


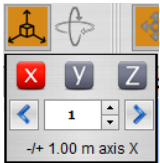
## Documentation: the manipulators

### Introduction

Manipulators allow you to modify previously created objects. However, some objects can not be modified because they belong to (automatically or manually) locked groups. The following descriptions, therefore, only have effect if the objects can be modified.


### Rotation

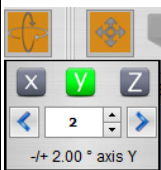
The rotation manipulator  makes it possible to rotate an object according to each axis of the coordinate. When the manipulator is active and an object is selected, it can be rotated. The centre of rotation of an object can be chosen by selecting it on the object. The sphere of manipulation will move there. Rotation can only occur on one axis at a time and each axis is represented by a colour. By selecting one of the colour rings and moving the mouse to the right or left, the object rotates and the rotation angle is displayed.



Another way to use the rotation manipulator is the small window that opened just below the rotation icon. The highlighted letter indicates the axis chosen for the rotation. It is therefore possible through this window to choose a step and apply it in one direction or another.

### Translation

The translation manipulator  is used to move an object along one of the axes of the coordinate. Similarly, when the manipulator is active and an object is selected, it can be translated. The position of the manipulator on the object has no influence on the movement of the object. To move the object, click on one of the axes and, without releasing the mouse, drag it in the desired direction. The small window open under the rotation manipulator also makes it possible to choose a step and to move the object along the selected axis (here Y on the example).



You must click again on the manipulator to deselect it.