



ELECTRONIC COMPONENT INSPECTION

Problem:

Due to strict quality requirements; comprehensive geometric tolerance and surface quality inspection for 100% of ferrite core production was needed. The small cylindrical shape and size of the cores created many machine design challenges.



Observe the size relationship between the core to be inspected and the U.S. dime behind it.

Our Solution:

Eastern created a fully automatic, easily configurable machine that checks the diameter and length dimensions to a tolerance of $\pm .001$ ". Also, the cylindrical surface was inspected for voids and cracks at 70+ parts/min. This was accomplished by escaping each core onto a set of rollers and spinning the core in synchronization with the vision system. All data is recorded and transmitted for archiving and evaluation, including high resolution images of the failures. Good parts are automatically batched in ship quantities and rejected parts are segregated for fault inspection.

