



Figure 1: Automotive Steering Component

**Problem:** A manufacturer of automotive steering components needed to verify manufacturing process consistency. A machine vision system was to automatically inspect manufactured parts for process deviation during the manufacturing process. Actual measurements were not as important as the difference in measurement from one inspection to another.

**Solution:** Stand-alone inspection system retrofitted to existing part handling system. Diffuse fluorescent illumination lighting the part from the bottom. FOV approximately 15" to accommodate all part sizes. Part number of the inspected part is selected from a Windows recipe menu. Parts are indexed in place by the existing part handling system. A Part In Place signal triggers the camera to acquire a series of images. Software tools measure the overall length of the part, the arc at the ball and the diameter of the rod. These measurements are not stored, but

rather are simply used for comparison from measurement to measurement to verify that the measurements remain within an acceptable range.



Figure 2: Validator Product