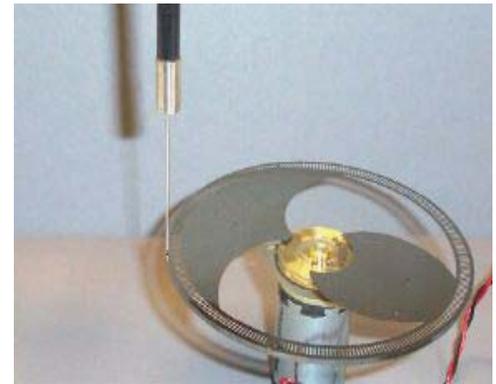


Measurements To Glass

A manufacturer of medical equipment needed to automate a manual process of aligning their glass encoder disc to a drive motor hub.

Problems:

1. Measure Radial Runout -
Indicate to the outer diameter of a 1.5 mm thick glass wheel.
The target surface is ground glass.
2. Measure Axial Runout -
Indicate to the outer edge of the encoder's black timing track.
The target is 1.5 mm wide black under clear glass.



Solution

- Philtec's model 2DMS-RC20 sensor was chosen to solve the problem.
With a target spot size of 0.5 mm, it readily fits into the small target dimensional space.
- A two channel DMS package was selected for the electronics.
- A glass encoder disc was provided to Philtec for setup and calibration of the DMS.

Separate calibrations were stored in the DMS for the two different target surfaces.

The performance of the sensors shown here, met the customer's requirements for:

standoff
range
accuracy

