

## Exercise 15-4

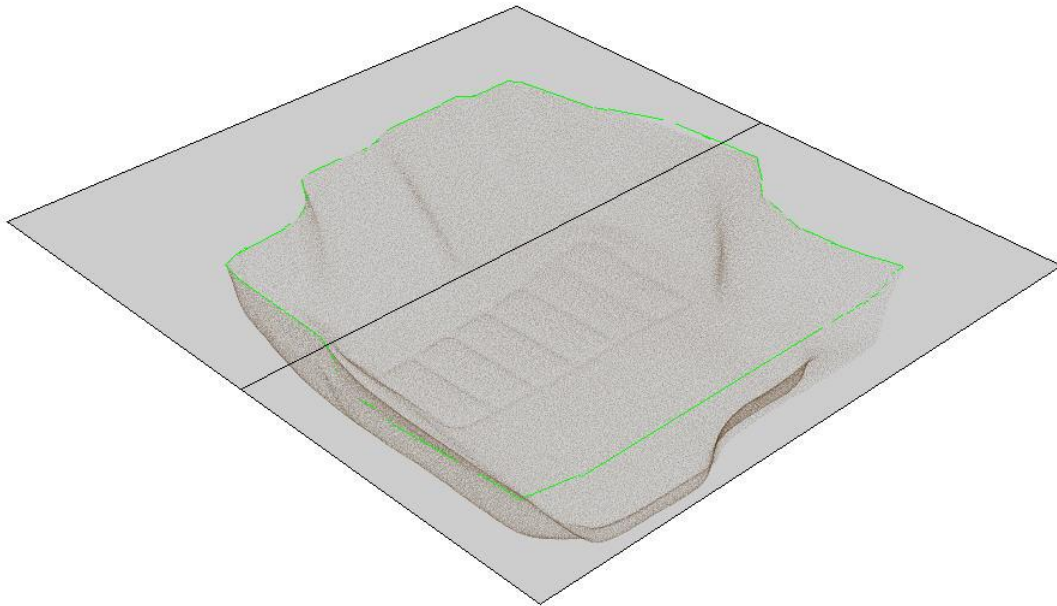
1. Copy the drawing Floor\_Mat.dwg available on the companion website to a folder of your choice. Copy the file Floor\_Mat.rcs to the same folder location. Open the drawing Floor\_Mat.dwg.
2. Select the point cloud and then select the **Top** option from the **Section Plane** drop-down list in the **Section** panel in the **Point Cloud** contextual ribbon tab. This creates a section plane that cuts through the top of the object. You will use this section plane to extract section lines from the point cloud. Refer to the illustration below.



*(Model courtesy of Laser Design and GKS Services)*

3. Access the **PCEXTRACTSECTION** command. In the **Extract Section Lines from Point Cloud** dialog box, select the **Entire cross section** and **2D Polylines** radio buttons. Set the **Maximum points to process** value to 1000000. Set the **Minimum line length:** value to 0.5 and the **Connect lines tolerance:** value to 20. Do not change the other settings from the defaults. Pick the **Create** button to close the dialog box and begin processing.

4. After processing is completed, accept the results. The extracted geometry should appear as shown in the following illustration.



*(Model courtesy of Laser Design and GKS Services)*

5. Select the point cloud, right-click, and select **Isolate>Hide Objects** from the shortcut menu. Erase the section object.
6. Using grips, edit the polylines to connect the endpoints and form one continuous polyline. Join or delete segments as needed.
7. Save the drawing as EX15-4.