



Vi1170 Anti-Counterfeit Taggant Detector

Introduction

The taggant UNW1980x is a key component for forming a secure solution for companies who are interested in deterring counterfeiting and/or diversion of their products. The taggant is made from non-organic material and is essentially indestructible. The taggant can withstand very high temperatures and will not deteriorate under extreme environmental conditions such as extreme temperatures, UV exposure and high humidity the following detection devices can be used to detect and view the Taggant.

Detector system VI1170

Since the taggant can be embedded into a wide variety of product it is necessary to have a means for detecting the presence of the taggant and thus the authenticity of the product. The taggant has a specific and repeatable response to a given stimuli. That specific characteristic can be detected by the use of the VI1170 hand held inspection device shown in Figure 1 below. The VI1170 has a built in stimulus source and detection system that will search for the presence of the taggant. The VI1170 is an ergonomic design constructed of an anodized aluminum housing and operates on three (AAA) batteries and will provide 1000 scans on a new set of batteries. The VI1170 has a single button that is used to commence the detection process. If the taggant is detected by the VI1170 it is indicated by an audible tone and /or a vibration of the device. Upon release of the trigger the unit automatically goes into an extremely low power mode to maximize the battery life.



Figure 1

Typical Applications of Inorganic Optical Taggants

- 1) Injection mold into plastic (pre-loaded pellets can be supplied).
- 2) Bubble jet printed
- 3) Mixed into high volume printing application such as;
 - a. Silkscreen inks
 - b. Flexo
 - c. UV curable inks
 - d. Gravure
 - e. Varnish
 - f. Holograms
- 4) Mixed into ceramic and can be fired during the normal production process
- 5) Mixed into paints and dyes
- 6) Easily mixed with adhesives.