

MODEL 50 X-RAY THICKNESS GAUGE

The perfect, economical solution for thickness measurement on process lines or as a replacement in traditional gamma-ray applications



The Model 50 T80XC is a low cost x-ray gauge designed to replace radioisotope “gamma ray” systems, while providing significantly improved thickness measurement...better accuracy, faster response and larger air gaps.

Americium-241 and other radioisotopes are becoming increasingly less desirable due to both safety and environmental concerns. X-ray systems are inherently safer and their use is generally less restricted.

The NEMA 12/ IP 64-rated Main Electronic Cabinet houses the system computers and associated electronics. A TCP/IP Ethernet interface permits easy integration into mill control systems. A Profibus interface is also available.

The cabinet requires no rear access so that it may be conveniently mounted on a wall, simplifying its installation. A touchscreen color LCD operator interface is mounted on the front door panel.



A C-frame suitable for a process line environment contains an x-ray source together with a high stability x-ray detector. The C-frame may be supplied with or without a drive motor for on-line/off-line control. Air gaps up to 400mm can be supplied – two times larger than most Am-241 gauges, reducing the chance of damage due to strip breakage, tails and cobbles.



RSI's compact, low power 80kV x-ray source is designed for long life, high stability and safe operation. The source tank is filled with an insulating oil that also acts as a cooling medium, ensuring years of reliable operation. Low power operation eliminates the need for liquid cooling of the x-ray source, while still permitting measurement of steel up to 6.5mm thick with performance specifications far superior to traditional radioisotope gauges.

RSI also manufactures a number of other low power x-ray sources of different voltages for additional applications, such as tinplate or aluminum.

RSI's exclusive X-ray Spectrum Correction (XSC) technique ensures interchangeability of x-ray sources and detectors without loss of accuracy for the lifetime of the gauge. In addition, “DynaComp” alloy correction provides accurate measurement of all alloys at all thicknesses while minimizing the need for calibration samples.