

ValiDotz™ – Security Markers

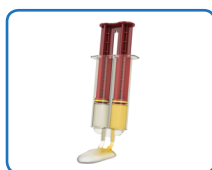
Anti-Counterfeiting Solution for the Plastic Industry

Dotz Ltd. is a technology leader, specializing in the development and marketing of novel end-2-end tagging, tracing, anti-counterfeiting and product-liability solutions customized to the plastic industry.

Dotz novel technology allows tagging and authenticating most thermoplastic and thermosetting materials, with no effect on their properties.

Our proprietary technology for tagging polymer products consists of:

- ValiDotz™ security taggants delivered as concentrated easily mixed masterbatches or in ready to use resins compatible with almost any polymeric system
- InSpec™ on-site, real-time, simple to use and inexpensive mobile phone based detectors customized to specific applications and configurations like: automotive parts, money notes, electronics, ID cards, toys, safety equipment and pharmaceutical packaging



Product Counterfeiting – A Global plague in the plastic Industry

The counterfeiting of popular brands has become a global epidemic with the total impact on the global polymer market estimated to be over \$900B/year.

Mostly overlooked, counterfeiting has many other detrimental effects on society. Counterfeits mostly enter the legitimate supply chain and in this form are cloaked by legitimate products. This presents several threats to consumers, businesses and society. Some examples are:



- Ⓐ Threat to consumer's health and safety, as well as to the environment from unregulated and inferior products
- Ⓑ Damage to the reputation of brands which can not be quantified
- Ⓒ Liability and litigation
- Ⓓ Loss of tax

The magnitude of global physical counterfeiting is estimated to have increased considerably since the beginning of this century. As a result, new regulations as well as the consumers themselves, are increasingly mandating that products can be accurately traced for their origin and authenticity.

Thus, plastic manufacturers are often asked by their clients to provide Brand-Protection measures.

Existing solutions today are limited, expensive, and are likely to induce undesired changes in the final product.

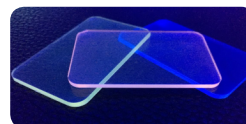
The Solution

Dotz technology allows verifying the authenticity of polymer-based products and identify if it was tempered, and if so, to have a valid indication of the factor in the supply chain where the counterfeit occurred hence prevent liability claims.

ValidDotz™ allows for the first time to cost-effectively mark the polymer itself (and not just the packaging) with a unique fingerprint, without alteration of the polymer properties or affecting its regulatory compliances (e.g., food contact*). Validotz presence in polymers can be detected by simple UV-LED or unequivocally authenticated with a mobile phone based reader (InSpec™).

ValidDotz™ masterbatches

Validotz can be provided to Brands, Compounders and Injection Molders as masterbatches compatible with plastic processing.



InSpec™ detector

Inspec is a mobile phone-based detector that is utilized on site to rapidly decode invisible ValidDotz™ in bulk polymers.



Authentic!



Authentic!



Suspected Fake!

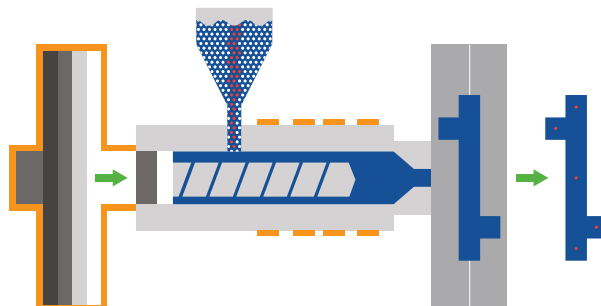


Suspected Fake!

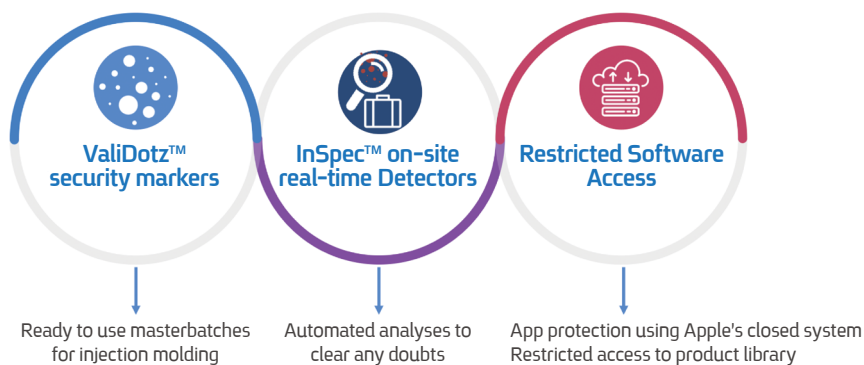
* Based on tests performed on plastic containing different ValidDotz markers at SQT5 labs, Switzerland

Benefits

- ✓ No effect on polymer properties
- ✓ Stable and robust in plastic production processes (300° C, 2000 PSI)
- ✓ Compatible with compounding and injection molding processes
- ✓ A unique coded signature specific to your product
- ✓ Secure, smart phone based, on-site and real-time detection with advanced data management and sharing
- ✓ Compatible with thermoset systems
- ✓ **Eco friendly - Safe** - carbon source only- no corrosive, abrasive, or toxic metals or inorganic materials



ValiDotz™ and InSpec™ give you a complete solution for your Brand Protection and Authentication needs



We make it easy for you to try us

No Initial Costs

We do need to run some lab tests, in order to match the best solution with your product. However, we will do these so free of charge. Just send us a sample of your product and we will have a technological solution for you in no time.

Customization

In addition to our unique advantages to the Polymer industry, we offer a comprehensive, tailor-made solution for each of our customers' needs.