

Adapting Current Hand Held Ultrasound Technology for the Quality Assurance of Thin Films in the Semiconductor Manufacturing Industry

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The continual improvement of the semiconductor industry is an incredible leap forward by modern science. As beneficial as the production of these thin films for semiconductors, a need has arisen for a better method of quality control. The current industrial standard for quality control of thin films is an optical microscope. This is a time consuming and outdated method. This paper discusses the possibility of adapting a hand held ultrasonic imaging device, and converting the information it receives into a language readable by MTConnect, in order to streamline quality control of the thin films. This intended output of this device would be an easy to read, color coded chart, that would save a significant amount of both time and money.