**Problem 2-6:** A coordinate measuring machine has sampled the surface of a hole feature and has generated the pattern of points shown below. Unlike the size tolerance which applies to a cross-section, the straightness tolerance is three dimensional and the points must be collected from the entire surface. Since it is not possible to show a 3D pattern of points on a planar paper, only two rows of points are shown representing the top and bottom of the hole surface. The specification is for the hole size to be 15-16 mm and a straightness tolerance of 0.5 mm at MMC. The GO gage is a 14.5 mm bar. Grab and move and rotate the gage to determine if the entire set of points can fit outside the gage bar. If it does, the feature straightness specification is acceptable.

14.5 mm GO