About Clipping Tool

This topic provides you information required for using the clipping tool.

The following topics are discussed:

- Clipping Terminology
- Clipping Modifications

See Also

Using Clipping Tool

Positioning the Clipping

Clipping Terminology

This topic explains the important terms used in the clipping operation.

Clipping

Clipping is the method of enabling or disabling the visibility of the objects outside of the defined Region of Interest (ROI).

The ROI is defined with the help of planes called as clipping planes.

Contours

Contours are the intersection curves of the objects and the clipping planes.

Capping

Cappings are the filled areas between the closed loop contours.

Bounding Box

It is the smallest box that encloses all the objects in a product. It is oriented according to the main axes of the product.

Clipping Box

It is a box made of six planes and used to define the ROI for clipping.

Slice

Slice is a group of two parallel planes used to define the clipping ROI.

Front Plane

Front plane is the plane of the clipping box, normal to the +W axis of the robot.

Clipping Modifications

You can resize the clipping using handles and rulers associated with the clipping planes.

For the single plane and slice modes, handles are only available for translation along the +w direction.

Automatic Snapping on the Elements

During the resize operation using handles, if the following elements satisfying respective conditions are detected under the pointer then such elements can be automatically snapped to the manipulating faces:

- A planner face parallel to the manipulating face.
- A cylinder with its axis coplanar with the manipulating face.
- A 3D point
- A PLM port, if it is loaded in the design mode. Only the 3D points and the 3D axis systems linked withe PLM port are used for the snapping. Temporary 3D points (corresponding to the element detected under the pointer) are created in th 3D area and are available for snapping.

  The snapped elements are highlighted and the snapping continues until the pointer is over the element.

This behavior is controlled by the **Snap on geometry (SHIFT toggles)** check box available in the clipping preferences. For more information, see Clipping.

Resize the Whole Clipping

You can resize the clipping using all directions using the handle associated with one face.

This behavior is controlled by the **Keep aspect ratio (CTRL toggles)** check box available in the clipping preferences. For more information, see Clipping.