Autodesk Inventor LT[™] Tips and Tricks



One of the powerful capabilities of Autodesk Inventor LT is the ability to create photorealistic images of proposed designs. When you can easily present good looking renderings of any part model before prototyping or production takes place, you save time and money, and you are able to refine concepts and gain the customer's approval to win the business.

Autodesk Inventor LT has several tools to assist in the creation of high quality renderings of parts. With the settings given in this document any part can be turned into a high-quality rendering by following these simple steps.

Easily Render any Model in Autodesk Inventor LT

Autodesk Inventor LT includes a built-in rendering application. You can use Inventor Studio to create highquality, photorealistic renderings from within Inventor. With the proper settings, any part model can be easily turned into a high-quality rendering.

Learning by example: Create Photorealistic Renderings

Imagine that you have designed a new piston for an engine. Creating a photorealistic rendering can help you express your design to the customer without creating a prototype, saving both time and money.

Follow these simple steps:

icon

 On the menu bar, select Inventor Studio from the Applications menu.



2. On the panel bar, select the Lighting Styles

3. With the Lighting Styles dialog box open, rightclick the Global Lighting lighting style, and select Copy Lighting Style.





Autodesk

Easily Render any Model in Autodesk Inventor LT

- 4. To rename the copied lighting style, slowly double-click on the name, type a new name of your choice, and then press Enter.
- Make the new lighting style active by rightclicking it, and selecting Active from the pop-up menu.
- 6. Select the new lighting style and change the settings on the General tab to: Brightness = 80 Intensity = 90
- 7. After making changes to the lighting style settings, click Save and Done. You can always change any of these settings at any time to make this style work best for your needs.
- 8. From the panel bar, select the Scene Styles icon.
- On the Scene Styles dialog box you can either select one of the predefined scenes, or create a new scene. For simplicity, this example uses one of the predefined scenes.
- From the scene styles' browser right-click XY Reflective GP and choose Active from the context menu.

ightness		
$I_{i}(i) = I_{i}(i) = I_{i}(i) = I_{i}$	80	
ana ar		10
0%	100%	
Sky Light		
 Enable 	90	Intensity
0		

Figure 3, Lighting Style - General tabe settings.



Figure 4, Creating a new scene style.

Easily Render any Model in Autodesk Inventor LT

11. On the Environment tab, change the Ground Plane Direction & Offset settings so the ground plane is below your part:

ackground	Environment		
-Ground P	lane		
Direction	& Offset	xy 🗸 ŀ.	06 m 🗦
Show	Shadows		
a N]	· · · ·	20.00
0%		100%	6
Show	Reflections		
]	1 1 1 1	20.00
0%		100%	6
Use Ref	lection Image		
			6
			UM

Figure 5, Scene Styles - Environmental tab settings.

- 12. After making changes to the scene style settings, click Save and Done.
- 13. From the panel bar select the Render Image icon.
- 14. On the Render Image dialog box, on the General tab, set the width and height of the image that you want to render, ensure that the Lighting Style and Scene Style are the ones that were defined previously, and that the following options are changed to: Camera = Current View Render Type = Realistic
- **15.** On the Output tab, change the Antialiasing
- setting to High Antialiasing.
- **16.** On the Style tab, check the True Reflection option.

Render	Image				×
General	Output	Style			
Width		Height			
640	>	480	>		
				Lock Aspect Ratio	
(Currer	nt View)		*	Camera	
Lighting) Example	ā	~	Lighting Style	
XY Ref	ective GP		~	Scene Style	
Realisti	c		*	Render Type	
2				Render Close]

Figure 6, Render Image - General tab setting.

Easily Render any Model in Autodesk Inventor LT

- 17. After configuring the rendering options click Render at the bottom of the dialog box. A new dialog box opens, as your rendering is calculated and displayed.
- **18.** To save the rendered image, click the Save Rendered Image icon.



Figure 7, Rendering of the part.

style settings so you can easily reuse them again, click on the Save to Style Library icon.

19. To save any of the Surface, Lighting, or Scene

Conclusion

This workflow gives you the steps and settings to use Inventor Studio from within Inventor LT to very easily create a photorealistic rendering of any part file. Use the settings given in this Tip to easily create high-quality renderings for any part file. By adding additional light sources and further tweaking the various settings, even higher quality results can be obtained.

Autodesk