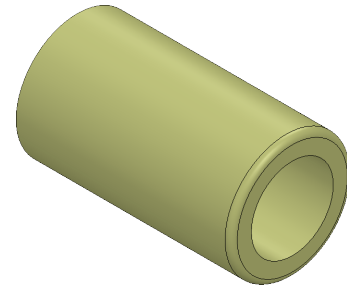




Tank Roller



A. Revolve.

Step 1. Click File Menu > New, click **Part Metric** and OK.

Step 2. Click **Front Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 1**.

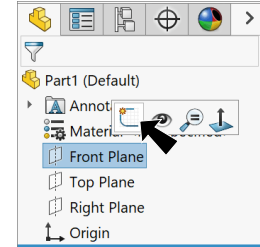
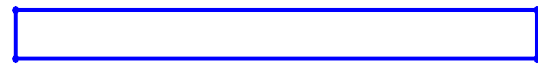


Fig. 1

Step 3. Click **Corner Rectangle**  in the **Rectangle flyout**  on the Sketch toolbar.

Step 4. Sketch **rectangle above Origin** , **Fig. 2**.



Step 5. **Right click graphics area and click Select**  from menu to unselect Rectangle tool.



Fig. 2



Step 6. **Ctrl click left vertical line of rectangle and Origin**  to select both. Release Ctrl key and click **Make Coincident**  on the context toolbar, **Fig. 3**.



Fig. 3

Step 7. Click **Centerline**  in the **Line flyout**  on the Sketch toolbar.




Step 8. Sketch horizontal centerline from Origin , **Fig. 4**.



Fig. 4

Step 9. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 10. Add the 17.6 dimension, then **double distance 6.7 and 10** last, **Fig. 5**. To double distance dimension, click centerline and then bottom horizontal line, move the cursor to left of Origin and click. Key-in 6.7 (inside diameter) in the Modify box and press ENTER. Double distance 10 dimension (outside roller diameter).

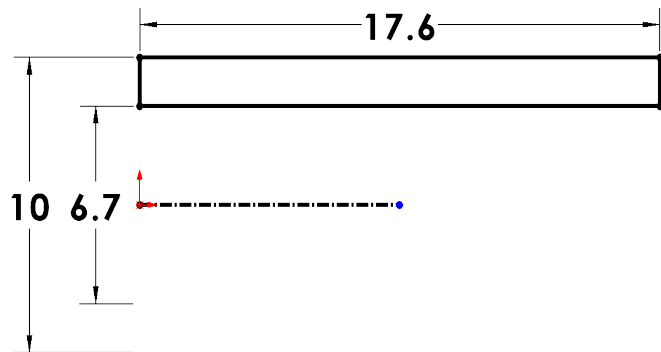




Fig. 5

Step 11. Click **Features**  on the Command Manager toolbar.

Step 12. Click **Revolved Boss/Base**  on the Features toolbar.

Step 13. In the Revolve Property Manger set:

under Axis of Revolution 
centerline line is auto-selected
click OK .

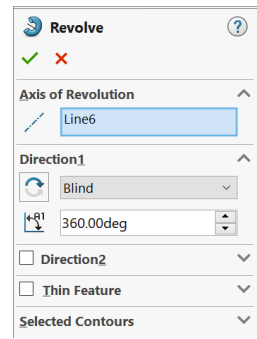
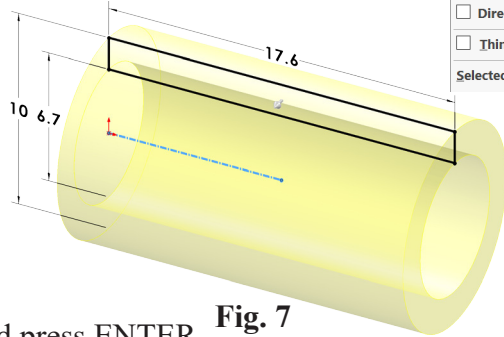


Fig. 6

B. Save as "ROLLER".



Step 1. Click File Menu > Save As.

Step 2. Key-in **ROLLER** for the filename and press ENTER.

C. Fillet Edge.

Step 1. Click **Fillet**  on the Features toolbar.

Step 2. In the Fillet Property Manager set:
select **FilletXpert**, Fig. 8

Radius  **.5**
click the right outside
circular edge, Fig. 9
click OK .

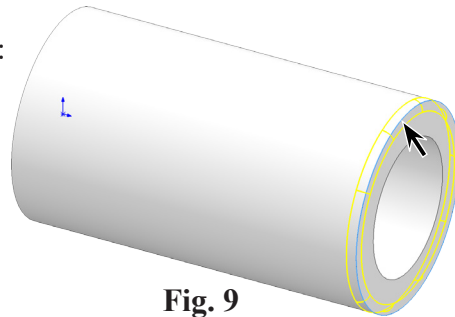


Fig. 9

Step 3. Save  (Ctrl-S).

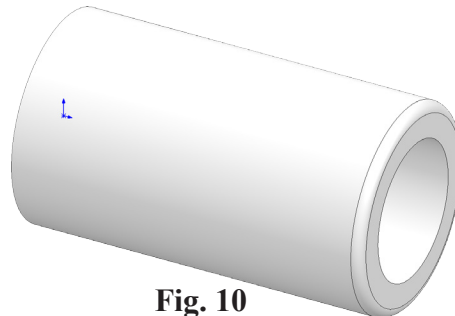


Fig. 10

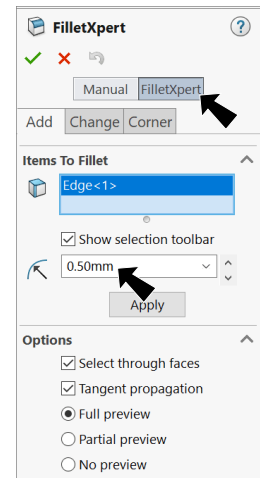




Fig. 8

D. Appearance.

Step 1. Click part, click **Appearance Callout**  on the context toolbar and click **ROLLER**  Fig. 11.

Step 2. In the Appearances Task pane at the bottom select **tank** and in the lower pane select **army green high gloss plastic**, Fig. 12.

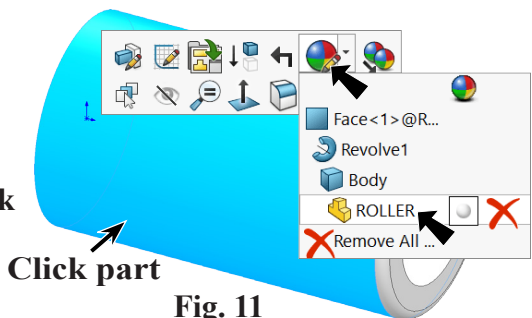




Fig. 11

Step 3. Click **OK**  in Property Manger to use:
R 171
G 175
B 110
click **OK**  .

Step 4. Save  (**Ctrl-S**).

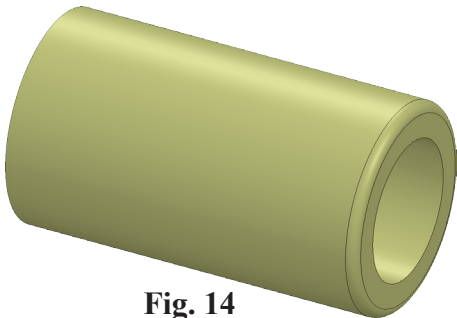


Fig. 14

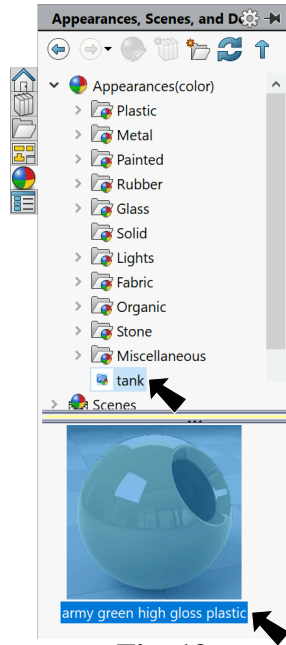


Fig. 12

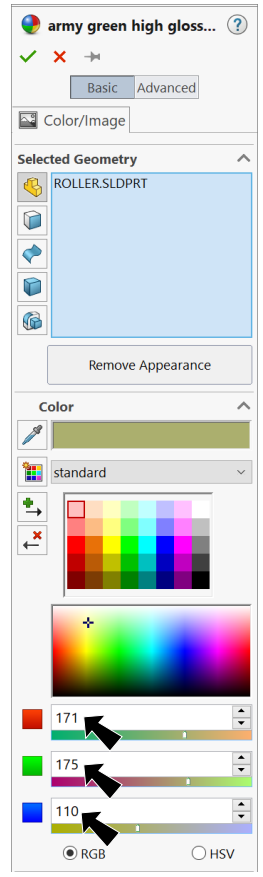


Fig. 13