

The Catalogue contains the 3D model of all the objects that may be used to build the Model of a given Physical Area.

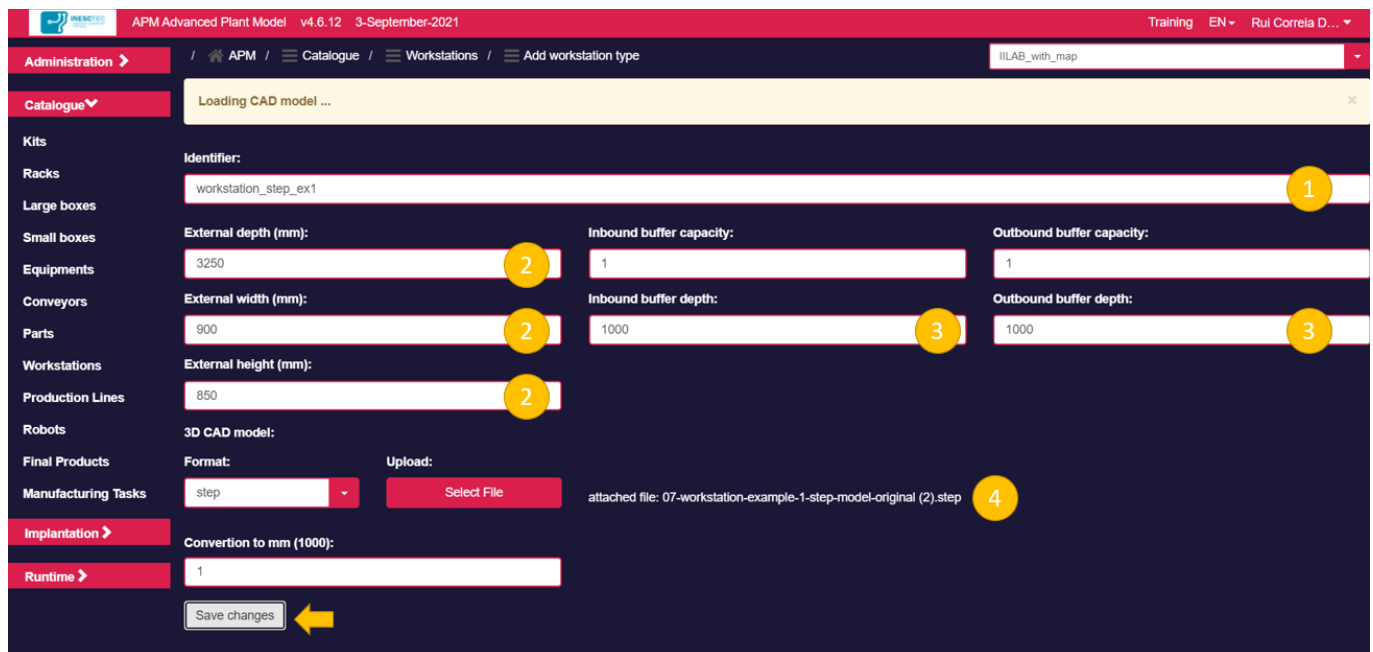
The Catalogue supports the following types of objects: Kits, Racks, Large boxes, Small boxes, Equipments, Conveyors, Parts, Workstations, Production Lines, Robots and Final Products.

Let's add a new Workstation to the Catalogue.

1. Go to **"Catalogue / Workstations"**
2. Press the top right button **"New workstation"** set the description fields (a workstation may have an inbound buffer and an outbound buffer which correspondent to the inbound / outbound spaces that may store temporarily the work in progress)
 - (1) Set the field **"Identifier field"** (DON't use blank spaces)
 - (2) Set the fields: **"External width"**, **"External depth"** and **"External height"**
 - (3) Set the fields: **"Inbound buffer depth"** and **"Outbound buffer depth"**


You may optionally associate a STEP model with the workstation (DON't use spaces in the Identifier field)

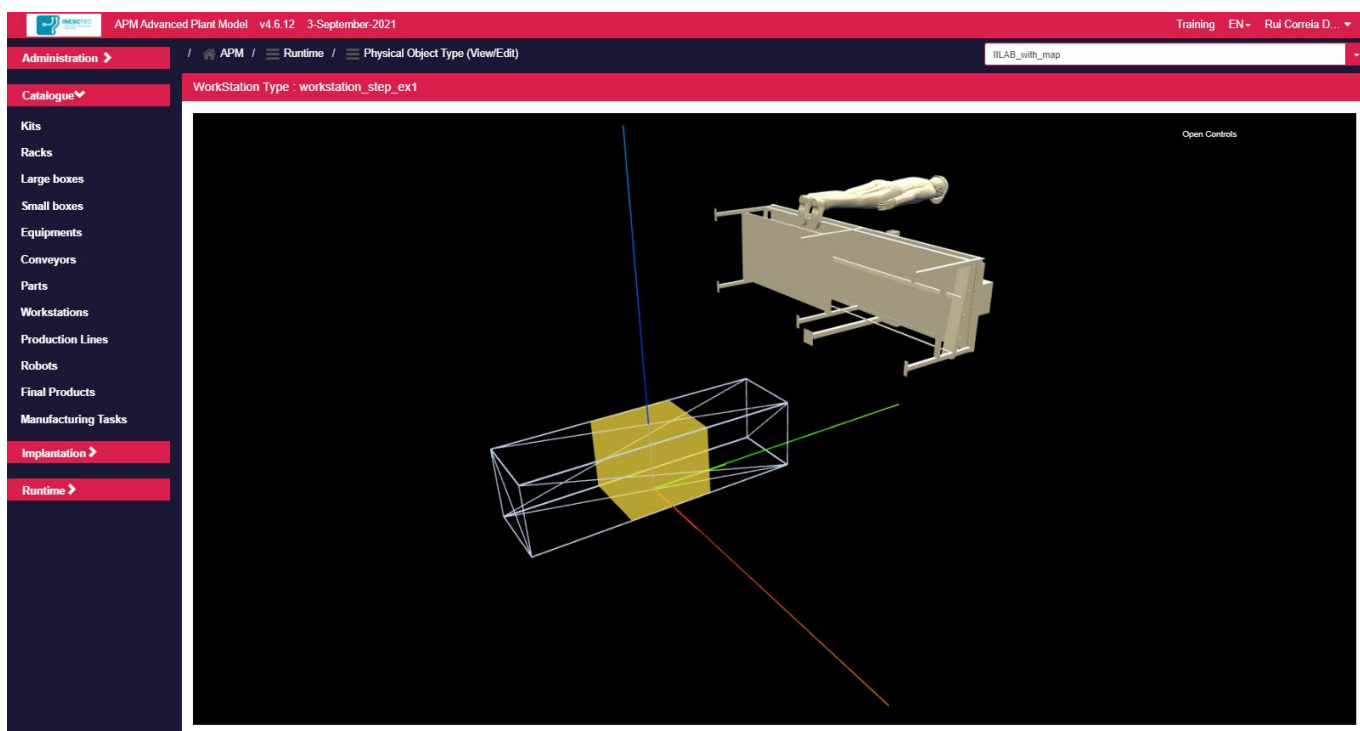
 - (4) Press the **"3D CAD model / Select file"** button
 - (5) Set the **"Conversion to mm"** field
3. Press the **"Save changes"** button and wait. When the upload is concluded the navigation will be redirected to the list of Workstations in the catalogue.



The screenshot shows the 'Add workstation type' form in the APM Advanced Plant Model interface. The form is titled 'Loading CAD model ...' and includes the following fields and controls:

- Identifier:** A text input field containing 'workstation_step_ex1' (marked with a yellow circle 1).
- External depth (mm):** A text input field containing '3250' (marked with a yellow circle 2).
- External width (mm):** A text input field containing '900' (marked with a yellow circle 2).
- External height (mm):** A text input field containing '850' (marked with a yellow circle 2).
- Inbound buffer capacity:** A text input field containing '1'.
- Inbound buffer depth:** A text input field containing '1000' (marked with a yellow circle 3).
- Outbound buffer capacity:** A text input field containing '1'.
- Outbound buffer depth:** A text input field containing '1000' (marked with a yellow circle 3).
- 3D CAD model:** A section with a 'Format:' dropdown set to 'step' and an 'Upload:' button labeled 'Select File' (marked with a yellow circle 4). Below it, the text 'attached file: 07-workstation-example-1-step-model-original (2).step' is displayed.
- Conversion to mm (1000):** A text input field containing '1'.
- Save changes:** A button at the bottom left, highlighted with a yellow arrow.

4. In the list of Workstations, press the  icon and check if the defined Workstation has the right form. It may be necessary to align the CAD model with the respective Bounding Volume (like in the picture below).



5. To align the CAD model with the respective Bounding Volume, press the top right button “**Open Controls**”.
- The following menu comprising four categories will expand:
- **Status:** gives feedback about the user’s actions.
 - **Position:** adjusts the CAD model position.
 - **Rotation:** adjusts the CAD model orientation.
 - **Actions:** allows to **undo**, **reset** and **update** the configuration.
 - **Undo** : loads the last saved configuration.
 - **Reset** : sets to zero the configuration.
 - **Update:** saves the current configuration.

Status The configuration is up to date

▸ Camera view

▾ Grid

grid 1x1 m

grid 10x10 cm

▾ Position (large displacement)

red axis	<input type="range"/>	0
green axis	<input type="range"/>	0
blue axis	<input type="range"/>	0

▾ Position (fine-tune displacement)

red axis (fine-tune)	<input type="range"/>	0
green axis (fine-tune)	<input type="range"/>	0
blue axis (fine-tune)	<input type="range"/>	0

▾ Rotation

rotate over red axis	<input type="range"/>	0
rotate over green axis	<input type="range"/>	0
rotate over blue axis	<input type="range"/>	0

▾ Actions

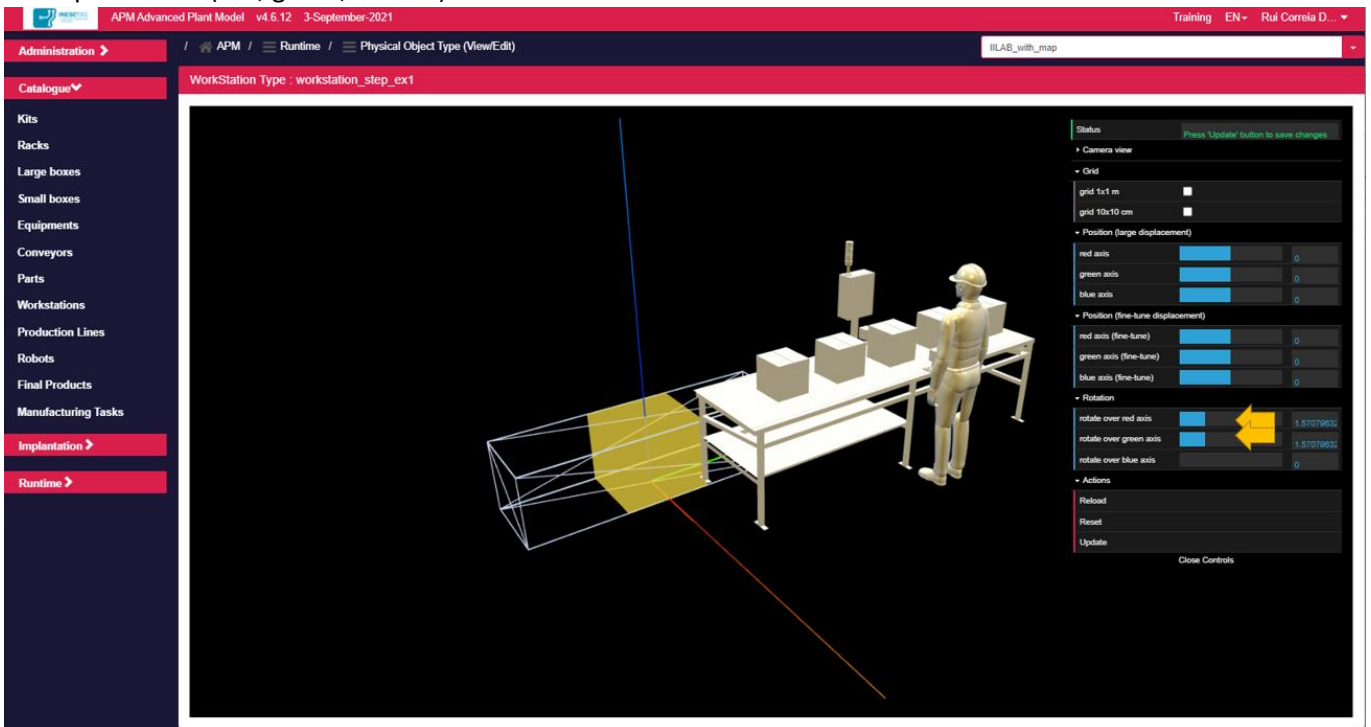
Reload

Reset

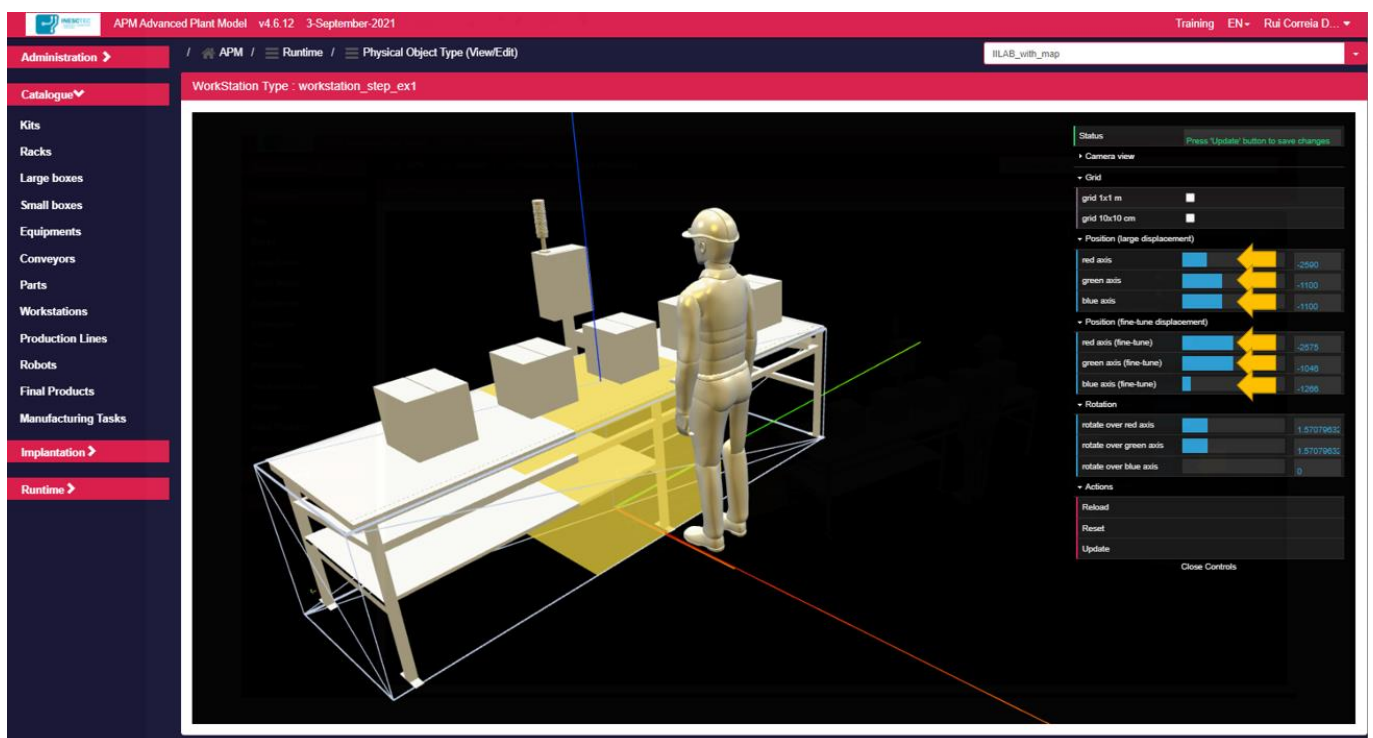
Update

Close Controls

5.1. Adjust CAD model **orientation** using the **Rotation sliders**. Each slider performs the rotation over a specific axis (red, green, or blue).



5.2. Adjust CAD model **location** using the **Position sliders**. Each slider performs a translation over a specific axis (red, green, or blue).



5.3. Once the CAD model is aligned with the Bounding Volume press Update button to save the configuration. A message is presented “The configuration is up to date” confirming the action.

