AirCC, true non-contact measurement sensor

True non-contact measurement with AirCC

Capacitive Systems can be used in the companied rotational scanning device for blown film tube (PROFIL) or double/single layflat flatbed scanning (C-SCAN) for Barrier and Cast film applications. Although suitable for approx 80% of applications the need for a low maintenance non-contact measurement head was identified.

The new AirCC true non-contact capacitive profile measurement head is designed to measure films with tacky surfaces or films where optical quality is paramount.

The potential problem of non contact capacitive sensors systems is trying to keep the air gap between the sensor and the film constant. That makes additional sensors necessary and means overall a complex system with mixed results if you consider the wide product ranges produced in the industry.

The AirCC sensor also utilises an air cushion but solves the distance problem. By rather than trying to control this distance it actively measures the air gap and adjusts the feedback signal based on the distance the film is from the sensor.

The variable offset generated by the sensor array is reactive depending on position of the film guaranteeing accurate measurement of thickness variations without the need of holding the gap constant.

This solution offers a very reliable and stable solution, coping with applications were measurement close to the collapsing frame is unavoidable or unstable processes such as silage films.