



Digital Design Graphics Technology  
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#### Ways to Render out of AutoCAD:

- Export to BMP from within AutoCAD (Quick but not the best quality)
- Use the Windows “Snipping Tool” and save out as a PNG. (Quick but not any better.)
- USE ME:
  - Set FACETRES = 10
  - Apply Materials through the palette “Materials”
    - Left click and drag for one continuous material across the whole part or
    - Hold “CTRL” and left click and drag for specific faces
  - Note: Background color does not matter if you are rendering out with an Alpha channel
    - Application Menu / Options / Display Tab / Colors Button / Color in top right
  - Go to “RENDEREXPOSURE”
    - Set “Environment” to ON and play with settings.
  - Go to “RENDERPRESETS”
    - Render Size = 1920 x 1080
      - Preset Medium = 10 seconds
      - Preset High = 5 minutes
    - Save out as a PNG:
      - 32 Bits (24 Bits + Alpha)
      - DPI = 150

#### Ways to Render out of Inventor:

- Open the file you want to have an image of and zoom in to fill your screen:
  - File, “Save As”, “Save Copy As” (use the PNG option)
  - Before saving out, choose “Option” in bottom right
  - Change Pixels X and Y to 1920 x 1080 respectively
  - Check on both checkboxes
  - Note: this is quick and does a decent job but will not give you the best overall quality
- Use the Windows “Snipping Tool” and save out as a PNG. (worst option)
- Use this for the best quality:

- Go to the “Environments” tab, choose “Inventor Studio”
- Click on “Render Image”
  - On General tab:
    - Change width and height to 1920 x 1080
    - Leave Camera to “Current View”
    - Choose the Lighting Style you want
  - On Output tab:
    - Click the checkbox for “Save”
    - Choose the folder location
    - Save as a PNG
    - Click on “Options” in bottom right
    - Set DPI to 150 for web (300 for printing)
    - Check on “Alpha Channel”
  - On Renderer Tab
    - Set “Render by Iteration” to 32
    - Lighting and Material Accuracy to “High”
    - Image Filtering to “Guassian “ at 3
- For Presentation Views:
  - Go to the View tab
  - Change Visual Style to “Realistic”
  - Adjust the Appearance Panel as you wish. I had good luck with the following settings:
    - Set “Ray Tracing” On
    - “Photo booth” for lighting
    - Disable Ground Plane
    - Disable Reflections
    - Disable Ground Shadows
  - Go to Presentation Tab, choose “Raster” on the publish panel
    - Set Image Resolution to 1920 x 1080
    - Set Resolution to 150
    - Choose a file location
    - File format to PNG
    - Check on “Transparent Background”

How to remove background from image in Photoshop:

- Select the layer you want to work with
- Use Magic Wand (“w”)
  - Settings:
    - Tolerance = 1
    - Turn “Sample all layers” off
    - Turn “Contiguous” On
    - Keep “Anti-Alias” On
  - Left Click on the background
  - Select / Inverse (Shift + Ctrl + I)
  - Select / Modify / Contract = 1 Pixel
  - Add “Layer Mask” to layer