SOLID EDGE
VELOCITY SERIES

Tutorial: ***Middle Pole***

Project: ***Bird Feeder (Synchronous)***

cad / cam / pdm / cae | CAAP®

Solution Partner PLM | SIEMENS

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	DIMENSION UNITS : MM	CLASS (DEPARTMENT) : -	
	DATE : 12-11-2011	CHECKED BY : -	

MATERIAL : Wood, Oak	TITEL :	NUMBER :	REV:	SIZE:
PROJECT: Bird Feeder	Middle pole	1003	A	A4

1 +	1. Start **Solid Edge.** 2. Click on **<u>ISO Part.</u>** 	
2	1. Click the **Rectangle by Center** button. 2. Point at the **Origin** and wait until the icon appears before clicking.	
3	3. Click to place the **Rectangle**.	

4	1. Click the **Select** button. 2. When you hover over the Region, it will turn red. Click on the Region, as shown.	
5	3. When you hover over the arrow, it will turn red. Click on the arrow, as shown. 4. Click the **Extrude – Symmetric** button.	
6	5. Type **100** and confirm with **Enter**.	

7	1. Click the **Smart Dimension** button. 2. Click on the horizontal line. 3. Click to place the dimension. 4. Click on the left green arrow. 5. Key in the value **40** and confirm with **Enter**.	
8	If the **Smart Dimension** is still active. 6. Click on the other horizontal line, as shown. 7. Click to place the dimension. 8. Click on the right green arrow. 9. Key in the value **40** and confirm with **Enter**.	
9 +	1. Click the **Circle by Center Point** button. 2. Point the cursor at the plane and click on the lock icon.	

10	3. Point the cursor at the centre of the two horizontal lines, as shown. Make sure the dotted lines are shown and click.	
11	4. Click to place the dimension.	
12	1. Click the **Select** button. 2. When you hover over the Region, it will turn red. Click on the Region, as shown.	

13	3. When you hover over the arrow, it will turn red. Click on the arrow, as shown. 4. Click the **Extrude – Symmetric** button.	
14	1. Key in the value **20** and confirm with **Enter**.	
15	2. Click on the edge of the cylinder. 3. Click to place the dimension. 4. Key in the value **30** and confirm with **Enter**.	

16 +	1. Click the **Hole** button. 2. Click on the **Hole Options**.	
17	Fill in the Hole Options, as shown. 3. Type: **Simple**; 4. Diameter: **10**; 5. Extents: **Finite**; 6. Hole Depth: **10**; 7. Click the **OK** button.	
18	1. Click on the plane, as shown.	

19	2. Click the **Select** button. 3. When you hover over the arrow, it will turn red. Click on the arrow, as shown.	
20	4. Point at the **Origin** and wait until the icon appears before clicking.	
21	1. Click the **Smart Dimension** button. 2. Click on the horizontal line. 3. Click on the Hole, as shown. 4. Click to place the dimension. 5. Click on the right green arrow. 6. Key in the value **160** and confirm with **Enter**.	

22	1. Click the **Chamfer Equal Setbacks** button. 2. Click on the edge of the Hole, as shown. 3. Key in a value for the chamfer (in this case **1**) and confirm with **Enter**.	
23 +	1. Click the **Select** button. 2. Select the Hole and Chamfer in the PathFinder. 3. Click the **Circulair Pattern** button.	
24	4. Point the cursor at the edge of the cylinder and wait until the icon appears before clicking.	

25	5. Key in the value **4** at Count. 6. Click the icon.	
26 + Smart Dimension	1. Turn the part. 2. Repeat steps 8 till 15 to place the second cylinder. Make sure the height is **10** mm.	
27 Hole + +	1. Repeat the steps 15 till 24 to place the Holes, as shown. Make sure the height is **80 mm**.	

28	Now we set the material property. 1. Click the **Application Button**. 2. Click on **Properties**. 3. Click the **Material Table** button.	
29	1. Choose the material **Wood, Oak**. 2. Click **Apply to Model** to set the material to the part. ***Hint:*** *There are several properties which are connected to a material, like color and density. The density is necessary to determine the weight.*	

30	The part is ready. Now it must be saved. 1. First press **Ctrl + i** to turn the image to isometric view. 2. Click on the floppy icon. 3. Go to the **Summary** tab**.** 4. Fill in *Middle Pole* at Title. 5. Go to the **Project** tab and fill in the following properties: Document Number*: 1003*. Revision Number*: A*. Project Name: *Bird Feeder*. 6. Click **OK** to close the screen. ***Hint:*** *All properties of the part are saved at the **File Properties**. These properties will used to fill in a part list.*	
31	1. Browse to the folder named *Bird Feeder*. 2. Save the document by name *Bird Feeder-1003-Middle Pole-A.par*. 3. Click the **Save** button. 4. Close the file. ***Hint:*** *Save all files of one project in the same folder.*	