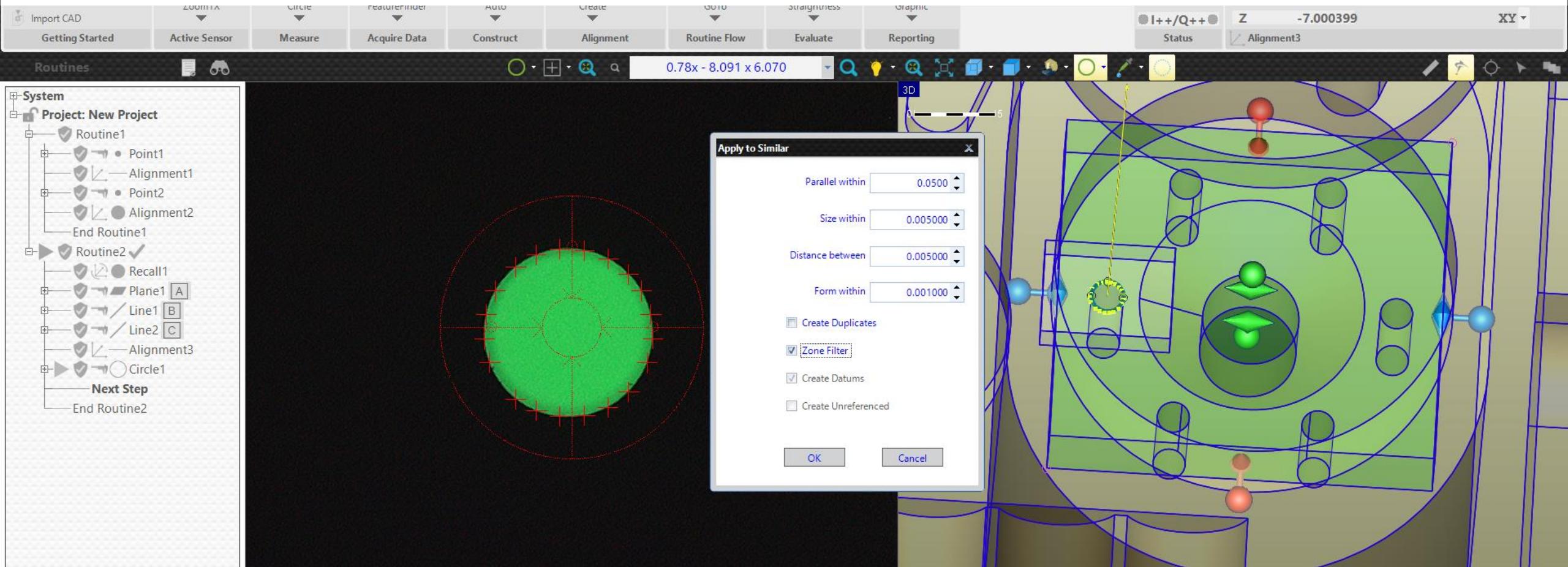# Model Window Mouse Controls

- Panning model:
  - Hold middle mouse button and drag within the window
  - Moves model around without changing its orientation or zoom level

- Rotating model:
  - Hold right mouse button and drag within the window
  - Model rotates around the center of the selected measured-feature or around the projection of the cursor's location onto the CAD model
  - To rotate the model around an axis normal to the view plane, hold Ctrl while you hold the right mouse button and drag within the window

- Zooming in/out of model:
  - Scroll the mouse wheel up and down
  - Based on position of the cursor
  - To zoom in/out of a specific area of the model, hold Alt and draw a box around the area you want to zoom into

Confidence. When Results Matter™
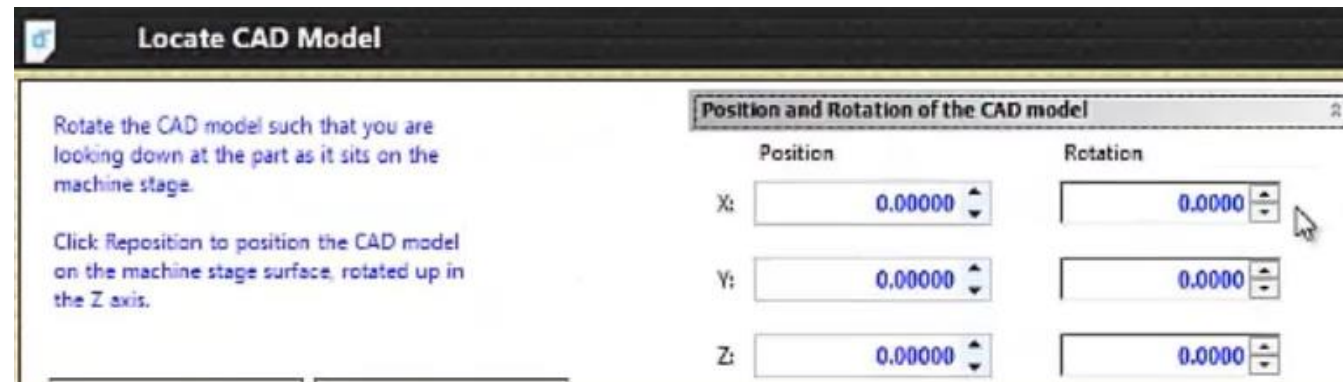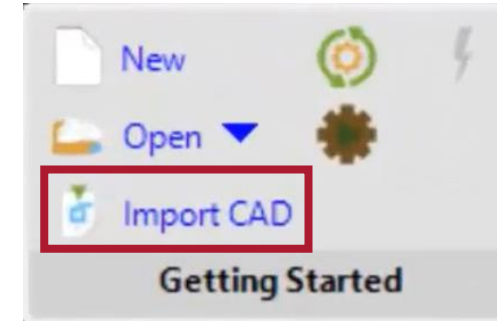
Native CAD Support

- The supported CAD file types are shown in the Supported Formats dropdown in the Import CAD file browser

- There is the option to purchase ZONE3 support for one or more native CAD types

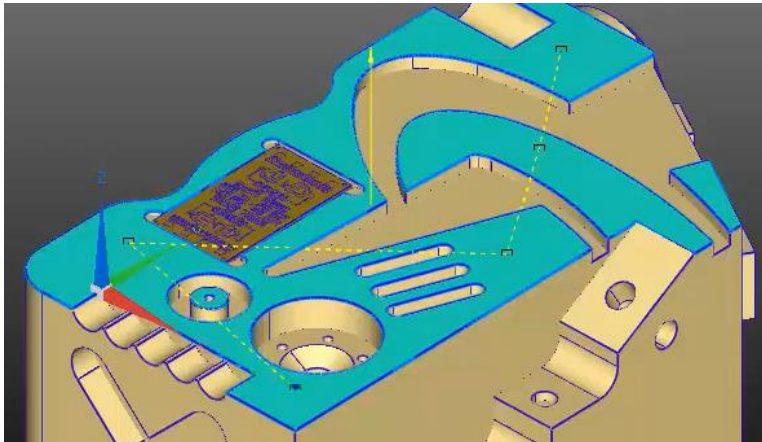|	EXPRESS	PRIME	PRO	OFFLINE
CAD TOOLS				
Program from 2D CAD	★	★	★	★
2D CAD Material Matching	★	★	★	★
Auto 2D CAD Program/Templates	★	★	★	★
Machine Model Kinematics	★	★	★	★
Sensor Simulation	★	★	★	★
Autopath	★	★	★	★
Program from 3D CAD		★	★	★
Auto 3D CAD Program/Recipes			★	★
Replace CAD			★	★
Production & Manufacturing Information (PMI) Support			★	★
EVOLVE to ZONE3 Strategies			★	★
Native CAD Support (NX/Unigraphics, Creo/ProE, CATIA, SolidWorks, or Inventor)		O	O	O

Importing CAD

1. Turn on the machine kinematic model in the Model window

2. Select Import CAD from the Getting Started tab

3. Select Import Units for the CAD model

4. Open the Position and Rotation of the CAD model ribbon and set the rotation of the model so it matches the intended orientation of the part and click Save

New

Open

Import CAD

Getting Started

Locate CAD Model

Rotate the CAD model such that you are looking down at the part as it sits on the machine stage.

Click Reposition to position the CAD model on the machine stage surface, rotated up in the Z axis.

Position and Rotation of the CAD model

	Position	Rotation
X:	0.00000	0.0000
Y:	0.00000	0.0000
Z:	0.00000	0.0000

Confidence. When Results Matter™
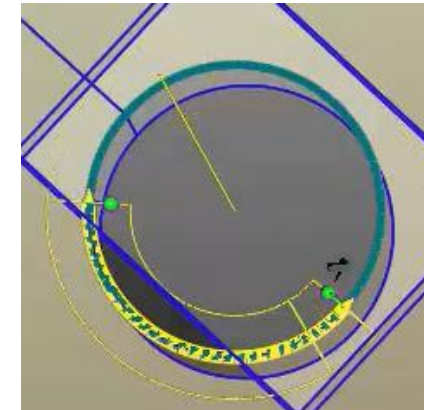
Path Generation with CAD

Manual Path Generation

- Manually pick points on CAD model

- Point-based finders

- Indicate point mode

Automatic Path Generation

- Automatically define measurement path based on CAD

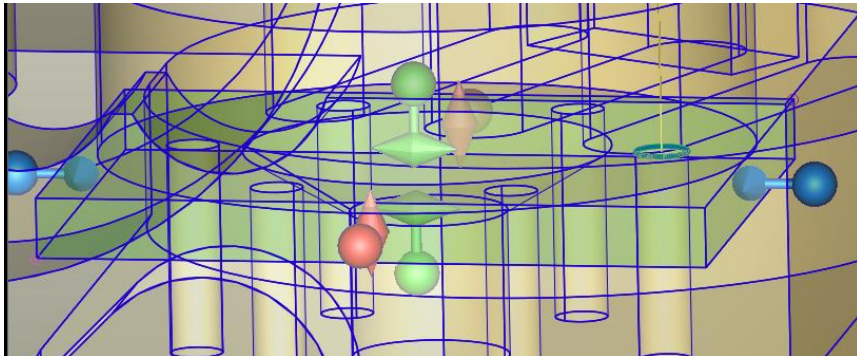- Path generation icon

- Set parameters in Path Generation window

Uses active finder and current lighting/magnification level

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Apply to Similar

- Right-click on an existing measured-feature step in the Routines Tree and select Apply to Similar

- ZONE3 will search the CAD model for entities associated with features that are similar and automatically generate measured-feature steps for them

- Requires the measured feature(s) to be related to CAD

- Can be used on group steps

Define how close the found features must be to the original feature to be considered similar (uses project units)

Apply to Similar

Parallel within	0.0500
Size within	0.00500
Distance between	0.00500
Form within	0.00100

☐ Create Duplicates

☑ Zone Filter

OK   Cancel

Creates a new step for a CAD entity that is already referenced in a step

Creates a specific zone on the CAD model to search through

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Update Similar

Define how close the found features must be to the original feature to be considered similar

Update Similar   ✕

Parallel within   **0.0500**
Size within   0.00500
Distance between   0.00500
Form within   0.00100

☐ Create Duplicates

Creates a new step for a CAD entity that is already referenced in a step

OK   Cancel

- Edit one of the measured-feature steps and then right-click to select Update Similar

- ZONE3 automatically updates the steps that measure the similar features

- Requires a CAD model

- Can be used on group steps

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CAD: Key Terms

Apply to Similar: Automatically adds measured-feature steps for a series of similar features. Select an existing measured-feature step and then select the Apply to Similar option. ZONE3 will search the CAD model for entities associated with features that are similar and automatically generate measured-feature steps for them.

Automatic Path Generation: Select the Path Generation icon on the toolbar of the Points List to automatically generate a measurement path for a feature that is known to ZONE3, either as an entity on a CAD model, or as a previously measured or constructed feature.

Indicate Point Mode: Available when a finder's properties are enabled for editing. Click to put ZONE3 in a mode in which you can indicate the measurement points along a path on the selected entity. As you indicate points, they are added to the finder's Points List.

Model Window: Shows a kinematic model of the measurement machine, including its sensor assembly, a rotary table and/or change rack (if equipped), one or more CAD models (if imported), ad any features, measured, constructed, or theoretical that are not associated with a CAD model.

Manual Path Generation: Select Indicate Point Mode on the Model window toolbar to manually create a measurement path on a CAD model when using a point-based feature (Focus, Laser Focus, Strong Edge, Touch Probe).

Update Similar: Automatically updates measured-feature steps for similar features. Edit one of the measured-feature steps and then select the Update Similar option. ZONE3 automatically updates the steps that measure the similar features.

Zone Filter: Within Apply to Similar, select to display an acquisition zone in which ZONE3 will search for similar features. Drag the zone's handles (circles at opposing corners) to move/resize it. Clear this check box to search for similar features on the entire CAD model.