

Lab Sheet 02

Incorporating your Custom Robot Tool in Robot Studio

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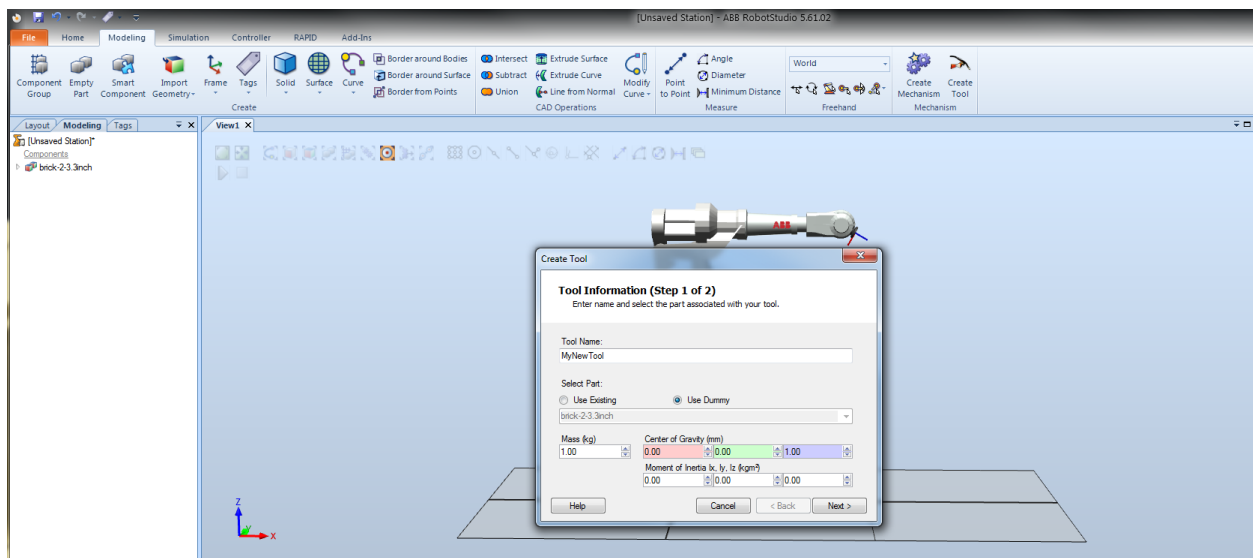
In this lab sheet we will create a tool and save it as a library component. To do this we will import a geometry representing the tool. From this geometry we then specify a Tool Center Point (TCP). When the tool is ready, we save it as a library component.

Note

After creating a tool the geometry will no longer be editable and cannot be used for creating tools again. This means that it is a good practice to make a copy or export the geometry to file before creating the tool, if you do not already have one.

On the **Home tab** click the Import Geometry button and import the geometry (You can export the geometry out of Rhino as an ACIS files and import it to RobotStudio).

On the **Modeling tab** click the Create Tool button. This starts the Create Tool wizard.

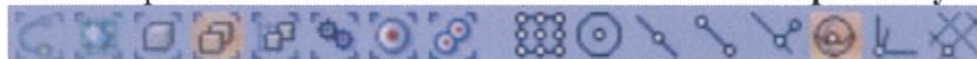


In the **Create Tool** wizard in the Tool Name field enter YourToolName.

Then in the **Select Part** click the Use Existing radio button and in the combo box select the YourToolName part.

In the **Create Tool** dialog click in the Center of Gravity field you can insert the numbers or use the Graphic window.

In the Graphics window select **Part Selection** level and **Snap Gravity**.



Note

The snap gravity assumes that the object is of the same density when calculating the center of gravity. You can put in mass and inertia but there is no RobotStudio functionality for this so you'd have to get the data externally.

Insert other information about your tool such as Mass and moment of inertia.

Click the Next button

In the TCP Name field enter NameofYourTool. This is the name of the tooldata that will be used in RAPID.

Fill out the Position box with position of your TCP and add it to TCP(s) box.

You are Done here!

Save the tool as a library component

Saving the tool as a library component makes it available for use in other stations as well. It also means that if you update the library then all station s using the library will be updated the next time you open them.

In the Layout browser right click the tool YourToolName and select Save as Library.

In the Save As dialog enter the address you want.

Now you can import your tool in any station and apply movement to it.