Datums On-The-Fly

We have learned the following about datum planes:

- You may sketch on the surface of an existing datum plane (frontal, horizontal, and profile) or on one you have created.
- You may dimension to the edge view of an existing or newly created datum plane.
- Datum planes are infinite in size.
- Datum planes are automatically named DTM1, DTM2, etc., however they can be renamed.
- When creating a datum plane it must be constrained.
- Datum planes may be selected by its name or one of its boundaries.
- Datum planes may be created before modeling a feature or while in the process of modeling a feature.

We have learned how to create a datum plane before modeling a feature, but not how to create one on-the-fly.

Creating a datum plane on-the-fly means you will start modeling the feature. Selecting Datum Plane Tool allows you to create the datum on the spot, called on-the-fly. Things to remember about datum planes on-the-fly:

- They will be internal datum planes. This means they will be listed within the feature in the Model Tree.
- After the feature is completed the internal datum and associated dimensions will become invisible. In other words, they are for construction only and will not show up on the drawing.
- The exception to the rules is when you use Copy/Mirror. Datum planes created on-the-fly in this feature will be visible and can be referenced by other features.
- Datum planes created on-the-fly in a cross-sectional view will be placed on a layer named xsec_datums.

Example of creating a datum plane on-the-fly.