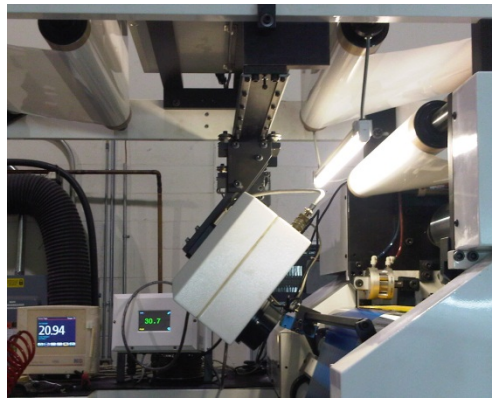


# Hot Melt Adhesive Thickness Measurement

## MCT360 Hot Melt Gauge

### Paper, Film, and Foil

Key Words: hot melt thickness, adhesive thickness, hot melt gauge, hot melt transmitter, hot melt sensor, hot melt GSM, roll coaters, doctor blade coaters, extruders

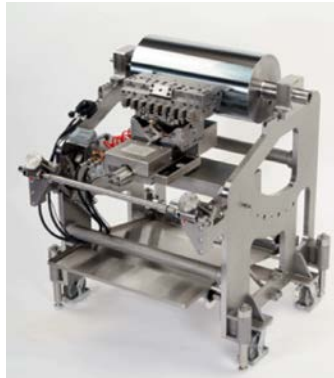


**Picture I: Hot Melt Thickness Measured On Film With MCT360 Gauge**

**P**araffin Wax is largely accepted as the first hot melt coating application. Polymer and copolymer resins brought a host of formulations for improved performance properties that continue to expand the horizons of Hot Melt applications.

**R**oll Coaters, Die Coaters, extruders, and doctor blade configurations are among the methods of applying hot melt adhesive. Roll coaters offer more flexibility than die application methods as they change over more quickly and allow for stripe coating. Die Coaters offer more precision across the web, especially in the 15 to 20 GSM. Hot melt applications of 100 GSM are very common and the range can go from 0-400 GSM.

## Picture II: Typical Hot Melt Machine



### Note Coat Melting Dies On Machine

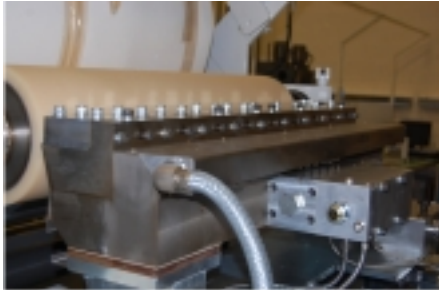
**M**elt coating dies vary from 100mm to 3m, depending on the application. The greater the number of dies, the greater the control across the substrate web to achieve set point. When dies malfunction or get contaminated, they need to be detected and maintained or replaced.

**T**he Guardian Hot Melt Web Profile System offers a Cross Direction (CD) Web Profile, and Machine Direction (MD) Trend to confirm proper die control, improve quality control, archive customer data, and provide simple roll reporting.

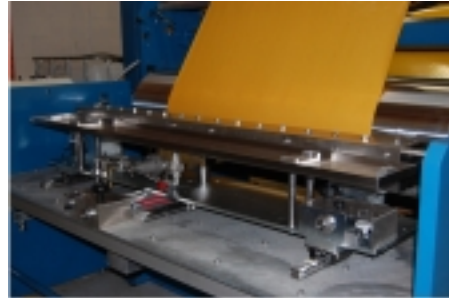
**F**or Roll Applications, the Guardian offers a sound way to confirm skew adjustments to maintain a uniform profile. Real time data provides real time solutions.

**F**ilm Applications zero on the film and then measure the stronger absorbing hot melt applied to the film in GSM. The MCT360 Hot Melt Gauge for paper and other substrates simply measures the hot melt thickness in GSM. Both have recipe options for different product selections and web widths. The Guardian System is easy to operate. Near IR technology for measurement of Hot Melt is well documented on the web, with our customers, and on the Blog.

### Picture III: Melt Coaters



**Hot Melt**



**Cold Melt**

## Configuration Options

The power and price of computers, consoles, and transmitters today have significantly lowered the capital investment required to improve hot melt adhesive control. The approaches include stand-alone hot melt gauge, sensor mounted on simple auto/manual scanning frame, and the Guardian CD Web Profile System.

### Stand Alone MCT360 Hot Melt Gauge

The MCT360 NIR Hot Melt Gauge is accurate, rugged, and reliable. The transmitter mounts between 6 and 16" from the web and provides digital display, Machine Direction MD trend, analog outputs for control, and digital output for data archiving.

### Picture IV: MCT NIR Hot Melt Gauge



### Picture V: MCT360 Operator Interface Digital Display And Trend



### MCT360 Hot Melt Gauge On Auto/Manual Scanning Frame

The MCT360 is mounted on a low cost auto/manual scanning frame. The operator can set it for automatic scanning across the web or jog the transmitter to a fixed position for Machine Direction trending.

### Picture VI: Low Cost Auto/Manual Scanning Frame



### Guardian CD Web Profile System for Hot Melt Thickness

The Guardian CD Web Profile System provides a Cross Direction web profile on a 19" flat panel LCD in an economical and attractive enclosure. The Guardian is fully automated with recipes for web width, scan speed, zone average, and data logging digital outputs. This is a complete system to provide the highest value performance to cost ratio. The system can supply CD Web Profiles and MD Trends for hot melt thickness, moisture and temperature. Multiple measurements can be mounted on a single screen.

**Picture VII: Guardian CD Web Profile Display**



**Picture VIII: Guardian CD Scanning Frame System**



**Picture IX: Local Operator Console**





## Helpful Links

[Click Here to View Guardian Brochure](#)

[Click Here to View Guardian Scanning Frame Operation](#)

[Click Here to View MCT360 Hot Melt Gauge Brochure](#)

[Click Here to Visit Process Sensors Website](#)

[Click Here to View Our BLOG for More Information](#)

## Summary

Hot Melt Adhesive Thickness can most reliably be achieved with the incorporation of MCT360 NIR Hot Melt Gauge measurement systems into the control scheme.

Please contact us at 508.473-9901 to discuss your application today.

### Picture X: Process Sensors Corp.

