

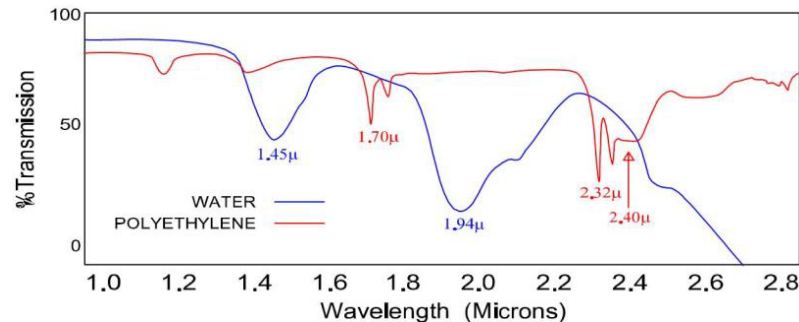
Mahlo Introduces the New IMF Near Infrared Sensor for Simultaneous Basis Weight and Moisture Measurement of Lightweight Nonwovens

After thorough evaluation and field testing, Mahlo has begun to install the IMF Infrared Sensor in nonwoven manufacturing facilities. Mounted on the Uniscan single-sided traversing frame, the IMF sensor accurately measures both the basis weight and moisture of nonwoven webs from 8 – 80 grams per square meter (gsm) with a single sensor.

For nonwovens of consistent chemical composition, typically Polypropylene or Polyethylene, the Mahlo IMF exhibits a measurement repeatability in the tenths of a gsm. Simultaneous moisture measurement repeatability is better than 0.1%.



The Mahlo IMF Infrared Sensor is Non-Nuclear and Non-Contacting.



Using the principle of Infrared Absorption, a different primary measurement wavelength is used for both the polymer and the moisture, with at least two independent reference wavelengths for each measurement. This eliminates any influences (crosstalk) between moisture and polymer, reduces the

effects of web color and greatly simplifies calibration. In most cases, a single calibration curve is all that is needed.

Mahlo's Uniscan family of single-sided scanners are part of the new QMS-12 QCS Platform and range from compact for narrow webs to large structural cross-sections for scanning over 6.4 meters. The Mahlo scanners are designed for long life with very low maintenance. The Uniscan mounts on one side of the web only, either above or below, wherever space is most available. The IMF Sensor can be up to 50mm away from the web and tolerates a large amount of flutter or edge curl without ever touching the web.



Mahlo QMS-12 IMF Infrared Sensor / Uniscan Scanner Benefits:

- **Non-Nuclear:** No regulatory restrictions whatsoever
- **Non-Contacting:** Won't ever touch or damage web or sensor
- **Single-Sided:** Easy to install / retrofit obsolete gauges; easy to thread line
- **Basis Weight and Moisture from a single sensor:** Extremely cost effective
- **Very industrially rugged:** Long life and low cost of ownership
- **Easy and inexpensive to maintain:** Off-the-shelf components
- **High accuracy with minimal calibration effort**
- **Proven and guaranteed**

Contact Mahlo to discover our full range of web process solutions!