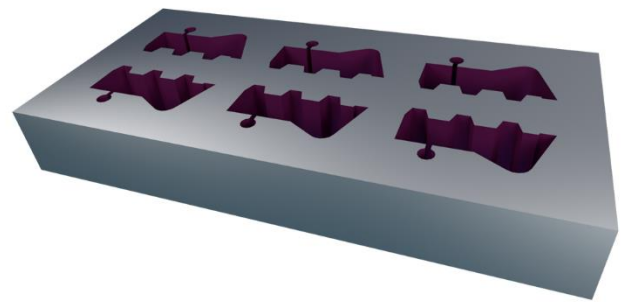


GO2cam

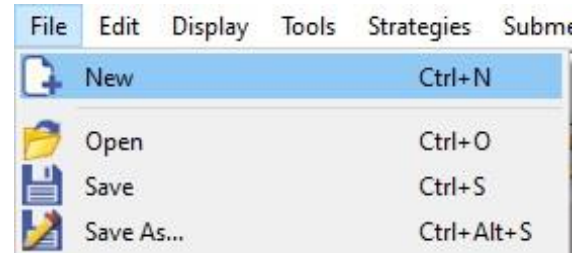


GO2cam V6.10 Tutorial W03 – Extrusion Die

I. Design:

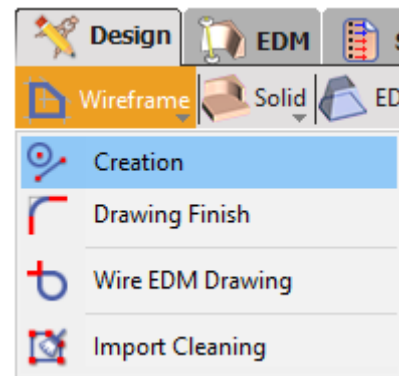
1. Start a new drawing :

- Left click on **File** then choose **New**



2. Start sketch:

- Left click on **Wireframe**
- Left click on **Creation**





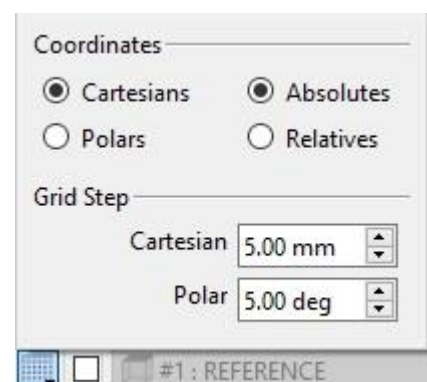
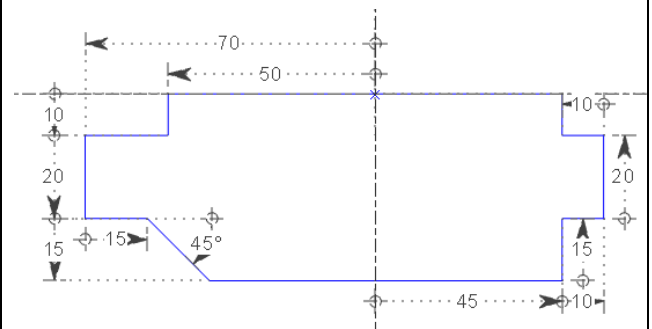
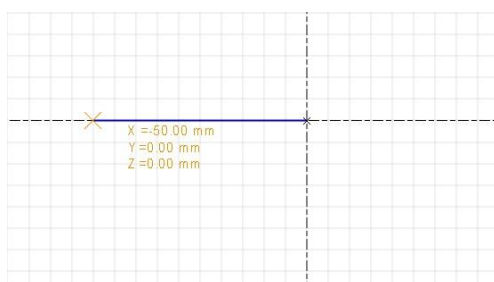
3. Creation of sketch:

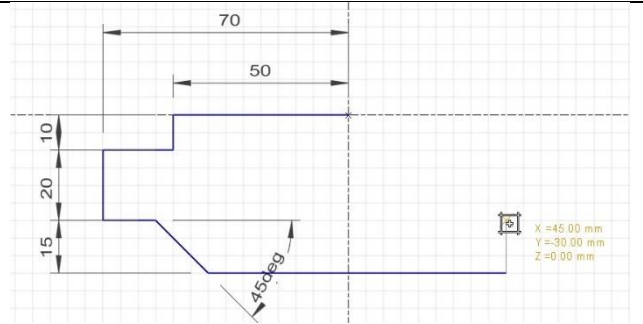
You need to repeat the drawing on the right.

The « layout design » is found in the data folder.

Make use of :


- Left click on  to set your Cartesian value to 5
- GRID (Press+Hold CTRL key)
- Segment command 
- Start at the origin and proceed to the left as shown below.

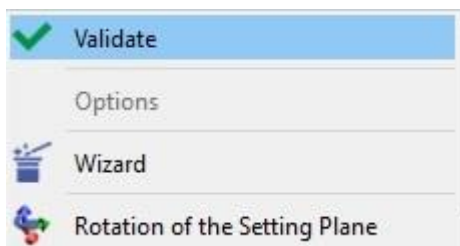





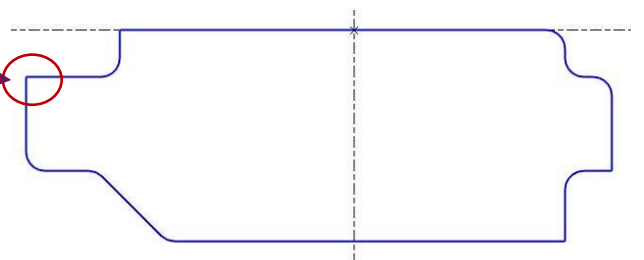
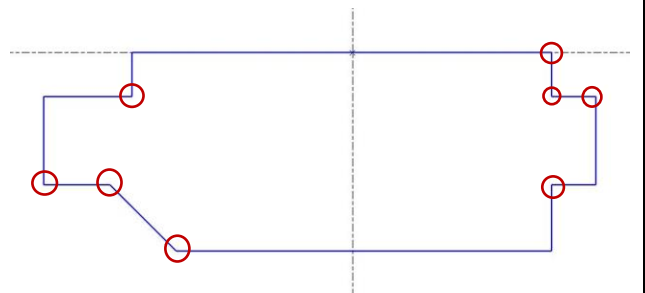
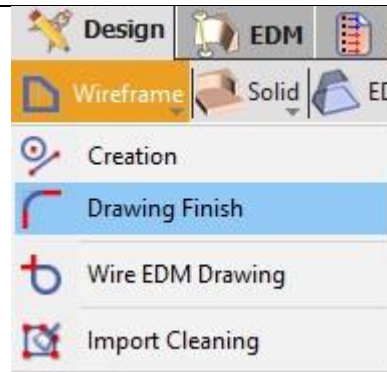
4. Creation of fillet :

- In the menu Wireframe
- Selection **Drawing Finishing**

- Left click on **Fillet** 
- Type the radius value 5
- Left click on the corner as show in the picture.
- Right click in working space and validate.




- The fillet command still active.
- Change the radius to 10
- And apply a fillet on the corner as shown.
- Left click on validate 




5. Definition of thread point :

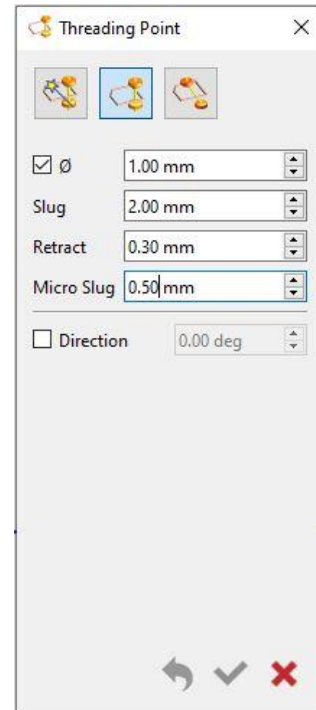
- Select the menu **Threading**
- Left click on **Manual Threadings on profiles**



- Select **Manual Threading** 
- Enter value 2 in Slug
- Keep the retract value at 0.3

As for coordinates, move your cursor on your working



- Type 0 in X
- Type -3 in Y
- Left click on 



6. Save file:

- Left click on menu **File**
- Left click on **Save as**
- Type **“W03_Extrusion_Die”** as name
- Press Enter or Left click on save

- **Definition of Taper:**

- Enter menu  EDM geom
- Left click on the function **Taper on profiles** 
- Left click on the profile
- If you need to **reverse** the direction of the profile,




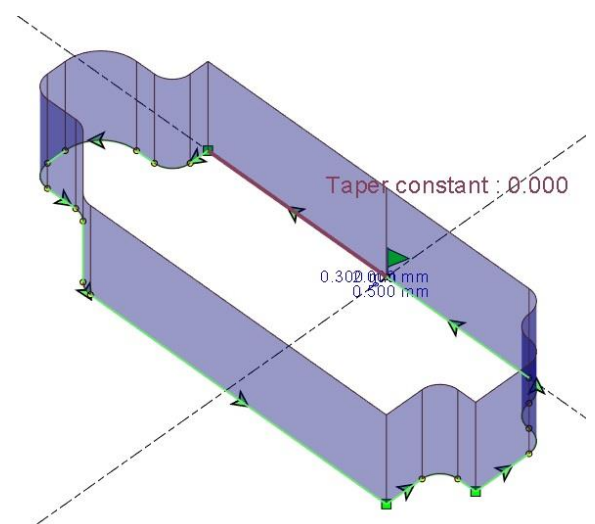
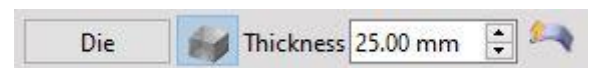
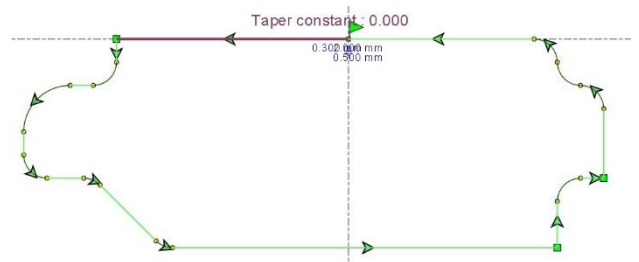
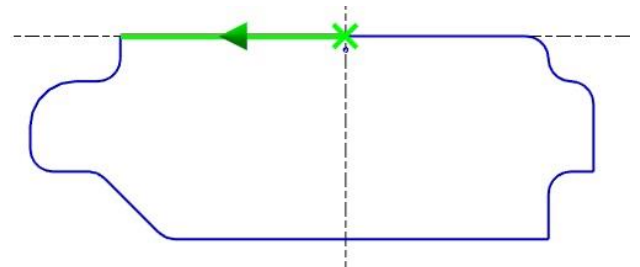
- Otherwise, close the profile as follows



- Left click on Validate 



Creation of Taper:






- In the dialog zone, Left click twice in **Thickness**, type **25**
- Check if the taper direction is upward , otherwise Left click on the icon to inverse






Use the layout design as a guideline for the following step.

- Select the taper type Evolutive to apply to the selected item and enter the value of 5 and 10 as shown in the picture

Use the following command   move to the next or previous element.


- Left click on 
- Untick the box for corner 
- Left click on 
- Taper constant should be 10 deg 
- Left click on 

For the radius, we have 3 modes : **Constant**, **Iso** and **Programmed** to define the result radius.

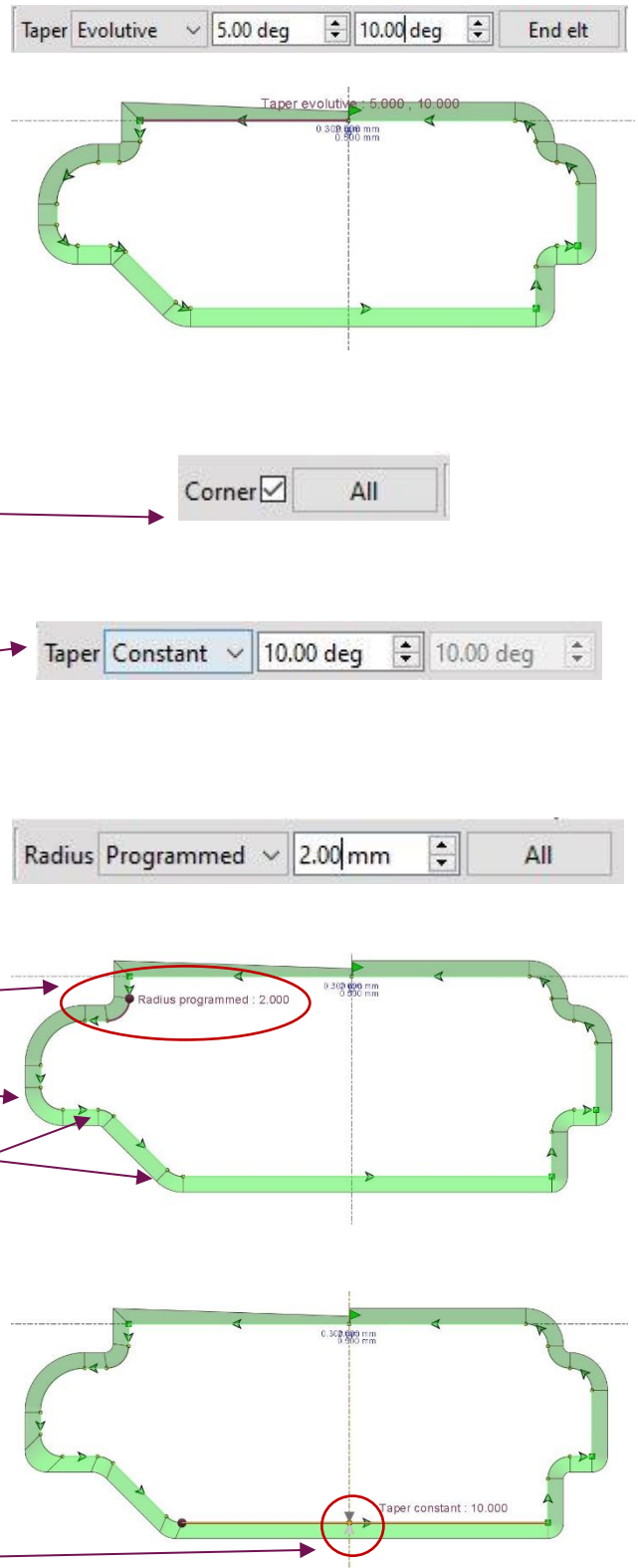
- Enter the Taper type « programmed » and value of 2 
- Left click on  till this corner.
- This time select the radius type « ISO » 
- And apply the same procedure on the following corners.

If an element needs to be split to have different taper types and angles, use the "Cut the profile" function





- Left click on , move your cursor on the element to cut and position the your cursor at this intersection to cut the element

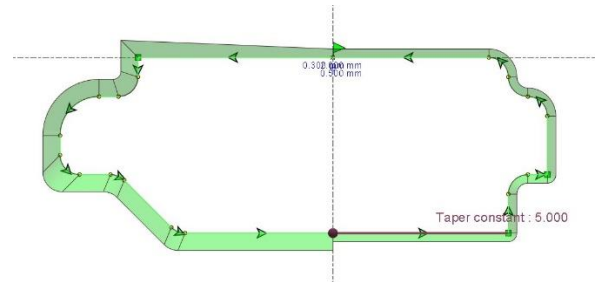
Half of the taper has been completed.



Continuing with the other half.


- Left click on 
- Change the value for Taper constant to 5
- Left click on 
- For the corner, untick the box.

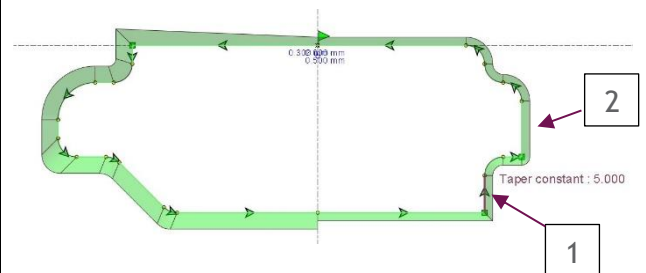
Taper Constant 5.00 deg



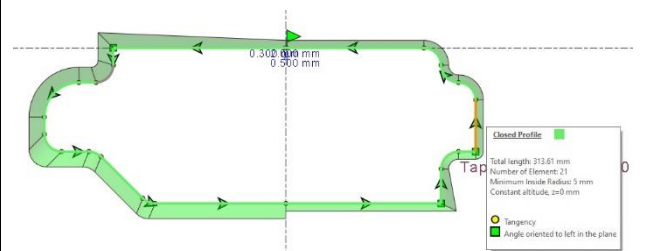
Corner ☒ All



We will have another evolutive taper start from 1 to 2.

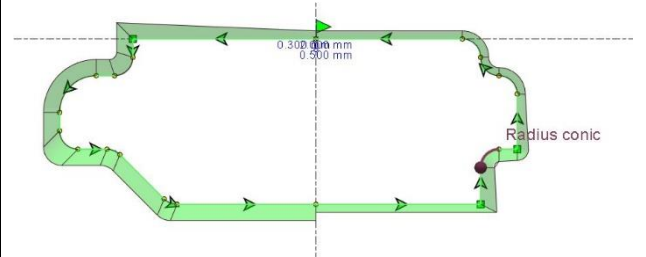
- Left click on  to start with the element at 1
- Change the taper type to evolutive
- Change the value to 10 deg to 5 deg
- Left click on **End elt**
- Select the element at 2.



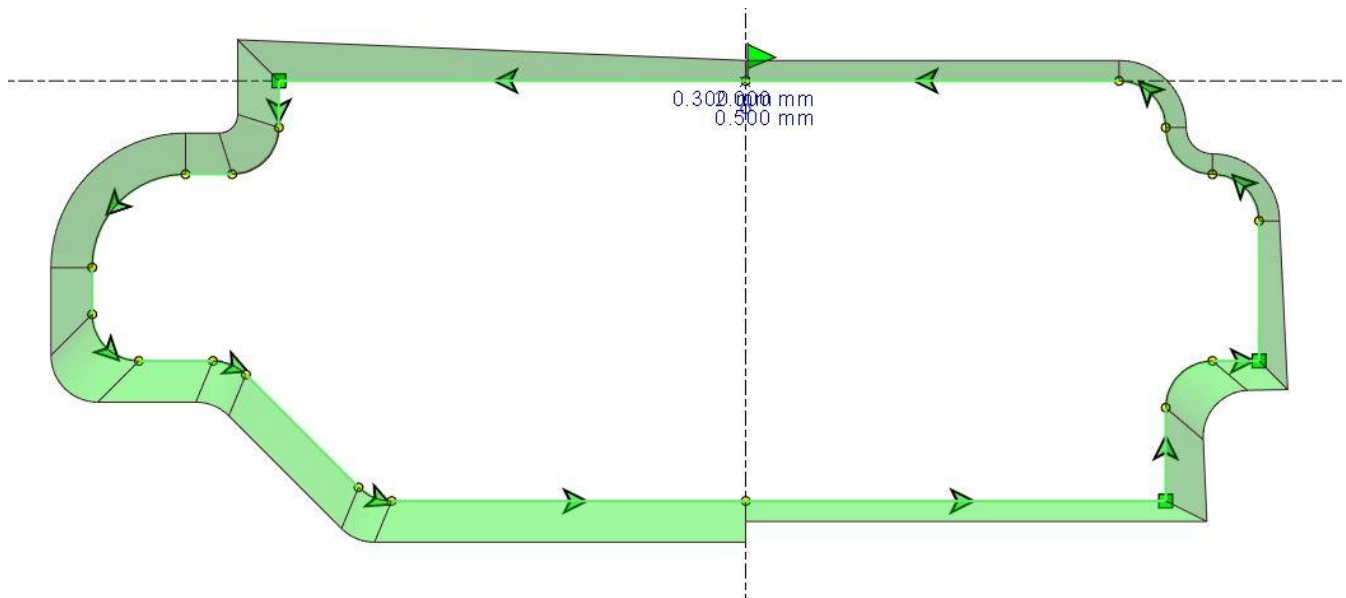
Taper Evolutive 10.00 deg 5.00 deg End elt



- Left click on 
- Change the type of radius to « ISO ».
- Left click on  till the conical corner
- Untick the corner.



- Left click on  to validate this function



II. Machining of single cut

1. Start:

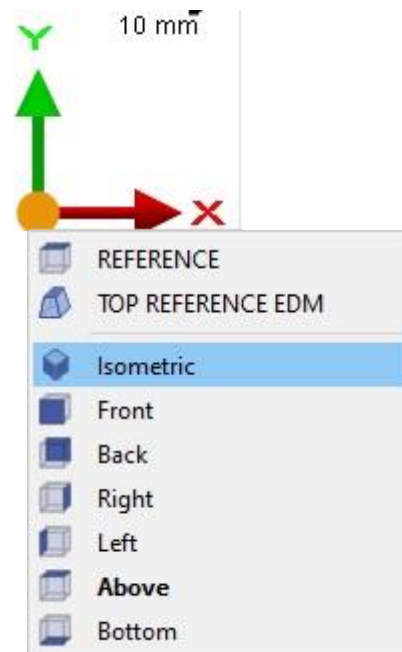
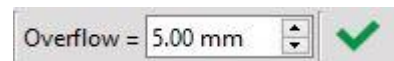
- Enter in menu



Automatically create stock based on your geometry.

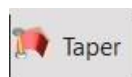
Note: This is a default definition of parallelepipedic stock, with a constant overflow of 5 mm around the geometry.

- Modify Stock:
 - Left click twice in Zmini and type 0
 - Left click twice in Zmaxi and type 25
- Switch to isometric view, 3 ways:
 - Left click on **change of views**
 - Right click on **interactive axis system** to access the **list of views**.
 - Press **F8** to access the **list of views**.



2. Selection of geometry:

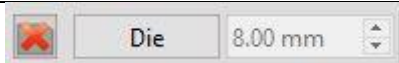
- Left click on the menu



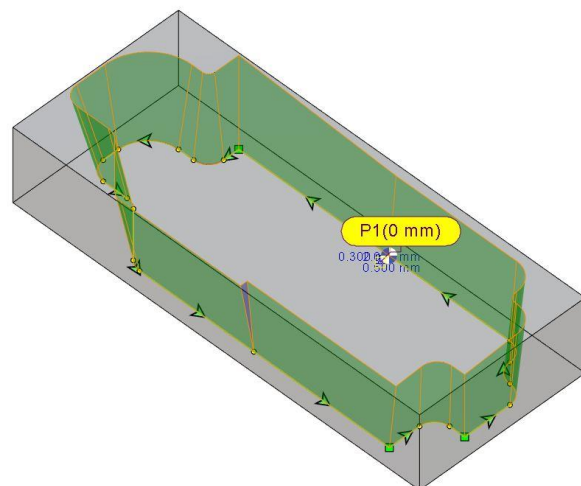
- Left click on selection of profile




- Choose mode Die



- Left click on the profile, the height and taper boxes must remain at 0 because the programming plane is 0 and the taper has been created



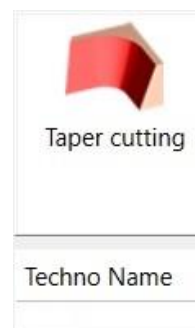
3. Selection of Tool:

- Left click on 
- In the list of tool, select tool "Cobra Cut 0.25"



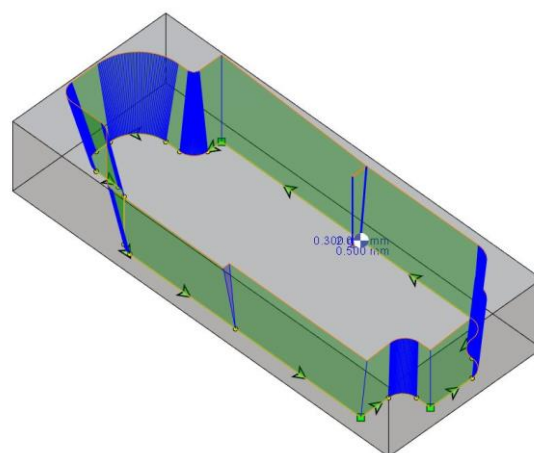
4. Selection of cycle:

- Left click on 
- Then select Taper Cutting



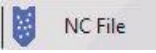



5. Calculation of cycle:

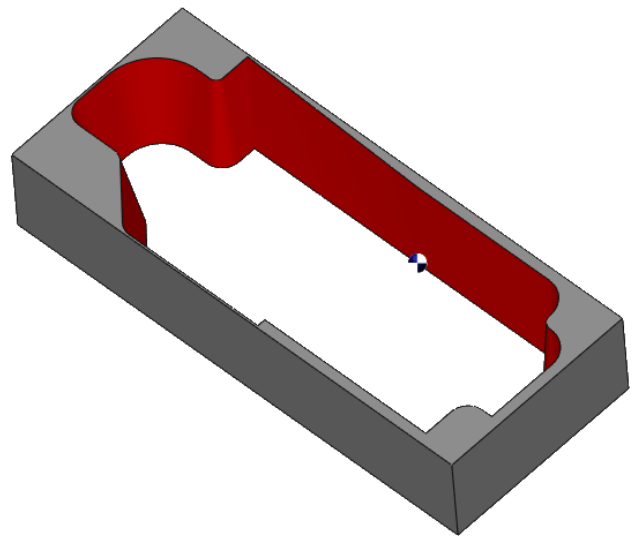
- Left click on Cycle Calculation




III. Simulation and NC block output:

1. Simulation :

- Enter in 
- Left click on **Simulation** 
- Left click on  Or click the space bar to start the simulation in step-by-step mode
- Left click on  Or press the Escap key to stop the simulation.



2. Generation of ISO program:

- Left click on 
- In the proposed list, Left click on E60_FanucW
- Left click on **Open**, Left click on **Confirm**

The ISO program is generated.

