THE BENEFITS

A reduction in waste if and when the glue is not properly applied to the rolling paper.

• The capacitive sensor ensures that glue is present at all times.

• The customer ensures the quality of their products and prevents bad product from leaving the factory.
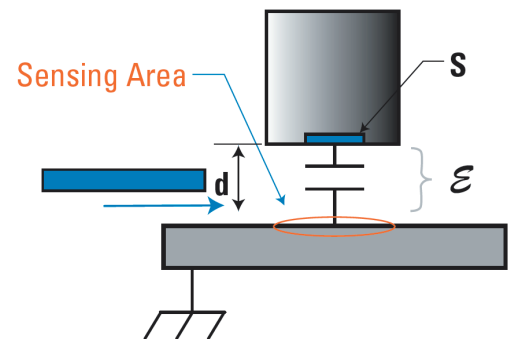
DYNAMIC NON-CONTACT MEASUREMENT AND ANALYSIS OF A GLUING MACHINE

Application

Using capacitive sensors to determine the presence or absence of glue in cigarette manufacturing.

$$C = \frac{\mathcal{E} \bullet S}{d}$$

C: Capacitance
d: Distance
S: Sensor Area
$\mathcal{E}$: Dielectric Constant

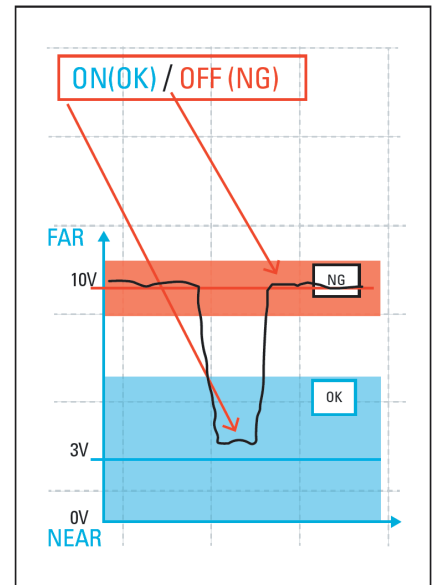

Sensing Area
S
d
$\mathcal{E}$

THE SOLUTION

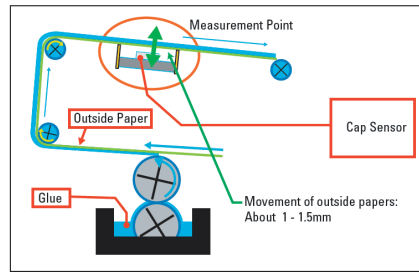**CPA100 - Driver**

C9.5-5.6-2 - Capacitive Probe

CIGARETTE MANUFACTURING requires the application of glue onto the rolling paper. In the factory, this glue is applied onto the rolling paper at extremely high speeds as the paper travels through the applicator. Once applied, the glue holds the rolling paper together and keeps the loose tobacco filling in place.

A LARGE TOBACCO MANUFACTURER needed a way to confirm that the glue was present on the rolling paper during production. If, for some reason, the glue was not applied to the paper, the cigarettes would be ruined. Since the machinery manufacturing the cigarettes is running at such high speeds, this would mean a large amount of money wasted on scrap materials by the time the problem is noticed. Lion Precision provides a capacity of sensing solution for this problem. The capacitive sensor detects changes in dielectric due to the presence or absence of glue, and instantly changes output when there is no glue present on the rolling paper. This triggers an immediate stop of the production machinery until the problem can be fixed.

Ordering Information

Please contact Lion Precision for ordering information.

We can be reached via email at infolionprecision@carlisleit.com, or via telephone at (651)-484-6544.