Chapter

8

Seed Files

This Chapter will Cover:

- 1. Starting a New Project
- 2. Creating New Levels
- 3. Setting MultiSnap
- 4. Modifying Text Styles
- 5. Modifying Dimension Styles
- 6. Changing Working Units
- 7. Removing the Grid
- 8. Saving and Setting a Seed File

In the first two problems, you started by creating layers and spent a good amount of time choosing parameters for colors, fonts, and other settings. However, there is a way to bypass reconfiguring all of the same settings every time you start a new drawing.

PowerDraft uses a system involving Seed files. A seed file is a normal .DGN file, but when assigned as the seed file for another project, will interpose its pre-configured settings onto the new project. In this chapter, you will create a basic seed file which you will be able to use when moving on to other problems.

Start a New Project

Select the New button from the Standard Toolbox and the New window will appear. Save the new file as "Seed" and save the file.

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(Ann	Name	*	Date modified	Туре	Size	
Recent Places	Circular Prob	lem oblem	12/21/2011 11:22 12/21/2011 9:21 AM	DGN File DGN File	47 KB 46 KB	
Desktop						
Libraries						
(Lange Computer						
	File <u>n</u> ame:	Seed			•	Save
	Save as type:	MicroStation DGN Files (*.dgn)			•	Cancel
	Seed:	C:\ProgramData\Bentley\PowerDra	ft V8i Academic\WorkSpa	ce\svstem\seed\seed2d	.dan	Browse

Figure 8.1 – Starting a New File

Creating New Levels

There are a number of different linetypes and styles used in all types of drafting. For this seed file, you will be focusing on mechanical drafting. Below is a chart containing the names, colors, and linetypes of each layer you need to add to the seed file. Add new layers the same way you did in the circle and rectangle problem. Select the Level Manager tool from the Primary Tools toolbox and the Level Manager window will appear.



Layer Name	Color	Linetype
Default	Black	Continuous
Border	8 (dk. gray)	Continuous
Center	Green	Center
Dimension	Red	Continuous
Hatch	254 (lt. gray)	Continuous
Hidden	Blue	Hidden
Section	Magenta	Phantom
Text	Cyan	Continuous

Table 8.1 - Mechanical Template Layers

Select the New button from the Level Manager window and rename the new level according to the chart above. Repeat this until you have every layer above set in the Level Manager.

😭 Level Manager					
Levels <u>F</u> ilter <u>E</u> dit					
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- Seed.dgn	▲ Name ^	ß		-	Used
- All Levels	Default	0	0	0	
└─	Border	0	0	0	
	Center	0	0	0	
	Dimension	0	0	0	
	Hatch	0	0	0	
	Hidden	0	0	0	
	Section	0	0	0	
	Text	0	O	O	
Active Level: Text	80	of 8 displayed; 1 selected;			

Figure 8.2 - New Levels

Change the colors by selecting the white box next to the 0 and a color pallet will appear. Select the correct color for each layer.

😭 Level Manager					23	
Levels <u>F</u> ilter <u>E</u> dit						
🧐 💓 📄 Symbolog	y: Overrides 🔹 🏳 (none	e) 🕶 🔝 👻				
- Seed.dgn	▲ Name ^	Ø	· · · · · · · · · · · · · · · · · · ·	>	Used	
- Al Levels	Default		0	0		
-> Filters	Border	8	0	0		
	Center	2	0	0		
	Dimension	3	0	0		
	Hatch	254	0	0		
	Hidden	1	0	0		
	Section	5	0	0		
	Text	7	0	0		
Active Level: Text	8 of 8 displ	ayed Color:			1	
					RGB: 0, 255,	255
					Override	On
					Override	Off
				В	OK Cance	el

Figure 8.3 – Modifying Level Colors

Change the linetype of the Center, Hidden, and Section levels by selecting the lines from the column next to the color column. Change the Center level to Center, the Hidden level to Hidden, and the Section level to Phantom, as shown before in the chart. Now you have finished creating and configuring all of the levels.

😭 Level Manager					• X
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- Kong Seed.dgn	△ Name ^	G			Used
- All Levels	Default	0	0	0	
-> Filters	Border	8	0	O	
	Center	2	(Center)	0	
	Dimension	3	0	0	
	Hatch	254		0	
	Hidden	1	(Hidden) —	<u> </u>	
	Section	5	0	0	
	Text	7			
			Name	^	
Active Level: Text	8 of 8 dis	splayed: 1 selected:	(Border)		
	11		(Dashdot)	- di	
			(Dashed)	=	
			(Divide)		
			(Dot)		
			(Hidden)		
			(Phantom)		
			{ Arrow }	+	
			[74004]		
			Override O	n	
			Override O	ff	



Setting MultiSnap Settings

The AccuSnap toolbox should be at the bottom of your screen. Right-click on the Multi-Snap I button and select Properties to modify the MultiSnap settings.

Intersection. Midpoint, Keypoint, and Center should be checked. If not, check the boxes next to the corresponding setting. If you feel more comfortable not using any of these, or feel you would like to use Origin, Bisector, or Nearest, uncheck/check those boxes also. The seed file will be the template you use to draw many projects, so you should customize it to fit your comfort level.



Figure 8.5 - MultiSnap Settings

Modifying Text Styles

You already created a text style in the Circle problem. Select Element from the menu bar and then select Text Styles. The Text Style window will appear.

🛝 Text Styles - Style (no	ne)	X
St <u>y</u> le Vi <u>e</u> w		
1		
Text Styles	General Spacing Under/Overline Background Advanced	
<u>istyle (none)</u>	Eont: The Arial Color: Height: 0.2500 Width: 0.2500 Slant: 0° Justification Left Top Vertical Vertical Full Justification	□ 0 ▼ cation
	None	

Figure 8.6 – Text Style Window

Only the Style(none) is shown currently. Select Style from the menu bar on the Text Styles window and select Import. The Text Style Import window will appear. Select the Circular Problem and click Open. The Standard text style you created in the circular problem should appear in the Text Styles column below Style(none). Right click on Standard and select Activate to set the Standard as the active text style.

🔊 Text Style Imp	ort - C:\Users\Cha	rles\Desktop\wcc microstation v8	i 2D\Microstation Trair	ning\		×
Look įn:	Microstation T	raining 🔹	G 🌶 📂 🛄 -			S 🖹
C	Name	*	Date modified	Туре	Size	
	Dircular Prob	lem	12/21/2011 11:22	DGN File	47 KB	
Recent Places	Rectangle Pr	oblem	12/21/2011 9:21 AM	DGN File	46 KB	
	Den Seed		12/22/2011 9:16 AM	DGN File	47 KB	
Desktop						
Libraries						
Computer						
(interview of the second secon						
	File <u>n</u> ame:	Circular Problem			•	Open
	Files of type:	MicroStation DGN Files (*.dgn)			•	Cancel

Figure 8.7 – Naming a New Text Style

🔼 Text Style:	s - Standard (Active : Styl	rle (none))	x
Style View	General Sp Font <u>Activate</u> Save Copy Rename Remap Elements <u>D</u> elete <u>R</u> eset Update From Library	Image: Second	0 -
		Standard	

Figure 8.8 – Setting the Active Text Style

Creating a Dimension Style

Just as with the text styles, you created a dimension style in the circular problem which you will use for this seed file, also. Select Element from the menu bar and then select Dimension Styles. The Dimension Styles window will appear.

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<u>S</u> tyle <u>V</u> iew			
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Dimension Styles	Geometry Units Text Symbology Advance	ced	
Style:(none)	Dimension Lines	Tolerance	
	Stack Offset: 0.0000	Enable	
	Relative Dimension Line	Type:	Plus/Minus 🔻
		Upper:	0.0000
	Extension Lines	Lower:	0.0000
	Cffeet: 0 500000	Text Size:	1.000000
	Extension: 0.500000	Sen Margin:	0.500000
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	Terminators Units that the extension lin	ion With Leade	er
	Arrowt beyond the dimension line	Mo <u>d</u> e:	None -
	Wiath: 1.000000	<u>T</u> ype:	None
	<u>H</u> eight: 0.500000	Terminator:	
	Symbols 🔻	Alignment:	Auto
	Fit Options		
	Text/Terminator: Term. Moves First -	Center Mark	
	Min. Leader: 3.500000	Center Size:	0.0000
	1.25	50"	— Ххх Үуу Ххххх Үуууу
		7	Хх Үү
		-	

Select Style from the menu bar on the Dimension Styles window, and then select Import. Open the Circular Problem just like you did in the text styles window. The Standard dimension style will appear in the Dimension Styles column. Right-click on Standard and select Activate. Now the Standard dimensions style will be the active dimension style for the seed file.

Figure 8.9 – Dimension Styles Window

🔊 Dimension Style:	s - Style:(none)	
<u>S</u> tyle <u>V</u> iew		
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Dimension Styles	Geometry Units Text Symbology Advance	ed
Style:(none)	Dimension Lines	Tolerance
0	Stack Offset: 0.0000	Enable
Va Standard	Relative Dimension Line	Ty <u>p</u> e: Plus/Minus ▼
		Upper: 0.0000
	Extension Lines	Lower: 0.0000
	✓ Enable	Text Size: 1.000000
	Offset: 0.500000	Left Margin: 0.500000
	Extension: 0.500000	<u>S</u> ep. Margin: 0.500000
	Terminators	Dimension With Leader
	Arrowhead: Open 💌	Mo <u>d</u> e: None 💌
	Width: 1.000000	Type: None 💌
	Height: 0.500000	Termi <u>n</u> ator:
	Symbols 👻	Alignment: Auto
	Di Ontine	In-line Leader
	Text/Terminator: Term. Moves First	Center Mark
	Min. Leader: 3.500000	Center Size: 0.0000
	1.25 8	0°Xxx Yvv
		XXXXX Yyyyy Xx Yy
l		

Figure 8.10 – Importing the Standard Dimension Style

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Dimension	n Styles	Geometry Units Text Symbology Advance	d
Style:(non	ie)	Dimension Lines	Tolerance
0	Activate	~pk Offset: 0.0000	Enable
Stan	Activate	e Dimension Line	Type: Plus/Minus 💌
	Save		Upper: 0.0000
	Cop <u>y</u>	hes	Lower: 0.0000
	Rena <u>m</u> e		Text Size: 1.000000
	Delete	Offset: 0.500000	Left Margin: 0.500000
	Deret		Sep. Margin: 0.000000
	Reset		Dimension With Leader
	Re <u>m</u> ap E	Elements	Mode: None
	Update l	From Library Width: 1 00000	
		Height: 0.500000	Terminator:
		Symbols V	Alignment: Auto
		- Symbols +	In-line Leader
		Fit Options	
		Text/Terminator: Text Moves First -	Center Mark
		Min. Leader: 3.500000	Center Size: 0.0000
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Figure 8.11 – Setting the Active Dimension Style

Category	Modify Working Unit Settings
Active Angle Active Scale Angle Readout Axis Color Element Attributes Fence Grid	Linear Units <u>Format:</u> MU <u>Master Unit:</u> Inches <u>Sub Unit:</u> Mils <u>Accuracy</u> 0.1234 <u>Custom</u> <u>QK</u> <u>QK</u> Cancel
Isometric Locks Snaps Stream Views Working Units	Advanced Settings Resolution: 10000 per Distance Meter Working Area: 9.0072E+008 Kilometers Solids Area: 1 Kilometers Solids Accuracy: 1E-008 Meters Edit Focus Item Description Select category to view.

Modifying the Drawing Units

Figure 8.12 – Setting the Working Units

The seed file you are creating will be based on Standard units rather than To change the Metric. project's working units, select Setting from the menu bar and then select Design File and the DGN File Settings window will Select Working appear. Units from the column on the left. Change Format to MU for Master Unit only, and change the Master Unit to Inches. Change the Angle Accuracy to 0.1. Hit OK to save these settings.

Design rile settings
Category Active Angle Active Scale Angle Readout Angle Readout QK Axis Color Element Attributes 0.1 Fence Grid Isometric Direction Mode: Azimuth Locks Base: East 0° Stream Views Working Units Focus Item Description Set the decimal accuracy used for angle readout.

Select Angle Readout from the column on the left. Change the Angle Accuracy to 0.1. Press OK to save these settings.

Figure 8.13 – Setting the Working Units

Removing the Grid



This is a personal preference of mine, but if you wish to remove the grid, press CTRL+B to bring up the View Attributes window. Uncheck the Grid box and exit the window.

Figure 8.14 - Removing the Grid

Saving and Setting the Seed File

To save the seed file, just click save.

The easiest way to set the seed file is to use PowerDraft's external program, accessible through the start menu. Select Start, then Programs, Bentley, MicroStation PowerDraft V8i, and then Set Seed File. Choose the third option, "Use the seed file selected from this dialogue". Select the seed file you just created. Now, whenever you start a new project in PowerDraft, the file will automatically be configured to your specifications. You can create infinite seed files that contain different settings for every kind of project on which you plan to work.



Figure 8.15 – Setting the Seed File

* World Class CAD Challenge 02-17 * - This task is not timed but we do challenge you to test your seed file on some sample drawings to discover whether you would be required to modify any system variables or create a level that is forgotten. Continue to test your templates, each time you can write down your omission and open the seed file, make the change to maintain your World Class status.