



Silicone Coat Weight Measurement

Model: SiliconePro

On-line Coat Weight Measurement of Silicone on Paper Substrates



Features

- √ High Precision Measurement
- ✓ On-line Measurement
- ✓ Scanning to provide Cross
 Direction (CD) and Machine
 Direction (MD) Profiles and Trends
- ✓ 2D and 3D profile mapping
- ✓ Roll Report creation and Storage

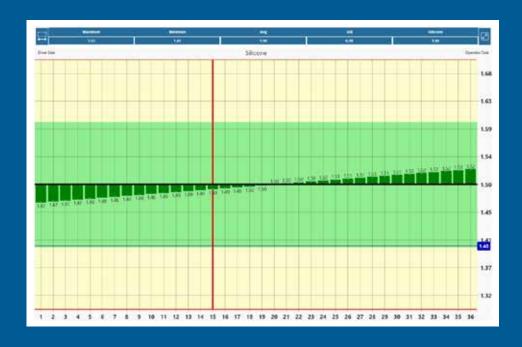


Quad Plus's Model SiliconePro

system is designed for on-line coat weight measurement of silicone on paper web substrate. Quad Plus has worked in cooperation with KPM Analytics to develop a scanning sensor solution for providing accurate, and repeatable measurements of silicone, while providing optimum measurement performance and results. The measurement is based on the principle of infrared (NIR) absorption, using a special combination of filters in the silicone absorption range.

Silicone Release Coating Coverage

The degree of silicone coverage of the base liner is a contributing factor affecting release. If greater or larger portions of the base are left uncoated or incompletely coated, the adhesive will contact the base, and release values will be both higher and less stable. Over coverage is costly and can also cause adverse effects.





Developments

Throughout the past 30-plus years, numerous methods of measuring a thin silicone release layer directly on the coating line have been attempted. These methods include total mass subtraction, typically with beta transmission sensor, laboratory spectrometers, and X-Ray fluorescence sensors. The total mass subtraction method uses two basis-weight devices, such as a beta transmission sensor, to measure the total web mass before and after the silicone coater. This data is then processed to provide a weight measurement profile. This subtraction method has its complications and inaccuracies, arising from the challenges of aligning scan data from both scanners and the inherently small coat weights at which silicone is applied.

Quad Plus has worked in cooperation with KPM Analytics to develop a scanning sensor solution for providing accurate, and repeatable measurements of silicone, while providing optimum measurement performance and results. The measurement is based on the principle of near infrared (NIR) absorption, using a special combination of filters in the silicone absorption range. Countless lab trials, along with many field trials were used to develop this comprehensive solution.

The SiliconePro system has had very successful results and deployments in measuring silicone on paper substrates within the 0.2-2.5 gsm coat weight range.





Product Maintenance

We base our service offering on corrective and preventative maintenance that reduces downtime and helps you improve the process.

At Quad Plus, our support agreements offer

- ✓ System calibrations
- ✓ Preventative maintenance
- ✓ On-site repair

Complete package options are available with all travel and labor included.

Education and Training

Our training, included with the sale of each system, helps you increase productivity by optimizing the use of your instruments and expanding the skills of your operators.

Training topics covered:

- ✓ Basic Operation
- ✓ Calibration
- ✓ Routine Maintenance
- ✓ Troubleshooting

Additional Offerings

Quad Plus can also assist in the removal and disposal of old nuclear sources.