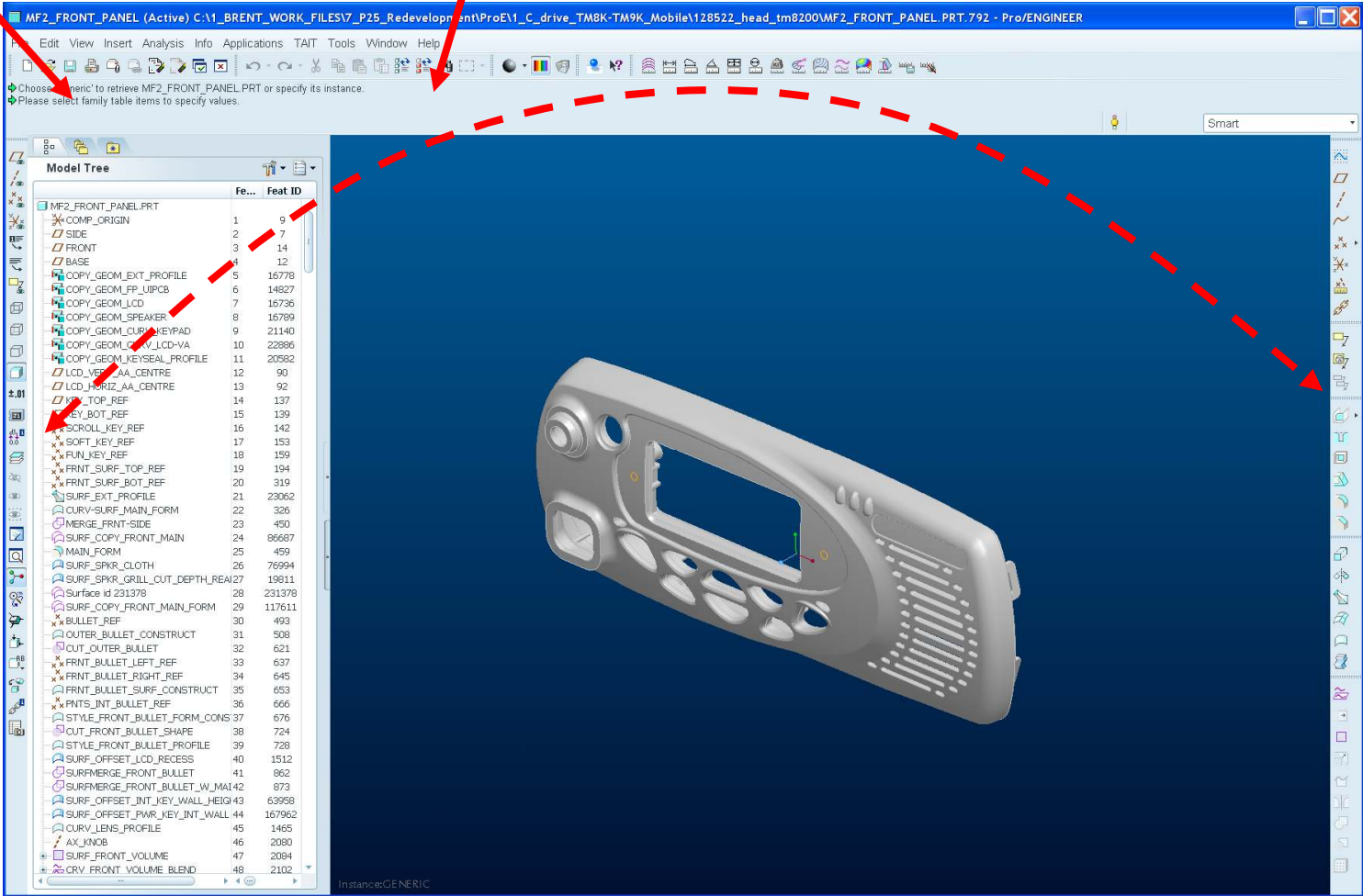


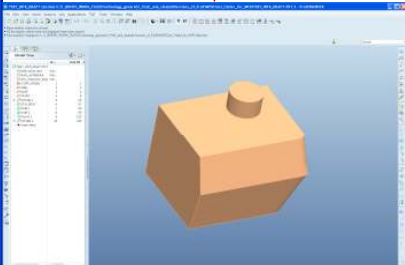
Note that all information that ProE reports will now appear here.

Dashboard and message bar are now on top of the model window (no option)

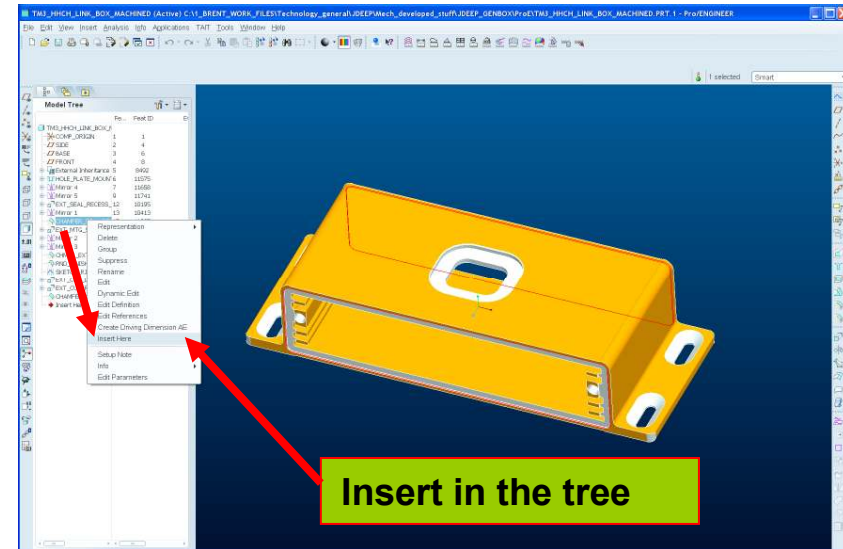
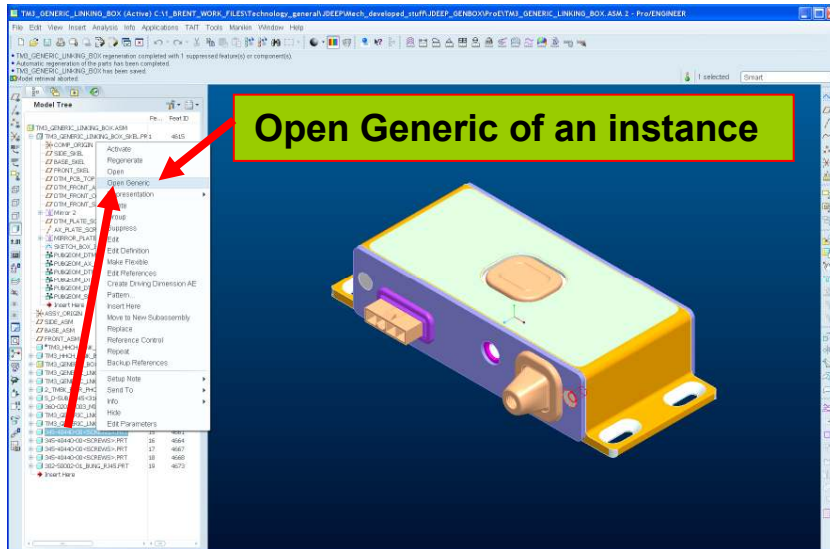
Change to Appearance/ workflow



Note that this is my preferred background colour. If you want this darker background then there are settings to make it your default. The default WF5 colour is a light blue instead of the previous WF grey.



Right Mouse Button. RMB has two great tree functions added

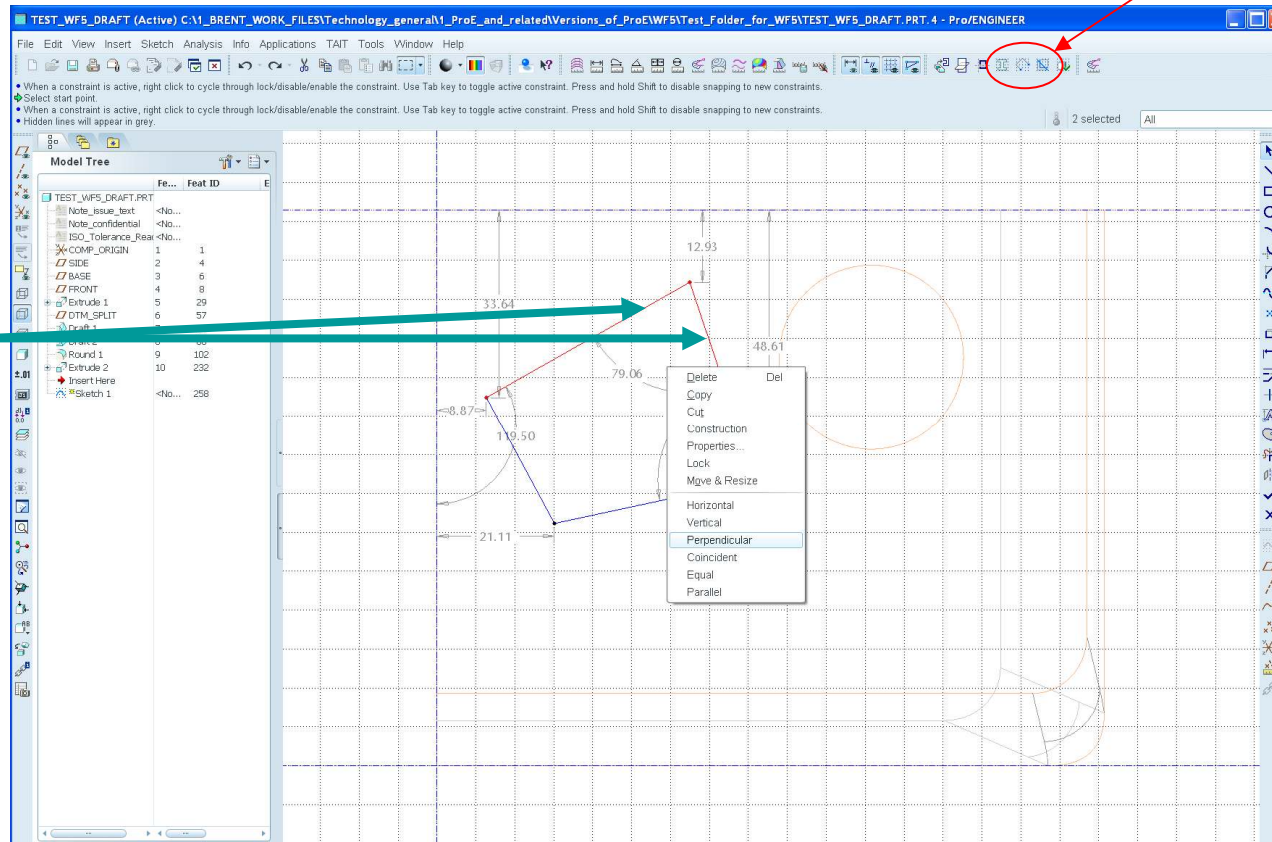


Also RMB has more context sensitive options in many areas.

Right Mouse Button. RMB has Sketcher constraints added

Reminder. These Sketcher checking tools were introduced in WF4. No they cannot be set on by default but they do stay live for each session

Select sketcher entities then RMB to get the constraint options at the bottom of the list. Options are context sensitive.



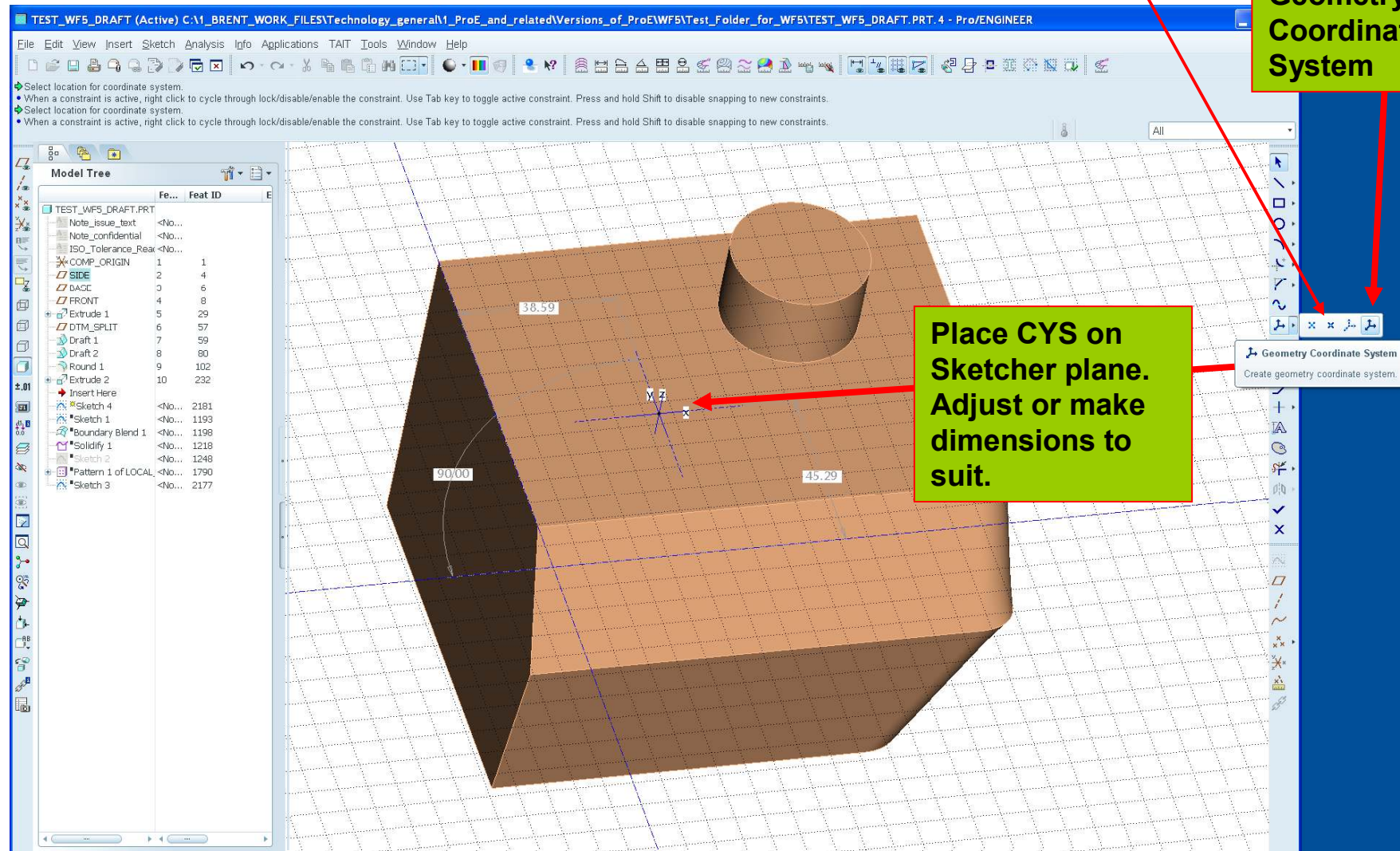
Changed Constraints Icon.

It looks different to the previous icon. In fact it shows the last constraint used. If clicked you get a fly out window with all the constraints

Sketcher has Geometry Coordinate System added

Another possibility is Geometry Point to generate an axis.

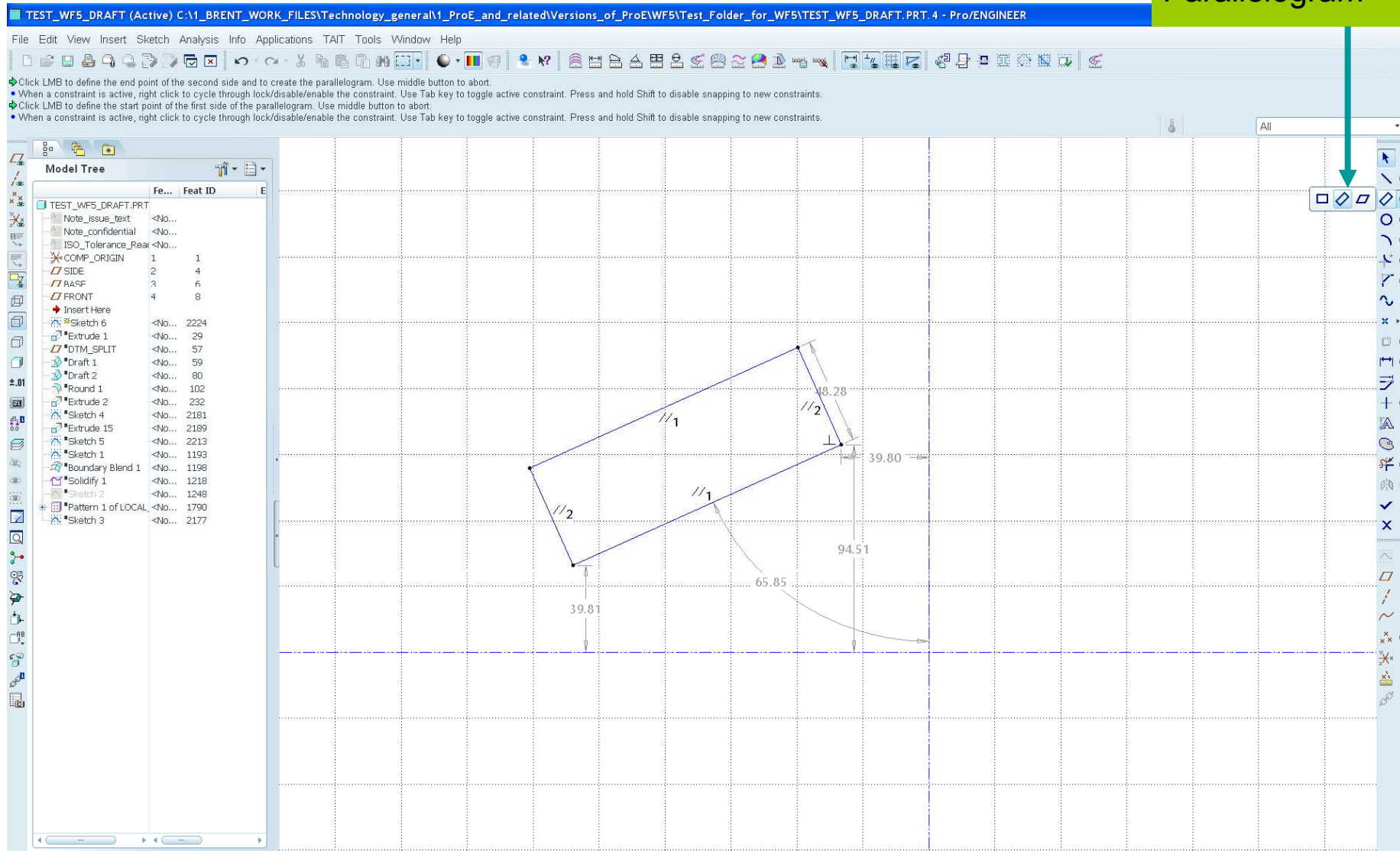
In Sketcher choose Geometry Coordinate System



Place CYS on Sketcher plane. Adjust or make dimensions to suit.

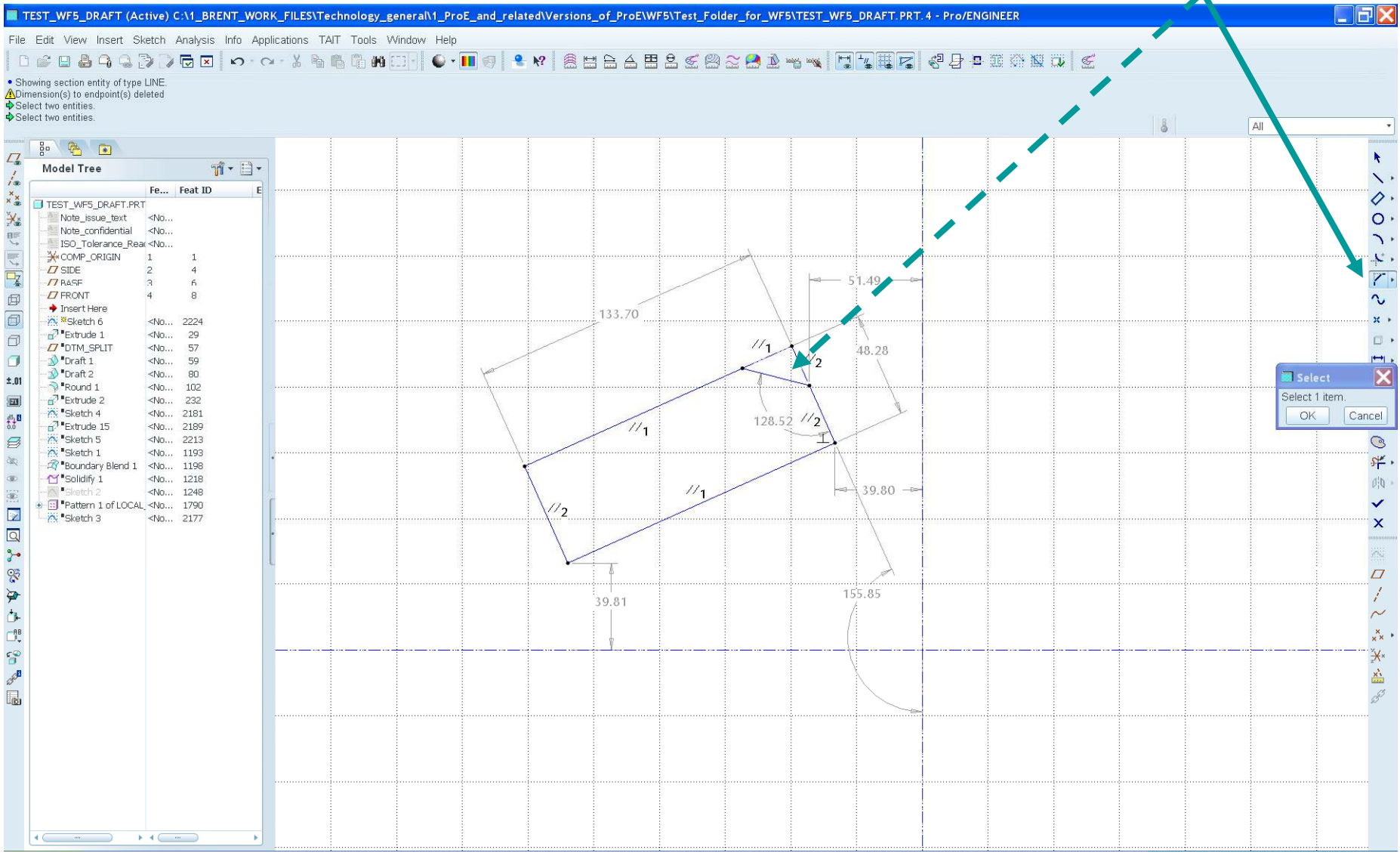
More Sketcher stuff; examples

- Slanted Rectangle
- Parallelogram



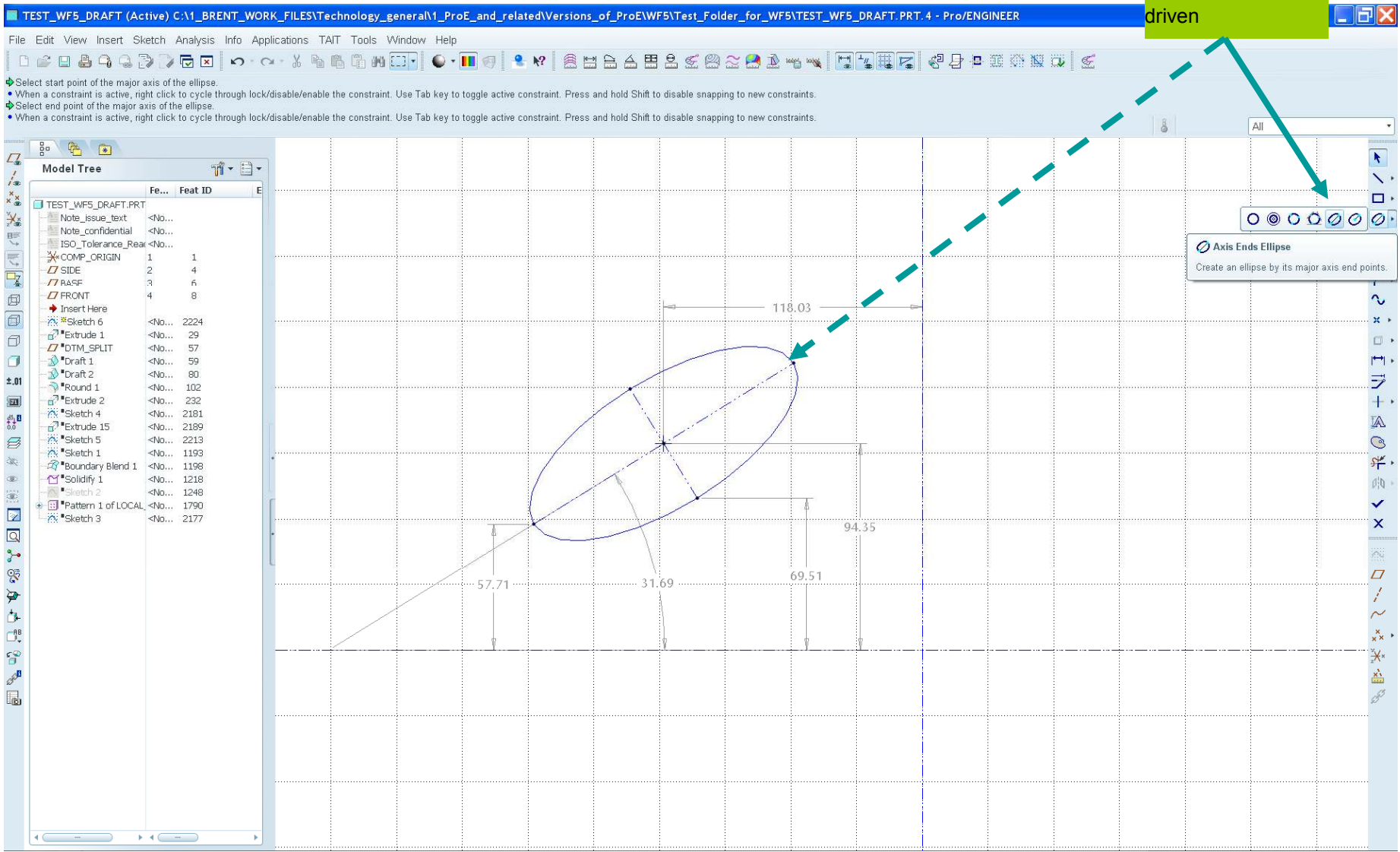
More Sketcher stuff; examples

•Chamfer



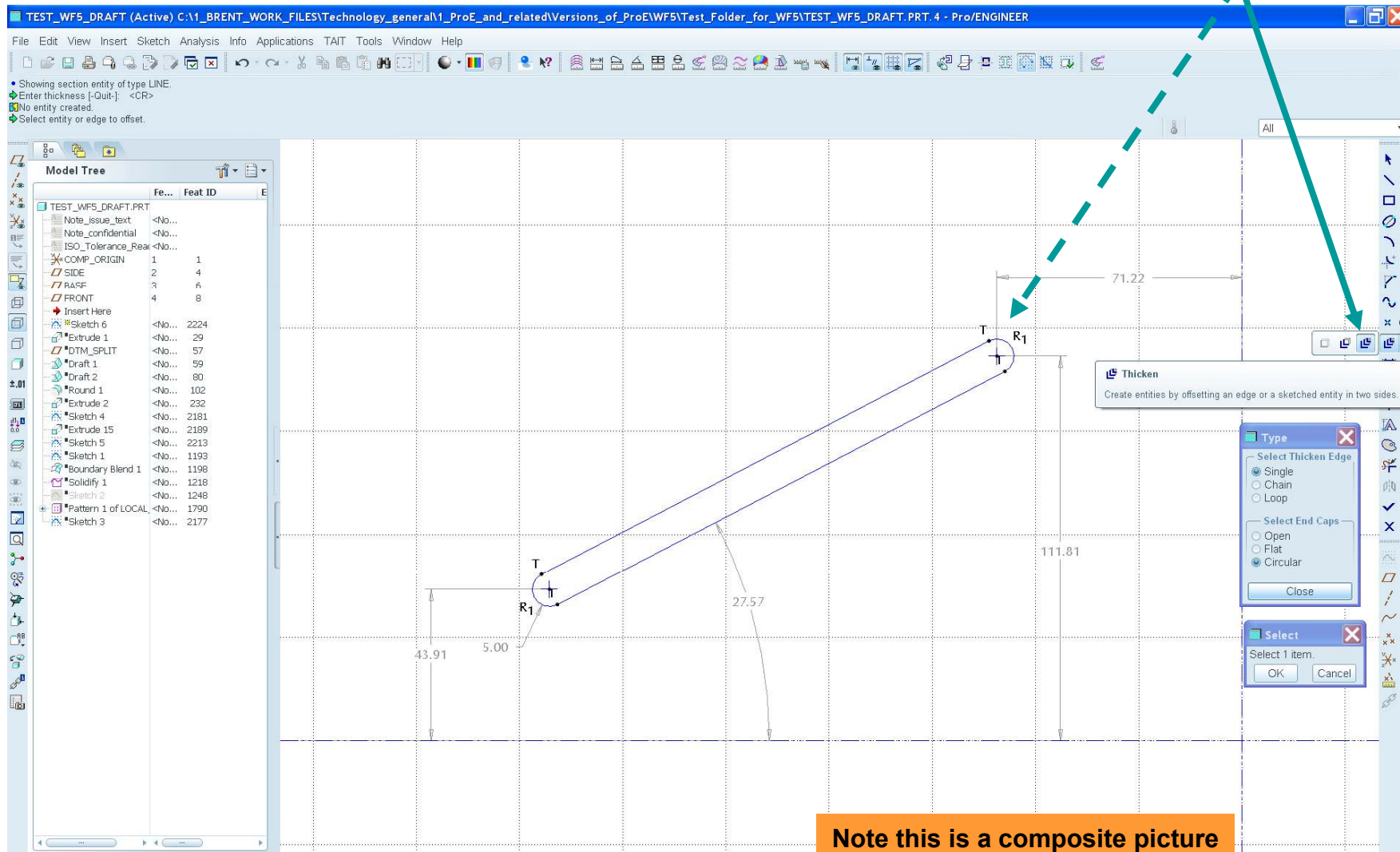
More Sketcher stuff; examples

• Ellipse
Diameter or radius driven



More Sketcher stuff; examples

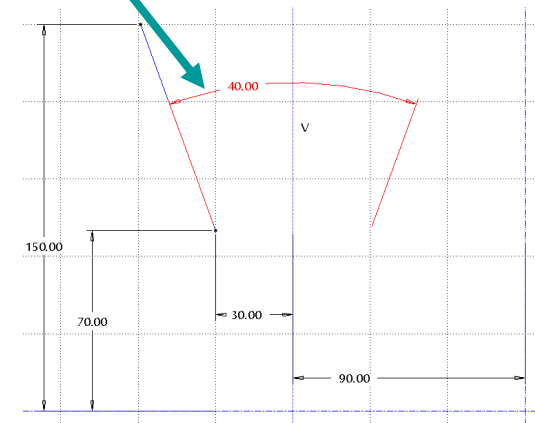
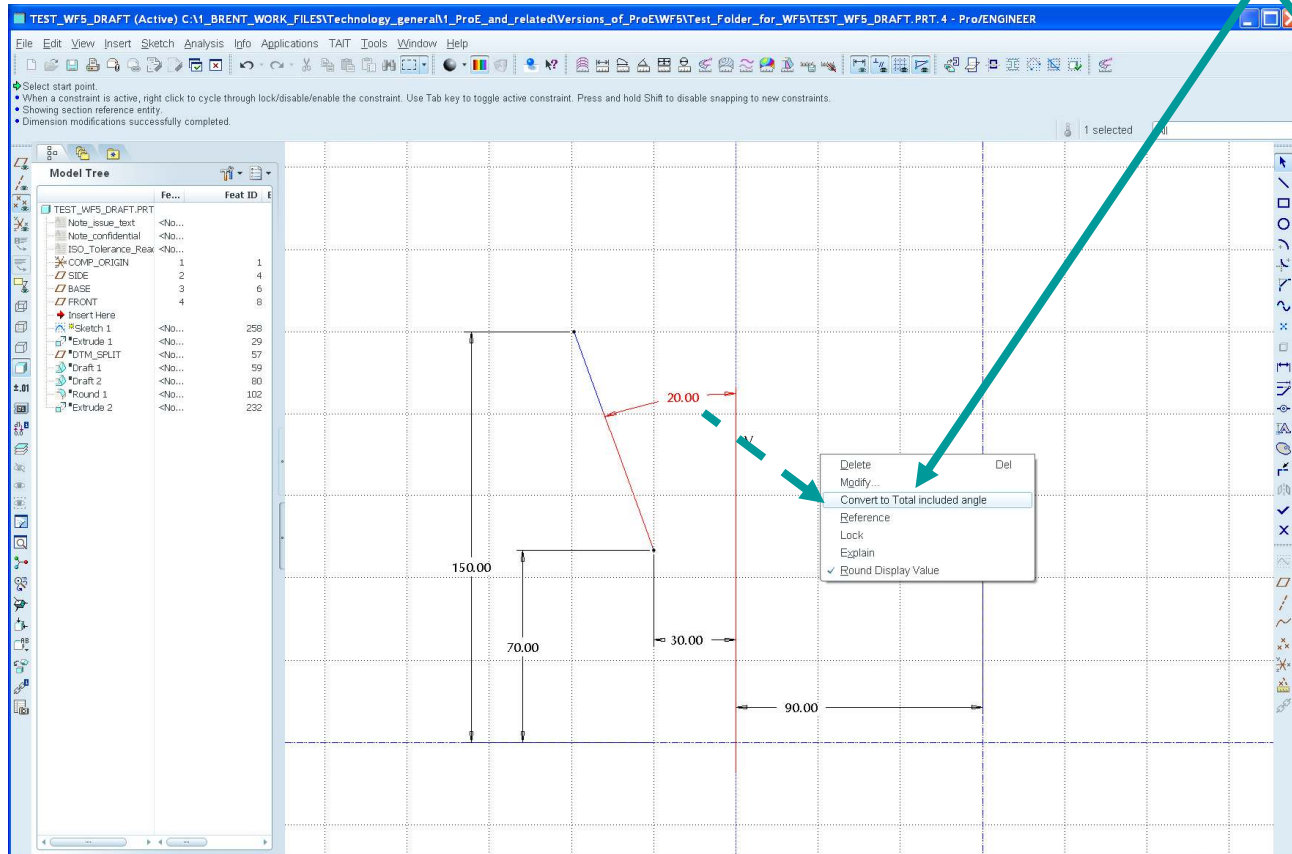
Thicken in Sketcher



Note this is a composite picture

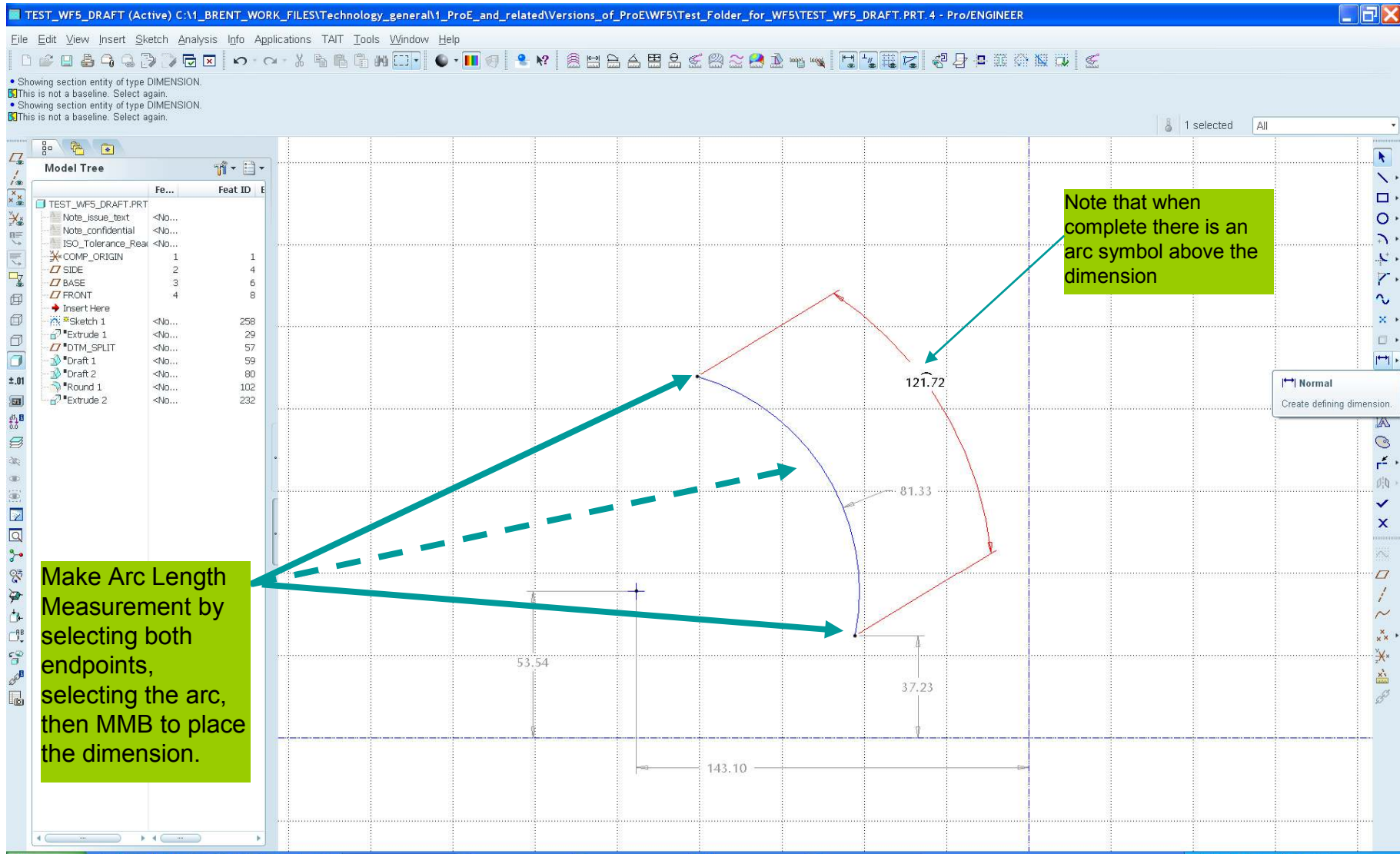
More Sketcher stuff; examples

RMB; Convert to Total Included Angle (or back to angle)



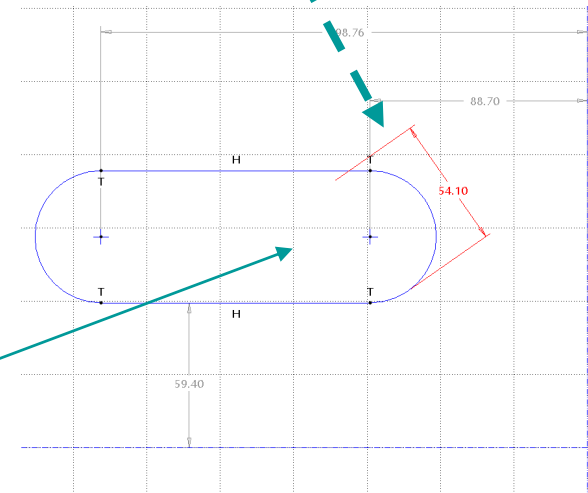
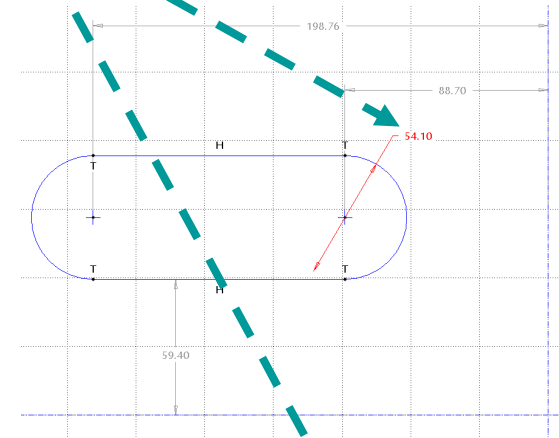
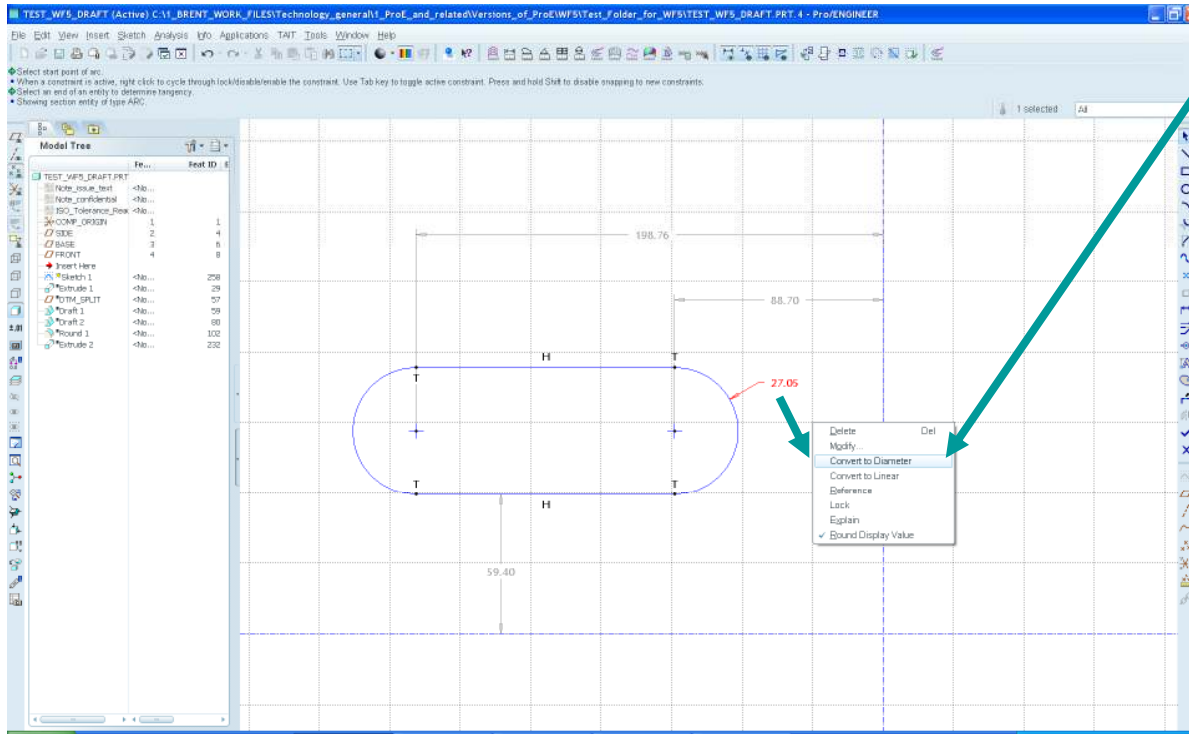
More Sketcher stuff; examples

Arc Length Measurement



More Sketcher stuff; examples

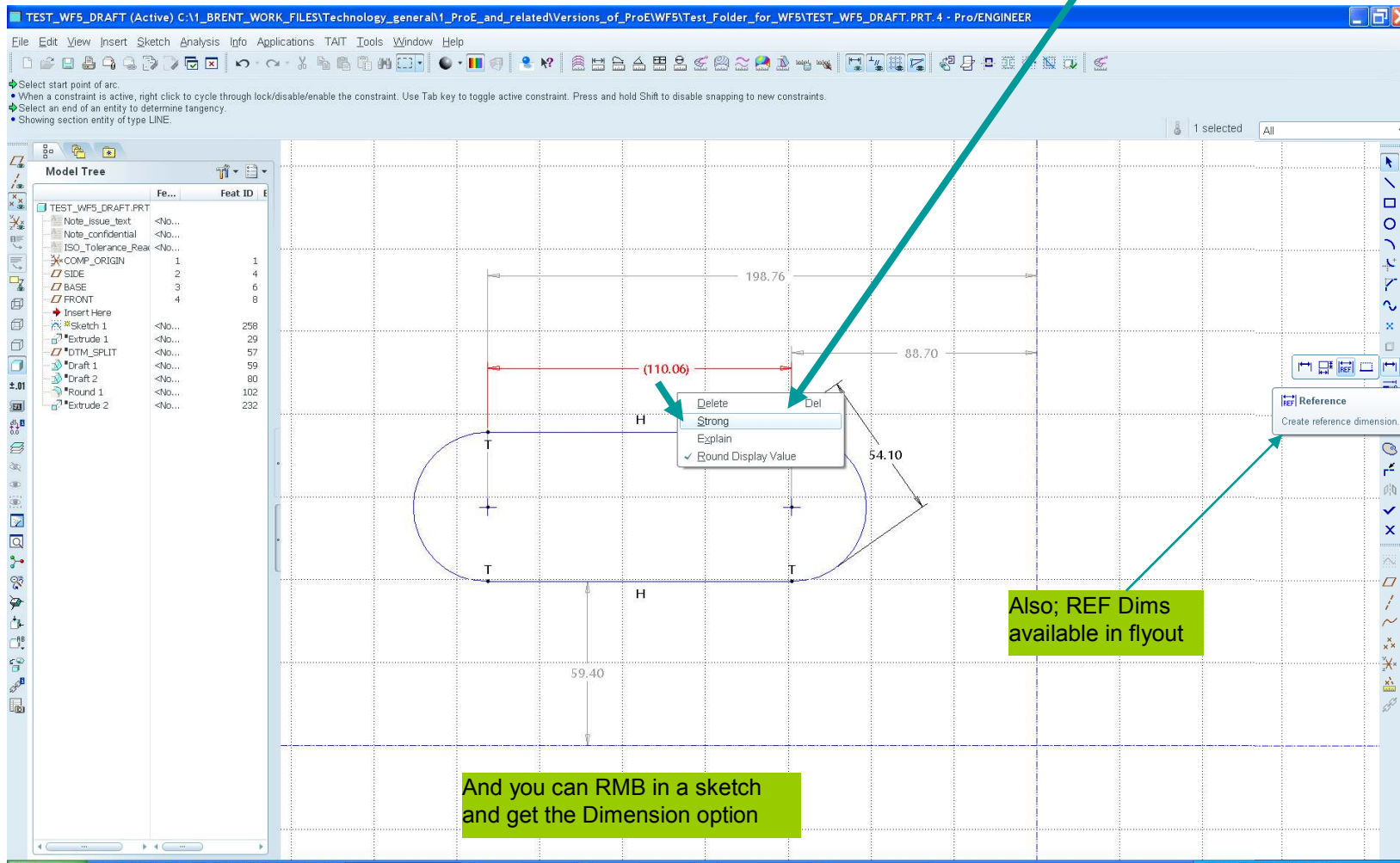
RMB; Convert to Diameter or Linear (or Radius)



Note that Linear dimension is placed in the same orientation as Diameter dimension (i.e. you have to set up the diameter dimension before converting as you cannot drag the angle of the linear dimension)

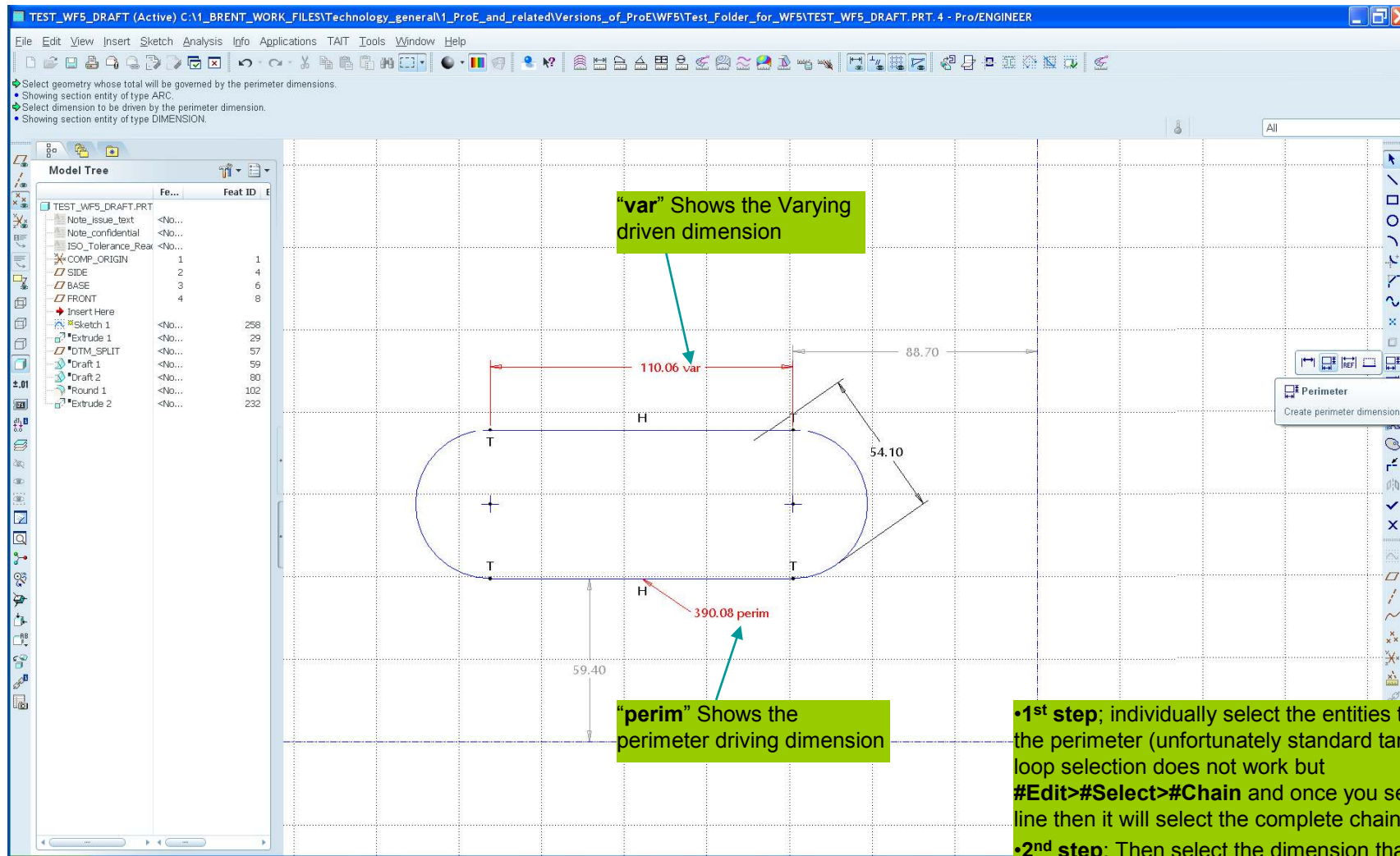
More Sketcher stuff; examples

RMB; Convert to Reference dimension OR BACK!!



More Sketcher stuff; examples

Add a Perimeter dimension (easier)



- 1st step; individually select the entities that form the perimeter (unfortunately standard tangent or loop selection does not work but **#Edit>#Select>#Chain** and once you select any line then it will select the complete chain).
- 2nd step; Then select the dimension that you want to vary (becomes a driven dimension) when you modify the perimeter (driving dimension)

Model Properties. Whole interface reworked/consolidated.

Accessed via File/ Properties
Some were previously Edit/ Setup

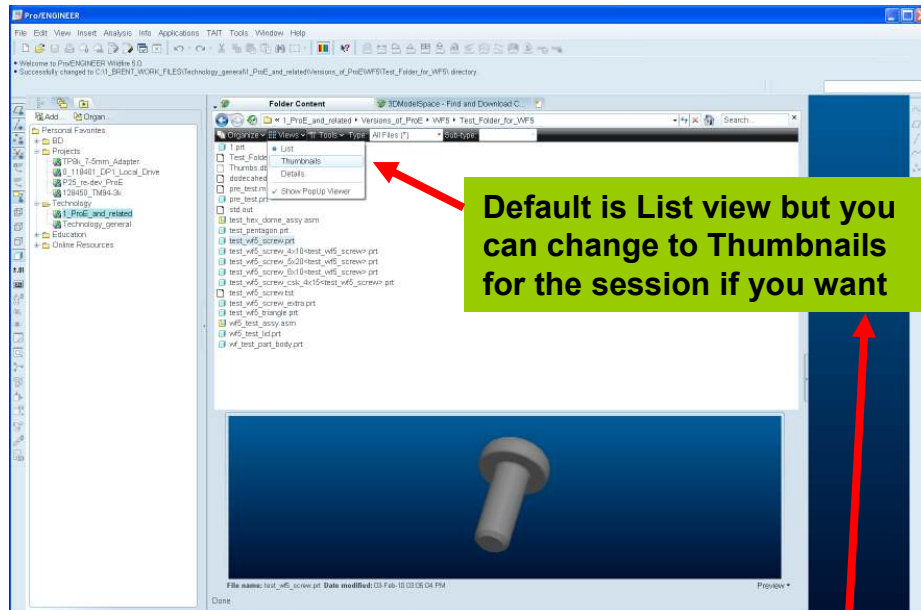
Options to change information (access other functions) or to select drop arrows to see more information.

Category	Property	Value	Action
Materials	Material	Not assigned	change
	Units	Custom	change
	Accuracy	Relative 0.0012	change
	Mass Properties		change
Relations, Parameters and Instances	Relations	33 defined	change
	Parameters	20 defined	change
	Instance	Not defined	change
Features and Geometry	Tolerance	ISO/DIN Fine	change
	Names	6 defined	change
Tools	Flexible	Not defined	change
	Shrinkage	Not defined	change
	Simplified Representation	4 defined	change
	Pro/Program	Active: Master Rep	change
Model Interfaces	Interchange	Not defined	change
Reference Control	Default settings	change	

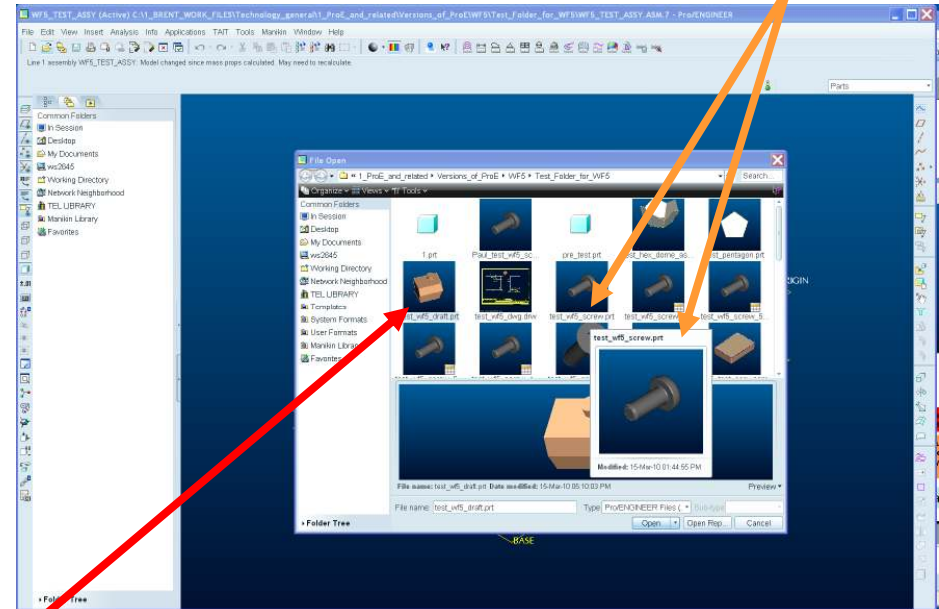
File stuff

Thumbnails for lightweight graphical representation of ProE items and have Popups and also the now useful Preview

If you hover the pointer over the filename below the thumbnail you see a popup window of the part



Default is List view but you can change to Thumbnails for the session if you want



Default using the browser window with Preview

Using the File Open dialogue box with Thumbnails and Preview

Note that for both ways of looking at thumbnails:

- The files need to have been saved in WF5
- Family Table Instances have a small grid icon in the bottom right hand corner and;
 - Only show the generic image (not the instance [might be able to fix this with accelerator files])
 - Do not show at all in the preview window
- You can RMB zoom/rotate/pan in the preview window
- You can LMB click on assembly items in the preview window and change to just that part

Occasional ProE lockup due to browser = IE8 (M010)

To get this as a default you need a custom.txt file (trail file) that runs when you start up WF5.

File stuff

Retrieve now brings Models and Assemblies with failed stuff.

Missing, unplaced, or unable to regenerate parts/features

Contextual RMB functionality

Example Info Window

The screenshot shows the Pro/ENGINEER interface. On the left, the Model Tree lists various components. A red traffic light icon is visible next to the component 'DIA45_FOSTER_SPEAKER.PRT'. A right-click context menu is open over this component, showing options: Retrieve Missing Component, Representation, Delete, Suppress, and Info. The 'Info' option is selected, opening the 'Feature info' window on the right. This window displays details for the failed feature, including the assembly name, component number, feature number, and internal feature ID. It also shows the reason for failure: 'Component model is missing.' and a list of parents and children.

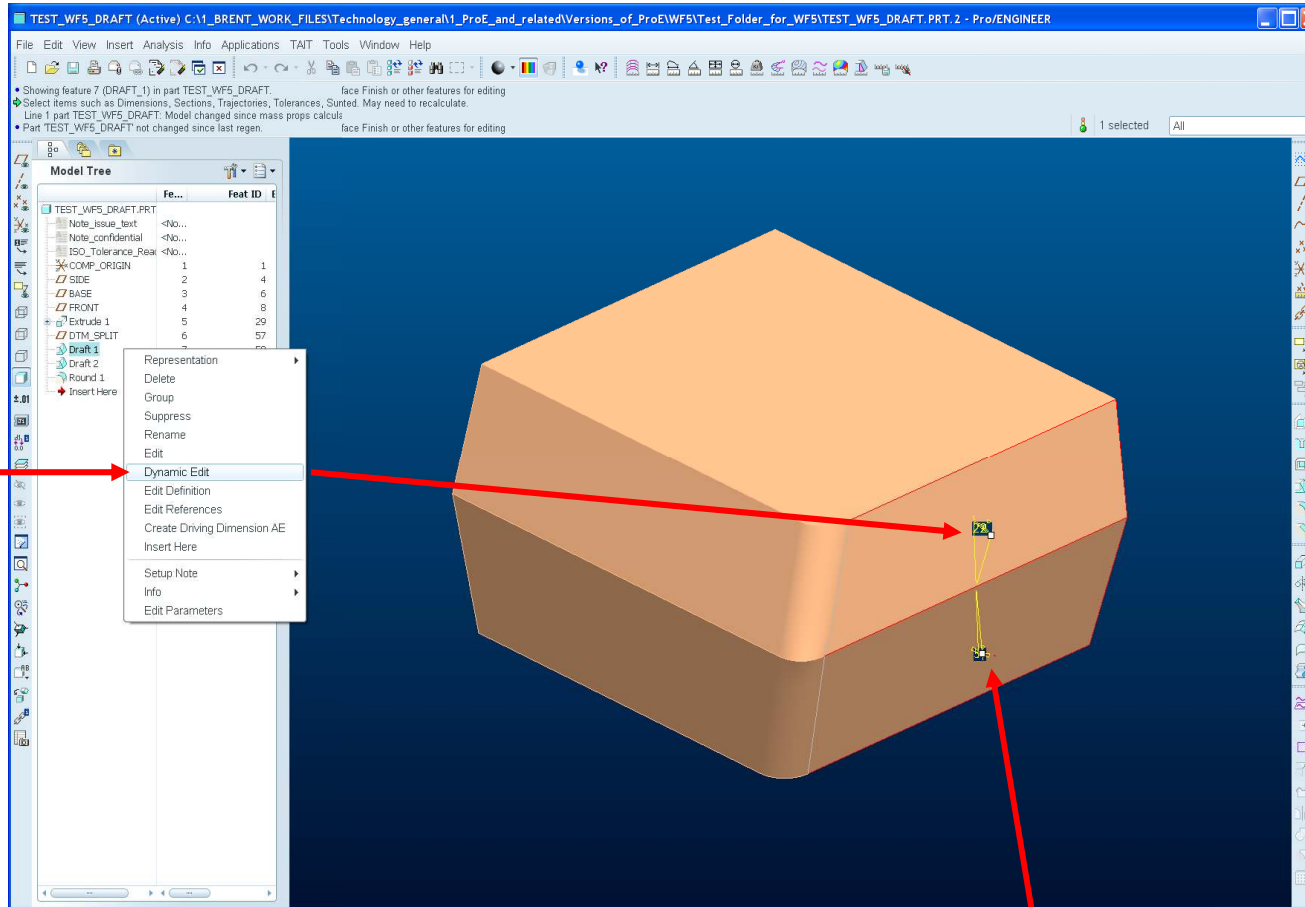
Look for this traffic light icon. The red light indicates a failed part/feature. Green is OK. Click on this to show Failed features or parts. Not sure about yellow

As before you have to choose how to deal with the failures; however now you can see the whole scope of what you are working with and fix things in your own schedule rather than have to repair each thing as it comes up.

The potential downside is that people could leave things without fixing them but there is a warning when you save.

Dynamic Edit

This new RMB menu choice is available for features. You can access this option either from the Tree or by selecting features in the main window.



Gives you drag handles on the items that can be dynamically changed. Regenerate when you have finished.
Experiment!

Draft

Change to simplify the draft analysis tool = clearer results

Simplified scale. You see one colour for areas greater than your set limit, graduated (default one) colour for areas between your limit and zero and zero itself.

New zero draft emphasis

Dynamic pointer relates to mouse position

Use this info icon to set the pointer to show draft as you hover over the part surfaces

You can revert to the default using the home icon

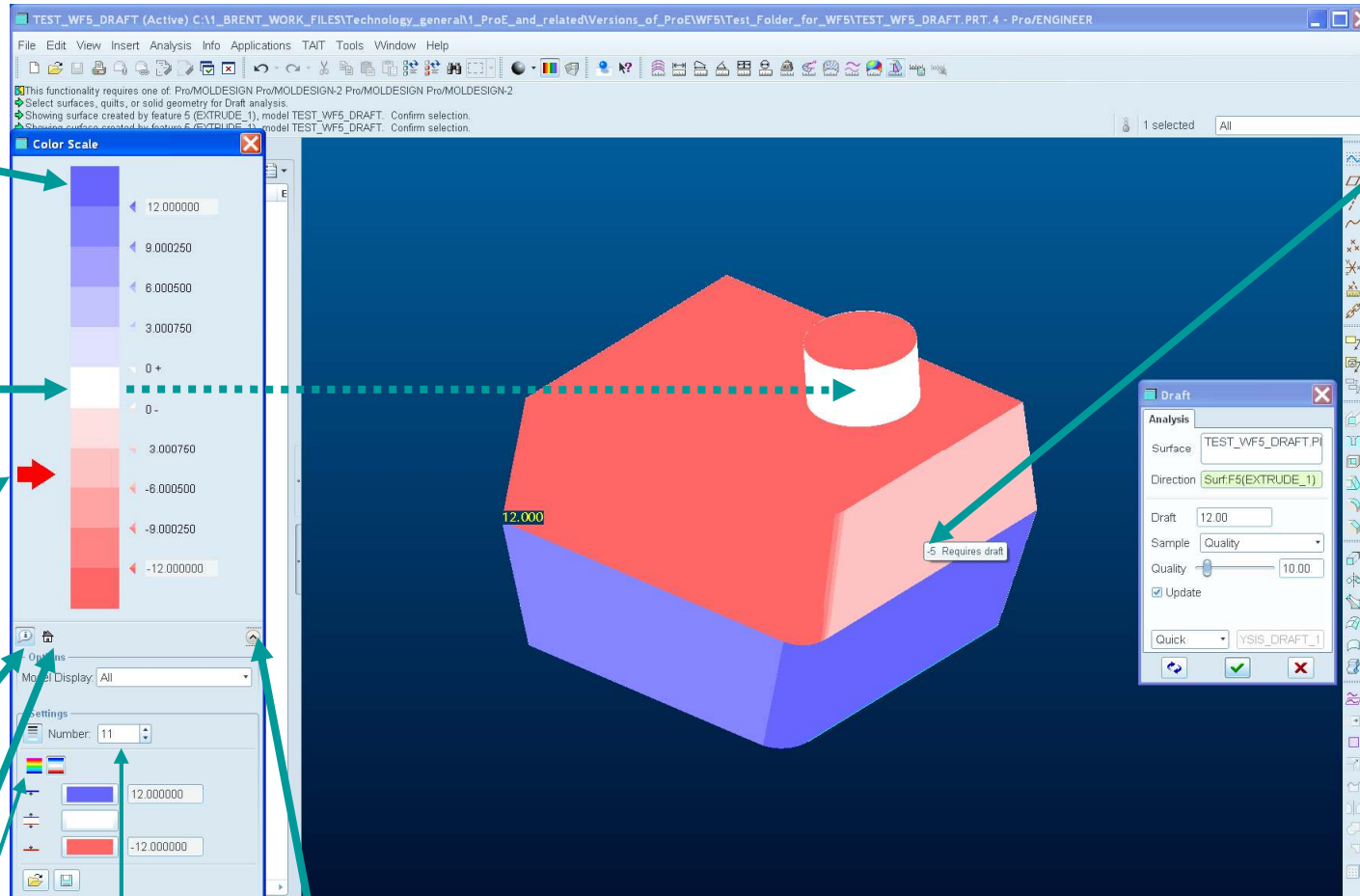
Previous colour scheme

Default is 5

You can tweak the output using the extra controls accessed through this button

Mouse position shows draft at that point.

Note that cursor itself is not shown in this example due to image capture limitations

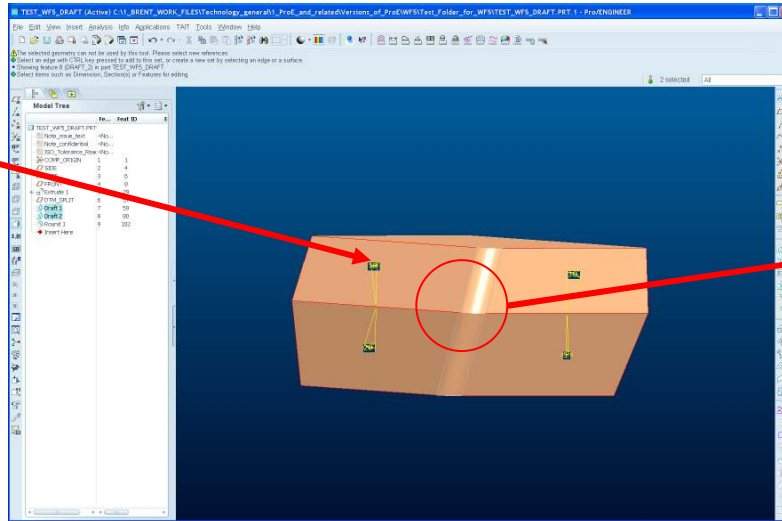


Draft related

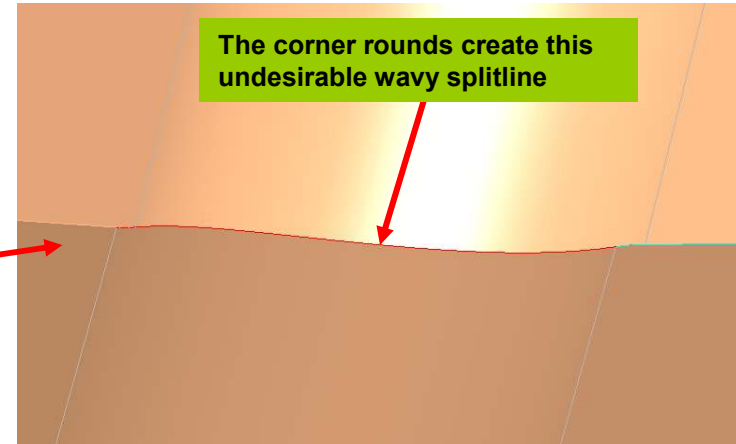
New tool to give correct splitline for radii

Example showing each of the four visible draft faces are drafted at different angles.

Traditionally it has been a problem to get the correct splitline transition when adding a round in this situation

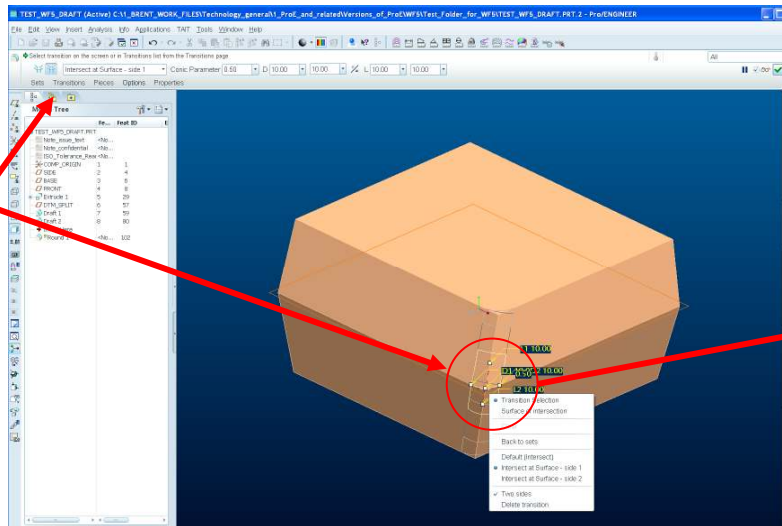


The corner rounds create this undesirable wavy splitline

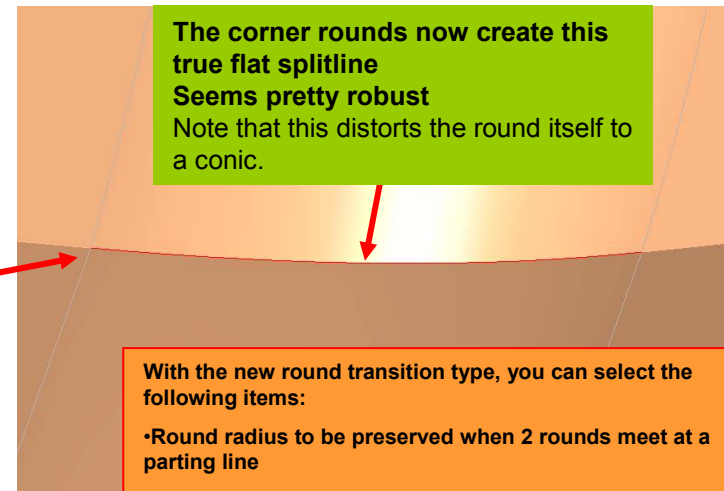


Example of same radius with new transition tool (via RMB or menu) used to align the two radii ends to be true to the desired splitline.

Experiment!



The corner rounds now create this true flat splitline
Seems pretty robust
Note that this distorts the round itself to a conic.

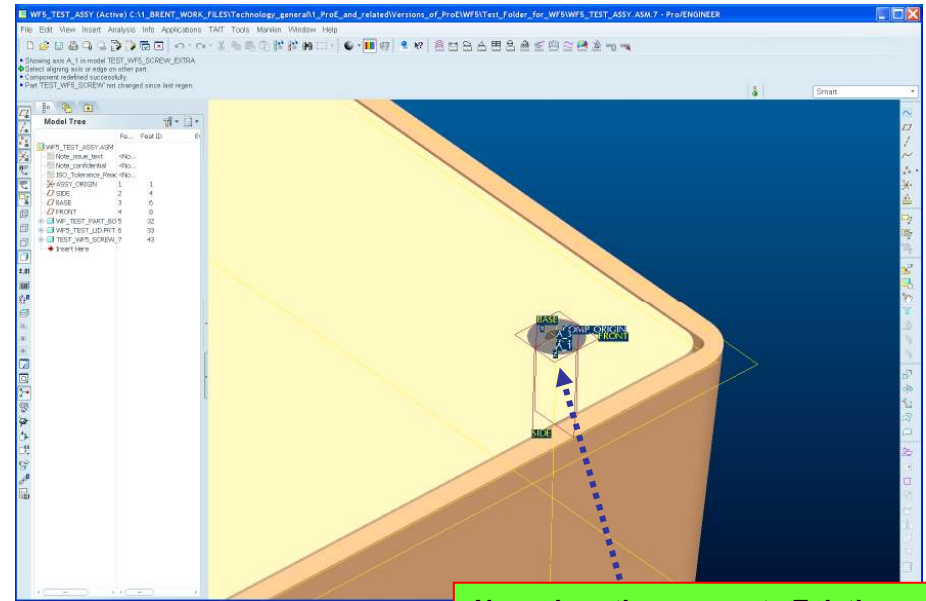
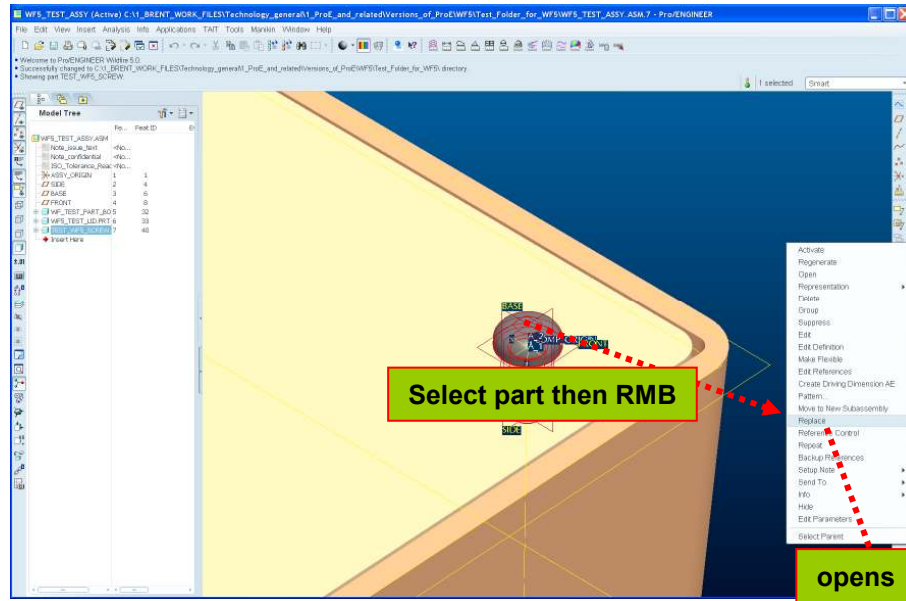


With the new round transition type, you can select the following items:

- Round radius to be preserved when 2 rounds meet at a parting line
- Length of the transition of the other round

Part replacement

Unrelated Part Replacement was introduced with WF4 and has been extended in WF5.



Now place the new part. Existing assembly references are used and ProE is looking for new references on the new part using the standard assembly process.

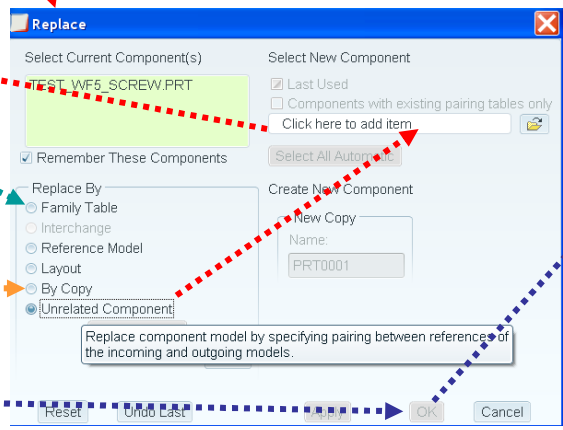
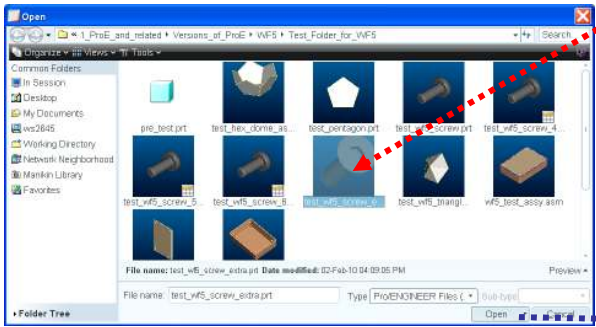
- In this example I had made windows copy of the screw so I could use the same plane and axis but this is not required.
- See also next slide for WF5

Look for unrelated part

Pre WF4 functionality

Pre WF4 capability to make a copy of the original part on the fly.

Once selected choose OK



Part replacement; continued

relatedVersions_of_ProE\WF5\Test_Folder_for_WF5\WF5_TEST_ASSY.ASM.7 - Pro/ENGINEER

File Edit View Insert Analysis Info Applications TAIT Tools Manikin Window Help

- Loading 2 tolerance tables ...
- Select component(s) to be replaced.
- Loading 2 tolerance tables ...
- Loading 2 tolerance tables ...

ASM0001 (Active) - Pro/ENGINEER

File Edit View Insert Analysis Info TAIT Tools Window Help

2 selected Surface

Model Tree

Fe...	Feat ID
ASM0001.A	
TEST_W1	1
TEST_2	2
Insert H	

FRONT FRONT
SIDE SIDE
Y/A_2/P_ORIGIN BASE
Y/A_3/P_ORIGIN BASE

Reference Pairing Table

File Options

Outgoing Components:
1 elms: [40]TEST_WF5_SCREW.PRT

Incoming Components:
TEST_WF5_SCREW_EXTRA.PRT

Show Optional Pairing Tags

Tag	Reference	Status	Rule	Reference	Status
TAG_0	(id 9) FRONT:F...	+	Manual	(id 9) FRONT:F...	+
TAG_1	(id 43) A_1(Axis...	+	Manual	(id 43) A_1(Axis...	+

Evaluate Evaluation Rules >>

OK Cancel

Replace By

- Family Table
- Interchange
- Reference Model
- Layout
- By Copy
- Unrelated Component

Edit Ref Table

Clear

Reset Undo Last Apply OK Cancel

New Component

Used

Components with existing pairing tables only

WF5_SCREW_EXTRA.PRT

All Automatic

Create New Component

New Copy

Name: PRT0001

Clear

Apply OK Cancel

Or manual similar to old Interchange Assemblies

Evaluate using rules. In the case of copied parts this may be all that is required.

Drawing Interface. Complete revision. Uses the MS Ribbon Style Interface

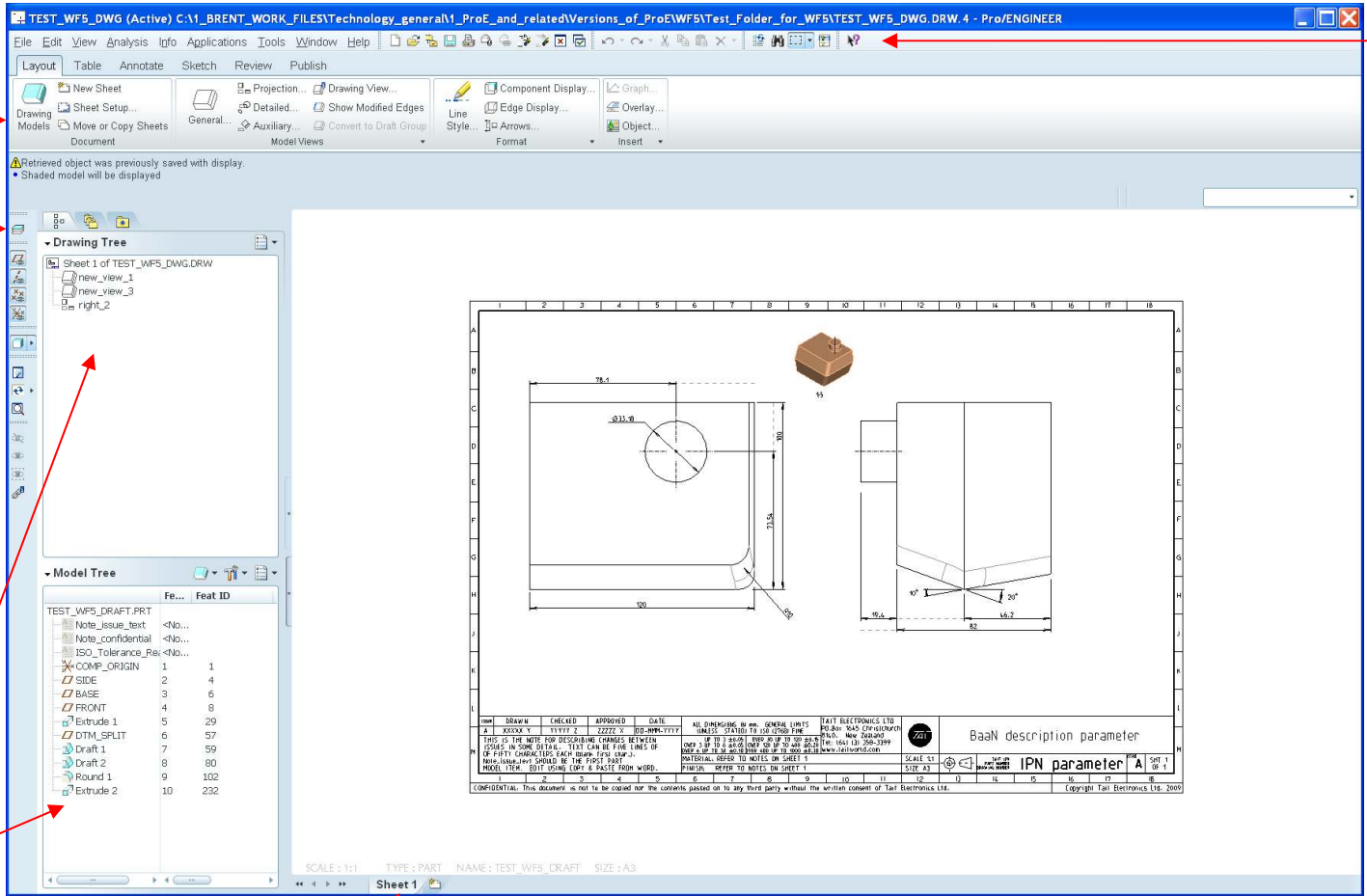
You generally need to be in the correct TAB to do those functions [RMB gives different options]

New Ribbon Interface

Drawing Layers.
Note that this toggles the drawing layers and that these are controlled separately to Model Layers.

New Drawing Tree

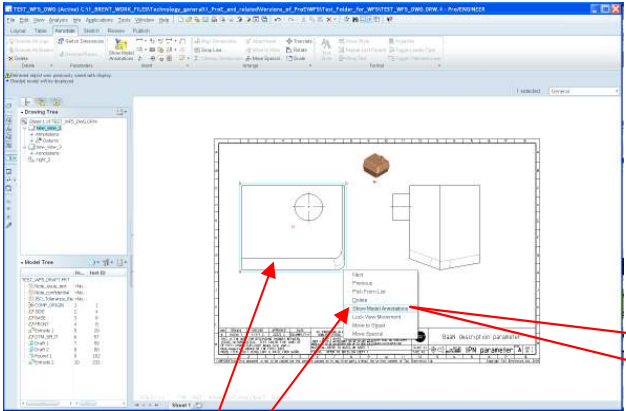
New Model Tree



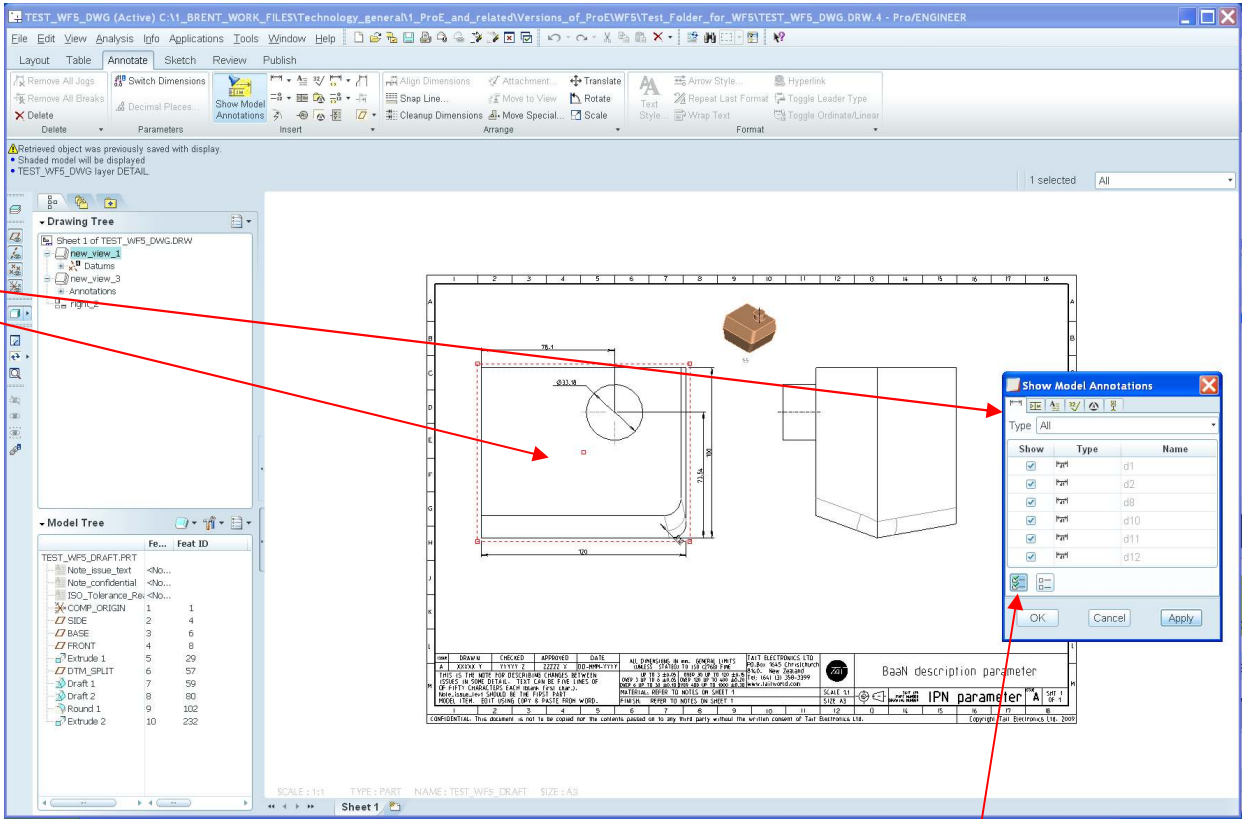
Note that I have altered Menus and icons on top bar to be as close to the other ProE windows as practicable

Sheet Tabs and "make new sheet"

Drawing Interface. Ribbon example. Annotate. Show Dimensions.



RMB on view gives this menu from which I selected "Show Dimensions"



Selection choices. All, None, or Individual checkbox.