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Model CX-1000 Film Thickness Gauge

The Model CX-1000 has a single high-resolution, capacitance sensor. This patented sensor resolves to 0.001 mil, and provides continuous, end-to-end sample measurement of film thickness information.

Calibration of the capacitance sensor is performed by preparing a calibration standard from your film material by measuring your film sample at a single point location with a high-quality micrometer, and recording that thickness value on the calibration sample. Next, place that measured location under the capacitance sensor, and then perform the calibration routine, either on the Gauge Faceplate, or using the Model CX-1200 Quality Control Software package.

Once the calibration is performed, the calibration value, plus your recipe setup information, can be stored either in the memory of the CX-1000 Gauge, or in the CX-1200 software for later recall and future sample runs of the same material.

Since all capacitance sensors use an indirect thickness measurement technique, a separate calibration value must be stored in the system memory for each type of film formulation you are running. Once your calibration recipes are created, you now have a convenient, easy-to-use system for measuring gauge and gauge variation of your range of film samples.

After calibration, or after recalling a stored calibration recipe, place the film sample to be measured through the Guide Plates, under the left-hand Idler, underneath the Capacitance Sensor, under the right-hand Idler, and finally, between the Drive Rollers. Start the drive mechanism to begin data collection. Stop the drive mechanism at the end of the sample to stop data collection.

Data can be read from the digital display on the faceplate of the CX-1000, or the system can be operated with our Model CX-1200 Quality Control Software. Your CX-1200 Quality Control Software allows you to display Linear Profiles, Polar Profiles, Statistics Summaries, Multiple Sample Statistics, and Fourier Analysis graphs. The CX-1200 Software also allows you to Export data to any ASCII-format software including Microsoft Excel, Minitab, Zontec Synergy, Hertzler Systems, and WinSPC.