



# As-Built Modeling using Point Clouds in CADWorx fieldPipe

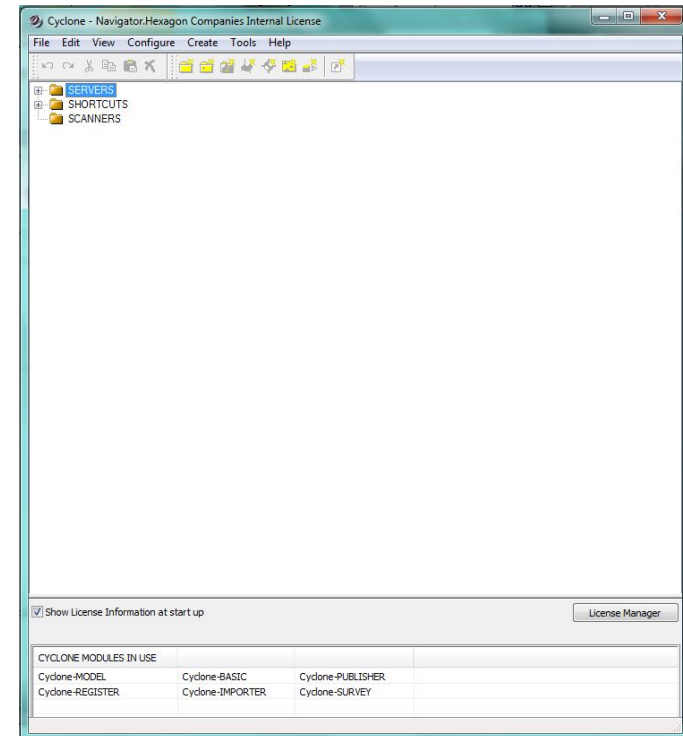
**Michael Conaway**  
**Industry Solutions Manager**  
**Plant Design Solution**

# Introduction to Leica Cyclone



## ■ Leica Cyclone Basic

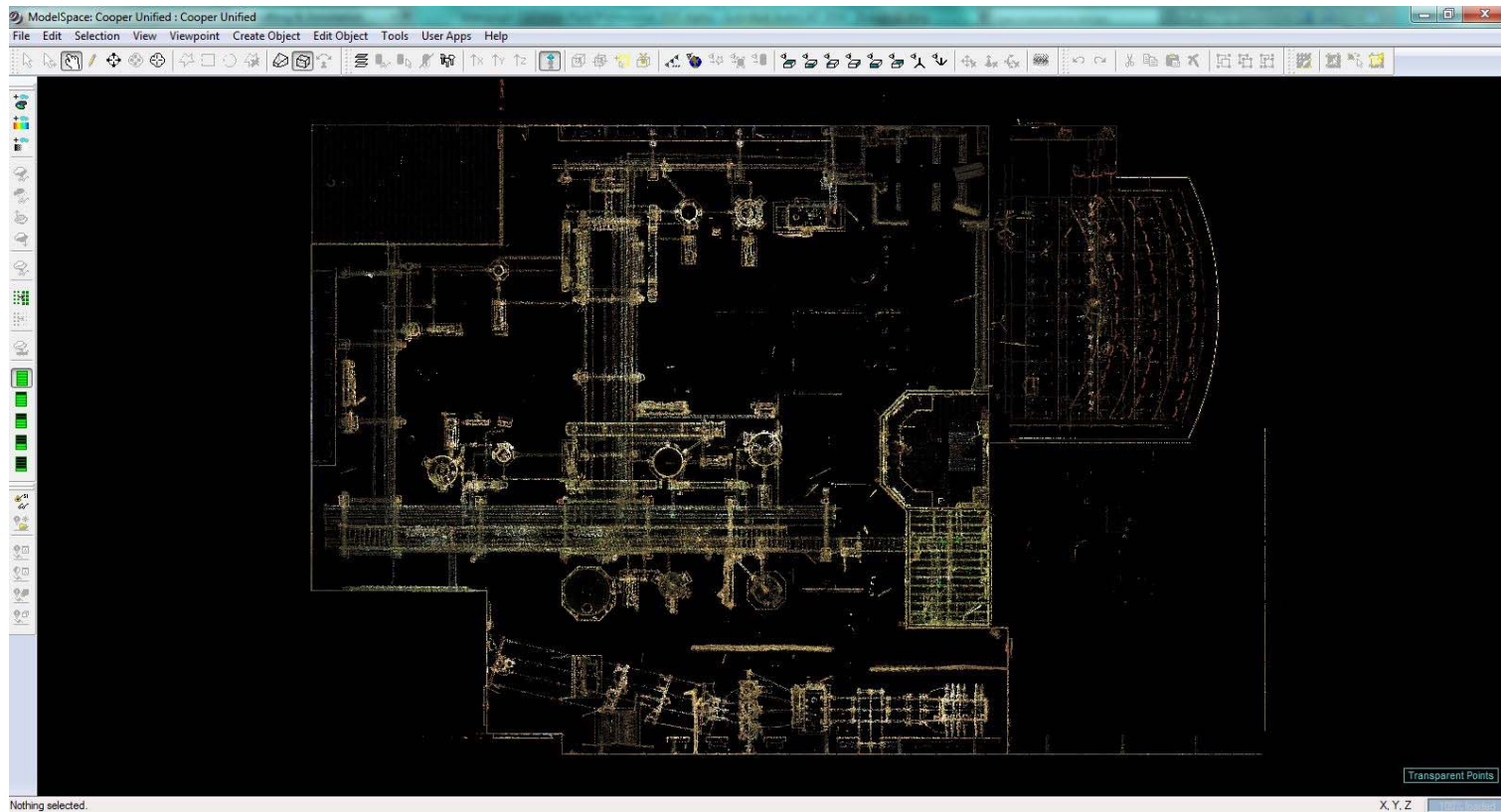
**Cyclone enables the importation of Point Clouds**  
**Enables the User to Set Coordinate System**  
**Clean Up Point Clouds**  
**Create New Model Spaces of Data**



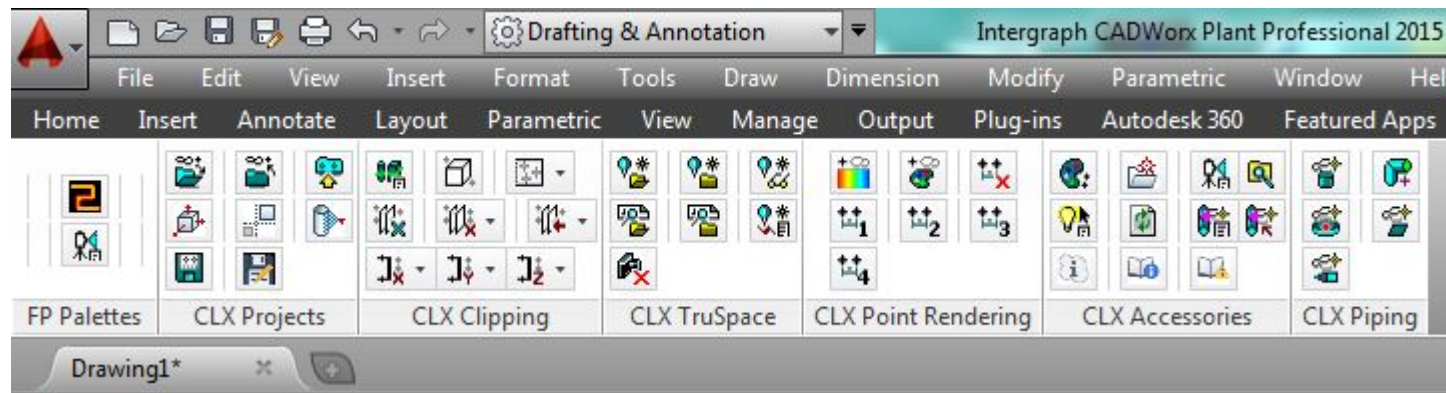
# Introduction to Leica Cyclone



- Cyclone View of Our Work
- Prior to Cyclone



# Tour the CADWorx fieldPipe Ribbon



**FP Palettes:** Opens the Tool Palette for use

**CLX Projects:** Allows for Importing the Point Clouds and Saving as Projects

**CLX Clipping:** Allows for Hiding Point, Slicing Point and Managing the Clips

**CLX TruSpace:** Allows for connecting to Truspace for Work

**CLX Point Rendering:** Manipulate the Color Shading of the Points

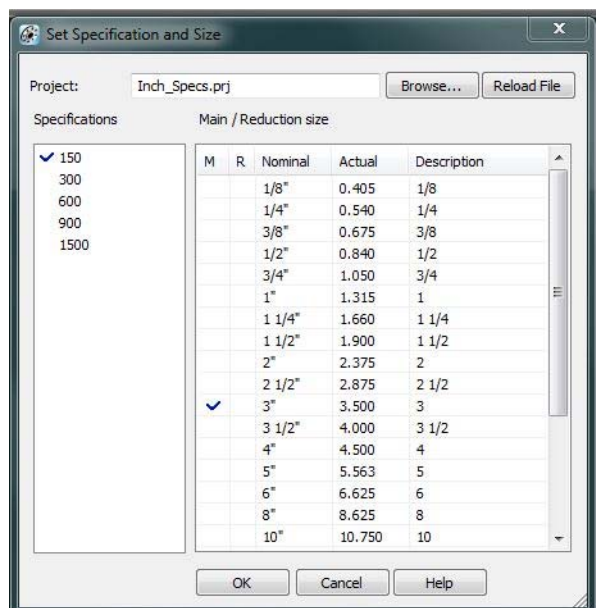
**CLX Accessories:** Main tool here is Reload Points

**CLX Piping:** Tool to all Flange Work Point Location

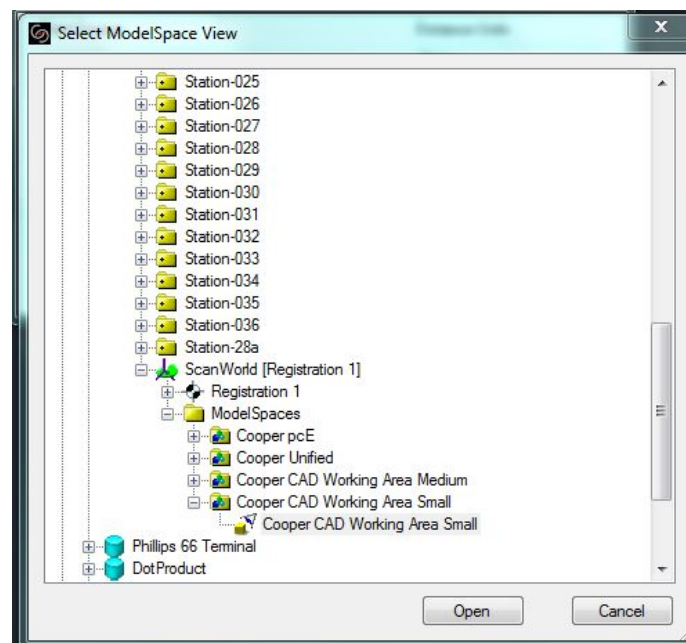


# Loading a Cloud to fieldPipe

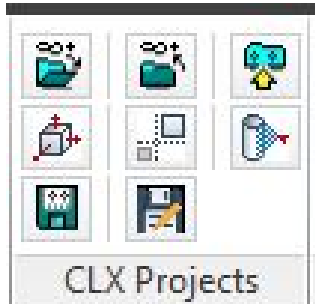
**Open the fieldPipe Palette and Browse to set Specs to the Inch\_Specs.prj and the 150 Spec.**



**Start the session by Importing Cooper CAD Working Area Small point cloud.**

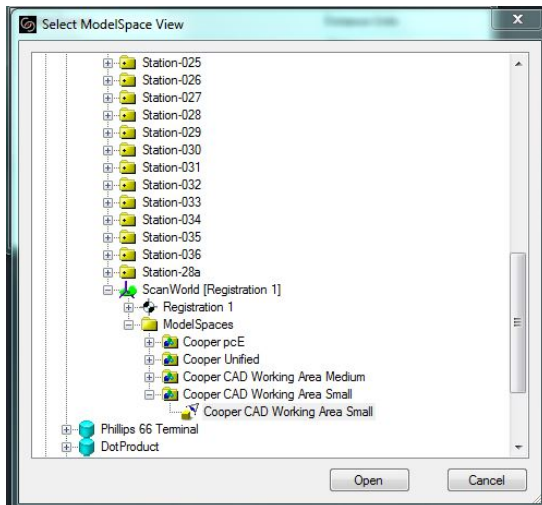
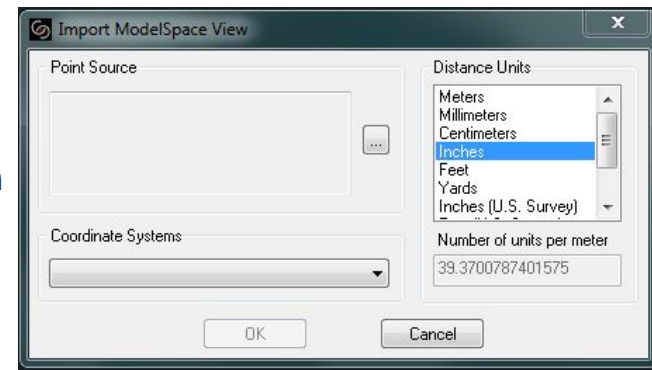


# Steps to Open Point Cloud



**For First Time Use in a Model Perform the Import ModelSpace View Command**

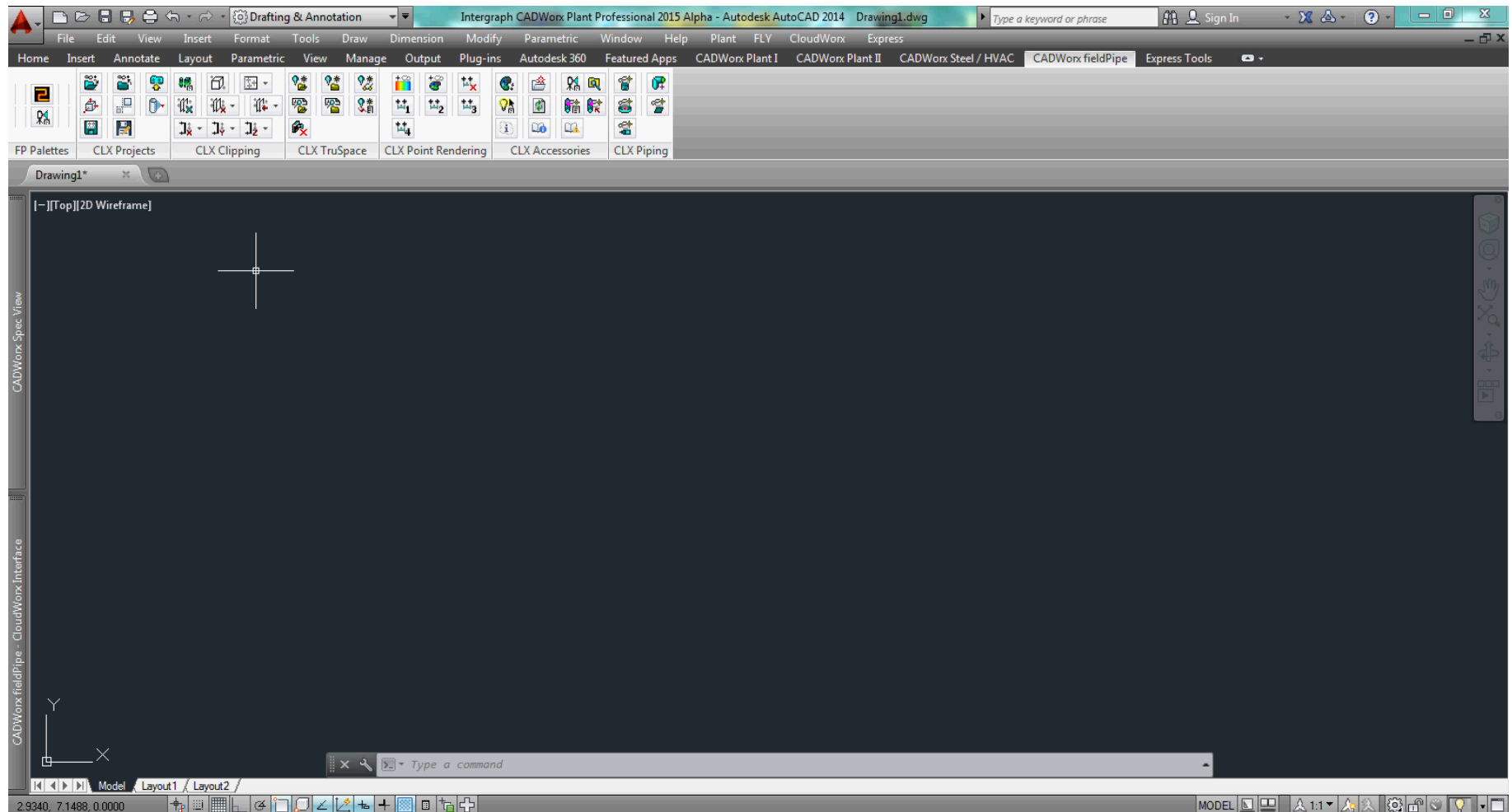
**Bring up Import Screen**



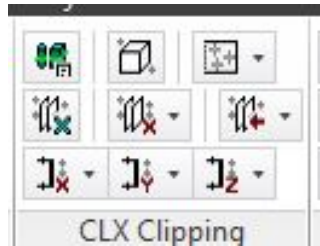
**Expand the Cooper File down to the ModelSpaces and Select the Cooper CAD Working Area Small to Open**



# Open Point Cloud for Work

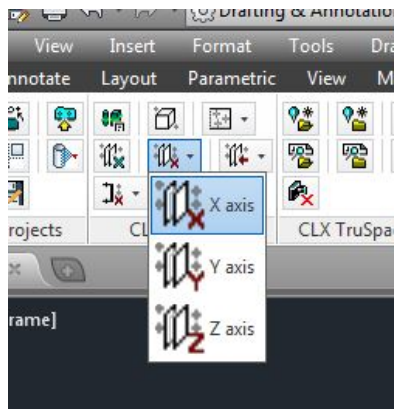
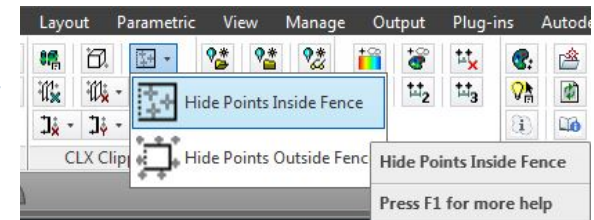


# Clipping And Managing Cloud



**CLX Clipping Allows Users to Hide, Slice, and Clip Point Cloud Data.**

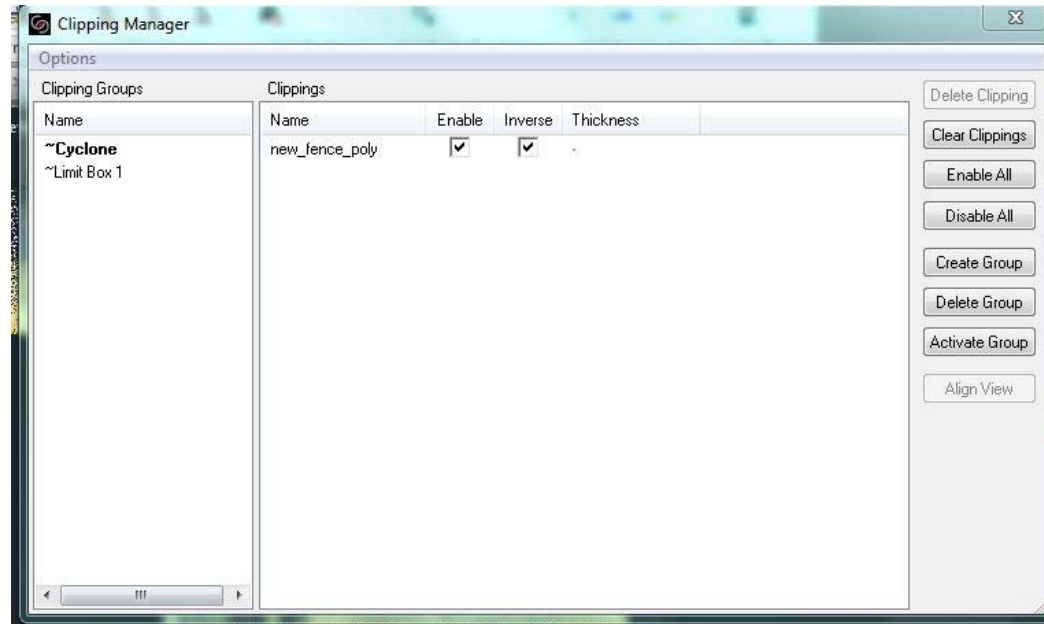
**User Can Hide Points Inside Or Outside a Selected Fence**



**Users May Select to Slice a Cloud on the X, Y, or Z Axis of the Model Space**



# Clipping And Managing Cloud

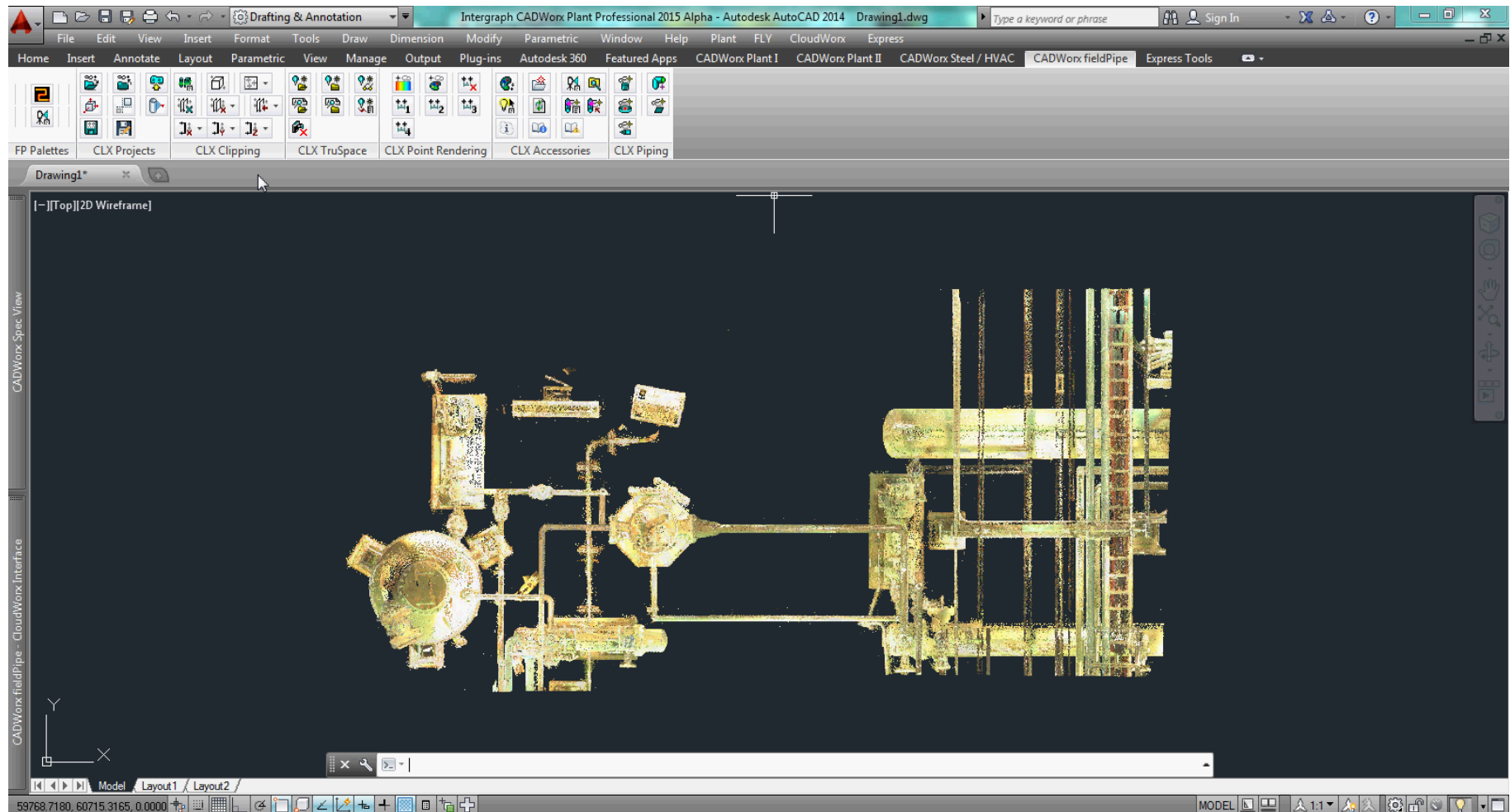


## Clipping Manager

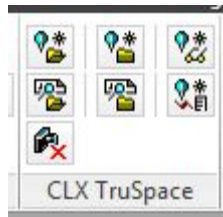
With the Clipping Manager User Can Turn the Previously Select Hide, Clips or Slices of the Data On or Off as Needed.

# Clipping an Managing Cloud

## Walk Through of the Clipping Tools For Point Clouds

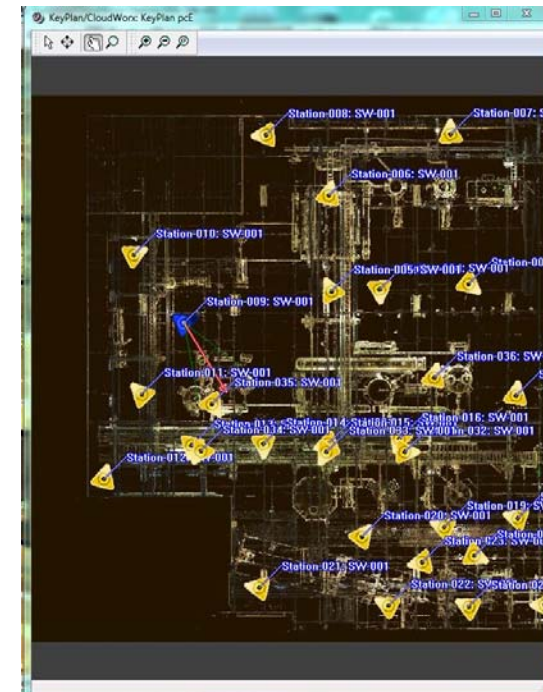


# Working with TruSpace



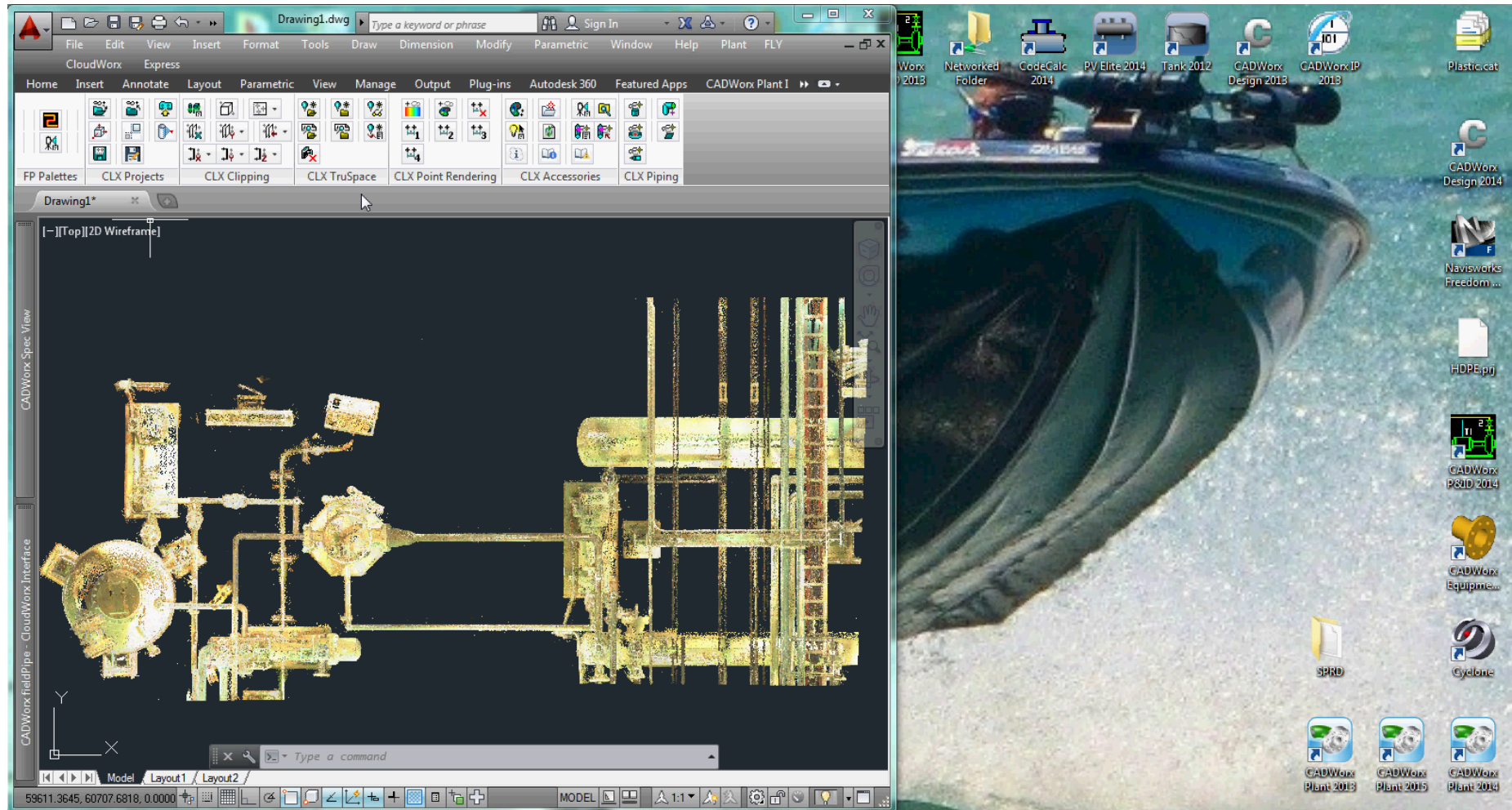
**CLX TruSpace will Open the TruSpace, and  
Open the Key Plan of the Scan Shots to Sync  
with the ACAD Point Model Work**

**Open TruSpace By Double Clicking on:  
Station-009: SW-001 to Start this Work**



# Working with TruSpace

Start this work by minimizing the ACAD screen to 50% to share screen Area



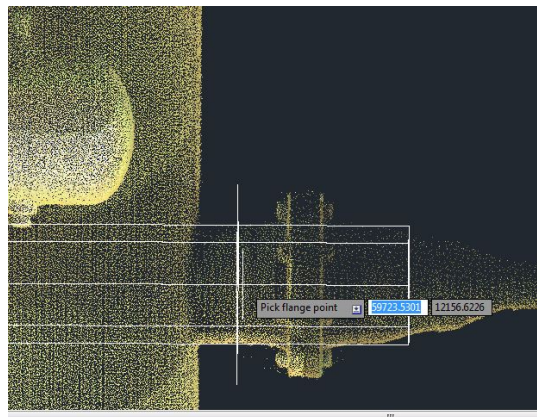
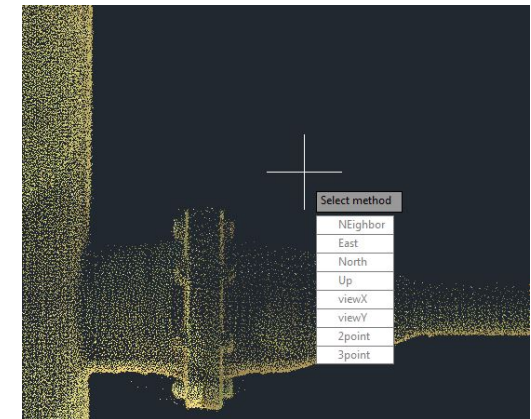


# Flange Work Point Control



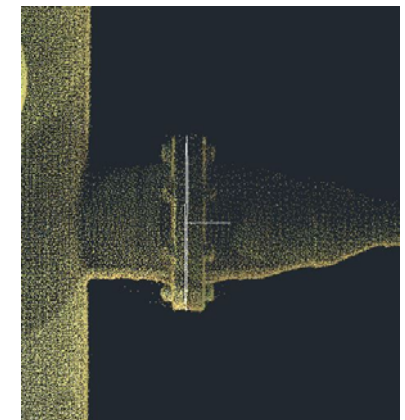
From CLX Piping Start the  
Flange Work Point Tool

**Best Option: Use the  
Neighbor to Select.**

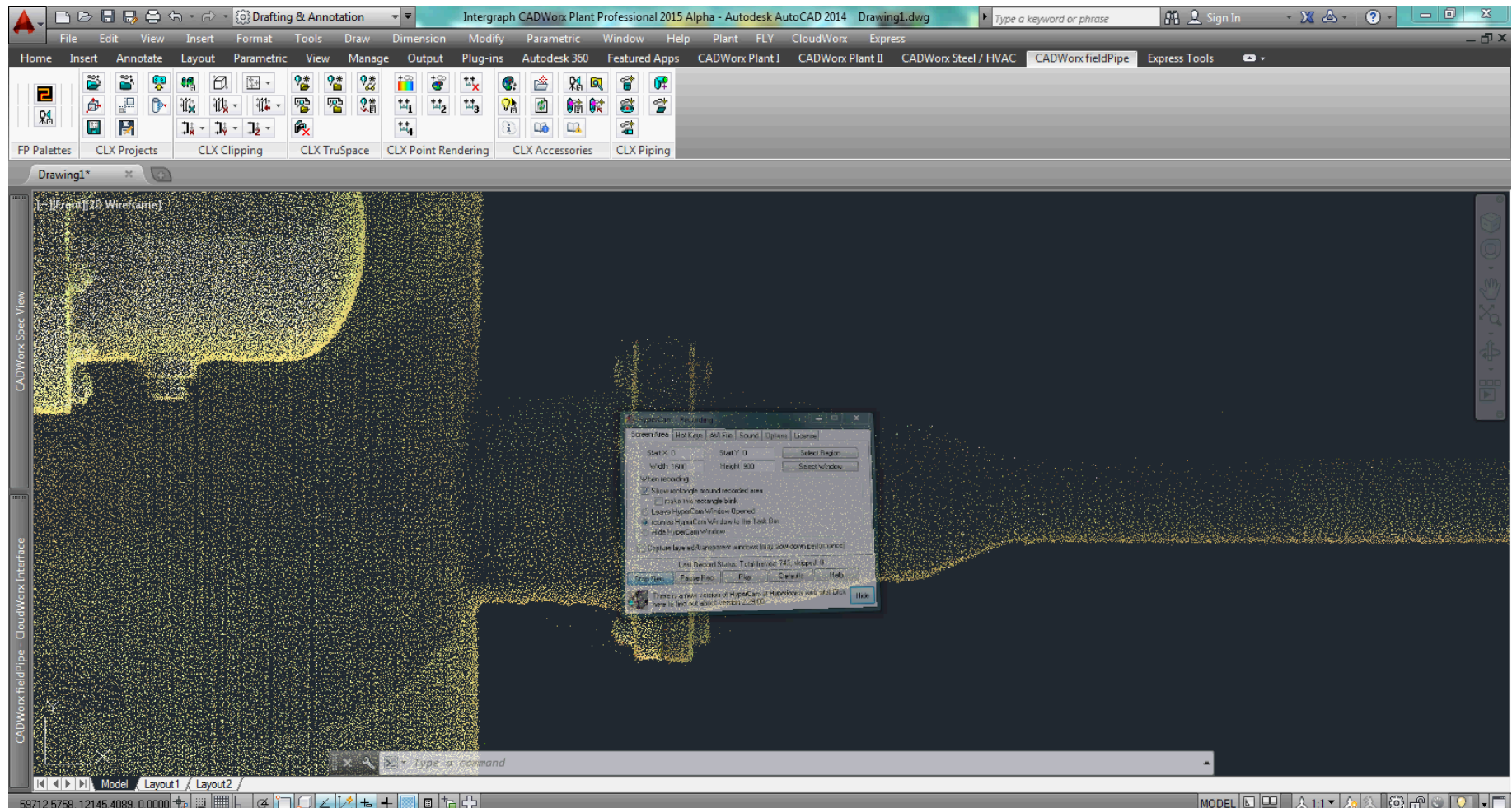


**Selecting the Nozzle will  
Locate the Center, next  
Locate the Face Of  
Flange**

**This will Place the Center  
and a Tail to assist in  
Placing the 8" 150# Flange**



# Flange Work Point Control





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## Questions??

**Thank You for Attending**

**If you have any further Question or would like to See more.  
Come By the Booths in the Zone, Many of us will be on hand  
to Assist.**