

The Importance of X-Ray Fluorescence for Successful Coatings from SilcoTek

SilcoTek utilizes a variety of methods to guarantee our customer parts are handled with the utmost care while at our facility. Our coating service begins with receiving parts in their original packaging and performing incoming inspection process. Upon arrival, the SilcoTek team inspects parts for potential damage incurred in transit, photographs parts for documentation and traceability, and ensures the parts received match the order form.

One aspect of matching the order form is ensuring material compatibility with the SilcoTek coating process. There are a variety of metals that are not compatible with the CVD technology used and would cause damage to customer parts as well as SilcoTek's manufacturing equipment. SilcoTek receiving quality technicians are trained to use a handheld X-ray fluorescence (XRF) gun to read the material composition of incoming parts to certify that they 1. match the customer's order specifications and 2. are compatible with SilcoTek's CVD coating process.

SilcoTek technicians only use XRF technology to ensure material compatibility for our customers' part safety and our quality standards. For more information regarding our incoming inspection process, you can watch [our processing video](#) or email SilcoTek at Info@SilcoTek.com.

SilcoTek does not use XRF technology for any purposes other than substrate confirmation as specified by the customer and certifying material compatibility with SilcoTek processes.



Figure 1. SilcoTek receiving quality technician scanning customer part for process compatibility confirmation.



Figure 2. SilcoTek receiving quality technician confirming incoming part composition (316L Stainless Steel) matches customer order specifications prior to processing.