# ULTRA ADD\_IN



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## Contenido

Introduction:		2
Setti	Steps: 2   Unpacking 2   Add-in files to robot studio 2	
1.	Unpacking	2
2.	Add-in files to robot studio	2
3.	Add new Cells	2
4.	Add-in initialization.	3
Functionality:		4
•	Confirmation (Generate)	4
•	Moving options (UP,DOWN,LEFT,RIGTH)	4
•	Station Configuration (Station, Fences)	4
•	IO connection (Autoconnect)	5
•	Contact info (Info)	5

## Introduction:

This adding has been designed and developed in order to give some facilities to the task of creating new layout and production lanes by easy import, correct positioning, easy connect... all that giving less user work.

The idea is that the user has a data base of cells that can be concatenated between then, so it is possible to interconnect them to perform different products.

## **Setting Steps:**

## 1. Unpacking

First move the file to the desktop and proceed to unpack the .rar.







The folder must be in the desktop!

## 2. Add-in files to robot studio.

Go to "...\Desktop\UltraAddin\ULTRA-ADDING" folder and copy the files ULTRA-ADDING.rsaddin and ULTRA-ADDING.sln, then go to "C:\Program Files (x86)\ABB\RobotStudio 2023\Bin\Addins" and paste those files, the do the same with the file ULTRA-ADDING.dll located in "...\Desktop\UltraAddin\ULTRA-ADDING\obj\Debug"

#### 3. Add new Cells.

In order to add more cells to the addin the cells has to be included in the next folder:

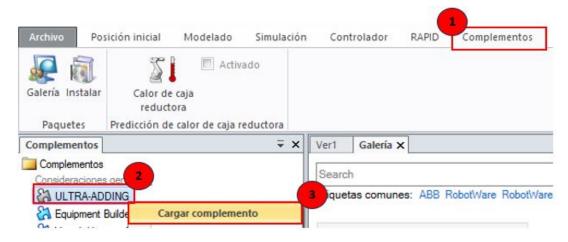
"...\Desktop\UltraAddin\STATIONS"

Also the extension has to be .rslib.

After adding the cells in the folder restart RobotStudio and the cells will be available to use.

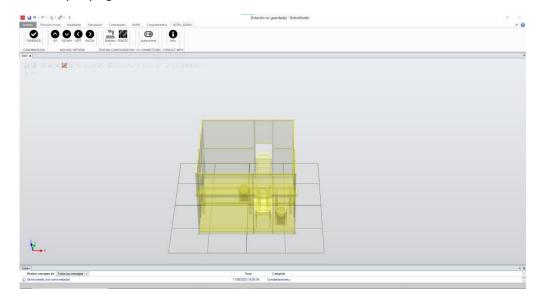
DO NOT DELETE THE STATION -GHOST.rslib

#### 4. Add-in initialization.

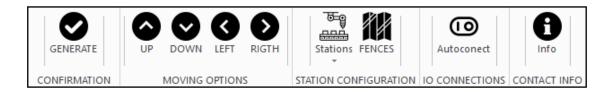


- 1. Launch the RobotStudio application on your computer then, click on the "Complements" option. This action will open the Complements window.
- 2. Inside the Complements window, identify the "ULTRA-ADDING" add-in. It should be listed among the available options. To load the ULTRA-ADDING add-in, perform a left click on the "ULTRA-ADDING" option.
- 3. then proceed by clicking the "Load Complement" button. This step will initiate the loading process of the add-in.

If all the preceding steps were executed successfully, the application will display a visual confirmation. This confirmation will be in the form of an interface resembling the image shown in the accompanying illustration.



## Functionality:



## • Confirmation (Generate)

The button GENERATE in CONFIRMATION load a new station with the position and type that was selected before.

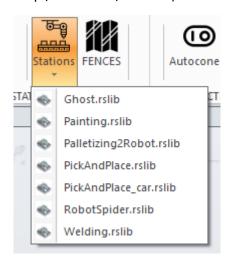
## Moving options (UP,DOWN,LEFT,RIGTH)

The buttons inside the group MOVING OPTIONS are used to select where the station is going to be located.

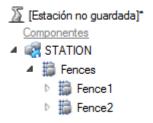
## • Station Configuration (Station, Fences)

The stations button is a popup selector that allows the user to select which cell is going to be loaded. The stations available in this pop up are the ones located into the folder "Stations".

That folder should be in: ("Desktop\UltraAddin\Stations")



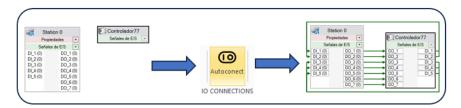
The FENCES button is to hide the fences of all the stations by one click, for that, into the architecture of the cell it must be a folder named Fences with all the fences wanted to be hidden when pressing the button. (See the next imagen to better understand)



## • IO connection (Autoconnect)

After loading a new station and its controller, there is a simple way to connect the signals between the smart component and the controller block. It is important to have the same signal name on both sides of the connection.

The controller must be added before adding the next station, and after creating the controller the only step to do is clicking the Auto connect button.



## • Contact info (Info)

This button will display a window with some contact information in order to solve doubts or any inconvenience about the add-in.

## Mouse clicking

While designing the layout, create a invisible box around the cells and include it to the cell smart component, also, all the smart component has to have the center point in (0,0,0) so the positioner can work correctly.

The adding has been designed to use cells that are 2.5x2.5 meters.