

FILM THICKNESS MEASUREMENTS YOU CAN TRUST



Specifically designed for thickness inspection of thin film and foil materials, these systems provide the necessary high resolution and consistent, accurate results demanded for today's emphasis on quality.



Brunswick Instrument

Sharing your commitment to quality

System #1 - Economy - This system provides the most economical means to achieve accurate, reliable thickness measurements on thin, soft materials. These systems continue to be specified by many of America's largest manufacturers of film. The system features Brunswick's MP-1 Metrology Processor Display that provides .000005"(.0002 mm) thickness measurement resolution on materials up to .040" thick. The display provides pushbutton zeroing, inch/metric conversion and RS-232 digital output for data collection. The gage stand has a flat, fixed steel anvil and mechanical fine adjustment. The gage probe is sprung against the anvil, provides a gaging force of approximately 2 ounces and is manually lifted as required. The probe contact tip supplied has a 1/4" diameter flat and slowly tapers to a 3/4" overall diameter for easy lifting and no-sag film gaging. The contact tip is constructed of hardened steel to allow easy lapping for maintaining contact parallelism. The system is supplied with a certified steel .01000" gage block for simple, fast calibration verification.



System #2 - Performance - This system adds efficiency enhancements that speed inspection and eliminate time consuming contact alignment procedures. The system features Brunswick's MP-1 Metrology Processor Display that provides .000005"(.0002 mm) thickness measurement resolution on materials up to .040" thick. The display provides pushbutton zeroing, inch/metric conversion and RS-232 digital output for data collection. The TMS-1 gage stand features Brunswick's unique "Floating Anvil" concept to eliminate the periodic servicing required to maintain contact parallelism. Every time the gage contact applies force the floating anvil automatically orients itself into perfect parallel alignment with the probe contact. The TMS-1 stand is also more rigid and less bulky than conventional gage stands. The gage probe, normally sprung against the stand anvil, adds a vacuum retract feature. The operator squeezes a hand vacuum pump to lift the probe contact tip before inserting or moving the film sample to prevent stretching or snagging. The probe contact tip supplied has a 1/4" diameter flat with radiused edges for no-sag gaging. Both the probe tip and floating stand anvil are constructed of lapped carbide for extremely long life. A certified .01000" steel gage block is supplied for fast system calibration verification.



System #3 - Laboratory / R&D - Here is the ultimate instrument for developing inspection methods and experimenting with the properties of different materials. This system adds the benefit of variable gaging force. In this system, the 1/4" diameter carbide probe contact tip is normally sprung upward or away from the floating anvil of the TMS-1 stand. Air pressure applied to the probe not only provides the remote actuation of the gaging function but also provides a means for varying the gaging pressure. The MP-1VF Metrology Processor Display includes all the features from System #2 plus the addition of air pressure regulation, metering and switching in one instrument chassis. The air applied to the probe may be regulated over a range of 2 to 6 PSI which converts to a gaging force range of 10 to 100 grams. The air supply to the probe may be switched on and off with a latching front panel pushbutton, a supplied footswitch, or an external switch closure. A certified .01000" steel gage block is supplied for system calibration verification. A dry, filtered and regulated air supply of 20-60 PSI is required for operation. Air connection is made with a typical 1/4" quick disconnect coupler.

