SOLID EDGE
VELOCITY SERIES

Tutorial: ***Tail***

Project: ***Rocket (Synchronous)***

cad / cam / pdm / cae | CAAP®

Solution Partner PLM | SIEMENS

DOORSNEDE A-A

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	DIMENSION UNITS : MM	CLASS (DEPARTMENT) : -	
	DATE : 29-10-2011	CHECKED BY : -	

MATERIAL : ABS Plastic, high impact	TITEL : Tail	NUMBER : 1003	REV: A	SIZE: A4
PROJECT: Rocket				

1	1. Start **Solid Edge.** 2. Click on **<u>ISO Part.</u>** 	
2	1. Click the **Line** button. 2. Draw the profile, as shown.	
3	1. Click the **Select** button. 2. When you hover over the Region, it will turn red. Click on the Region, as shown.	

4	3. Click the **Revolve** button.	
5	4. Click on the blue doth of the Steering Wheel and click on the X-axis to place it. 5. When you hover over the **Torus** of the Steering Wheel, it will turn red. Click on the **Torus**, as shown.	
6	6. Click the **360** button.	

7	1. Click the **Symmetric Diameter** button. 2. Click on the X-axis. 3. Click on the horizontal line, as shown. 4. Click to place the dimension. 5. Key in the value **10,1** and confirm with **Enter**.	
8	If the **Symmetric Diameter** is still active. 1. Click on the horizontal line, as shown. 2. Click to place the dimension. 3. Key in the value **17** and confirm with **Enter**.	
9	4. Click on the horizontal line, as shown. 5. Click to place the dimension. 6. Key in the value **20** and confirm with **Enter**.	

10	7. Point at the right endpoint of the slanted line and wait until the icon appears before clicking. 8. Click to place the dimension. 9. Key in the value **27,94** and confirm with **Enter**.	
11	1. Click on the horizontal line, as shown. 2. Click to place the dimension. 3. Key in the value **44** and confirm with **Enter**.	
12	1. Click the **Smart Dimension** button. 2. Click on the horizontal line, as shown. 3. Click to place the dimension. 4. Click on the left green arrow. 5. Click on the lock icon. 6. Key in the value **30** and confirm with **Enter**.	

13	1. Click on the other horizontal line, as shown. 2. Click to place the dimension. 3. Click on the right green arrow, as shown. 4. Click on the lock icon. 5. Key in the value **7** and confirm with **Enter**.	
14	1. Click on the horizontal line. 2. Click to place the dimension. 3. Click on the right green arrow. 4. Click on the lock icon. 5. Key in the value **10** and confirm with **Enter**.	
15 +	1. Click the **Select** button. 2. Click on the dimension, as shown. 3. Click on the lock icon.	

16	1. Click the **Smart Dimension** button. 2. Click on the right vertical line. 3. Click on the horizontal line, as shown. 4. Click to place the dimension. 5. Click on the lock icon. 6. Key in the value **25** and confirm with **Enter**.	
17	1. Click on the horizontal line. 2. Click to place the dimension. 3. Click on the right green arrow. 4. Click on the lock icon. 5. Key in the value **10** and confirm with **Enter**.	
18	1. Click on the right vertical line. 2. Click on the left vertical line. 3. Click to place the dimension. 4. Click on the left green arrow. 5. Click on the lock icon. 6. Key in the value **83** and confirm with **Enter**.	

19	1. Click on the face relate: **Parrallel**. 2. Click on the inner cone. 3. Click on the green icon.	
20	4. Click on the outer cone, as shown. 5. Click on the green icon.	
21	1. Click on the **Symmetric Diameter** button. 2. Click on the X-axis. 3. Click on the horizontal line. 4. Click to place the dimension. 5. Ke i the value **54** and confirm with **Enter**.	

22	1. Click the **Select** button. 2. Click in the PathFinder on **Protrusion**. 3. Click on the blue doth of the Steering Wheel.	
23	4. Point the cursor at the edge of the **Revolve**, as shown and wait until the icon appears before clicking.	
24	5. When you hover over the arrow, it will turn red. Click on the arrow, as shown.	

25	6. Point at the **Origin** and wait until the icon appears before clicking.	
26	1. Click on the **Chamfer by Equal Setback** button. 2. Click on the edge's, as shown. 3. Key in a value for the chamfer (in this case **0,5**) and confirm with **Enter**.	
27	1. Click the **Thread** button. 2. Select the Type: **M20**. 3. Click on the cilinder, as shown.	
28	4. Click the **OK** button.	

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Now we set the material property.

1. Click the **Application Button**.
2. Click on **Properties**.
3. Click the **Material Table** button.

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1. Choose the material **ABS, high impact**.
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.

31	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 *Tail* at Title. 5. Go to the **Project** tab and fill in the following properties: Document Number*: 1003*. Revision Number*: A*. Project Name: *Rocket*. 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.*	
32	1. Browse to the folder *Rocket*. 2. Save the document by name *Rocket-1003-Tail-A.par*. 3. Click the **Save** button. 4. Close the file. ***Hint:*** *Save all files of one project in the same folder.*	