



SIEMENS

Ingenuity for life

Siemens PLM Software

Solid Edge tutorial: Rendering

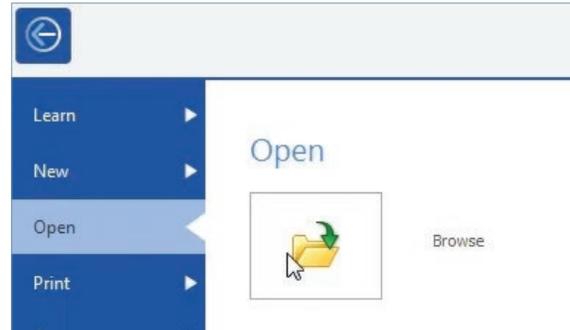
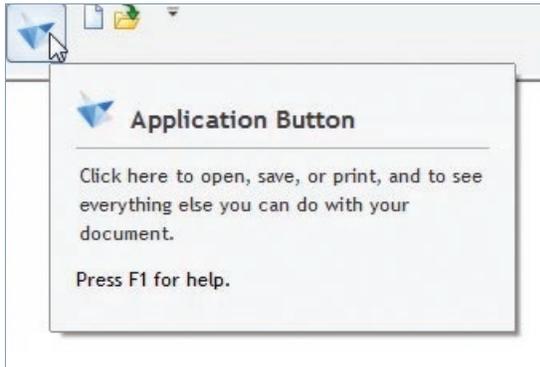
www.solidedge.siemens.com

Introduction

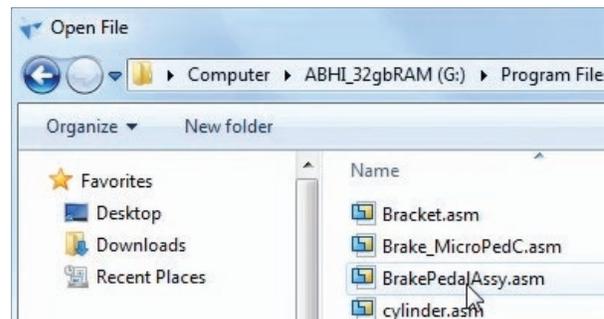
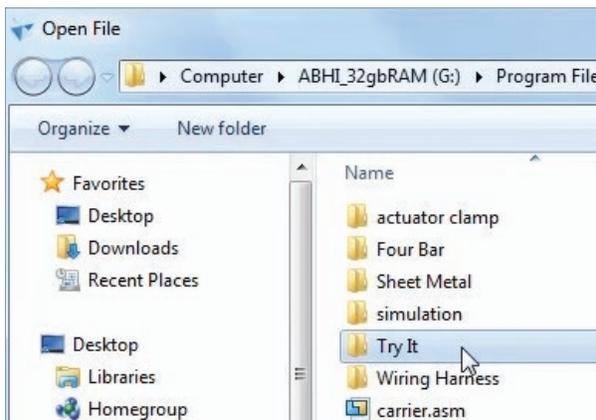
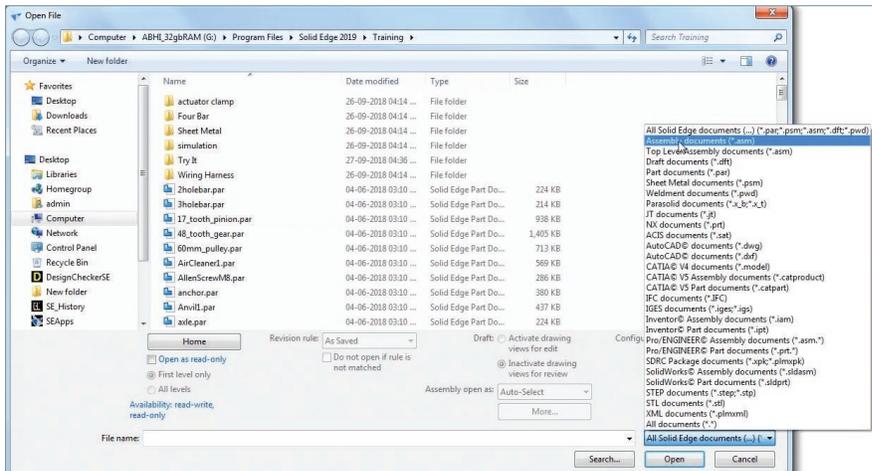
Real-time rendering software KeyShot is integrated with Solid Edge and is being increasingly used as a rendering tool to create photorealistic visualizations of products as they evolve throughout development to speed up concept approvals, identify problems and sell products. This tutorial shows you how 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

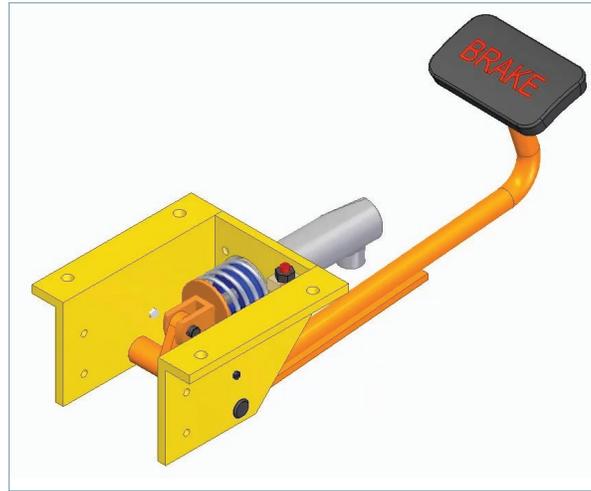
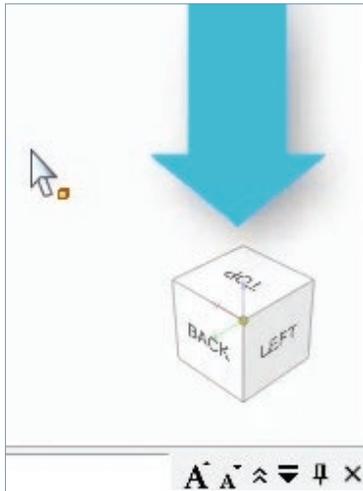
1. Click the Solid Edge application button and from the **Open** menu, **Browse**.



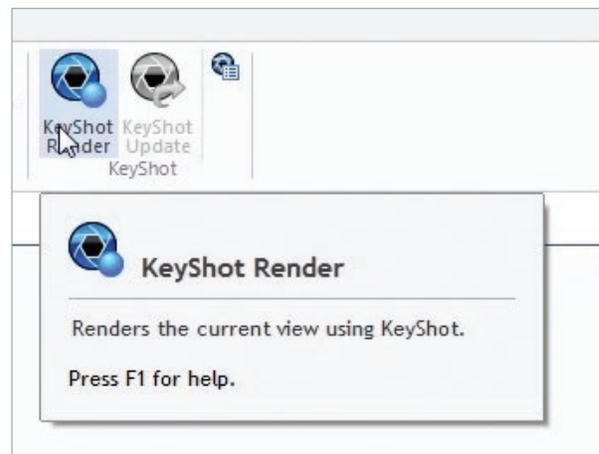
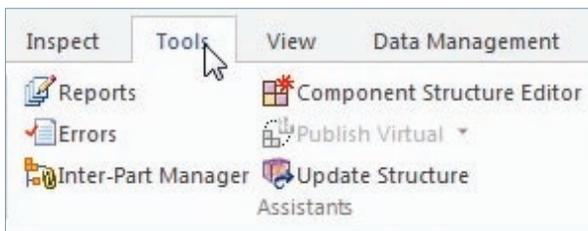
2. From the list at the bottom of the dialog, select **Assembly documents** and select the **BrakePedalAssembly** file from the **Training** folder. By default the location is: C:\Program Files\Siemens\Solid Edge 2019\Training\Try It



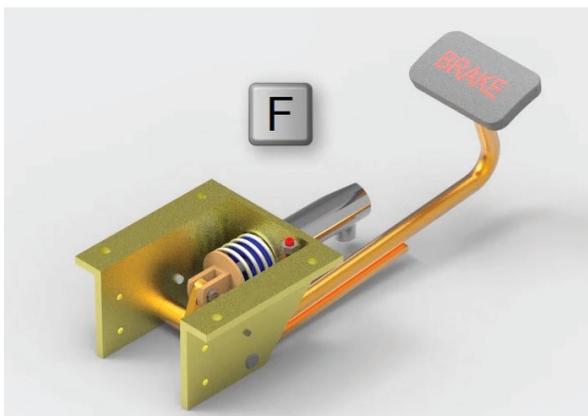
- Use the **Quick View Cube** to orient the view so that it is easy to see most parts of the assembly.



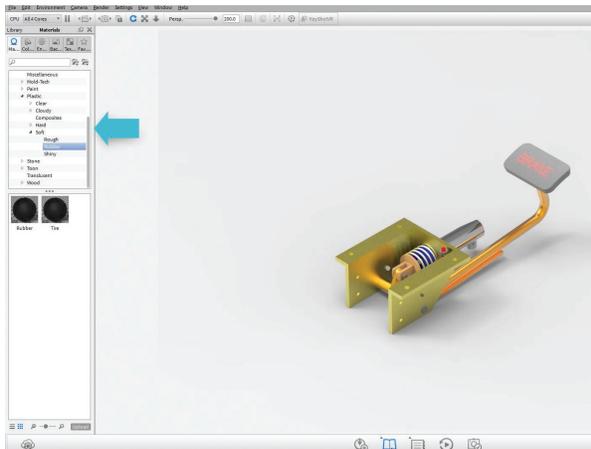
- From the **Ribbon bar**, start the **KeyShot Render** command.



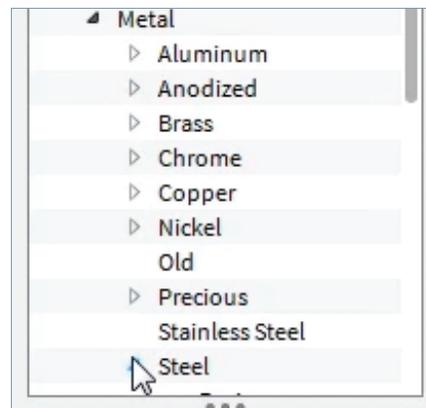
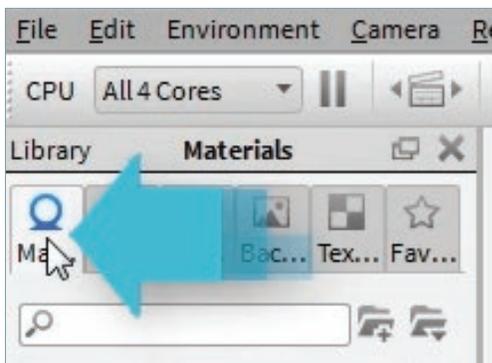
- Press the **F** key to view the **KeyShot** application fullscreen.



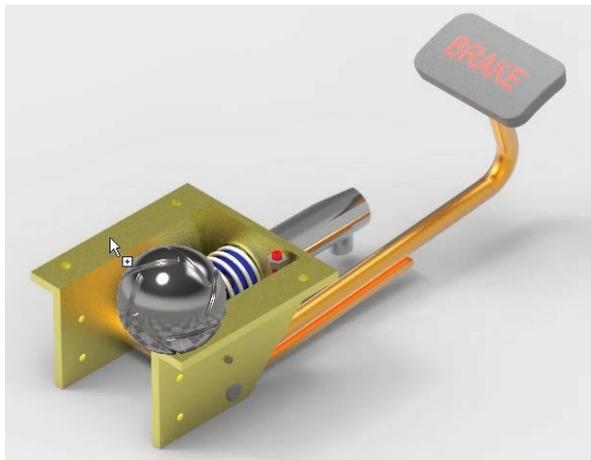
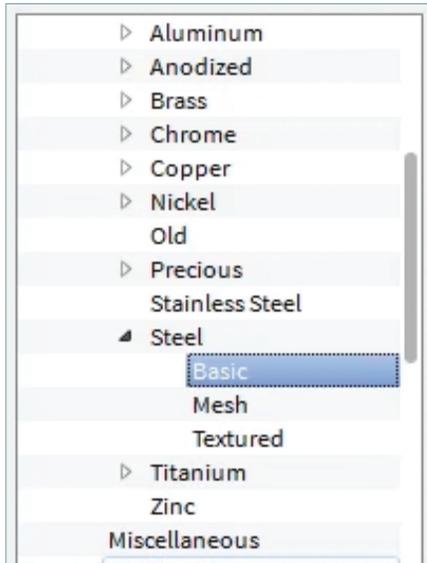
- From the tray menu at the bottom, click **Library** to turn its icon blue and make sure the panel is visible and docked to the left side of the **KeyShot** main window.



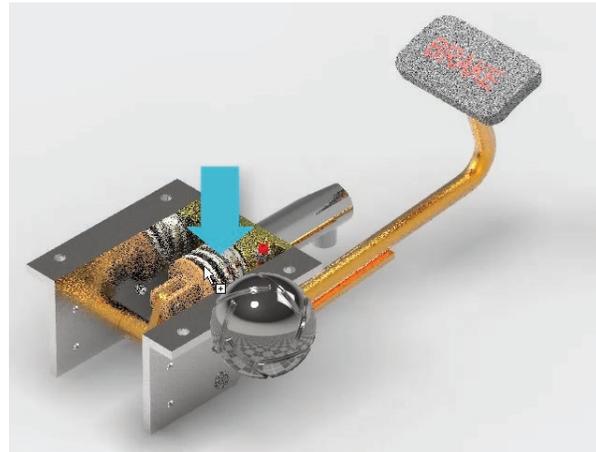
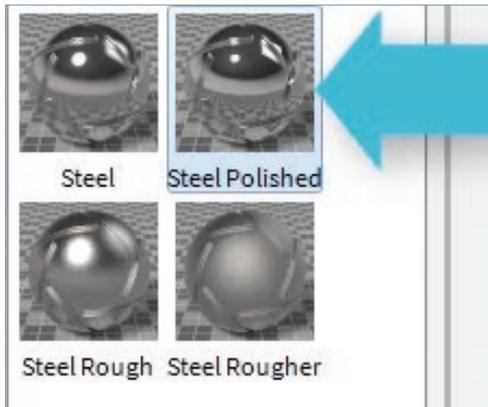
- Take the materials tab and expand the **Steel** group.



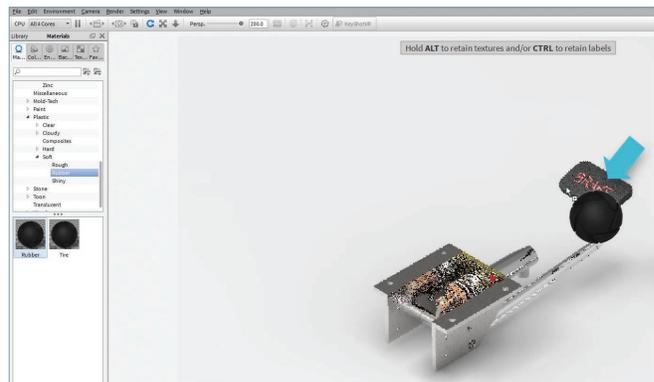
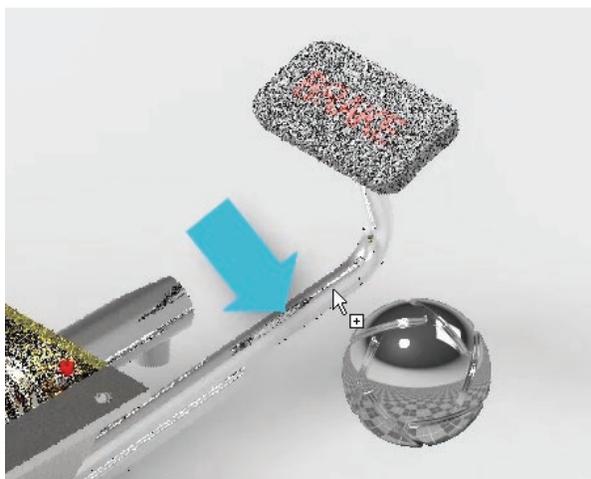
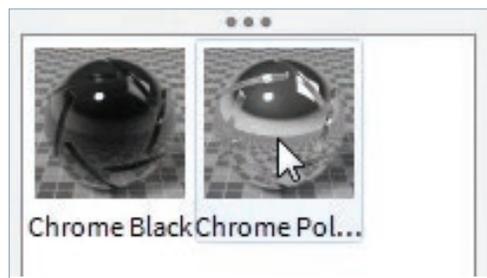
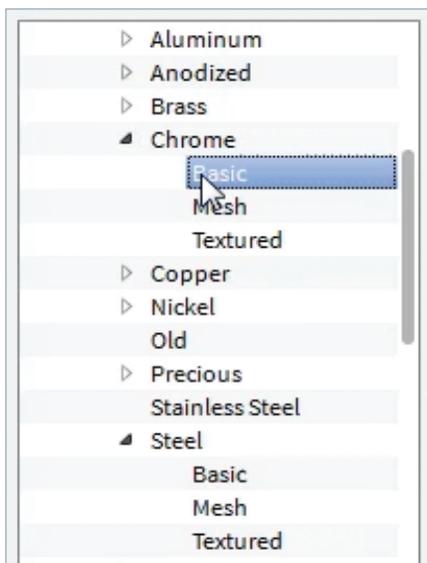
8. Select **Basic** and drag and drop the material **Steel** on the brackets.



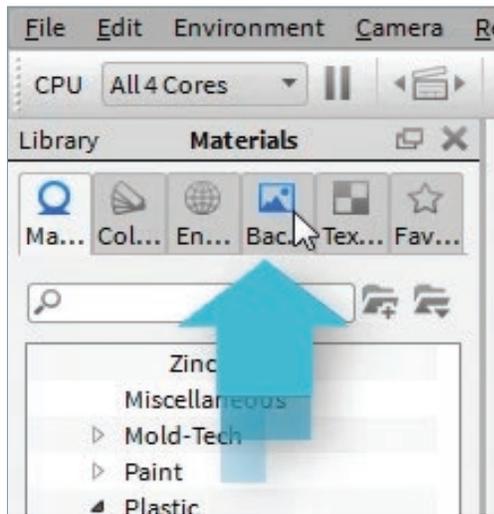
9. Similarly apply the material **Polished Steel** on the spring.



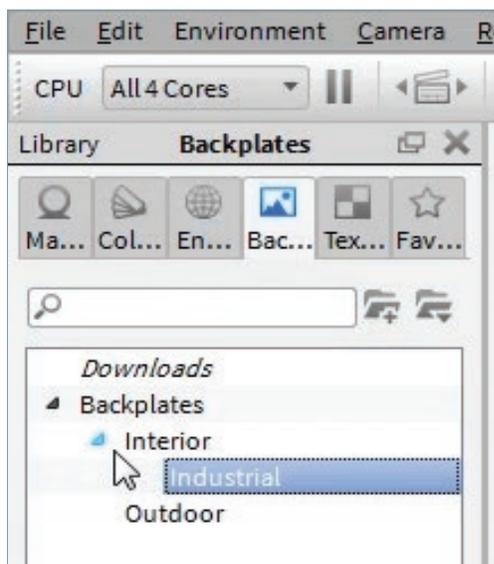
10. Apply **Chrome** plating to the pedal and rubber to the brake pad. You can find the material "rubber" in the **Plastic** folder or you can also use the search box finding different materials.



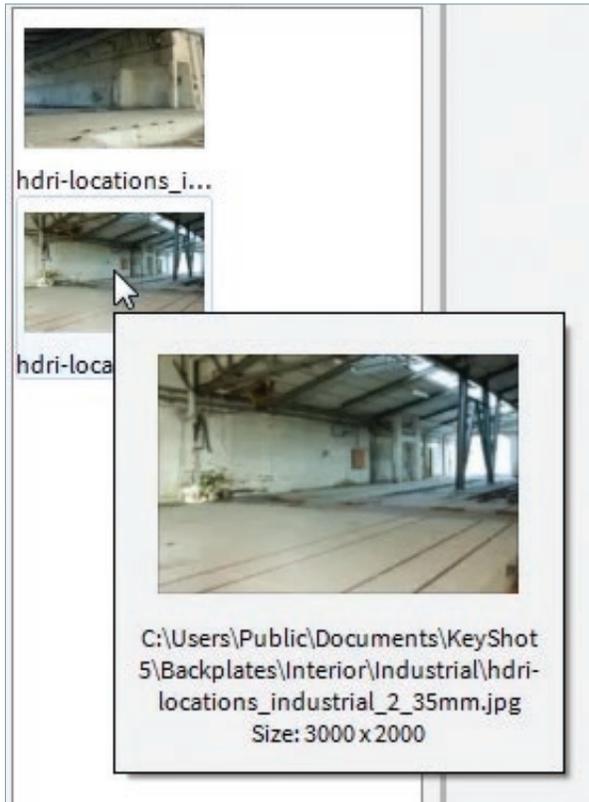
11. Switch to the **Backplates** tab.



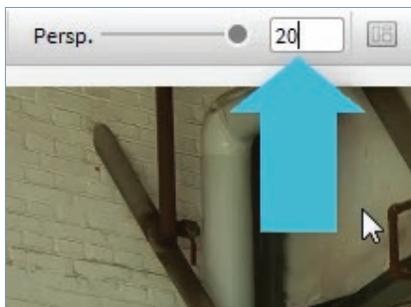
12. Expand **Interior > Industrial**.



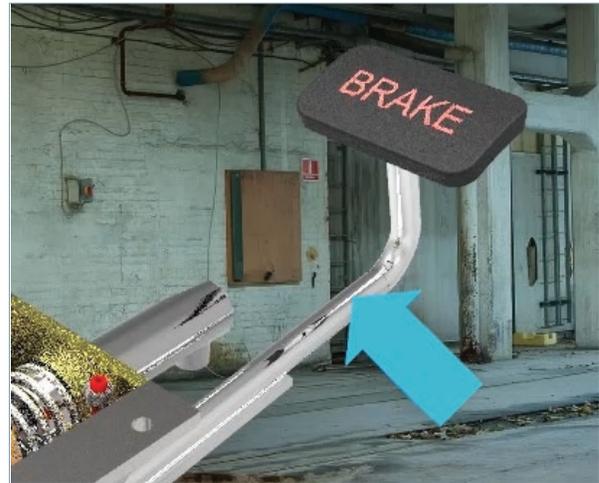
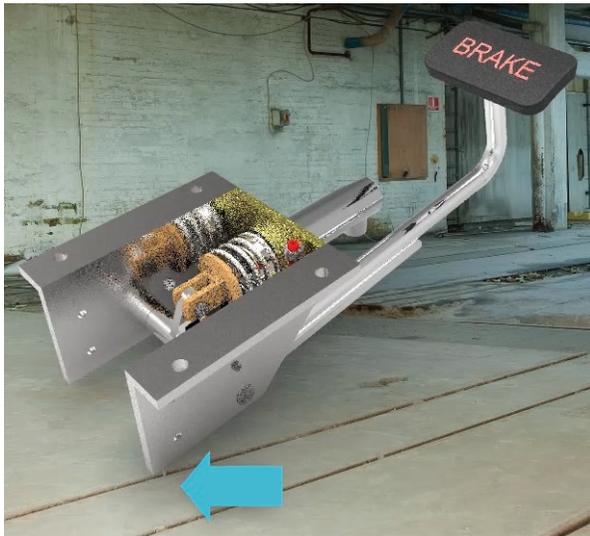
13. Drag the **industrial_2_35mm.jpg** image and drop it in the background area.



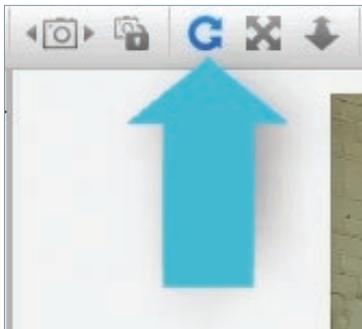
14. Set the **Perspective** to 20.



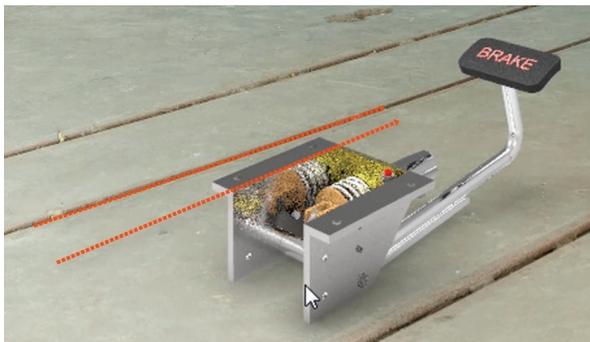
15. Note the shadow cast on the ground by the brake pedal assembly and the reflection of the surroundings on the pedal surface.



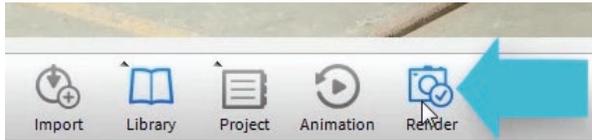
16. From the main toolbar, activate **Tumble Camera** and using the left mouse button, align the length of the bracket so that it is parallel to the channels in the concrete bed in the background.



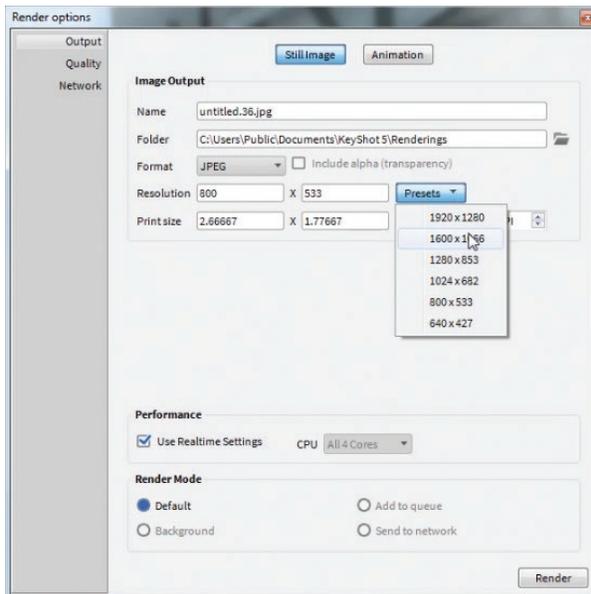
17. Rotate the model further so that the bracket edges and the channels in the concrete platform meet at a distance at the perspective vanishing point.



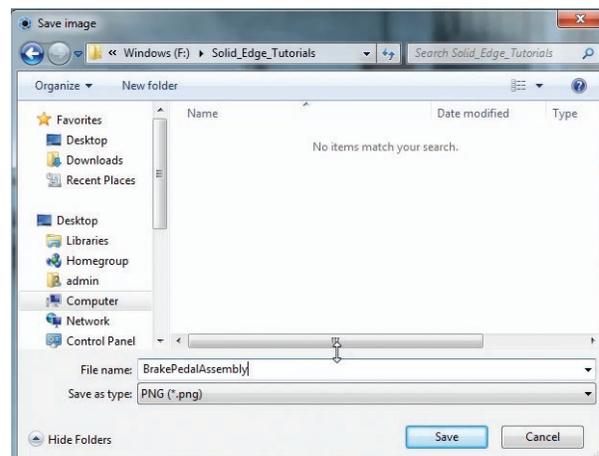
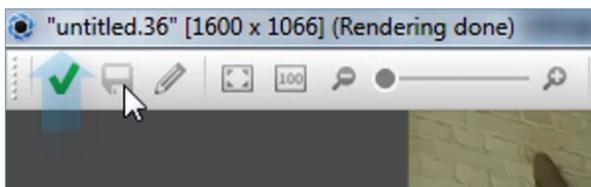
18. From the tray menu, click **Render Options**.



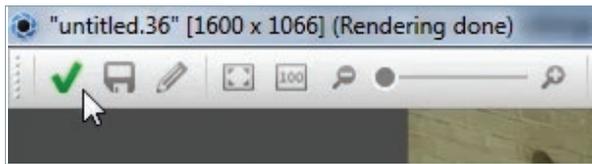
19. In the **Render Options** dialog, select size 1600x1067 from the **Presets** pull down, then click **Render**.



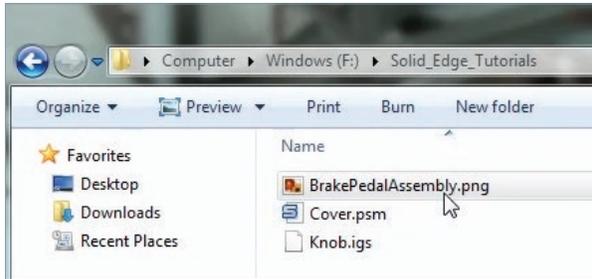
20. When the red cross mark changes to a green tick mark, click the **Save** button to save the rendering to a PNG format.



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

Siemens PLM Software

Headquarters

Granite Park One
5800 Granite Parkway
Suite 600
Plano, TX 75024
USA
+1 972 987 3000

Americas

Granite Park One
5800 Granite Parkway
Suite 600
Plano, TX 75024
USA
+1 314 264 8499

Europe

Stephenson House
Sir William Siemens Square
Frimley, Camberley
Surrey, GU16 8QD
+44 (0) 1276 413200

Asia-Pacific

Unit 901-902, 9/F
Tower B, Manulife Financial Centre
223-231 Wai Yip Street, Kwun Tong
Kowloon, Hong Kong
+852 2230 3333

About Siemens PLM Software

Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a leading global provider of software solutions to drive the digital transformation of industry, creating new opportunities for manufacturers to realize innovation. With headquarters in Plano, Texas, and over 140,000 customers worldwide, Siemens PLM Software works with companies of all sizes to transform the way ideas come to life, the way products are realized, and the way products and assets in operation are used and understood. For more information on Siemens PLM Software products and services, visit www.siemens.com/plm.

©2018 Siemens Product Lifecycle Management Software Inc. Siemens, the Siemens logo and SIMATIC IT are registered trademarks of Siemens AG. Camstar, D-Cubed, Femap, Fibersim, Geolus, GO PLM, I-deas, JT, NX, Parasolid, Solid Edge, Syncrofit, Teamcenter and Tecnomatix are trademarks or registered trademarks of Siemens Product Lifecycle Management Software Inc. or its subsidiaries in the United States and in other countries. Simcenter is a trademark or registered trademark of Siemens Industry Software NV or its affiliates. All other trademarks, registered trademarks or service marks belong to their respective holders.