

Using AutoCAD to Maximize Your CADWorx Project's Success

C Greg Silva



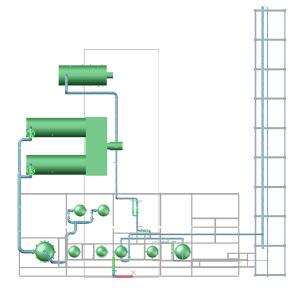
System Variables

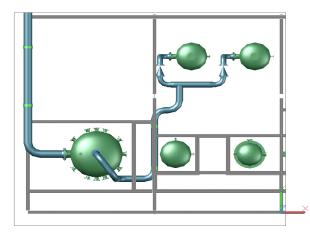


Indexctl set it to 3 by default AutoCAD sets it to 0

- 0 No index are created
- 1 Layer index is created
- 2 Spatial Index is created
- 3 Layer and spatial indexes are created
- Xloadctl set it to 2 which is the default
- Visretain set it to 1

What can you do now to utilize the Indexctl system variable? XCLIP



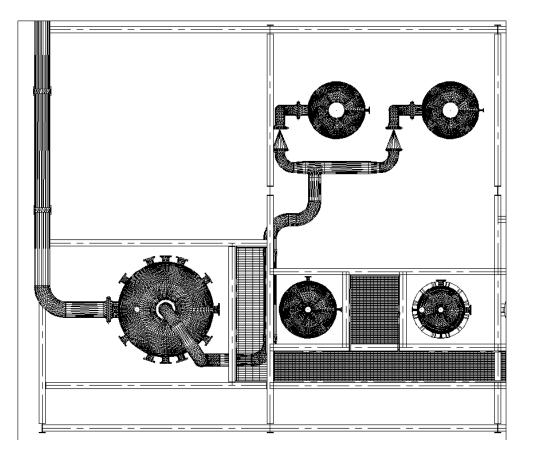








Plotting in CADWorx with AutoCAD default settings.



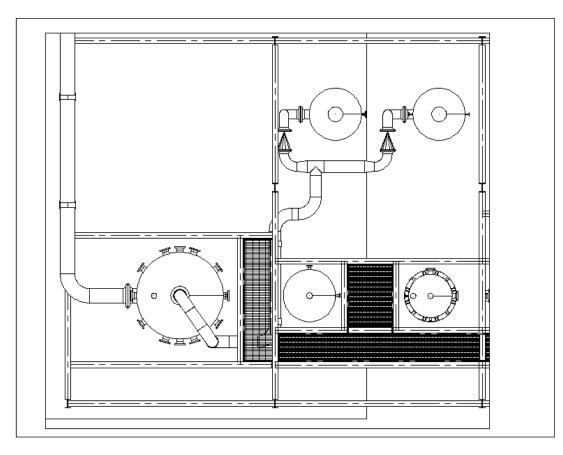




Plotting



DISPSILH = 0FACETRES = 5 HIDEPRECISION = 1 VIEWRES = 20000



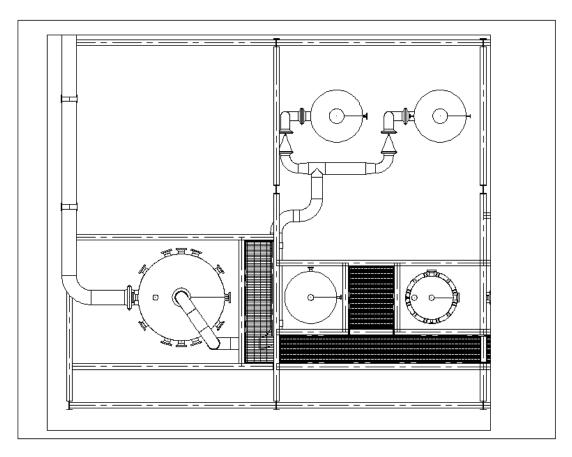






FACETRATIO =

1









INTERSECTIONDISPLAY

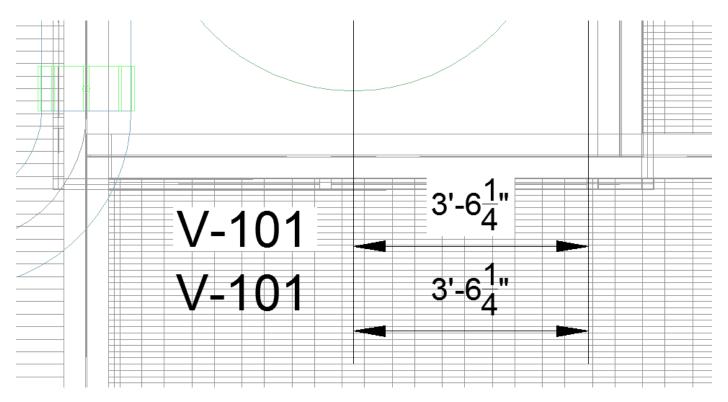
INTERSECTIONDISPLAY = 0 INTERSE

INTERSECTIONDISPLAY = 1





Add the background mask to Mtext and Dimensions to help keep dimensions and text legible.







Dimensions: Add background fill color to your

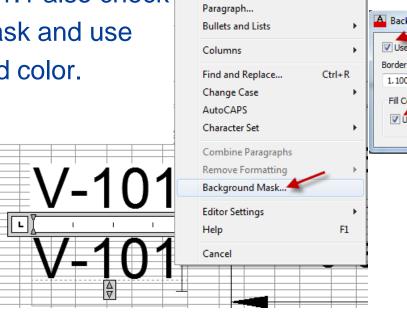
dimension style.

| A Modify Dimension Style: Standard | | | | | | |
|------------------------------------|--|--|--|--|--|--|
| Lines Symbols and Arrows Text Fit | Primary Units Alternate Units Tolerances | | | | | |
| Text appearance | | | | | | |
| Text style: Standard | | | | | | |
| Text color: ByBlock | | | | | | |
| Fill color: | | | | | | |
| Text height: | | | | | | |
| Fraction height scale: ByBlock | \$* | | | | | |
| Draw frame around t | | | | | | |
| Text placement Green | Text alignment | | | | | |
| Vertical: 🗧 Blue | Horizontal | | | | | |
| Horizontal: Elack | Aligned with dimension line | | | | | |
| View Direction: | - | | | | | |
| Offset from dim line: 0'-0 | 3/32" ISO standard | | | | | |
| | | | | | | |
| | | | | | | |
| | OK Cancel Help | | | | | |



Mtext:

Double click your mtext to edit. Right click and select Background Mask. In the dialog box change The offset factor to 1.1 also check use background mask and use drawing background color.



Select All Cut

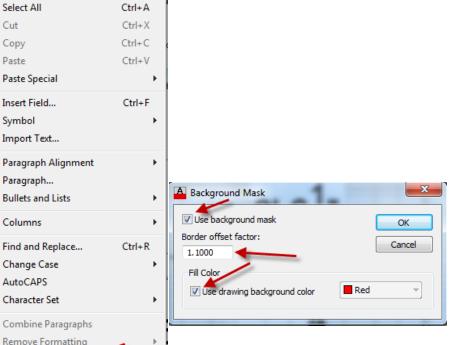
Paste Special

Insert Field...

Import Text...

Symbol

Copy Paste









Fields.

Use AutoCAD Fields to fill in important parts of your title block box. If you are using Sheet Sets they are even more valuable.

| | Enhanced Attribute Editor | 22 | Field | | x |
|----------|---|--------------|--|---|---|
| | Block: _Ansi_d Tag: DWG_NO Attribute Text Options Properties | Select block | Field category: Document Field names: Author | Filename: PIPING-FEILDS Format: (none) | Filename only Path only Dath and filename |
| | Tag Prompt Value DWG_NO Drawing Number PIPING-FEILDS NAME Drawn By DATE Date SCALE Scale AS NOTED Volue: PIPING-FEILDS Value: PIPING-FEILDS | E + | Comments Filename Filesize HyperlinkBase Keywords LastSavedBy Subject Title | Uppercase Lowercase First capital Title case | O Path and filename |
| ORD DATE | JOB NO. | | Field expression: | | |
| S NOTED | DRAWING NO. PIPING-FEILDS | REV | | % | |
| | | | | ОК | Cancel Help |





Fields.

Create plot stamps to keep track of your drawing location and when they were plotted.

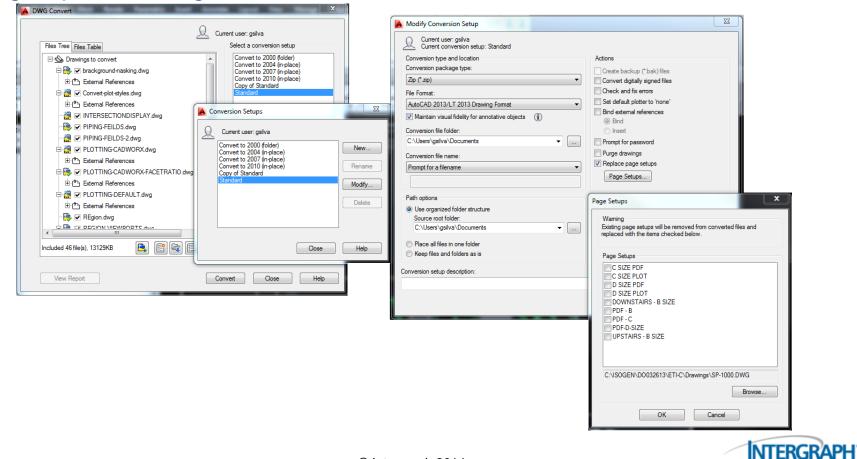
FILE: C:\CAU2014 CLASS\PIPING-FEILDS.DWG PLOTTED BY: GSILVA ON 4/27/2014 5:28:30 PM

| Select All | Ctrl+A | Field | | | Field | | | Field | | |
|---------------------|--------|---------------------------------|---------------------------------|--------------------------|-----------------------------|----------------------------|-------------|---|--|----------------------------|
| Cut | Ctrl+X | Field category: | Filename: | | Field category: | Login: | | Field category: | Date format: | Hints |
| Сору | Ctrl+C | Document - | C:\CAU2014 CLASS\PIPING-FEILDS. | Filename only | Plot | GSILVA | | Plot | M/d/yyyy h:mm:ss tt | M - month d - day |
| Paste | Ctrl+V | Field names: | Format: | Path only | Field names: | Format: | | Field names: DeviceName | Examples: | y - year |
| Paste Special 💋 | • | Author Comments | (none) Uppercase | Path and filename | Login DeviceName | (none) Uppercase | | Login | 4/27/2014 Sunday, April 27, 2014 | h - hour m - minute |
| Insert Field | Ctrl+F | Filename Filesize | Lowercase First capital | ☑ Display file extension | PageSetupName PaperSize | Lowercase First capital | | PageSetupName PaperSize | April 27, 2014 4/27/14 | tt - am or pm |
| | | HyperlinkBase Keywords | Title case | | PlotDate PlotOrientation | Title case | | PlotDate PlotOrientation | 2014-04-27 27-Apr-14 | , - separator separator |
| Symbol | • | LastSavedBy Subject | | | PlotScale PlotStyleTable | | | PlotScale PlotStyleTable | 4.27.2014 Apr. 27, 14 | / - separator |
| Import Text | | Title | | | | | | , i i i i i i i i i i i i i i i i i i i | 27 April 2014 27.04.2014 | Month example: |
| Paragraph Alignment | + | | | | | | | | 27/04/2014 2014/04/27 | M - 8 |
| Paragraph | | | | | | | | | 2014-4-27 April 14 | MM - 08 MMM - Aug |
| Bullets and Lists | • | | | | | | | | Apr-14 4/27/2014 5:35 PM | MMMM - August |
| | | | | | | | | | 4/27/2014 5:35 PM 4/27/2014 5:35:06 PM 5:35 PM | |
| Columns | * | | | | | | | | 5:35:06 PM | |
| Find and Replace | Ctrl+R | | | | | | | | 17:35 17:35:06 | |
| Change Case | • | | | | | | | | Sunday, April 27, 2014 (Regional | |
| AutoCAPS | | Field expression: | | | Field expression: | | | Field expression: | | |
| Character Set | , | %<\AcVar Filename \f "%tc1%fn7" | >% | | %<\AcVar Login \f "%tc1">% | | | %<\AcVar PlotDate \f "M/d/yyy | y h:mm:ss tt">% | |
| | | | | | | | | | | |
| Combine Paragraphs | | | ОК | Cancel Help | | OK | Cancel Help | | ок | Cancel Help |
| Remove Formatting | | | UK | Cancel Help | | UK | Cancel Nep | | OK | Cancel Nep |
| Background Mask | | <u></u> | | , | | | | · | | |
| Editor Settings | , | | | | | | | | | |
| Help | F1 | | | | | | | | | |
| | · · · | | | | | | | | | |
| Cancel | | | | | | | | | | |





DWGCONVERT : use this command to add your standard plot style to a group of drawings.

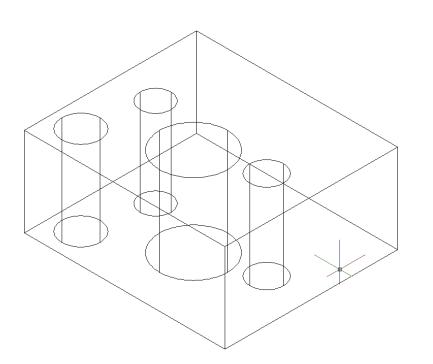


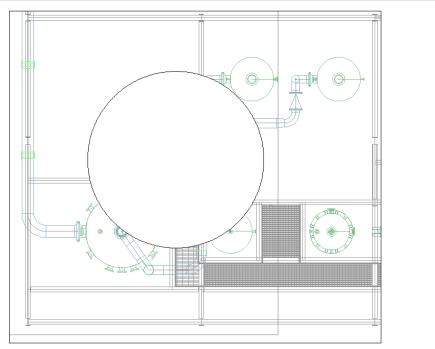




Regions.

Use regions to help in the aid of unique viewport creation and also when creating 3D solids.



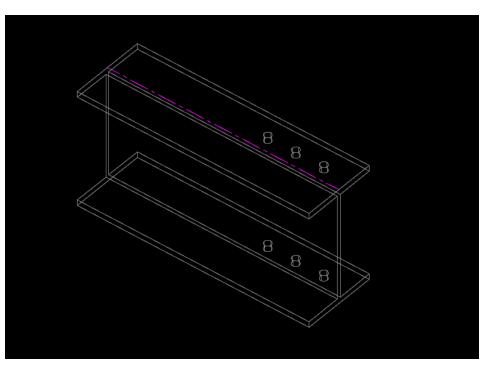






Solid Editing Tools Learn each one of these tools.

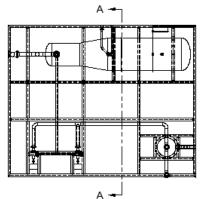
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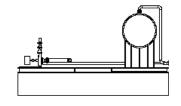




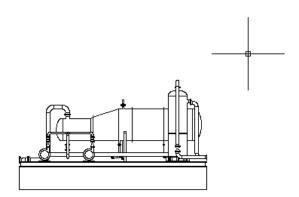


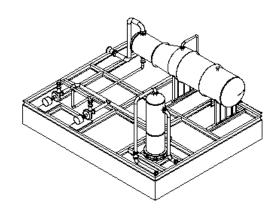
Viewbase command will help with small skid drawings.





```
SECTION A-A
SCALE 1/128" = 1'-0"
```







Quick way to test machines and settings



Gstest.arx located in AutoCAD root folder.

| | ., | ogram Files 🕨 Autodesk 🕨 Auto | | ✓ Search | AutoCAD 2014 | | |
|-----------------------------|-----|-------------------------------|------------------|--------------------|--------------|---|----------|
| Organize 🔻 🔳 Open with Burn | Nev | v folder | | | | • | |
| 퉬 MSOCache | * | Name | Date modified | Туре | Size | - | |
| 🐌 OddFlo2000 | | 🚳 fontcap.dll | 2/8/2013 3:08 AM | Application extens | 42 KB | | |
| 퉬 Program Files 🔤 | | geom3d.crx | 2/8/2013 3:07 AM | AutoCAD Core Ext | 90 KB | 1 | |
| 퉬 Autodesk | | geomcal.crx | 2/8/2013 3:07 AM | AutoCAD Core Ext | 18 KB | | No previ |
| ApplicationPlugins | | GsTest.arx | 2/8/2013 3:11 AM | AutoCAD runtime | 611 KB | | availabl |
| 🍶 AutoCAD 2014 | | HaveDisk.dll | 2/8/2013 3:08 AM | Application extens | 45 KB | | |
| 鷆 Acadm | | locreg11.dll | 2/8/2013 3:06 AM | Application extens | 77 KB | | |
| AcWebBrowser | - | 🚳 heidi11.dll | 2/8/2013 3:06 AM | Application extens | 1,404 KB | - | |

Load it into your test model using APPLOAD.

GSTESTBENCHMARK

| Command: GSTES | FBENCHMARK |
|----------------|------------------|
| Wireframe | : 1806.986469 ms |
| Wireframe | : 100.720179 fps |
| Hidden Line | : 4362.031489 ms |
| Hidden Line | : 41.723679 fps |
| Flat Shaded | : 2761.974318 ms |
| Flat Shaded | : 65.894892 fps |
| Gouraud Shaded | : 2819.252604 ms |
| Gouraud Shaded | : 64.556117 fps |
| | |





Thank you for attending!!!



Any questions?

