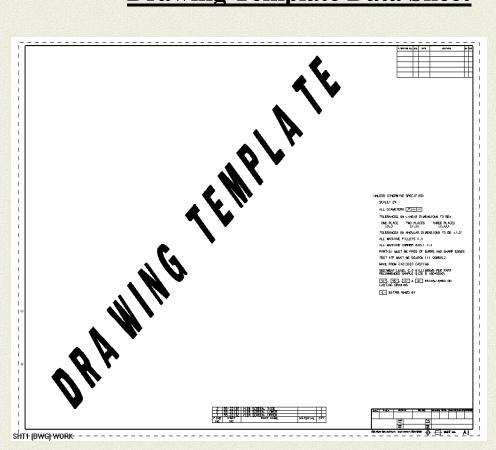
Drawing Template Data Sheet



Drawing Sheets in Template:

Sheet 1:

Title Sheet

- Title Block
- Views
- Report List

Drawing Creation Instructions:

- Before adding views in template, please turn on all the layers which objects will be put into, or please use Format->Visible in view to set layer status in each view.
- Please note that the dimensions of reference point in electrode blank part will only be created in the TOP and FRONT view, that means those views' name must starts characters "TOP" or "FRONT"
- The report list must be named as 'DRAFT_ELECTRODE_REPORT", and header of the column will be one of strings as below

"DRAWING" "ELECTRODE" "MACHINED LIST" "EXCLUDED LIST" "OPTIONAL LIST"

- Drag drawing template onto the model view. When doing so, the following will occur:
 - a. A 'new' part file will be created with the current model / assembly added as a component.
 - b. All views will be populated with the new model and scaled to maintain the same relative drawing view size
 - c. All parts list will be updated and views auto ballooned.
 - d. All model dimensions will be automatically inherited onto the drawing in the most appropriate views.
 - e. All views will receive centerlines.
- Validate the results and adjust drawing annotation based on company standards.

Please import the template files into TcEng system as seed files, for example 'ugs_dwg_xxxxx.prt'.

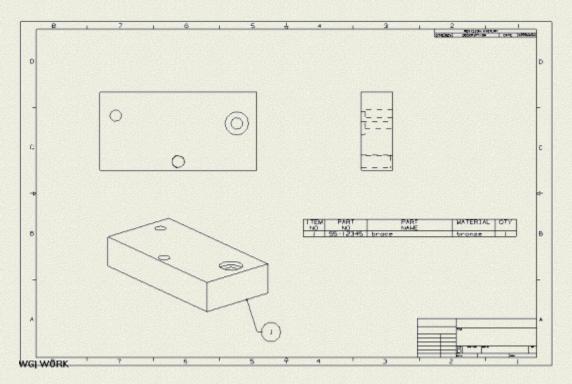
TcEng is a folder located in C:\Program Files\UGS\NX 7.0\UGII\table_files\tables_tceng.pax You only need this for new dwg, not if you modify existing NX/Siemens.

Which I did,

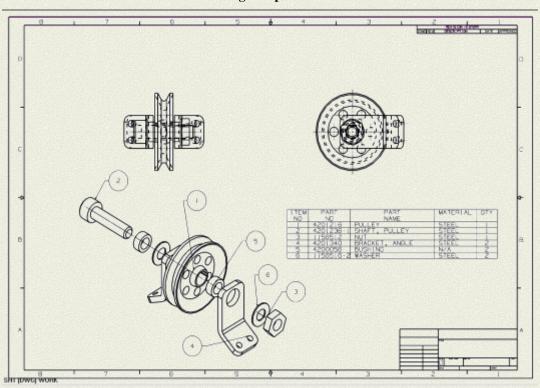
Drawing Templates let you create a new master model drawing from a part using a template part file. **Drawing Templates** are available from a palette on the **Resource Bar**. (bar to the left while opening)

The Drawing Template functionality works by dragging and dropping a template onto a model. NX creates a drawing from the template and includes the model as a component. The **WCS** of the model determines its orientation of the new component.

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Drawing Template Part



New Component Part

Drawing Templates can include the following:

- Drawing borders
- Prearranged Imported views

- Prearranged Section views
- Prearranged Exploded views
- Prearranged faceted Views
- Parts list
- ▶ ID symbols

The newly created component contains automatic:

- Scaling and positioning of views.
- Placement of section lines and update of section views.
- Associativity to model for section lines, anchor points, and view boundary curves.
- Placement of centerlines.
- Placement of annotation.
- ▶ Placement of inherited sketch dimensions and hole features dimensioned in the appropriate view when there is a single solid body present in the part. This placement does not occur when there is more than one solid body.
- Update of parts list.
- Id symbol placement for parts list.
- Explosions of views.

Template part components and parts list are not merged with the new Master Model component. Instead, the new component maintains associations to its own assembly components and uses its own parts list.

Note:

You must add the **Drawing Template** palette to your Resource bar. See <u>Palettes overview</u> in *Introduction to NX* for additional information.

Where do I find it?

Application	Drafting
Resource bar	Drawing Templates

To create a drawing template with predefined views:

- 1. Create an assembly part file with one component.
- 2. Add the desired views, borders, notes, etc. in the assembly part file.
- 3. Save the part.
- 4. Find the PAX file (see the links at the top of this page).
- Move the template file and image file to the location of the PAX file you recorded from the previous step.
- 6. Edit the PAX file (see the links at the top of this page).
- 7. To refresh the palette, toggle the palette from list to preview and back to list.

The original drawing PAX and template part files are located in your site installation in the ugii\templates subdirectory. The PAX file is UGS_Drawing_templates.pax. This file is located in UGII_ROOT_DIR\templates.

You can find the path to UGII_ROOT_DIR as follows:

- Choose Help→ NX Log File.
- 2. In the Information Window, choose **Edit**→ **Find**.
- 3. In the Find what text box, enter UGII ROOT DIR.
- 4. Record the location pointed to by UGII_ROOT_DIR.

For customization purposes, we recommend that you **copy** any PAX and **template part files** to a local directory that you have access to. This keeps the original files intact. Please check with your local administrator for site protocol.

Make new folder under C:\ copy the name of the template to a new spare folder.

If the template palette tab does not appear on the NX **Resource Bar**, you can add it as follows:

- Choose Preferences→ Palettes.
- 2. Click **Open Palette File**
- 3. Enter the directory location or use the **Browse** button to locate the directory.

If the template palette tab already appears on the NX **Resource Bar**, you can **locate** the directory for the template files as follows:

- 1. Choose Preferences→ Palettes.
- 2. Find the name of the template in the **Palettes** dialog list window.
- Pass your cursor over the **Location** column entry in the same row and as the template name.???

Note:

You must have write access to the file you want to edit.

The PAX file is a **text file** with a ".pax" file extension. The file contains tagged definitions for each one of the drawing templates. When you **add** a new drawing template, you must **define(add)** it in the PAX file. Before you can edit the PAX file you must first find its location (see the link at the top of the page).

Then you can edit it with e.g. Notepad

The file contains tagged definitions for each drawing template. A **single** entry for **one template** looks like the following:

```
</Presentation>
    <ObjectData class="DrawingTemplate">
        <TemplateFileType>none</TemplateFileType>
        <Filename>dwg a format.prt</Filename>
        <Units>English</Units>
        <UsesMasterModel>Yes/UsesMasterModel>
    </ObjectData>
  </PaletteEntry>
Attention check, because d1 through d26 are usually occupied.
And you may want to rename existing NX to d27 to d36 and use d13 to
d22 for
Company-header set.
  <PaletteEntry id="d13">
    <References/>
    <Presentation name="A0 - views" description="NX Example, 4</pre>
Views, 2 Sheets">
      <PreviewImage type="UGPart"</pre>
location="drawing noviews template.jpg"/>
    </Presentation>
    <ObjectData class="DrawingTemplate">
        <TemplateFileType>none</TemplateFileType>
        <Filename>A0-noviews-template.prt
        <Units>Metric</Units>
        <UsesMasterModel>Yes/UsesMasterModel>
    </ObjectData>
  </PaletteEntry>
```

To **add** a drawing template, you must **copy** the above section and **add** it to the PAX file. **Then edit the section you just added** as follows:

- 1. Edit the text in quotes for the PaletteEntry id so that the text ("d1") is unique in the file. That is, no other entry should use the same id.
- 2. Edit the text in quotes for the Presentation name to make it describe what the template does. This name appears in the palette window as the template's name.

- Edit the text in quotes for the Preview Image location to give file name for the template.
- 4. Verify that the text in quotes for ObjectData class reads "DrawingTemplate".
- 5. Edit the path for the Filename to give the path for your template. (the filename)
- 6. Save and exit the PAX file.

e.g./vorbild

Drawing Sheet Templates adds drawing sheets to the current work part. If the part does not have drawing sheets, NX creates drawing sheets.

If the part has a drawing sheet, NX adds additional sheets. Sheet templates have the same capabilities as drawing templates. The difference is that a drawing template creates a new part which references the master part file. The sheet template adds a sheet to the current part.

Use the sheet template functionality to quickly add drawing sheets to the current work part with pre-defined content from the template. NX provides sets of drawing sheet templates in both English and metric sizes.

Note:

Please note the following:

When you create drawing sheet templates, the layer settings for the current part are honored for the new sheets. If the work part does not have layer 255 and 256 visible, the border and text from the sheet template part can not be seen until you make those layers visible. A site administrator can customize these templates to meet company standards.

Where do I find it?

Application	Drafting
Resource bar	Sheet Templates (Inch) or Sheet Templates (Metric)
Location in dialog box	Insert Sheet dialog box→Size group→ Use Template

Automatic text automatically synchronizes text to a defined value when you use either a drawing or sheet template. To use this feature, add the appropriate text to the template and ensure that the text references the correct part attribute or key word (sheet template only). When you use the template, the text updates to show the predefined value.

The following is a list of valid control character strings for part drawing sheet attributes.

Control string	Description
<w@\$sh_sheet_number></w@\$sh_sheet_number>	Sheet number of the current sheet
<w@\$sh_number_of_sheets></w@\$sh_number_of_sheets>	Number of sheets in the current part
<w@\$sh_sheet_scale_numerator></w@\$sh_sheet_scale_numerator>	Numerator of the sheet scale
<w@\$sh_sheet_scale_denominator></w@\$sh_sheet_scale_denominator>	Denominator of the sheet scale
<w@\$sh_sheet_size></w@\$sh_sheet_size>	Size of the current sheet
<w@\$sh_sheet_units></w@\$sh_sheet_units>	Units of the current sheet
<w@\$sh_sheet_projection_angle></w@\$sh_sheet_projection_angle>	Projection angle symbol of the current sheet
<w@\$sh_master_part_name></w@\$sh_master_part_name>	Master Model drawing sheet part name
<w@\$sh_part_name></w@\$sh_part_name>	Sheet part name

To use these control strings, you can use the Text Editor dialog box to enter a string in an area where you wish to automate text. For example, you could use these strings in the title block of a sheet template's drawing format.

- ChoosePreferences→Palettes.
- 2. On the **Palettes** dialog box, click **Open Palette File**
- 3. Browse to the palette files located at \$UGII_ROOT_DIR\templates.
- 4. Select UGS_sheet_templates.pax.

A Sheet Template tab appears on the Resource Bar for the template file you install. You can drag a template onto a modeling view to import sheets into the work part.