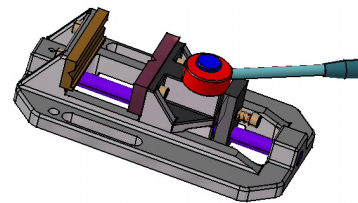


TP2

Support: vice with quick.tightening



Objective: Draw a simple assembly.

Procedure :

For any drawing, you must open the file that contains the 3D part.

- open the file **Mobile_vice_jaws** stored in the directory **Q:/...../planning/TP2**

- click on  and choose **drawing** or select **File->New....->Drawing** The drawing workshop is launched.

- to select **A2ISO**, check the box **Landscape** and click on **okay** The drawing sheet appears

Creation of the frame and title block

- create a title block using the TP1 approach

Creation of views

- Click on **Edit->View Layer**

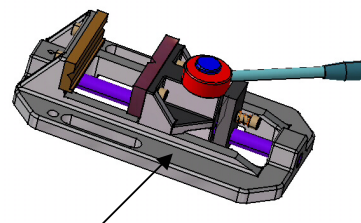
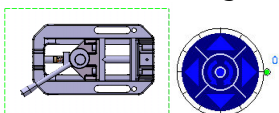
- click on **Window -> Vertical Tile** to display the 3D part and the drawing sheet


- click in the drawing window to make it active

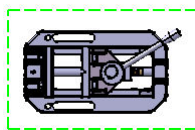
Inserting a front view


- click on  Or on **Insert->views->projections->front view** on the 3D part that is open

- select the surface marked by the arrow of the blue arrows and a green frame is displayed:



- straighten the view as follows using the arrow 



- validate by clicking on 

- place the view, as on the drawing, using the mouse (by clicking on the red frame and keeping the button pressed) .

Inserting a Section View

to draw the cutting plane.


- you can select points and holes.
- you can draw lines

To complete the cutting plane, double click on the last point.

- you can select a plane on the 3D part.

- zoom in the figure

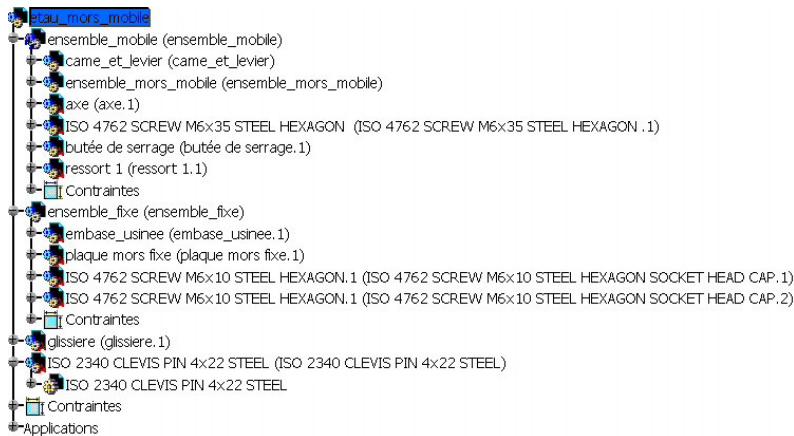


- click on  WhereInsert->Views->Sections->Broken Section
- draw a horizontal line corresponding to the cutting plane
- place the view as on the plan (see file)

change display properties of parts

in the section view it would be desirable to represent the axes and parts of revolution not cut

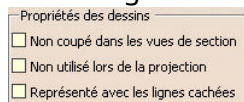
- make the 3D window active by clicking inside
- expand the tree structure as shown in the figure:



- right click on  axe (axe.1)
- choose properties



- click on the tab
- the dialog box is displayed



- check the box ☒ Non coupé dans les vues de section
- click OK

- do the same procedure for:

-  glissiere (glissiere.1)
-  ISO 2340 CLEVIS PIN 4x22 STEEL (ISO 2340 CLEVIS PIN 4x22 STEEL)
-  ISO 4762 SCREW M6x35 STEEL HEXAGON (ISO 4762 SCREW M6x35 STEEL HEXAGON .1)

- click on *file->Save all*

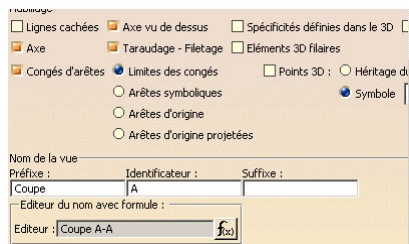
- make the drawing window active



- click on to update the views
- double-click on the AA section view to activate this view (the frame turns red)
- right-click on the AA section view
- choose properties



- click on the tab
- the dialog box is displayed



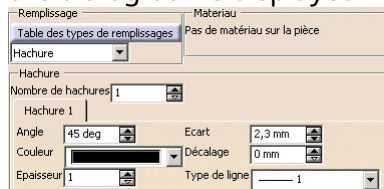
- check the box ☐ Spécificités définies dans le 3D
- click OK

modification of hatching

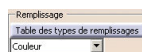
- zoom in on the spring
- right-click on the hatches of the spring or its outline
- choose properties

- click on the tab **Remplissage**

the dialog box is displayed



- choose color in the fill area
- click OK



Inserting a projected view

- double-click on the AA section view to activate this view (the frame turns red)

- Click on the icon **Insert -> Views**

>Projections->Projection

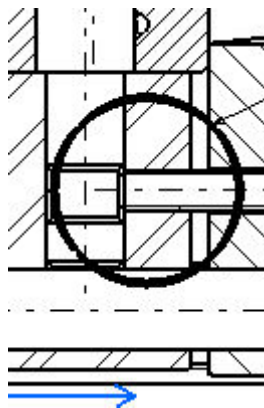
- place the left view



Choose Where

creating a detail view

- click on
- draw the circle as in the figure




- place the detail as on the plan (see file)

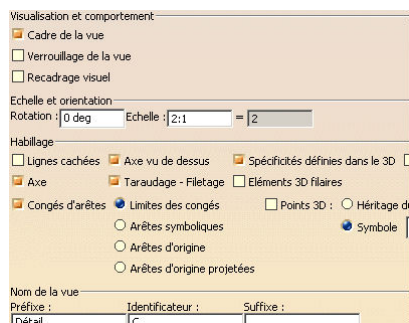
modification of the detail view


- right click on the detail view

- choose properties

- click on the tab 

the dialog box is displayed



- check the box  Spécificités définies dans le 3D

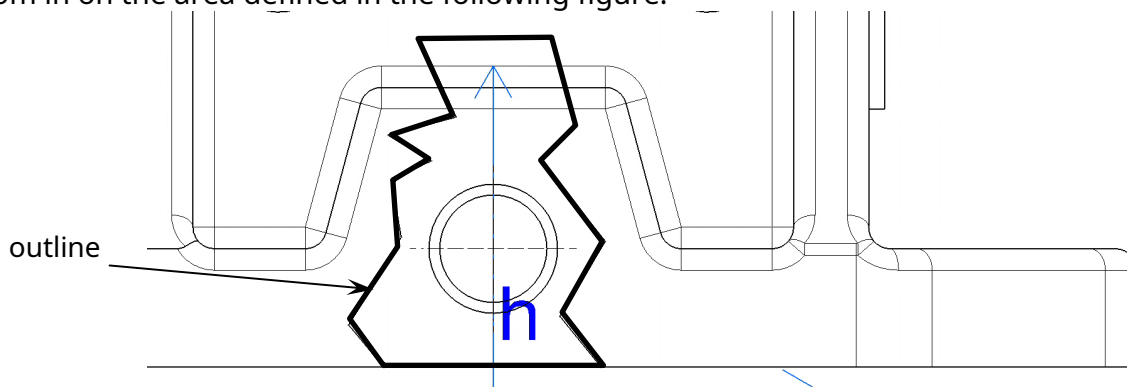
- put a ladder **3:1** in the zone



insertion of a cutaway in the left view

- make the left view active by double clicking on it (the view frame turns red)

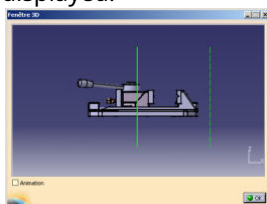
- zoom in on the area defined in the following figure:



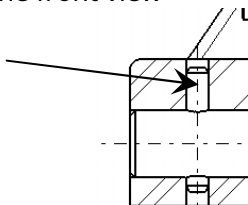
- click on  Where **Insert->views->local sections->** 

- draw an outline as in the figure

when the contour is closed the following window is displayed:




- click on the axis marked with an arrow in the front view




the cutaway section plane is displayed in green in the window

- click OK

BOM creation

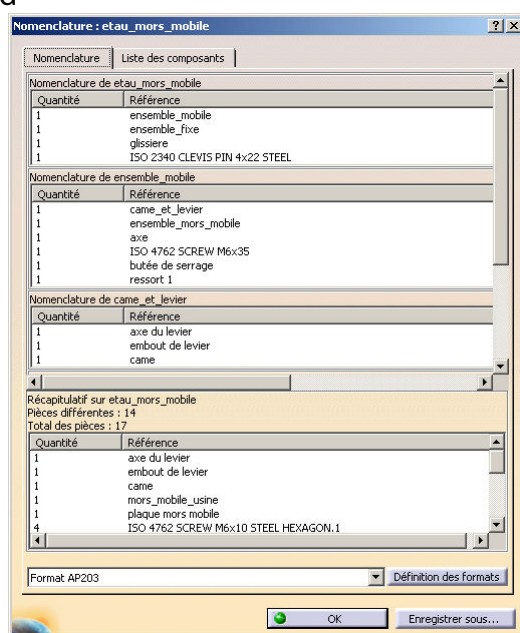
- make the 3D window active
- click on Start->Infrastructure->Product structure numbering of parts
- click on  etau_mors_mobile in the construction tree

- click on 

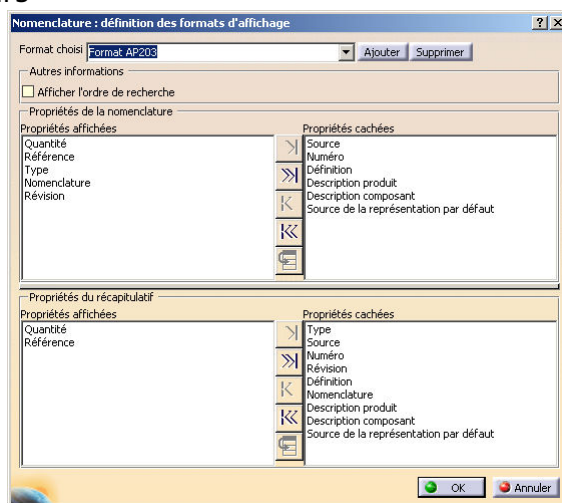
The following dialog box appears





- click OK
- click on Analysis->BOM the following dialog box is displayed

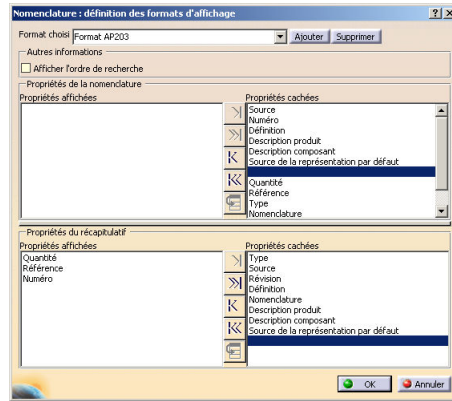


- click on  Définition des formats
- The following dialog box appears



- click on  BOM properties

- select Number of displayed properties
- click on 
- select Number from the list of displayed properties
- click on 
- click on quantity (the first in the list)
- the following list should appear on the screen




- click OK
- the following list should appear on the screen



Pièces différentes : 14		
Total des pièces : 17		
Numéro	Quantité	Référence
1	1	axe du levier
2	1	embout de levier
3	1	came
4	1	mors_mobile_usine
5	1	plaque mors mobile
6	4	ISO 4762 SCREW M6x10 STEEL HEXAGON.1
7	1	axe





- click OK
- make the drawing window active
- click on **Edit->Background layer**

- choose the anchor point of the text at the bottom right by clicking on 


- click on  or Insert->Drawing->
- select in the 3D window the root of the construction tree
- click above the title block the nomenclature is displayed

14	1	ISO 2340 CLEVIS PIN 4x22 STEEL	4
13	1	glissière	
12	1	plaque mors fixe	
11	1	embase usinée	
10	1	ressort 1	3
9	1	butée de serrage	
8	1	ISO 4762 SCREW M6x35	
7	1	axe	
6	4	ISO 4762 SCREW M6x10 STEEL HEXAGON.1	2
5	1	plaque mors mobile	
4	1	mors mobile usine	
3	1	came	
2	1	embout de levier	1
1	1	axe du levier	
Total des pièces : 17			
Pièces différentes : 14			
Récapitulatif sur etau_mors_mobile			
Etau à serrage			

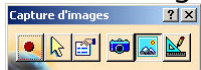
- click on **Edit->view layer**
- double-click on the AA section view to activate this view (the frame turns red)
- click on  or on Insert->Generation ->  Génération de numéros de pièces
- double click on the right view to activate this view (the frame turns red)


- click on  or on Insert->Generation ->  Génération de numéros de pièces
- double click on the top view to activate this view (the frame turns red)
- click on  or on Insert->Generation ->  Génération de numéros de pièces
- remove excess markers on each view, as on the plan (see file).

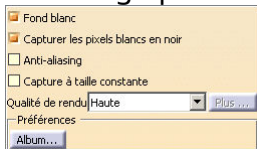
Insertion of a 3D image in color.

- make the 3D window active
- click on Tools->Images->  Capture...

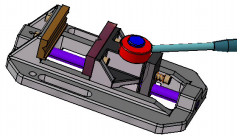
The following dialog box appears




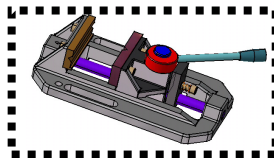
- click on 
- click on the tab check the following options:



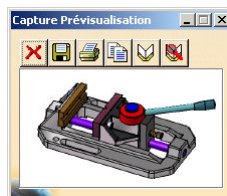
- click OK
- orient and display the vise as in the following figure




- click on 
- build a rectangular area around the vise




- click on 
- The following dialog box appears




- click on 
- choose as the following file type:
- name the file: etau

JPEG High Quality (*.jpg)

- click on 

- click on 

- make the drawing view active
- click on **Edit->Background layer**
- click on **Insert->**  Image...
- choose the file name **vice.jpg**
- place the image as on the plan (see file).
- resize it if necessary.