



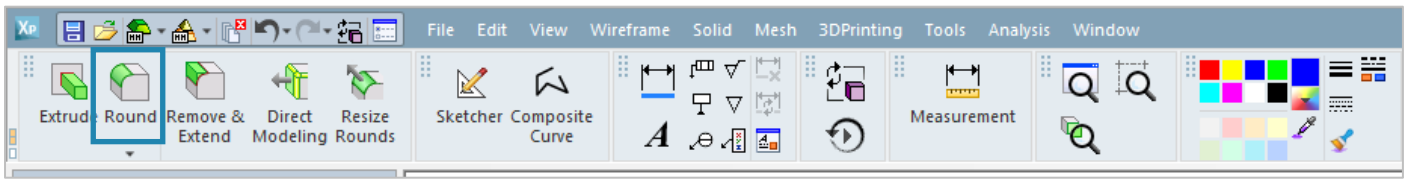
**3DXpert™ for SOLIDWORKS®**

# **PART DESIGN**

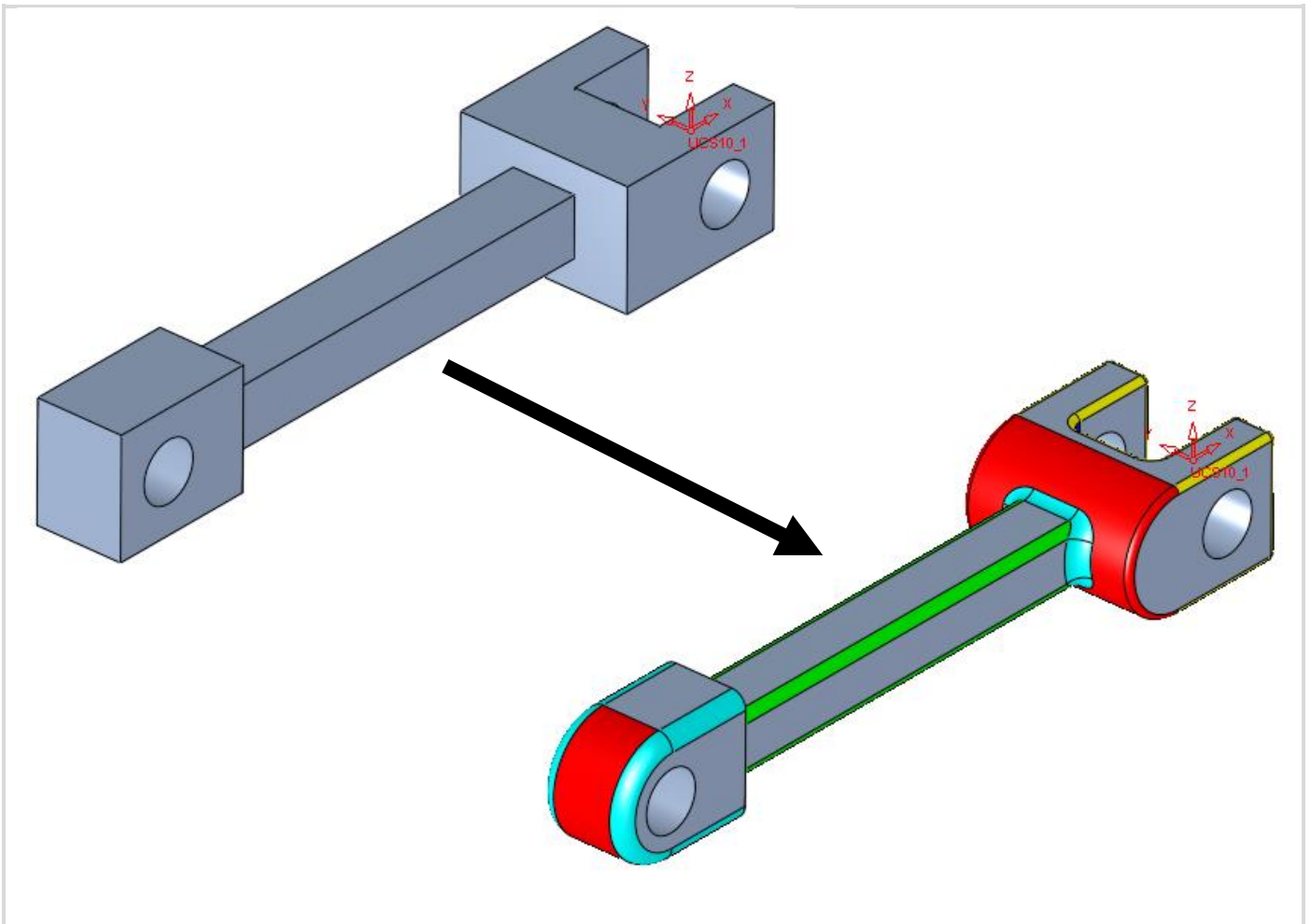
## Round Exercise

Tutorial V6: 14,0200,1606,1028(SP2)

In this exercise, we will learn the Round function.

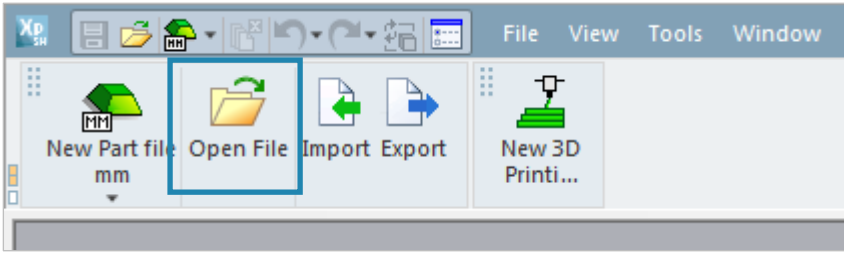


With this function, we will build Rounds on sharp edges of the model:





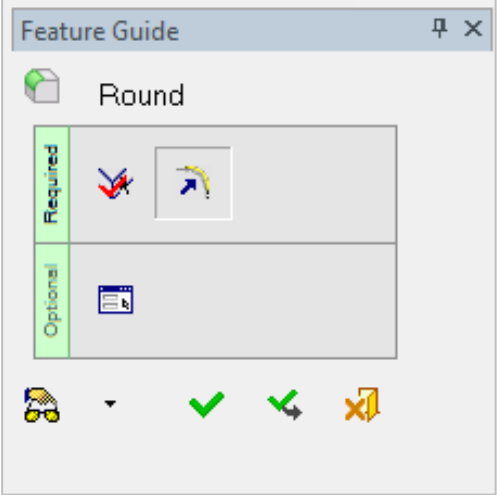






<p>!</p> <p>Notice/ Remember</p>		<p>Left mouse button name is <b>"pick"</b></p>
		<p>Middle mouse button name is <b>"Exit"</b></p>

1. From the main menu **pick** "Open File":

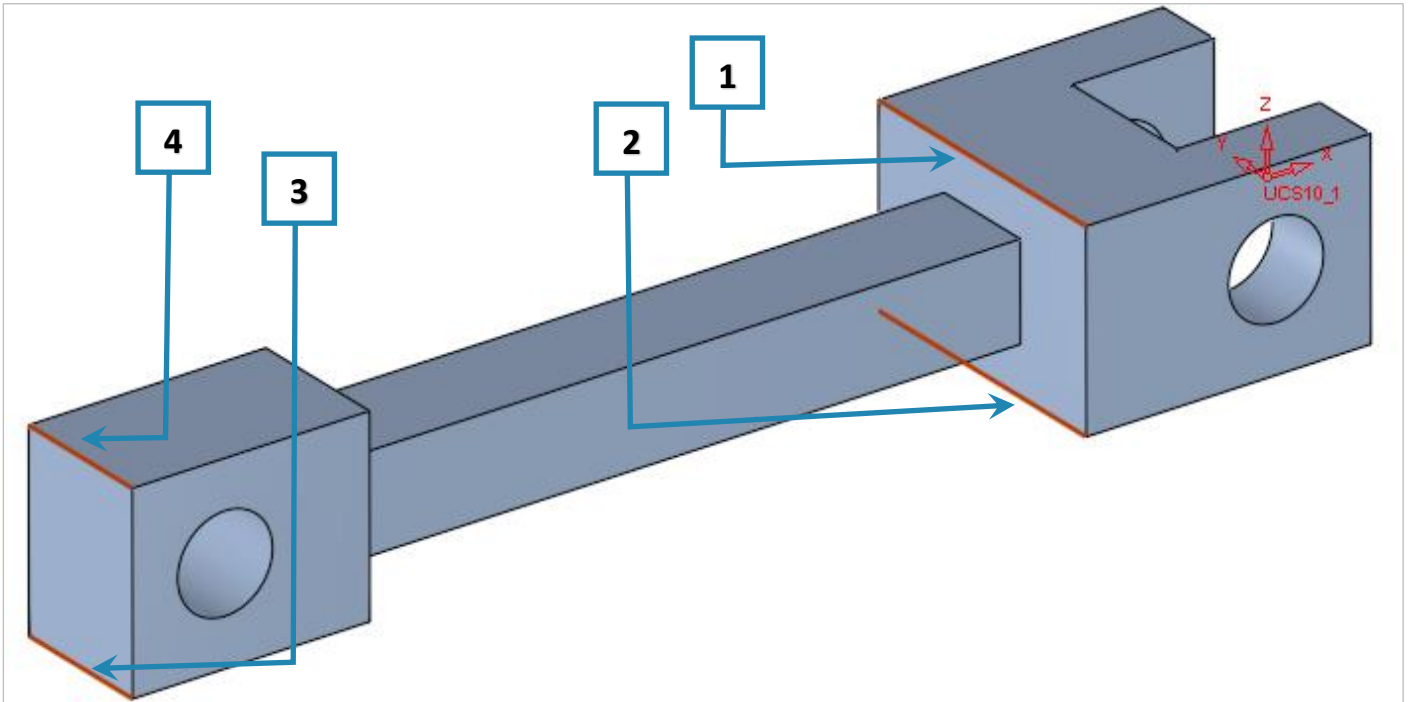


Use the 3DXpert for Solidworks Explorer, browse to the folder where the file Exercise **3DXpert-Exercise-Round\_Start.elt** is located and **pick** to open it.

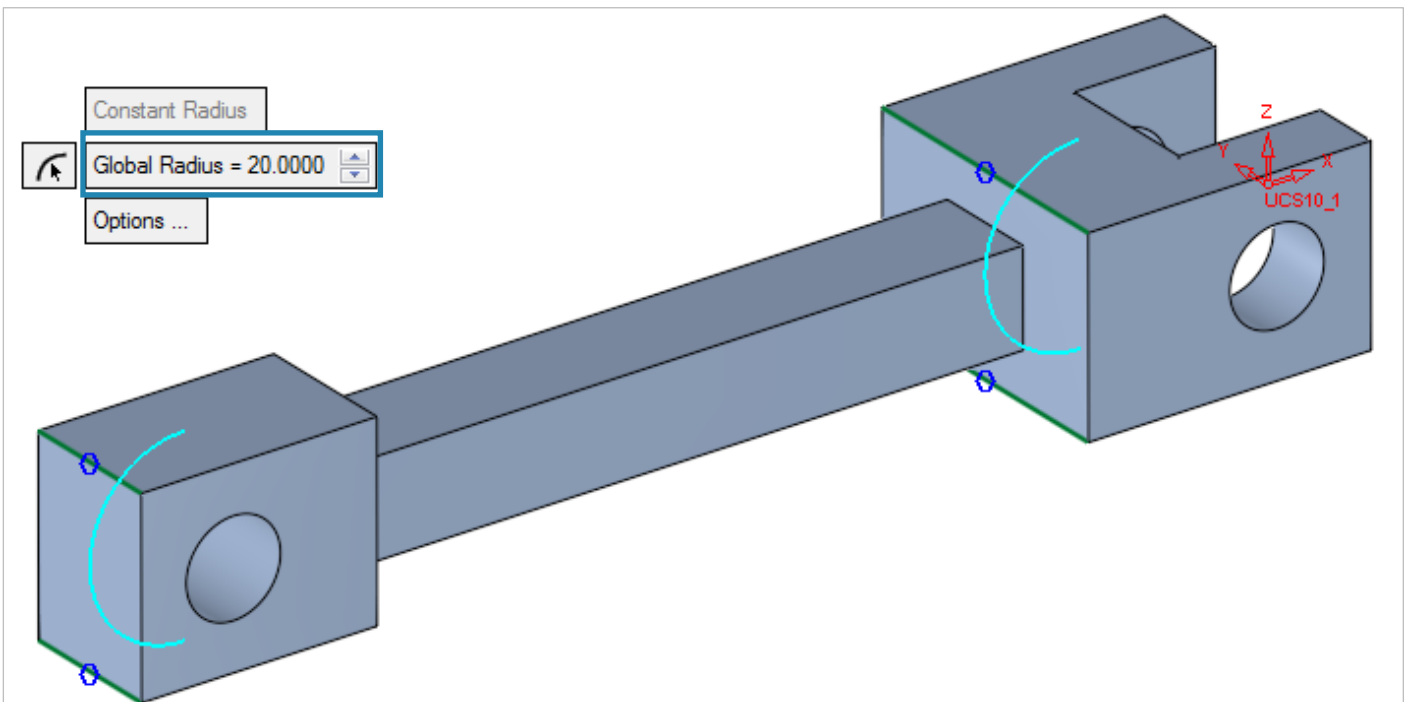
2. From the toolbar **pick** the "Round" Command ,

	Round	
	<b>pick</b> edges and/points for round	
	Set parameters	
	<b>Options</b> - If required	
	To approve and finish use the " <b>OK</b> "	
	To approve and continue use the " <b>Apply</b> "	
	<b>"Cancel"</b> – exit the comand without keep changes	

3. Pick 4 edges as shown and **Exit** (middle mouse button).





4. Set parameters of the global Radius to 20 as shown in the picture:

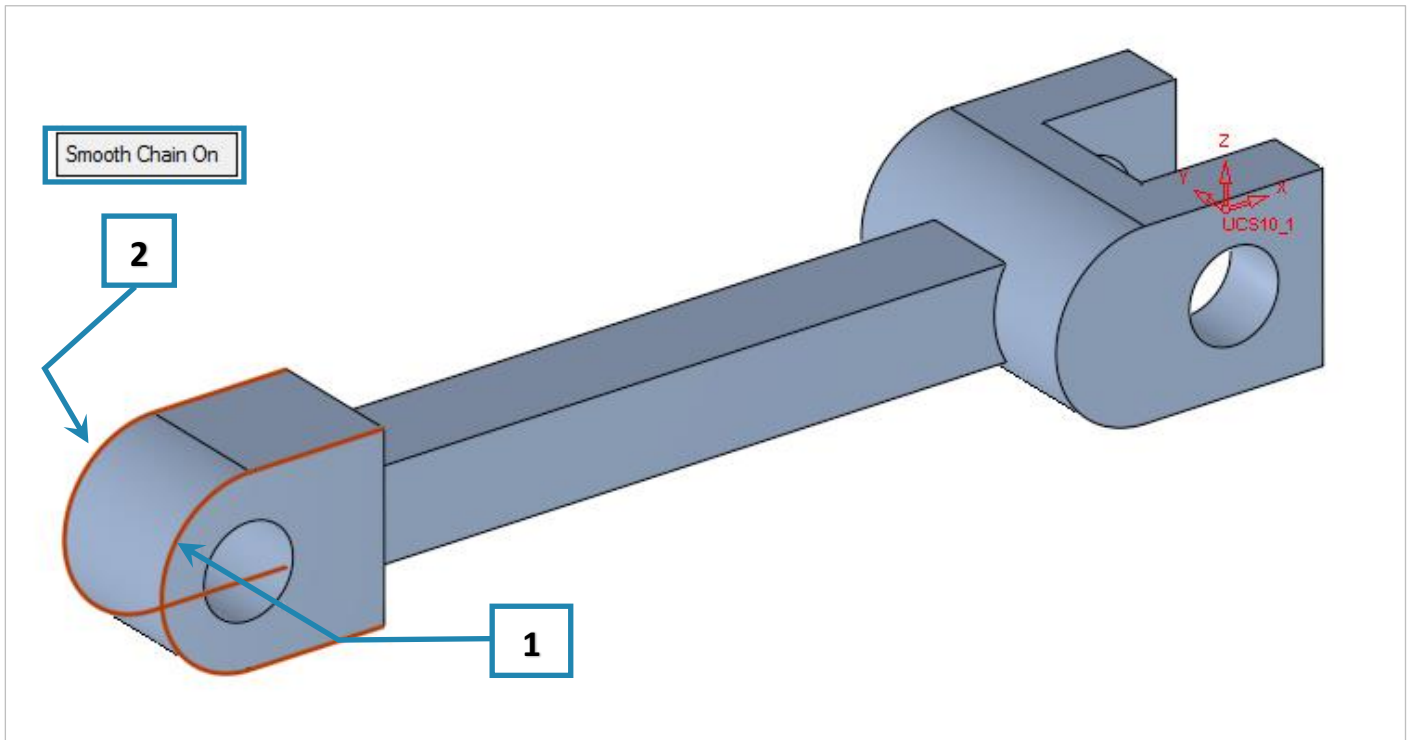


Please notice: This command is using a "Quick Preview" so the radiuses are represented as arcs. It is possible to press the **preview** button  in the feature guide to preview the actual result.




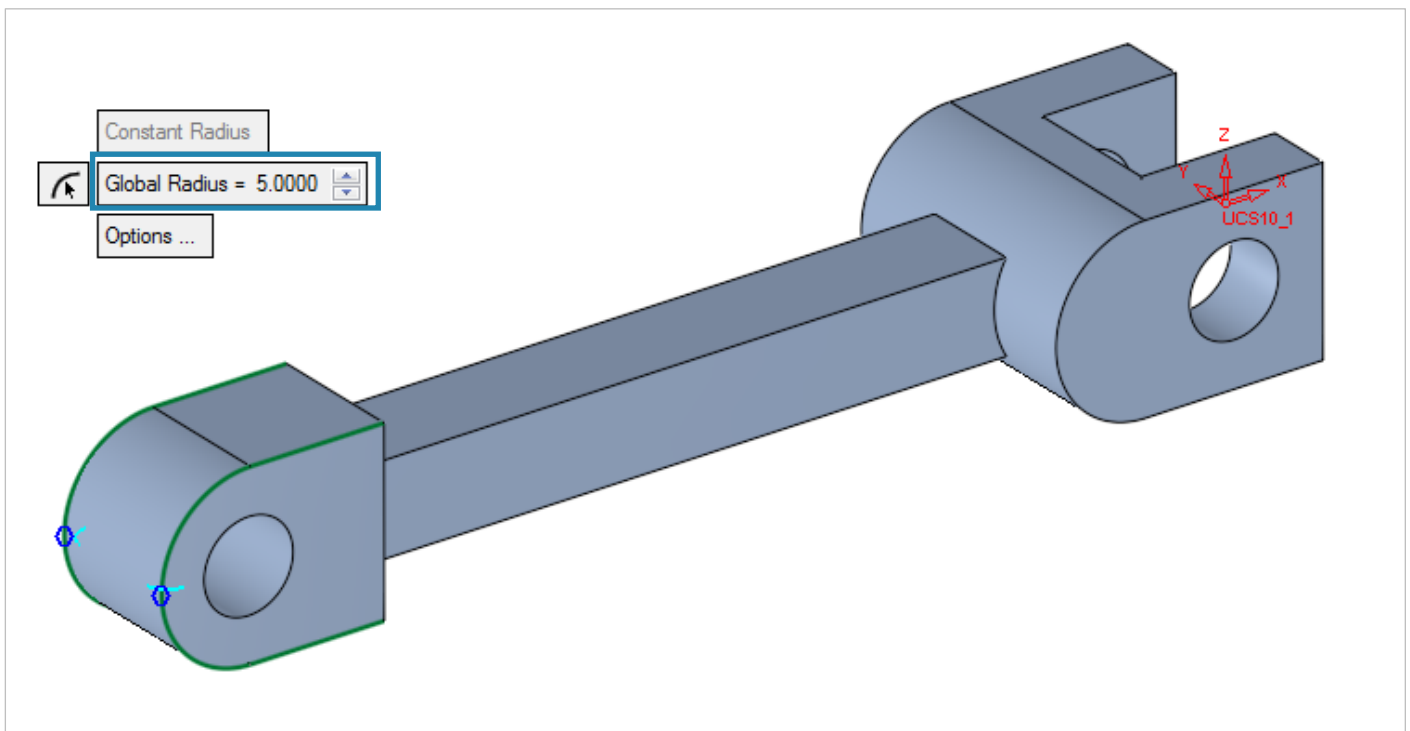
Since this exercise is based on a continuity of "Round" command one after the other, it is possible to use "**Apply**"  instead of "OK" .

5. **Pick** 2 edges with "Smooth Chain On" as shown on the arcs and **Exit** (middle mouse button).

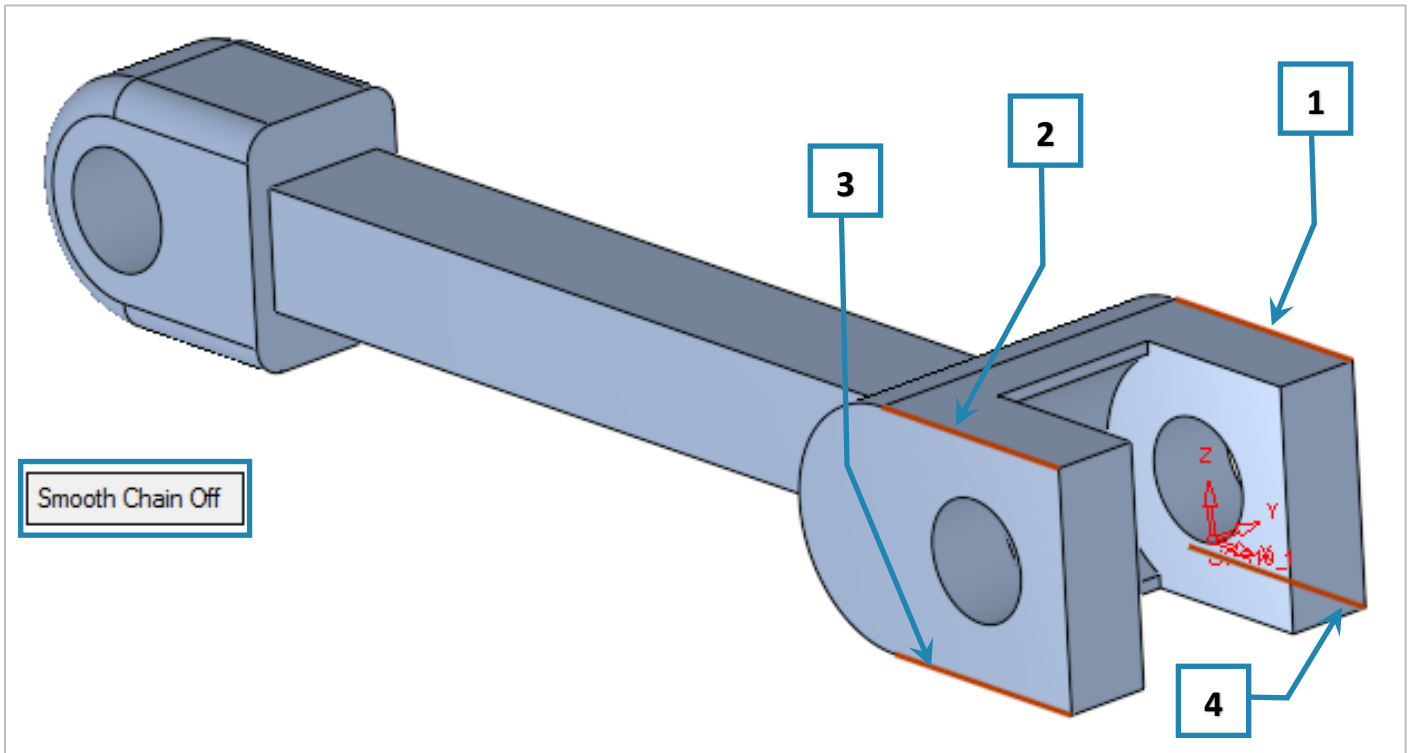



Please notice: The Round is in "**Smooth Chin On**" mode - It means that the system looks for a tangential loop from both sides of the **pick**, up to break points.

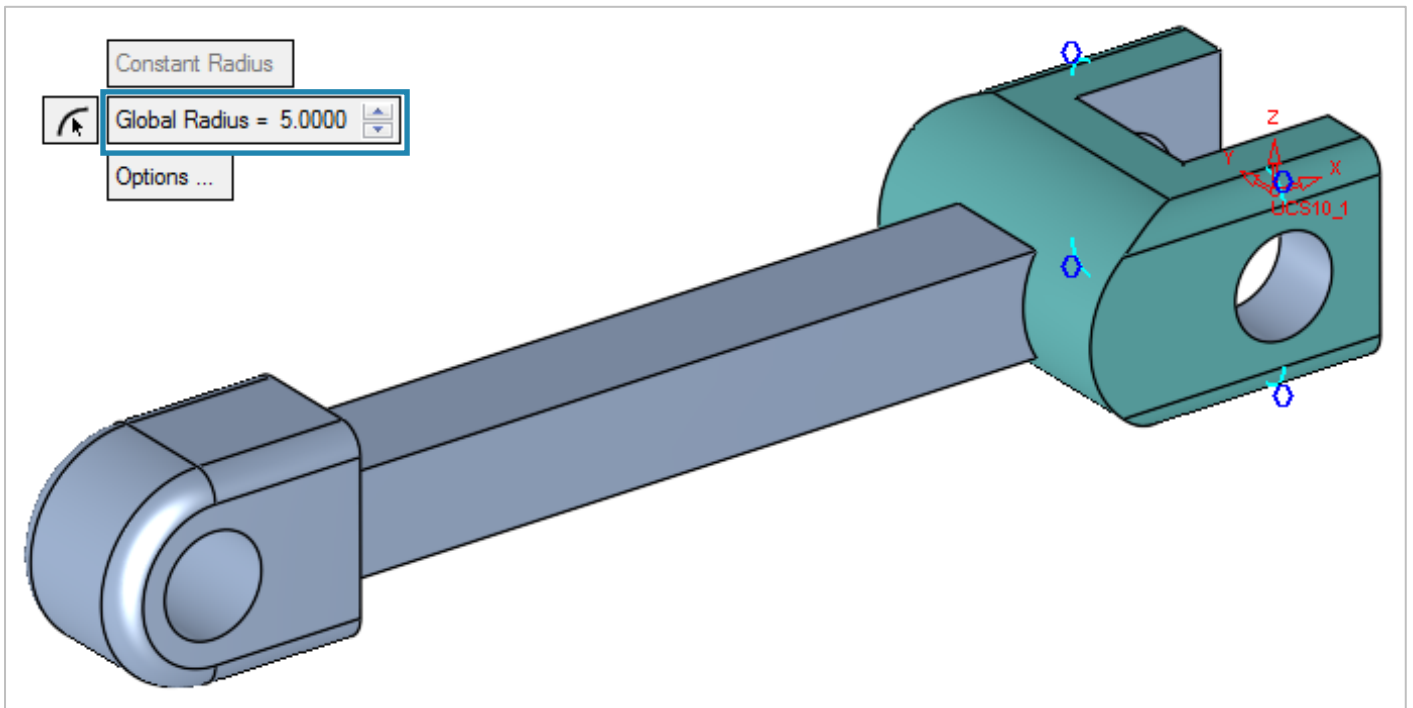
6. Set parameters of the global Radius to 5 as shown in the picture and then "**Apply**" .



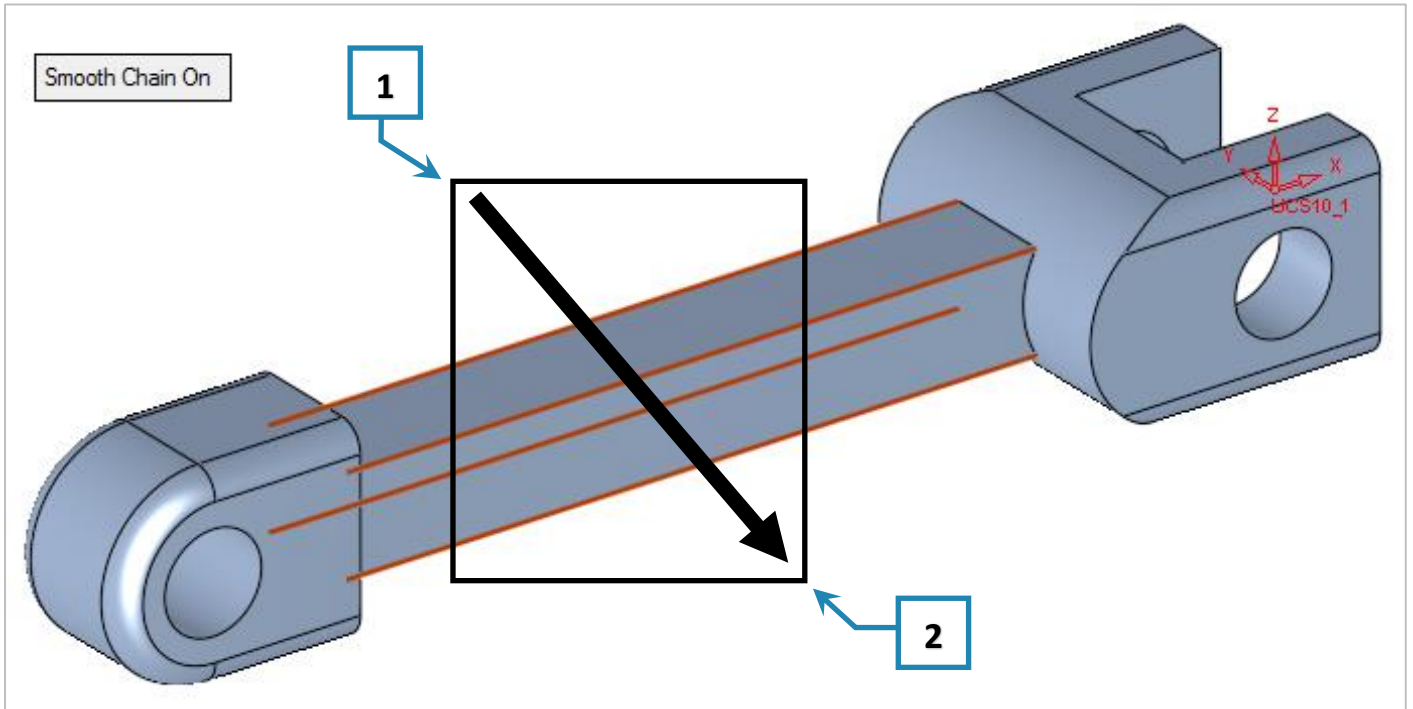
7. Pick 4 edges with "Smooth Chain Off" as shown and **Exit** (middle mouse button).



8. Set parameters of the global Radius to 5 as shown in the picture and then **"Apply"** .



9. **Pick** 4 edges by using "Select by Box" over the center of the part. Start the box on the top left corner to the bottom right corner and then **Exit**.

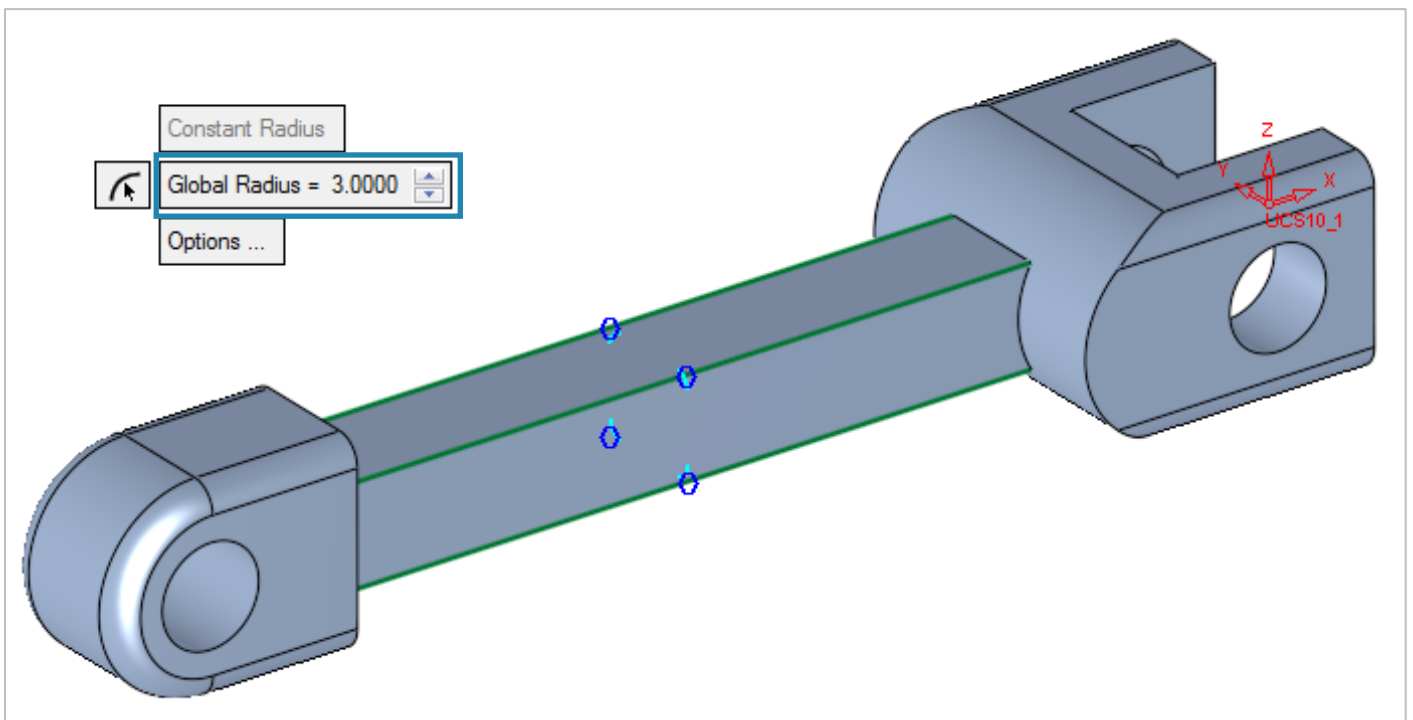


Please notice: "**Select by Box**",

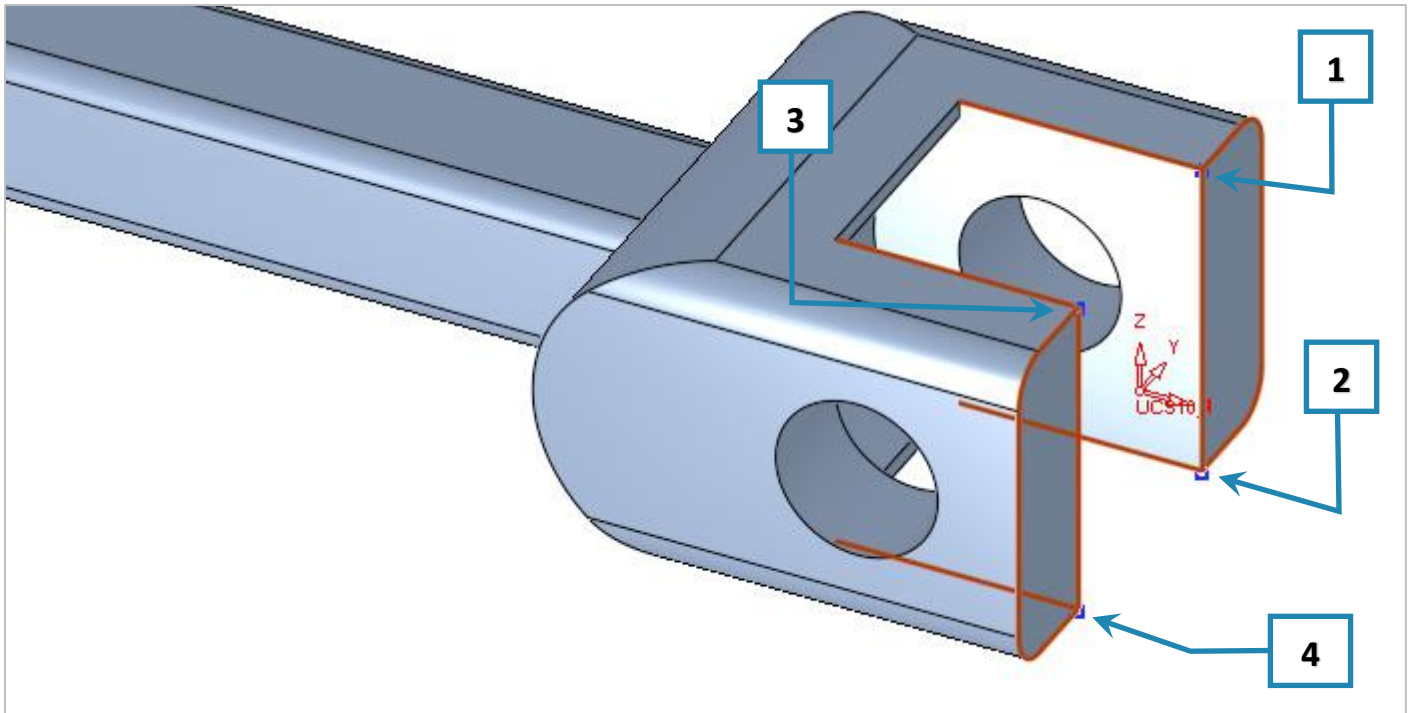
From **left to right** includes all entities within the box, even partially contained entities.


From **Right to Left** includes only fully contained entities.

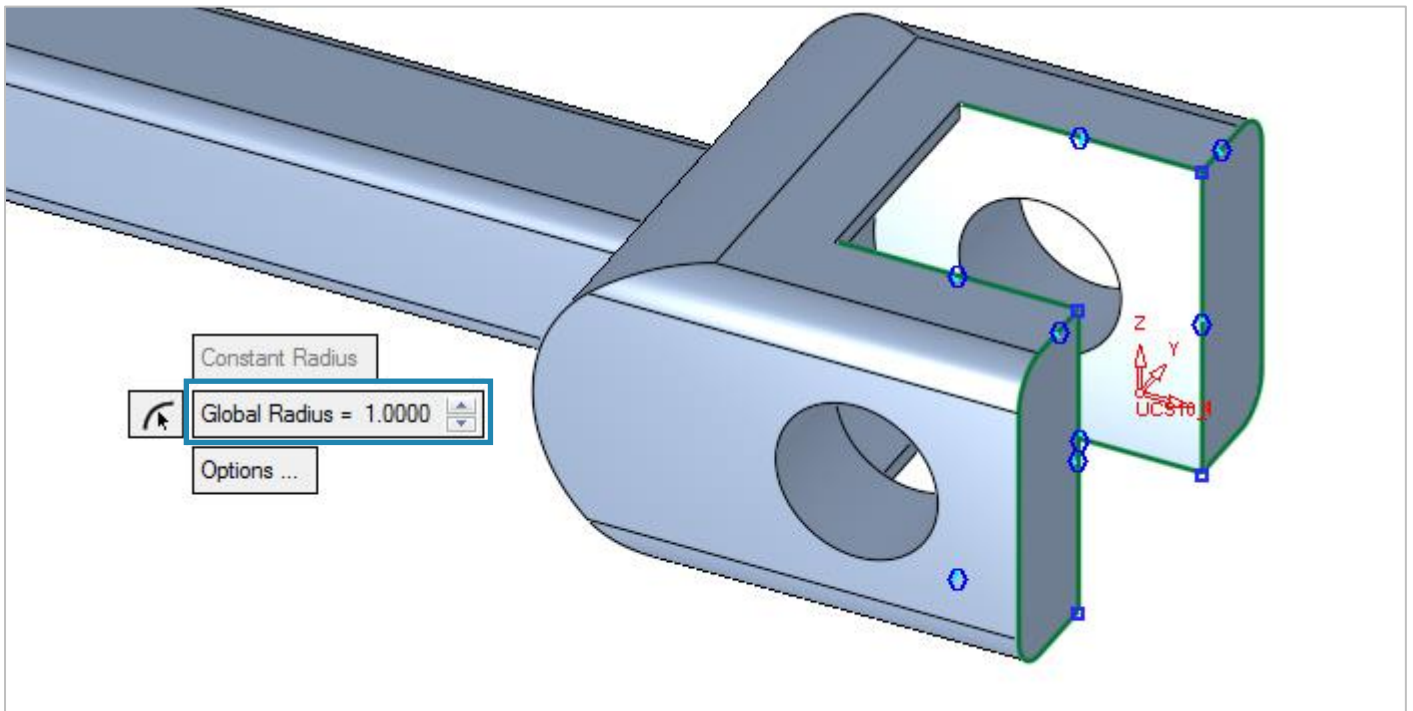
10. Set parameters of the global Radius to 3 as shown in the picture and then "**Apply**"



11. Pick 4 vertexes points as shown and **Exit** (middle mouse button).

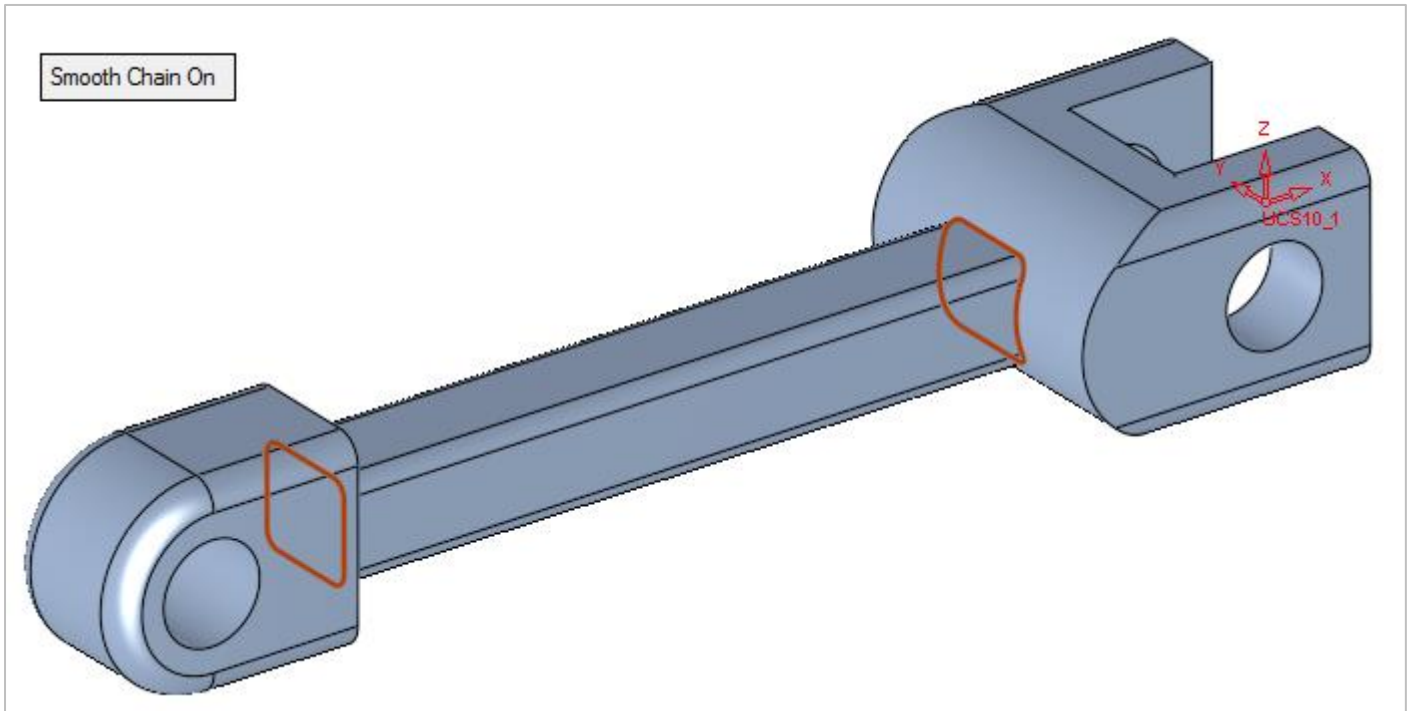



12. Set parameters of the global Radius to 1 as shown in the picture and then **"Apply"** .





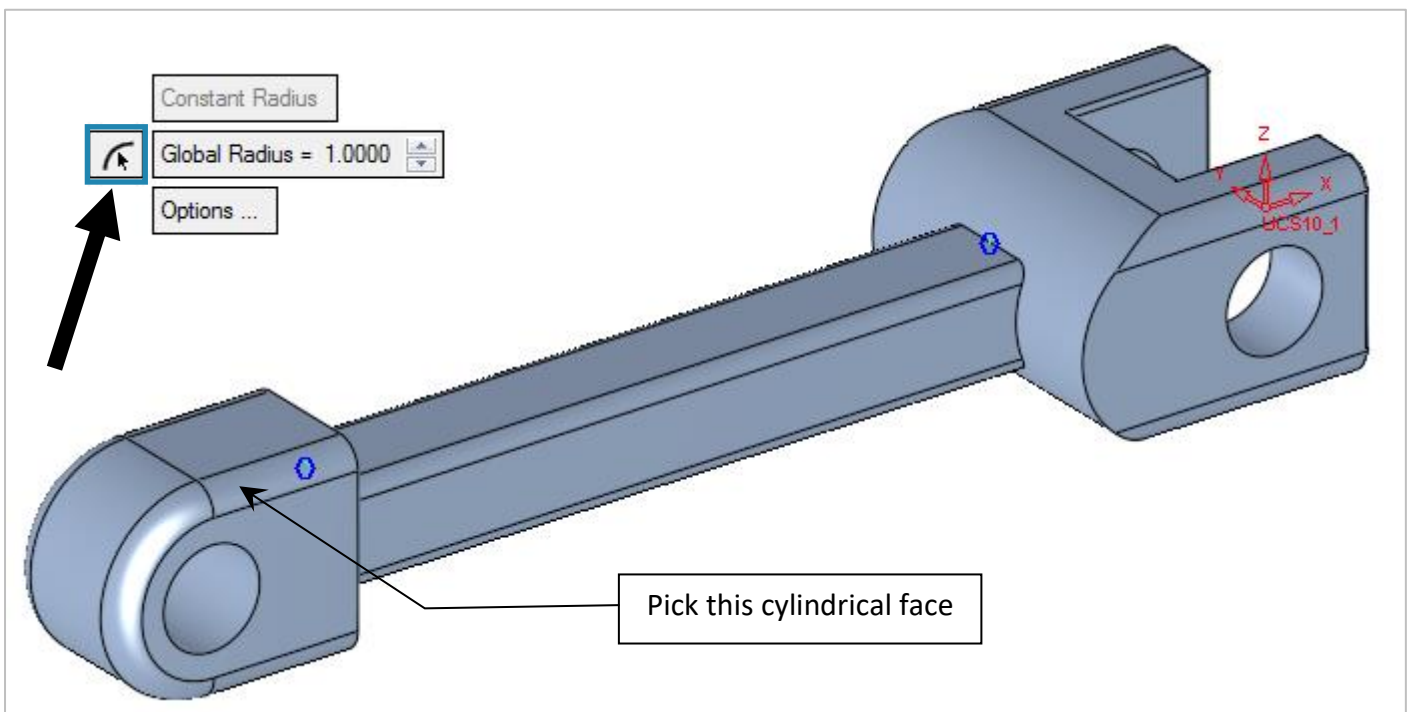
13. **Pick** 2 edges "Smooth Chain On" as shown and **Exit** (middle mouse button).



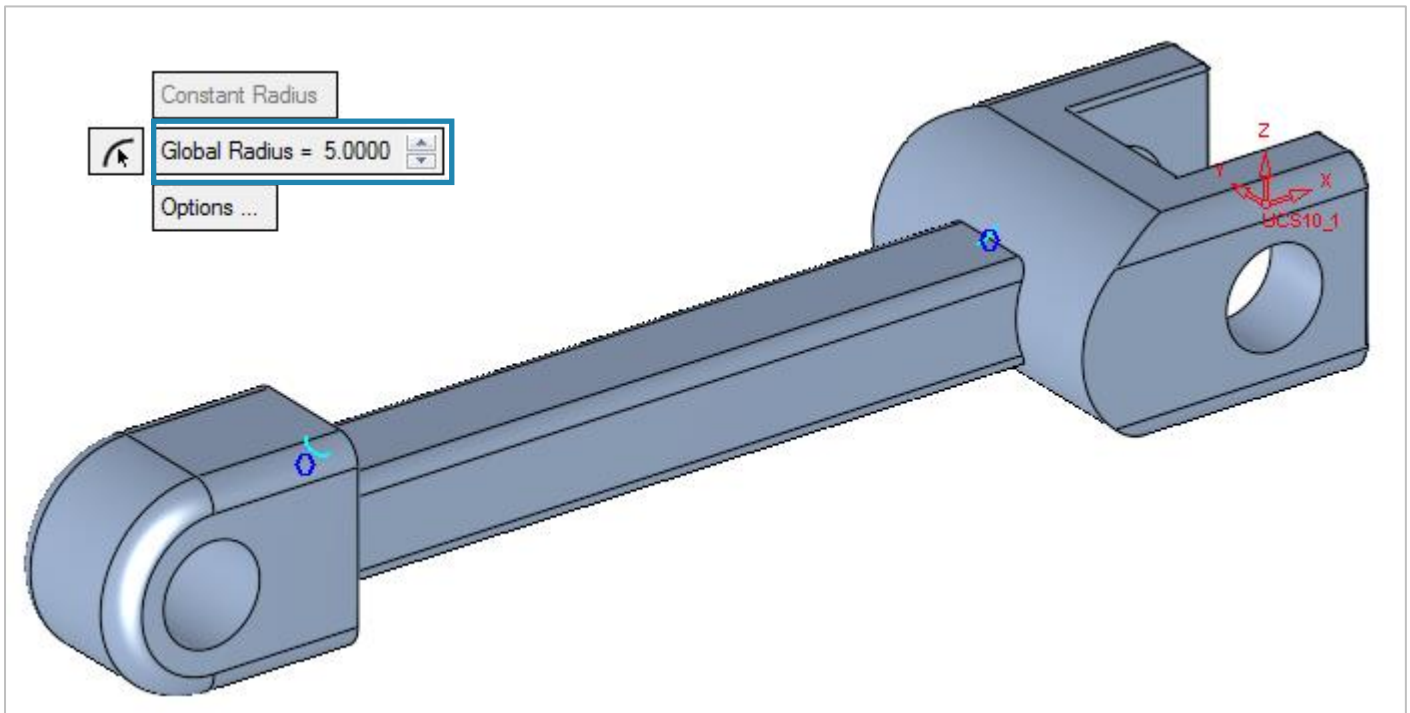
14. Set parameters by using the "Radius Capture" .

This enables to define the radius value by picking a cylindrical face and get his value.

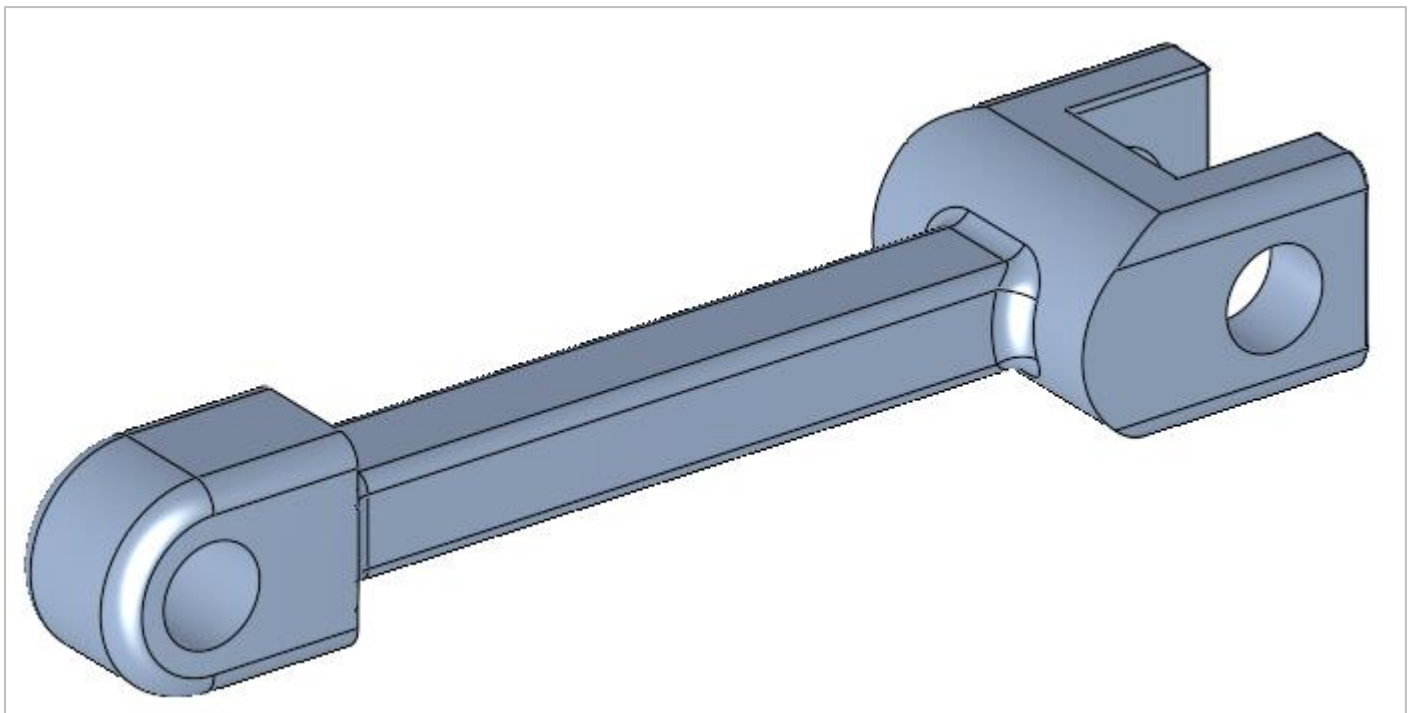
**Pick** the radius shown here:



The radius is set automatically to 5. Now **"Apply"**



**15.** This is the final result:



It is an option to **pick** some more edges/points to practice the **Round** command.

End of Exercise.