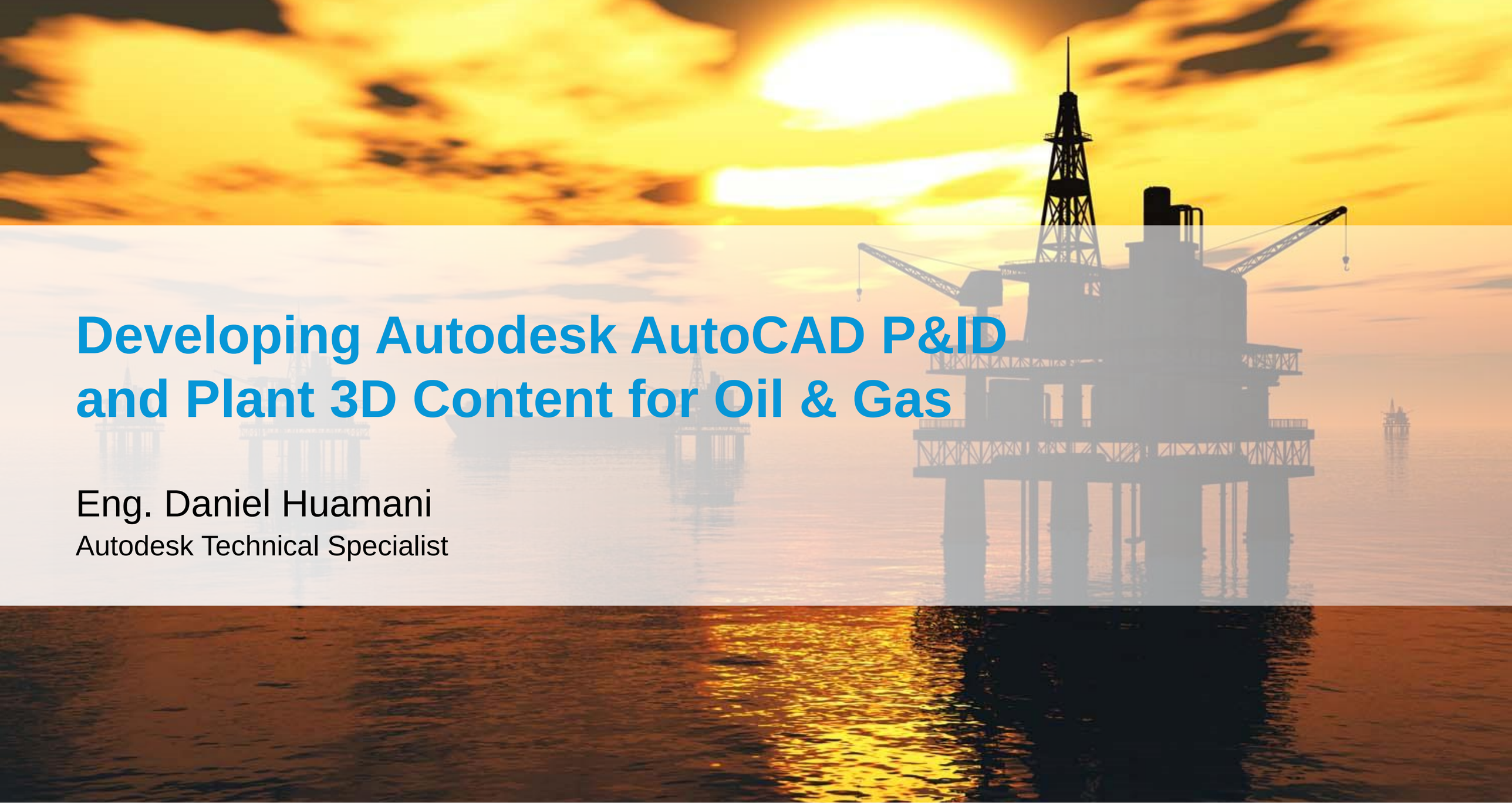
Developing Autodesk AutoCAD P&ID and Plant 3D Content for Oil & Gas

Eng. Daniel Huamani
Autodesk Technical Specialist



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Introductions

- **All-arounder-Jack-of-all-trades**
  Mechanical engineer, P&ID drafter,
  piper, field assistance, CAD manager...

- **Where I work**
  Small local company

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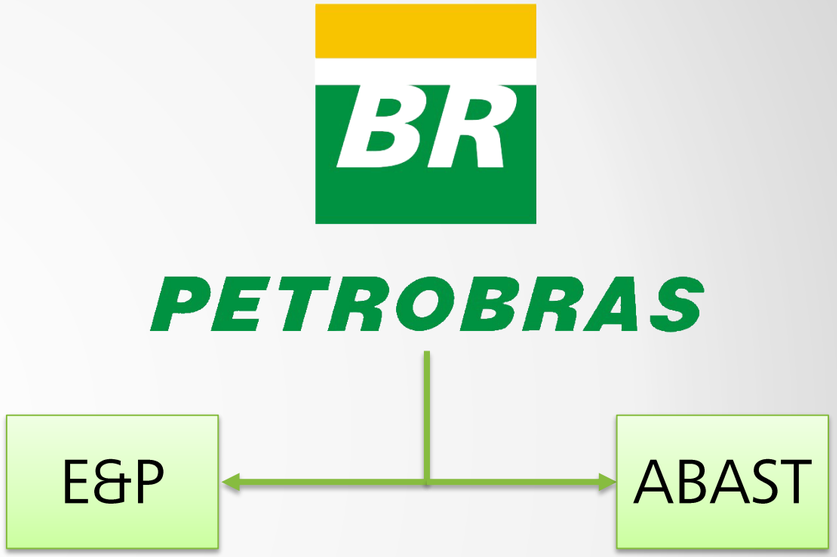
Agenda

- Context
- P&ID library creation methods
- Pipe specs creations
- Lessons Learned

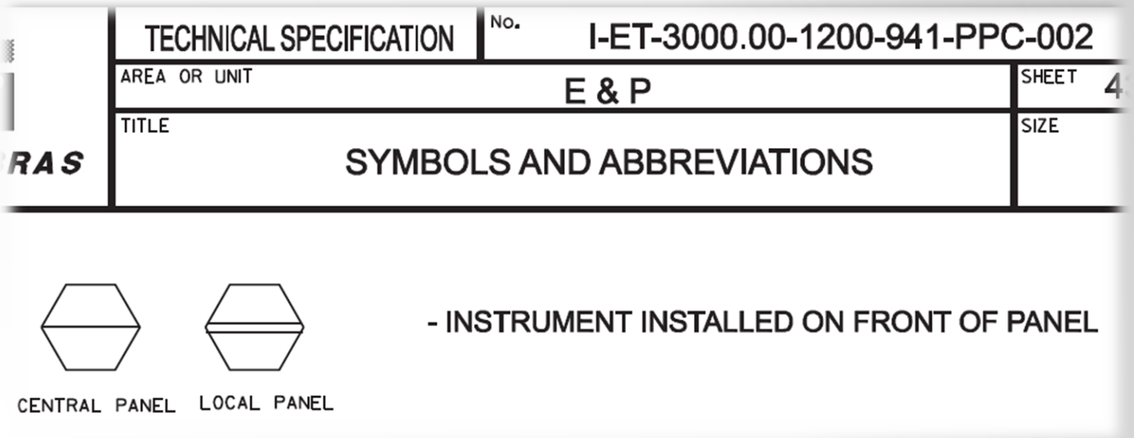
Context

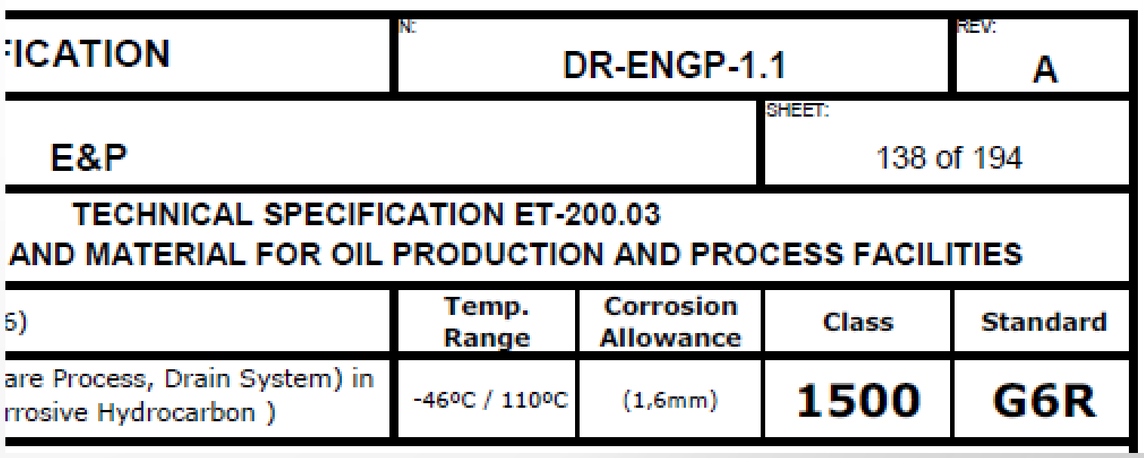
- Develop P&ID libraries
- Develop Pipe Specs
- Develop templates



Context

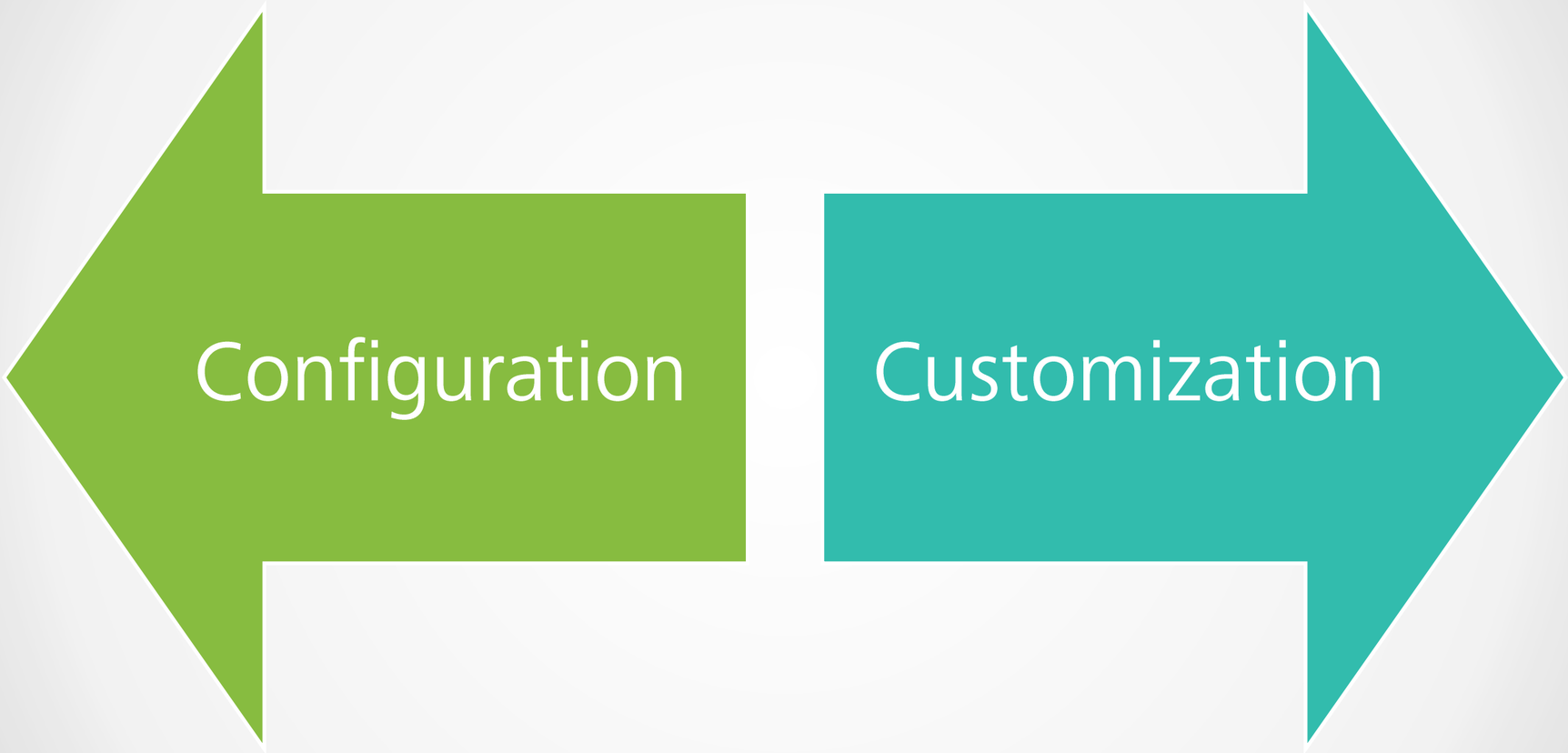
- 1700+ P&ID symbols
- 180 pipe specs
- Properties
- Behaviours
- Title Blocks



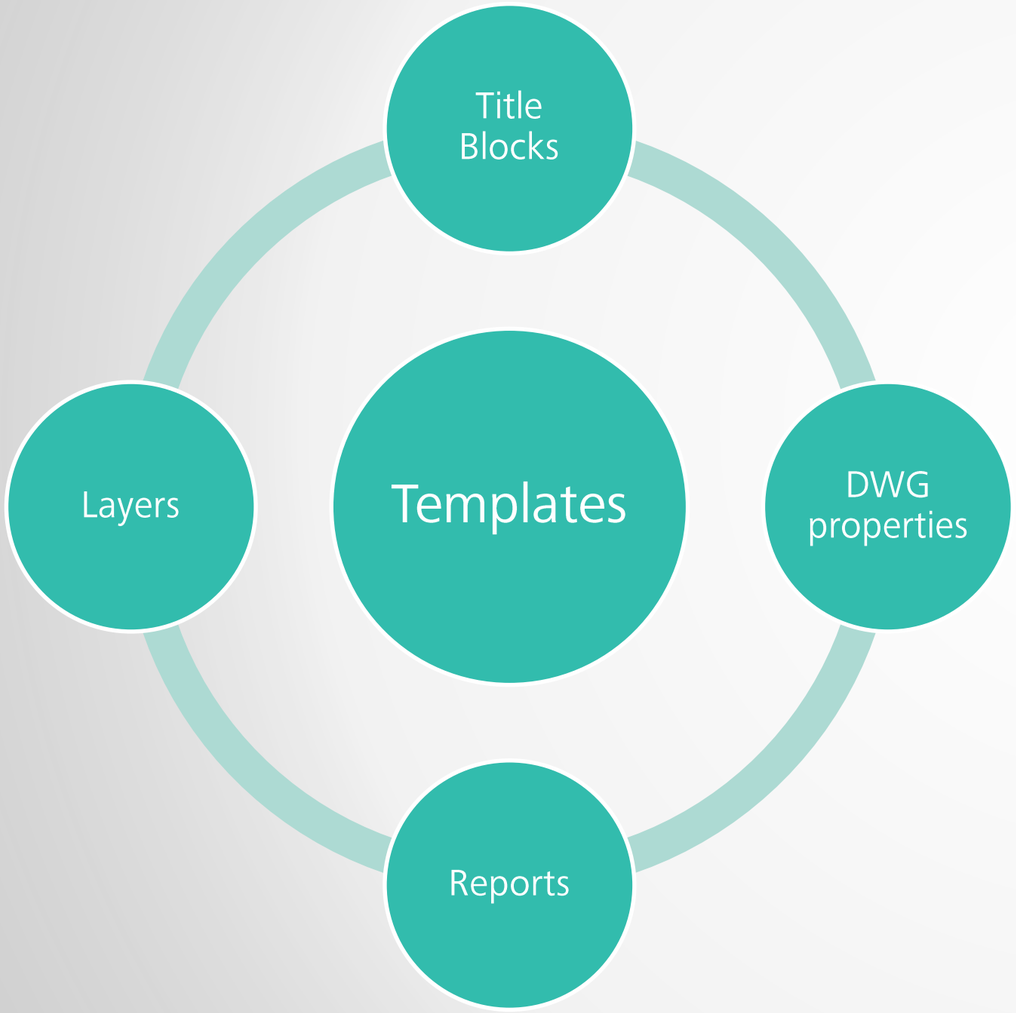


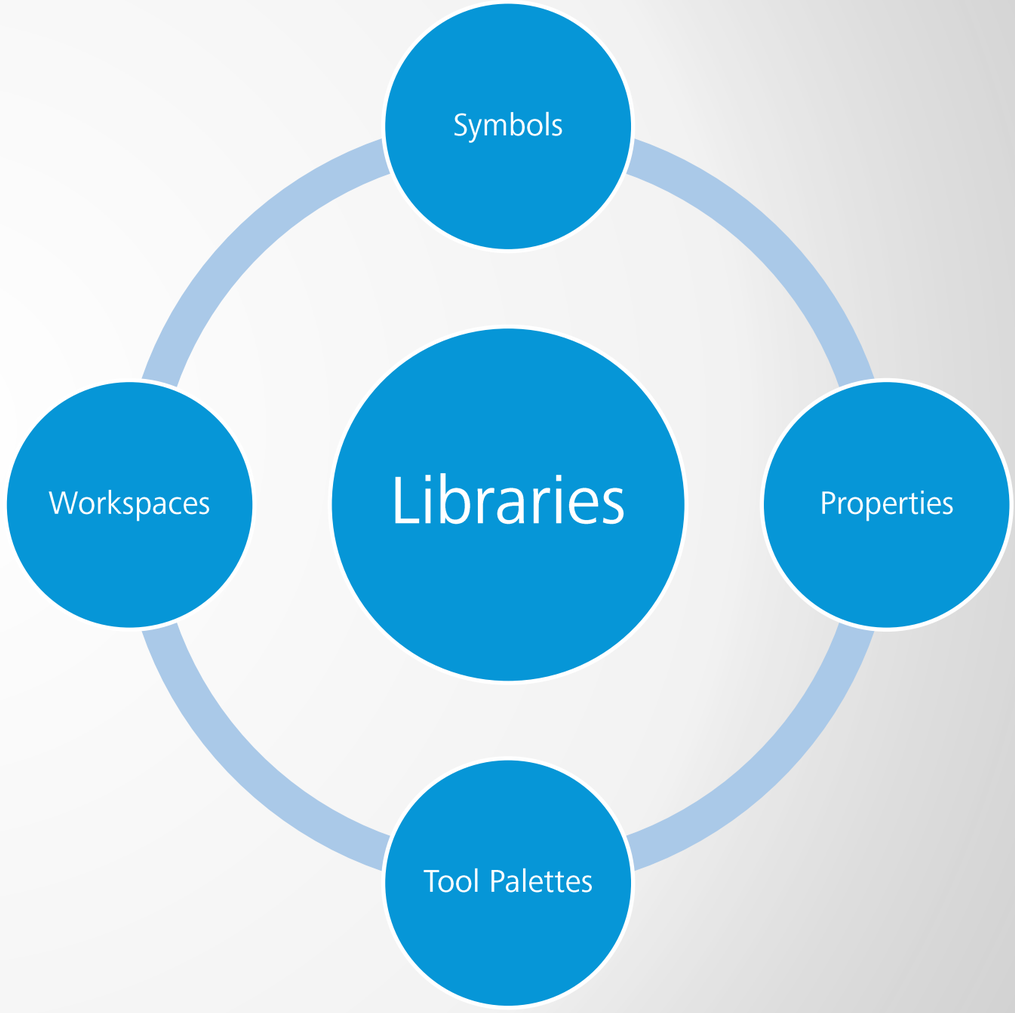
P&ID Library Creation Methods

Types of work



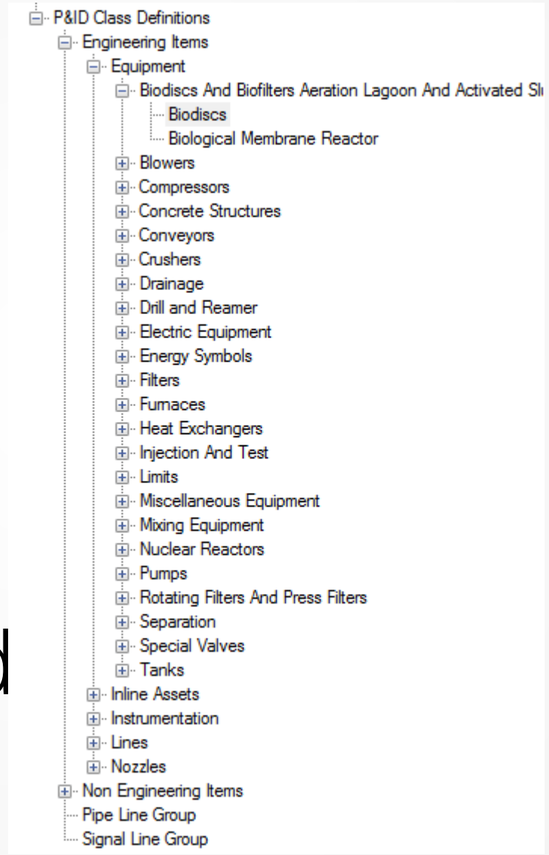
Types of Configurations

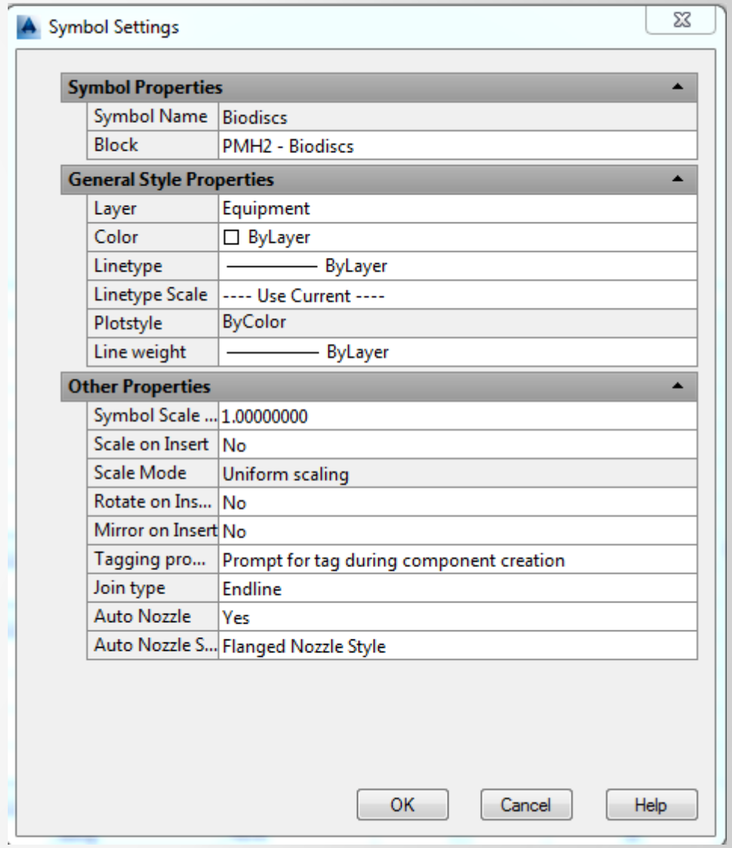




Library Creation Method

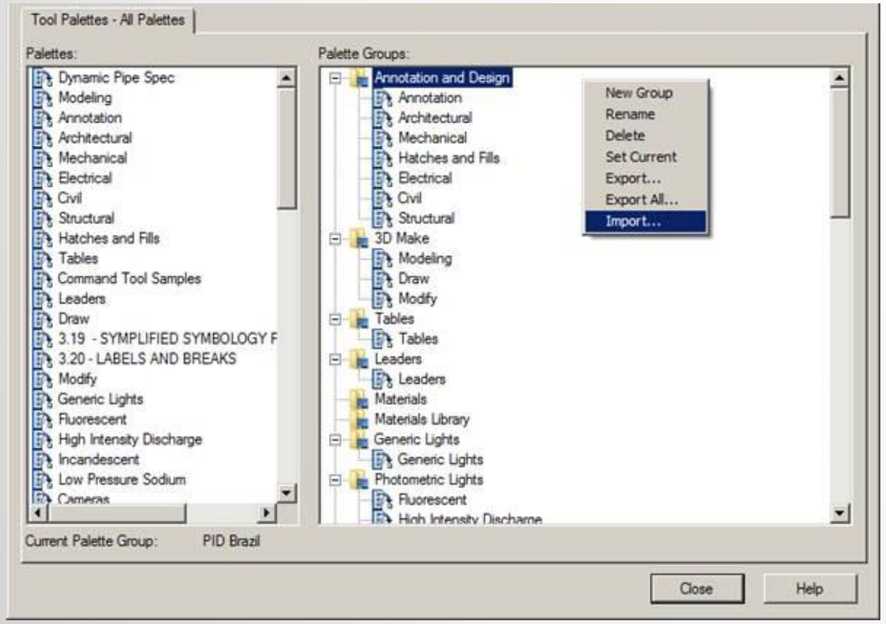
1. Treat existing blocks
2. Create new blocks
3. Import and associate
4. Create Tool Palette and Workspace





Distribution

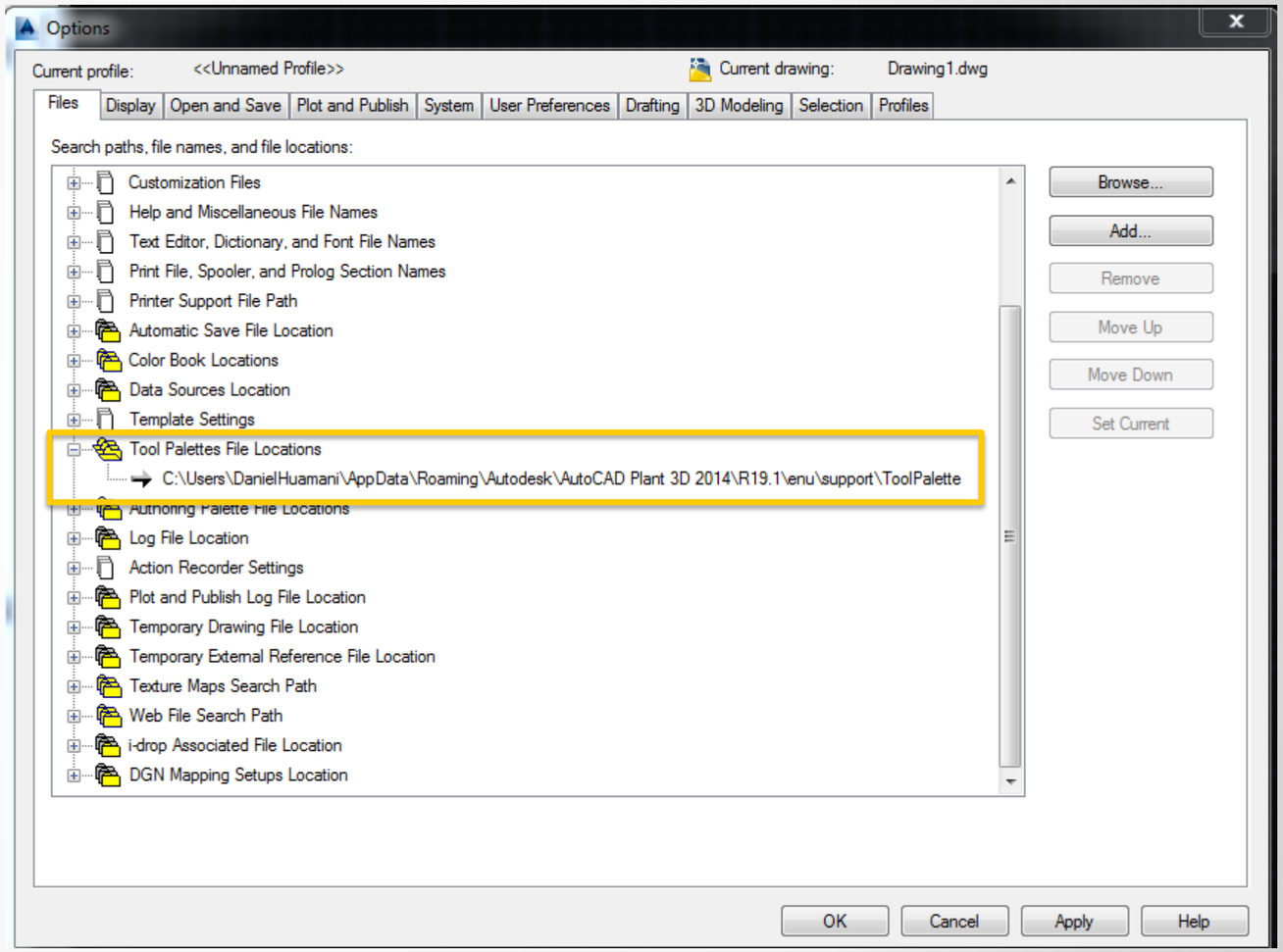
- C:\Users\<whatever>\AppData\Roaming\Autodesk\AutoCAD Plant 3D 2014\R19.1\enu\Support
  - Tool Palettes folder
  - File PNP.CUIX



- Distributor:
  - Command *CUSTOMIZE* and export the Palette Group
- Receptor
  - Command *CUSTOMIZE* and import the Palette Group

Distribution | Network folder

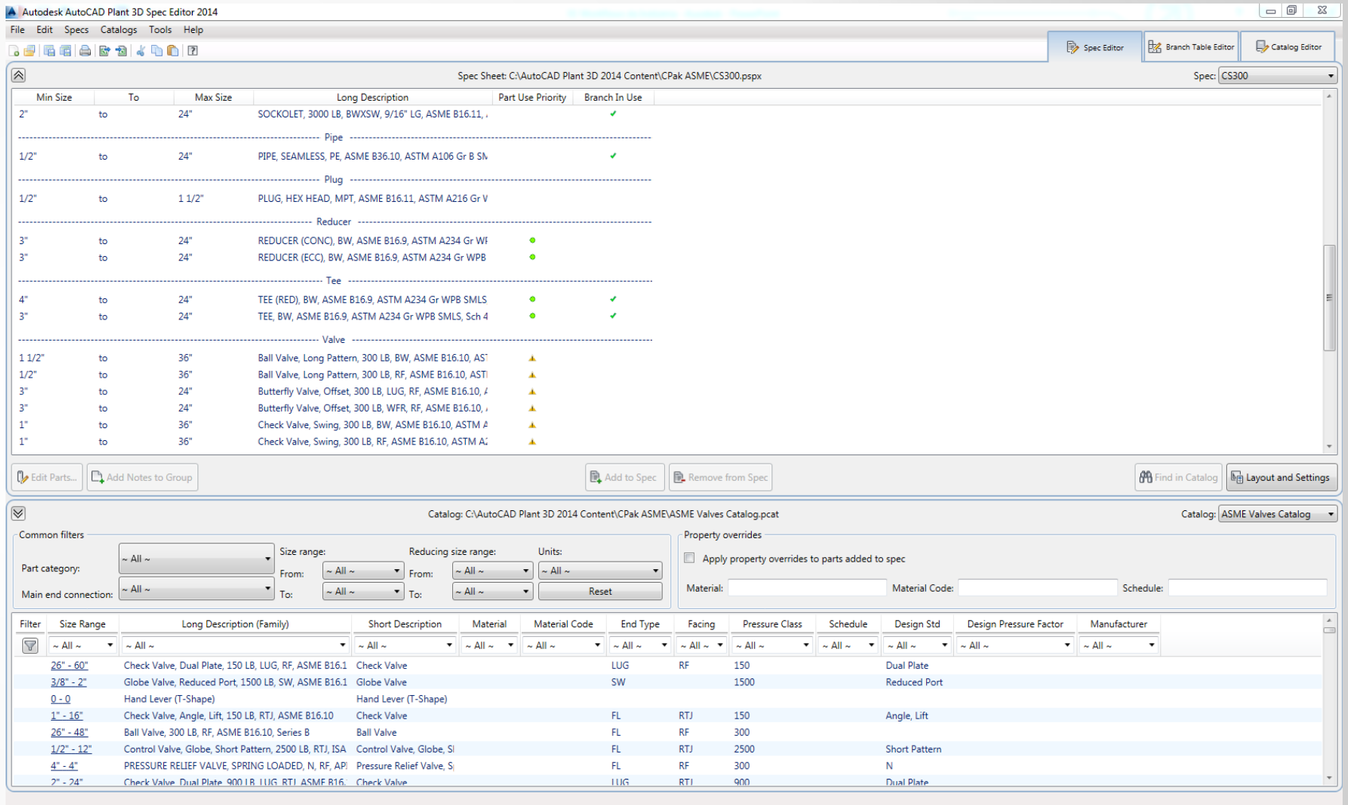
- AutoCAD *Options*



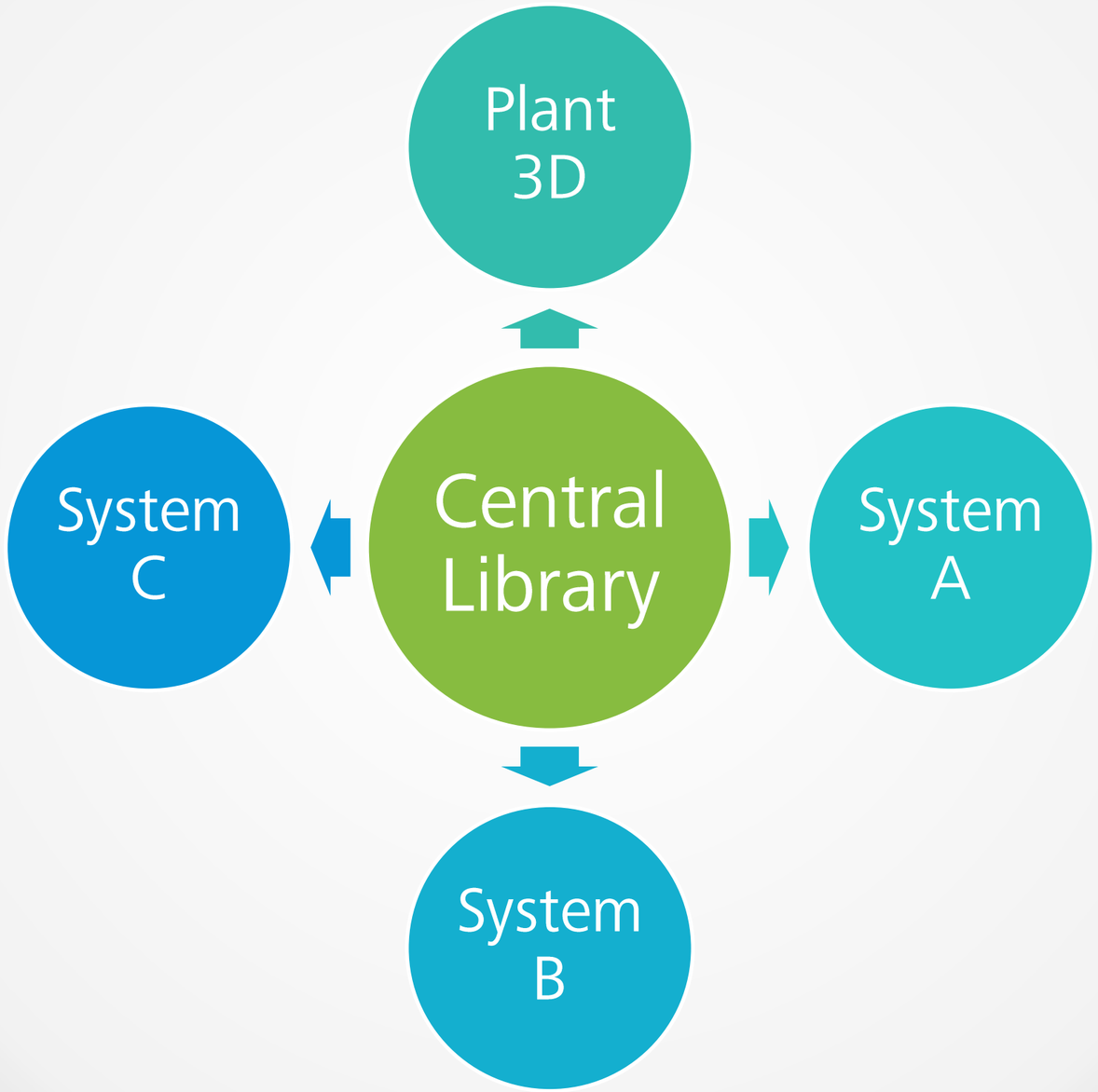
Pipe Spec Creations

Spec Editor

- Creates the pipe specs
- International Catalogs
- Catalog Editor
- Has APIs!



Creation Method

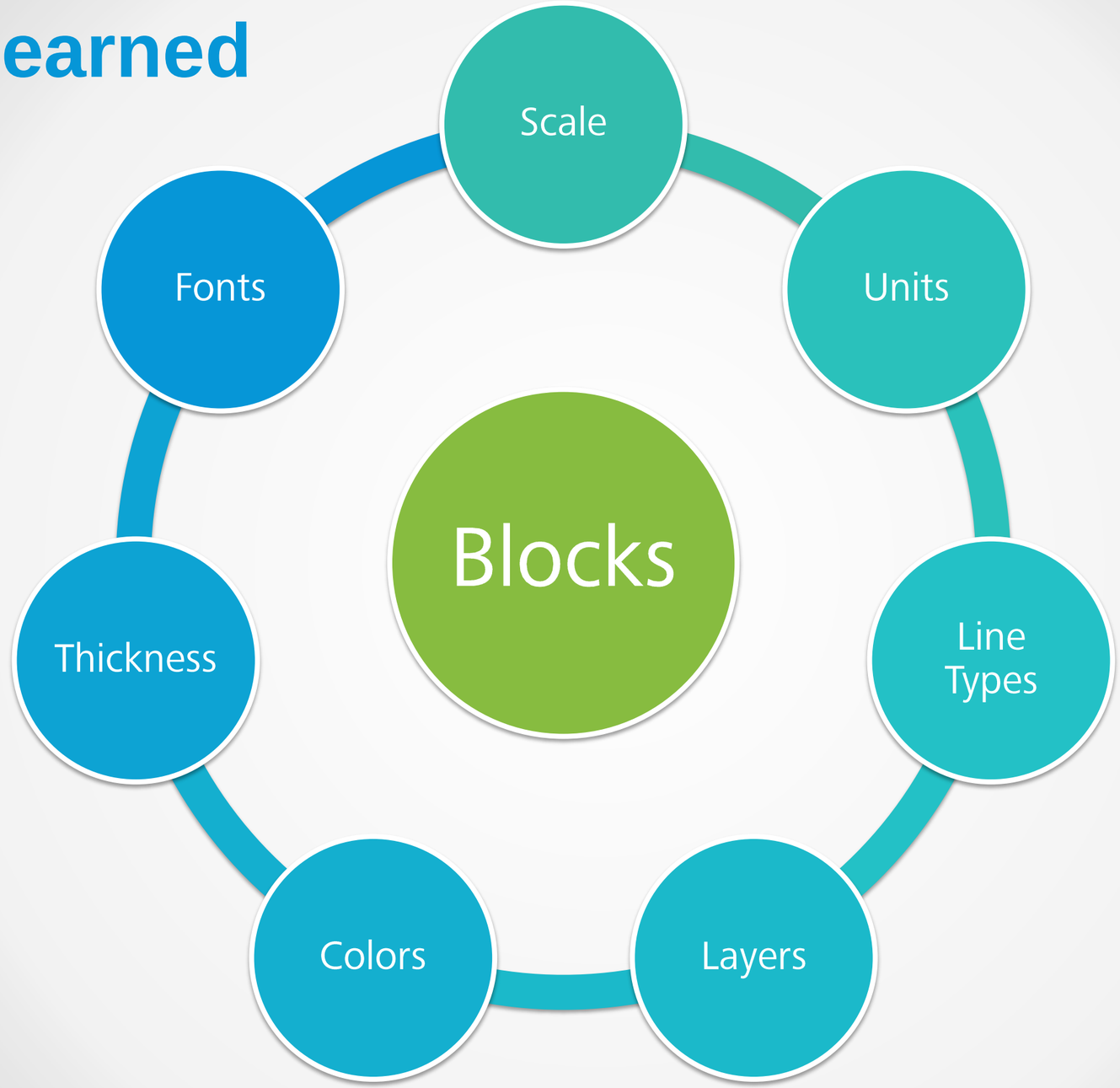


Pipe Specs

- System exports the specs
- New properties must be added to Plant 3D project too

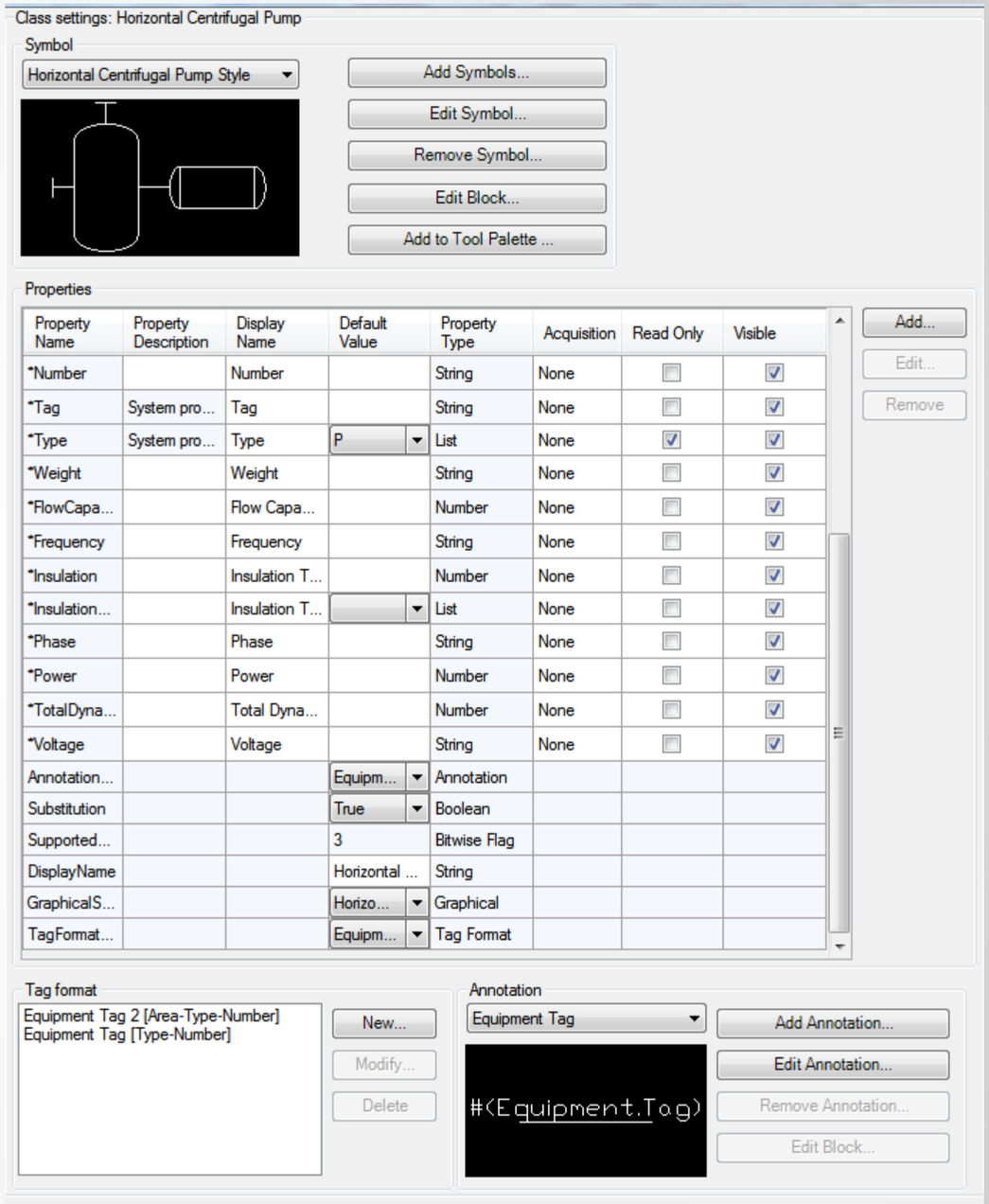
Lessons Learned

Lessons Learned

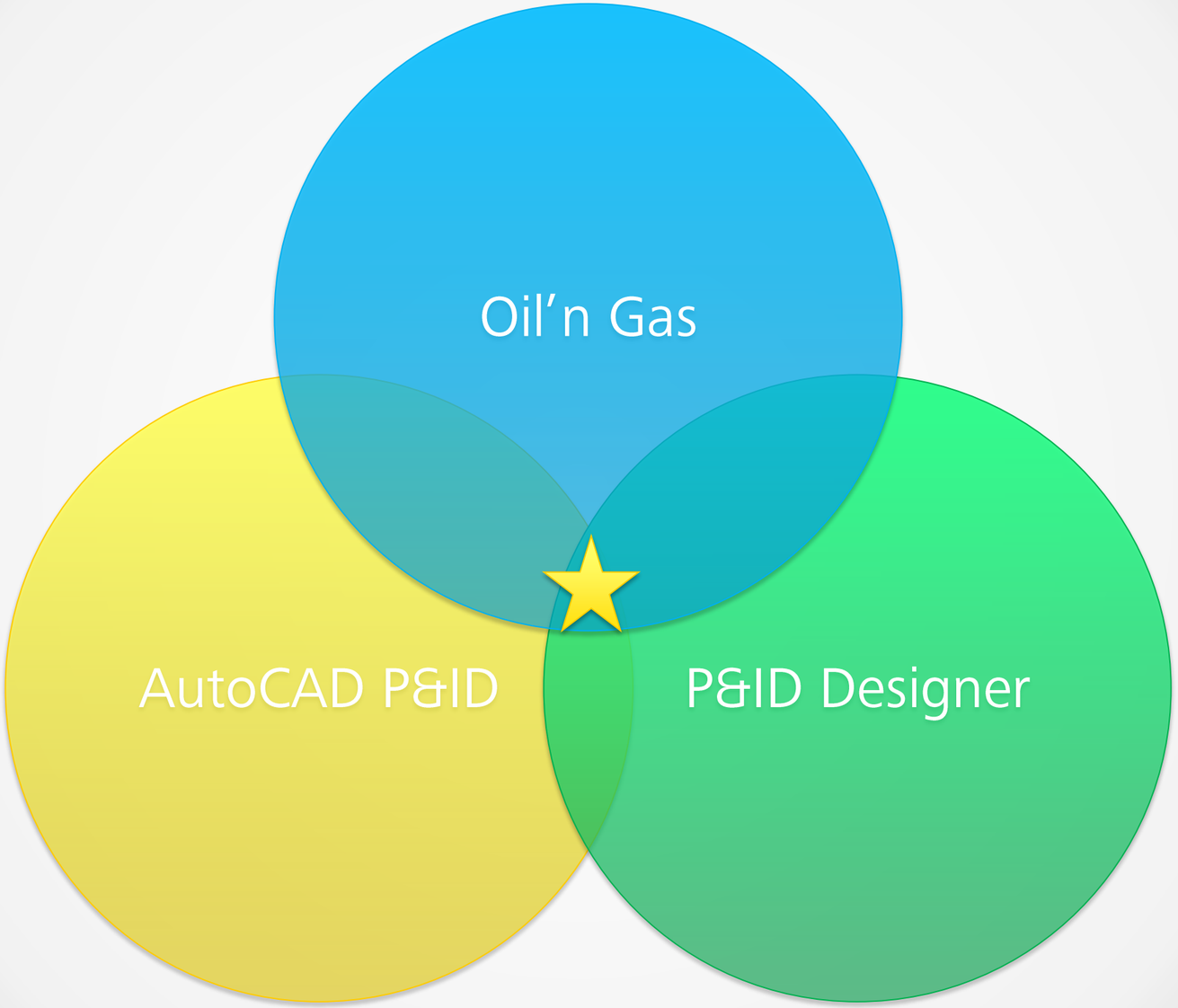


Lessons Learned

- Classes with no special chars.
- Default Values properly set
- Structure of classes prior to DO anything



Lessons Learned



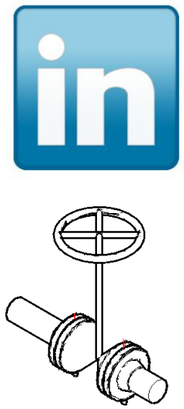
Short Demo

Daniel Huamani

- Youtube
  www.youtube.com/666danielh

- LinkedIn
  http://br.linkedin.com/in/danielhuamani/

- Plant Exchange
  http://autocad.autodesk.com



- Best document on configuring AutoCAD P&ID
  http://autocad.autodesk.com/ama/orig/plant/CustomizationFromTagsAndAnnotationsToSymbols.pdf

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