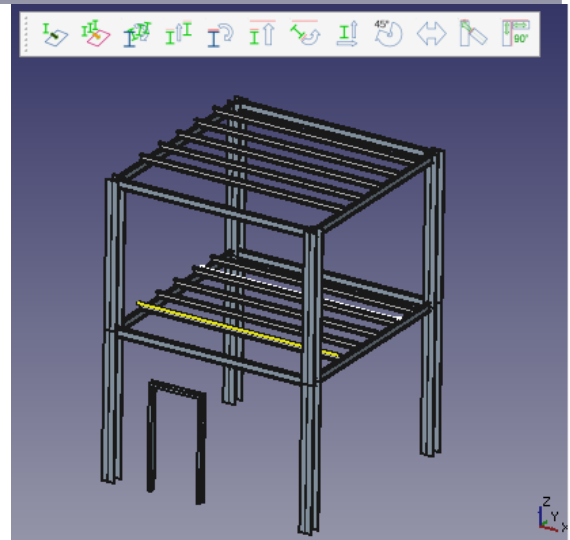
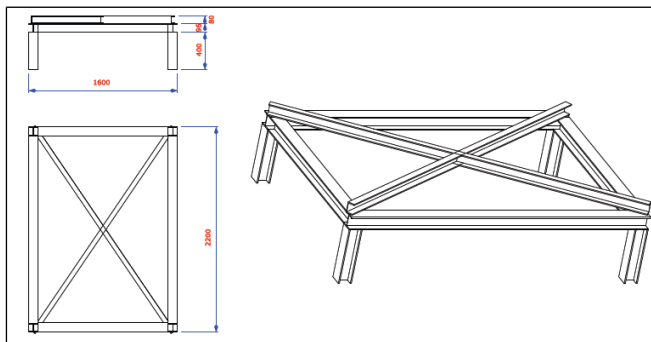
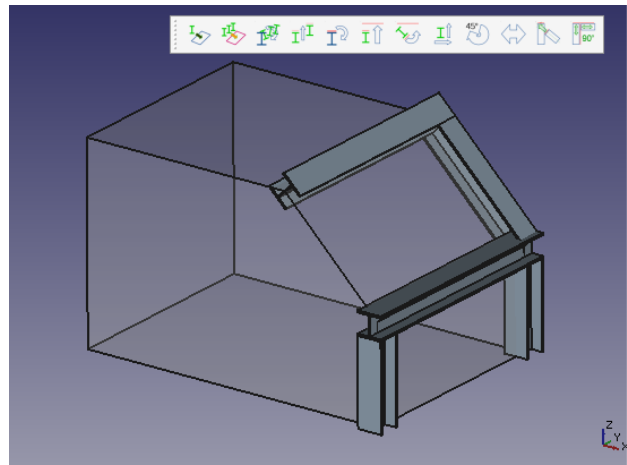
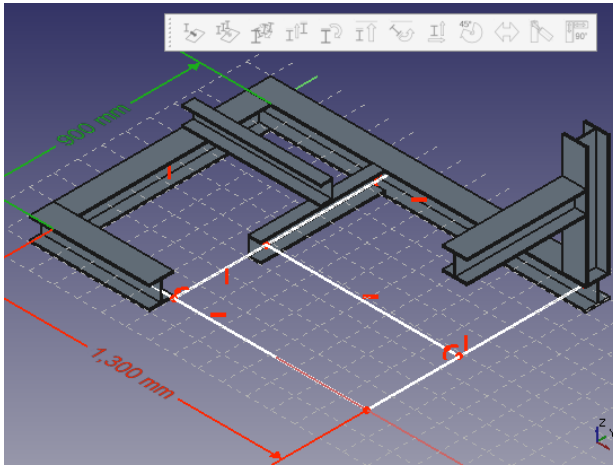


## "Frame" toolbar

This toolbar includes 12 commands that help to dispose the Structure objects of the Arch workbench over a draft of a frame made with Draft or Sketcher workbenches or the edges of a solid made with Part or PartDesign.



## Commands list



**beamFit:** place a beam ("Structure" of Arch workbench) over one edge, i.e. changes the placement and the height of the object according to the edge orientation and length.

The edge can be either the edge of a solid or a drafted or sketched line. You can preselect the edge and the beam, no matter about the order of selection, or if you don't select anything or the selection is not congruent, the console prompts you to select one edge and one beam; in that case you can repeat the action for other beams and other edges until you press [ESC].



**fillFrame:** copy a beam ("Structure" of Arch workbench) over multiple edges. The edge can be anything (as above) but you should remember to first select the beam prototype (either in the active view or in the model tree) and then the edges. Otherwise, if you select the beam in the active view through one of its edge or face, it will be copied over that edge or the edges of that face.

In alternative, if nothing is selected or the selection is not congruent, the console prompts to select first the beam (once) and then the edges (until you press [ESC]).



**alignFlange:** rotates one or more beams (or any selection that has a "Face" shape and a "Placement" property) to make their selected faces parallel to the first face in the selection set.

That is useful when you use beamFit or fillFrame over edges not aligned with main axis, since the section may be not rotated as you desire.

As usual, you may preselect all faces or be prompted by the console until you press [ESC]



**levelTheBeam:** brings the CenterOfMass of the selected faces on the plane of the first selected one. So, despite the icon, this command works also if the faces are not parallel.

As the previous command, it works for any selection that has a "Face" shape and a "Placement" property, not only with Arch's Structure objects.

Select all faces before or be prompted by the console until you press [ESC]



**pivotTheBeam:** to rotate one beam around one of its edges.

You must select at least one edge (anyway only the first is taken as pivot) before invoking the command; then you'll be prompted for the angle. Finally the macro will ask you if the direction of rotation is correct: if not, it will be reverted.

It works for any selection that has a "Edge" shape and a "Placement" property, not only with Arch's Structure objects.



**alignEdge:** moves one beam along the minimum distance vector to the target edge without changing its rotation. The two edges don't need to be parallel.

As you may expect now, the target edge is the first selected one if you make a multiple selection before invoking this command. Otherwise you have the possibility to select the target first and then the other edges, until you press [ESC].

It works for any selection that has a "Edge" shape and a "Placement" property, not only with Arch's Structure objects.



**rotjoinEdge:** translate and rotate the beam in order to align one edge to another.



**shiftTheBeam:** move the beam, or any other object, along one edge.

At least one edge must be selected before invoking the command, but only the first edge selected defines the direction and the object of displacement.



**rotTheBeam:** rotates the beam by steps of 45° around its axis.

It works only on one single beam at each time. The beam must be an Arch's Structure and must be selected before invoking the command.



**stretchTheBeam:** changes the Height of an Arch's Structure object in three different ways:

- if more than one beam are selected in the model tree before invoking: you will be prompted for the new length to be applied to all selection
- if one or more beams are selected before invoking plus one edge, all the beams' Height will get the length of that edge
- otherwise you will be prompted to select one beam and then asked for the new length of it



**extend2edge:** extends the beam (only Structures) to the plane that includes the CenterOfMass of the target edge.

You can both select the target edge (first) and the beams before invoking the command or let Console prompt you until you press [ESC]



**adjustAngle:** same as previous command but it works on two beams in one shot in order to adjust the ends of beams at angle of a frame.

I believe the icon is self explanatory.