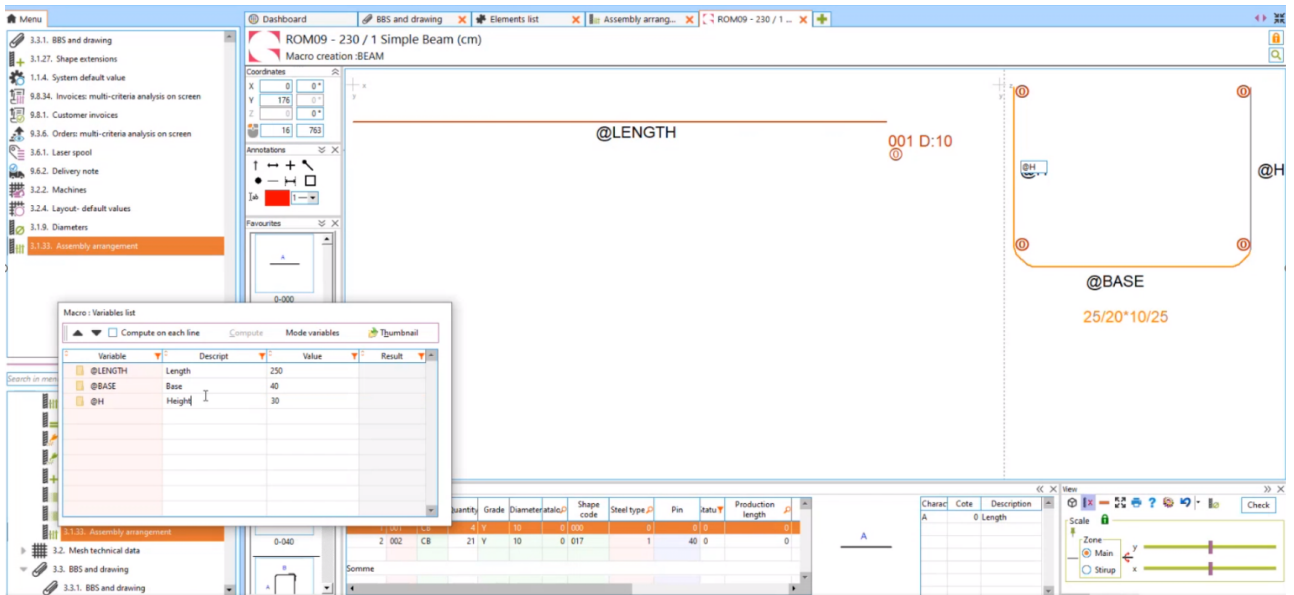
## 1.12 NEW OPTION COMMAND, UNDO AND IMPROVED UI/UX ANNOTATION

An improvement on User interface and User experience has been made on annotation and as well adding an *Undo* command.
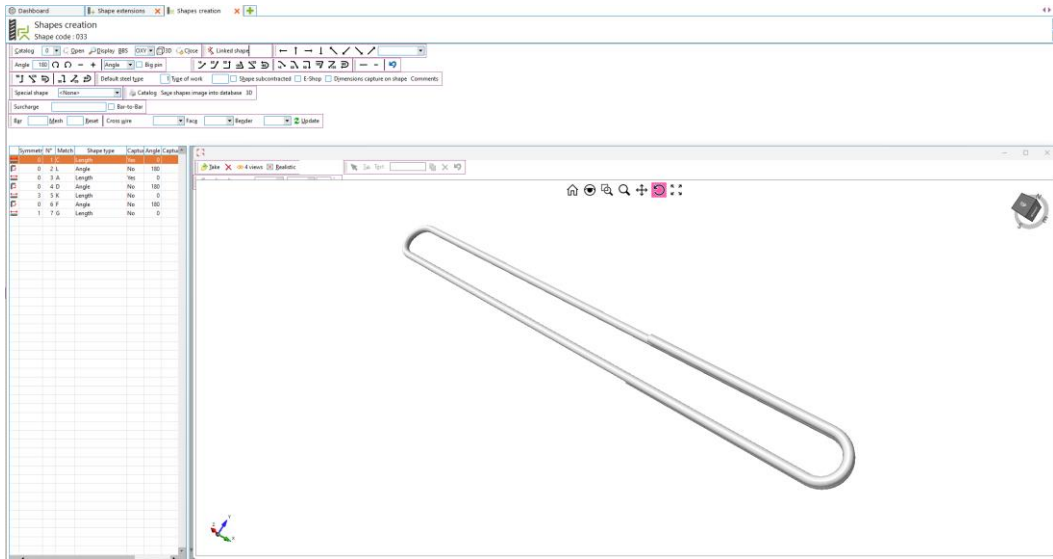
The users can now undo on its previous 30 steps and re-work on the detailing if needed.

# 2  3D SHAPE CREATION

Advance Workshop has now added a new module for creating shape codes and view them live in 3D.

# 3 PAYMENT CLAIM FEATURE

The **Payment Claim** feature is now available.

If required by the regulations, you can now use the Payment Claims to claim, "to be entitled to a payment for, or in relation to, the construction work carried out to date under a construction contract."

The construction contract prices and scheduled quantities are hosted in the job site, per zone and item.

The Payment Claim covers both delivered items and fixed/placed items, as per the Placing situation feature:

- delivered items: products that have been delivered on site;
- fixed/placed items: service of fixing/placing the products onsite.

**Payment Claim** data is displayed by zone, drawing/BBS, element, type (Delivered or Fixed), delivery note (or fixing situation), and item:
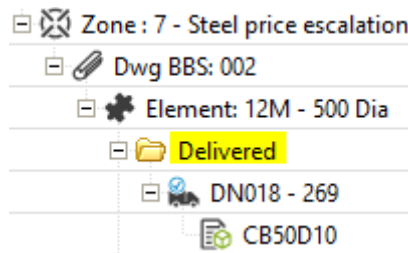


- (example with delivery note DN018-269)
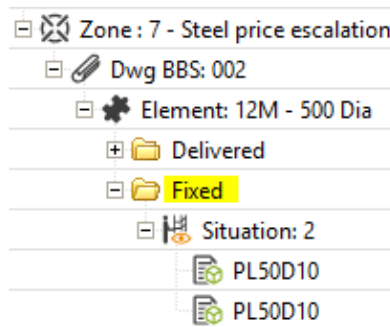


- (example with fixing situation number 2)

You can pick the delivery notes and/or fixing situation elements you want to include in the Payment Claim, and then save the Payment Claim, print it, and send it to your customer.

When your customer receives your Payment Claim, they can either:

- pay the amount claimed in the Payment Claim (in full) on or before the due date for payment; or
- if they dispute the Payment Claim, send you a written payment schedule stating the amount they are prepared to pay instead (which could be nothing).

You can then amend the claim (by excluding some delivery notes and/or fixing situation elements, or even by adjusting the quantities with "variances"), up until there has been a mutual/final agreement of the claim with your customer.

Once agreed, the Payment Claim can be converted into an invoice, and the invoice be sent to your customer. All that is left to claim will be available for the next Payment Claim that you address to your customer.

## 3.1 VARIATION FROM THE ORIGINAL/BASE CONTRACT

The pricing conditions of an end-customer contract may vary over time. New prices or additional quantities are agreed for one or more items. It is now possible to manage these variations from the original contract.

These variations will be tracked in the Payment Claim, enabling the differences to be identified. In this way, the Payment Claim will illustrate the differences between the base contract and the contract variation.

The variations from the base contract can be identified as such in the job site and they will be followed up to the Payment Claim, where the **Contract variation** elements will appear in the dedicated branch of the tree:



1. *Contract Variations* branch;
2. Delivered rebar item;
3. Fixed rebar item;
4. Delivered sundry item.

## 3.2 LUMP SUMP CONTRACTS

A **Lump Sum** is a contract invoiced on *Payment Claims* where a global quantity is agreed with your customer for a list of items. For each Payment Claim, you can compare the delivered or fixed claimed quantity against the initial contract quantity.

If, for example, at the end of the production and delivery process, 90% of the initial contract has been delivered to your customer and you are not going to deliver more, you can then adjust the claimed quantities to 100%.

Specific columns dedicated to **Lump Sum management** are the following:



- Total quantity to date (COU)

- total claimed quantity by zone-item, including previous payment claims

- Lumpsum (COU)

- estimated quantity as entered in Jobsite rebar items and Jobsite sundry items

- Total amount to date (COU)

- total claimed value by zone-item, including previous payment claims

- Lumpsum (NZD)

- estimated value (estimated quantity as entered in Jobsite rebar items and Jobsite sundry items multiplied by Price)

- Adjustment to Lumpsum (NZD)

- editable field to adjust the current claimed amount for one zone-item

# 4 FUNCTIONALITY DELIVERY OF GOODS RETURN (SALES):

Advance Workshop now can perform a delivery of good return on the sales aspect. When an End Customer returns goods, the Advance Workshop user can now create a credit note and reassign the delivery once requested by the end customer.
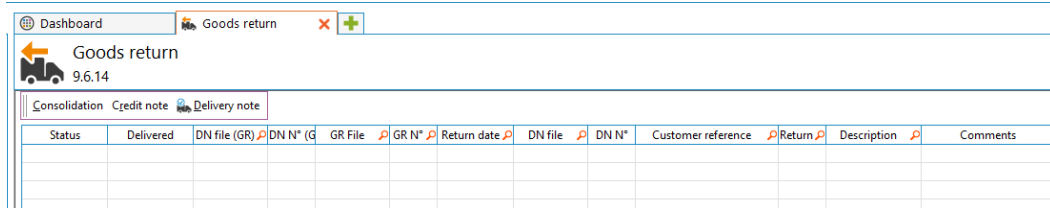
# 5 HIGH RESOLUTION ARRANGEMENT

Advance Workshop will now be compatible for high-resolution scale screens.
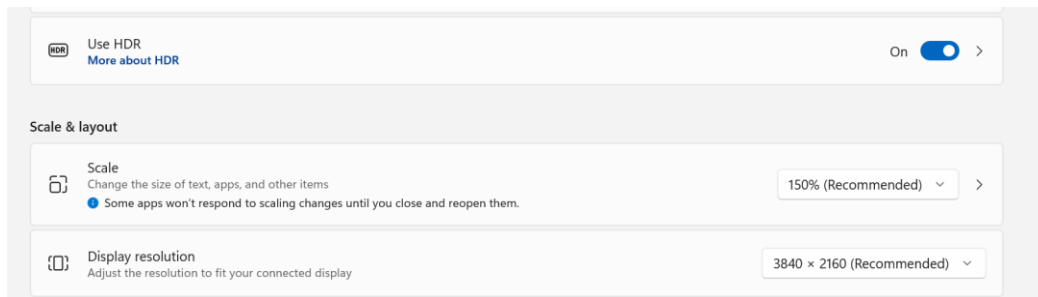
# 6 GTCx IMPORTATION (ADDITIONAL PACKAGE):

*Advance Design* and *Arche* software is used to design the structural rebar assemblies. The given software's will export the designed data in native Graitec format (GTCx format) and be imported to *Advance Worksho*p. The data will be used to process the manufacture of the designed structural rebar assemblies.
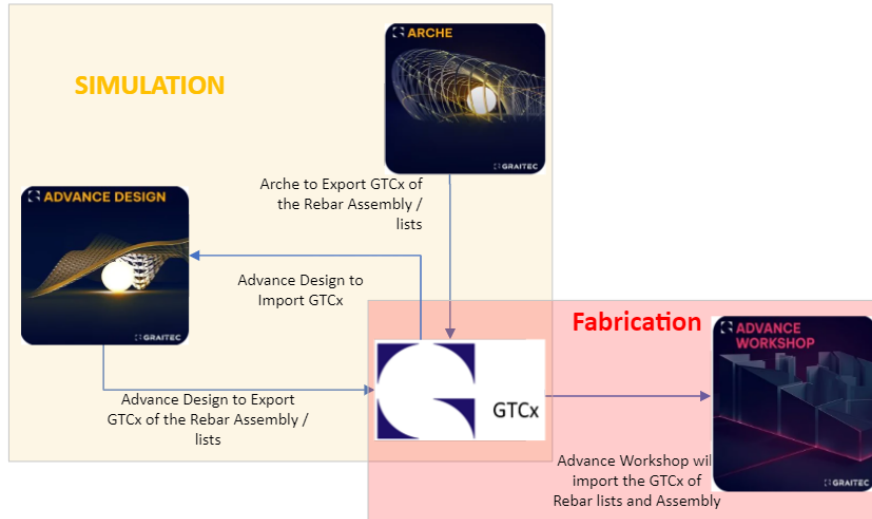


Advance Workshop will now be able to import bar list through GTCx format via *Arche* and *Advance* design software's. The user will have a dedicated *GTCx button* within the detailing module (BBS) where a user can seamlessly import the list of the *Bars* designed via Arche and or Advance Design.



Users will have the ability to feasibility check all rebars and import the list of rebars captured from the designed software. The list of rebars can then be ready to be processed as part of production.