

Siemens PLM Software

Solid Edge tutorial:

Rendering

www.solidedge.siemens.com

Introduction

Real-time rendering software KeyShot is integrated with Solid Edge and is being increasingly used as a rendering tool to create photorealistic visualizations of products as they evolve throughout development to speed up concept approvals, identify problems and sell products. This tutorial shows you how to transfer the model and materials from Solid Edge to KeyShot and apply various materials to the components, use a background image, adjust camera perspective to align with the shadows, reflections, and geometry in the background image and finally create a composite rendered image in the desired format and size.

How to render a Solid Edge model in KeyShot

1. Click the Solid Edge application button and from the **Open** menu, **Browse**.



 From the list at the bottom of the dialog, select Assembly documents and select the BrakePedalAssembly file from the Training folder.

By default the location is: C:\Program Files\Siemens\Solid Edge 2019\Training\Try It

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3. Use the **Quick View Cube** to orient the view so that it is easy to see most parts of the assembly.



4. From the **Ribbon** bar, start the **KeyShot Render** command.



5. Press the **F key** to view the **KeyShot** application fullscreen.



6. From the tray menu at the bottom, click **Library** to turn its icon blue and make sure the panel is visible and docked to the left side of the **KeyShot** main window.



7. Take the materials tab and expand the **Steel** group.



⊿ Me	tal	
⊳	Aluminum	
⊳	Anodized	
\triangleright	Brass	
⊳	Chrome	
\triangleright	Copper	
⊳	Nickel	
	Old	
\triangleright	Precious	
	Stainless Steel	
D	Steel	
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8. Select **Basic** and drag and drop the material **Steel** on the brackets.









9. Similarly apply the material **Polished Steel** on the spring.



10. Apply **Chrome** plating to the pedal and rubber to the brake pad. You can find the material "rubber" in the **Plastic** folder or you can also use the search box finding different materials.









11. Switch to the **Backplates** tab.



12. Expand Interior > Industrial.



13. Drag the **industrial_2_35mm.jpg** image and drop it in the background area.





14. Set the **Perspective** to 20.



15. Note the shadow cast on the ground by the brake pedal assembly and the reflection of the surroundings on the pedal surface.



16. From the main toolbar, activate **Tumble Camera** and using the left mouse button, align the length of the bracket so that it is parallel to the channels in the concrete bed in the background.





17. Rotate the model further so that the bracket edges and the channels in the concrete platform meet at a distance at the perspective vanishing point.



18. From the tray menu, click **Render Options**.



19. In the **Render Options** dialog, select size 1600x1067 from the **Presets** pull down, then click **Render**.

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20. When the red cross mark changes to a green tick mark, click the **Save** button to save the rendering to a PNG format.



21. Click the tick mark to close the render window.



22. Browse to the output folder and open the rendered image with the default viewer.





23. This completes the tutorial for rendering a Solid Edge model in KeyShot.

Summary

In this tutorial you learned:

- 1. How to open the active model in Solid Edge in KeyShot.
- 2. How to apply materials to various parts in KeyShot.
- 3. How to apply a background image to the model.
- 4. How to tumble the camera to adjust the perspective view.
- 5. How to set render options.
- 6. How to create a rendered image of the model in the desired format and size.

Open the Solid Edge active model in KeyShot

Apply materials to components in KeyShot

Apply background image to the model

Tumble the camera and set the perspective

Set rendering options in KeyShot

Create images in desired format and size

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