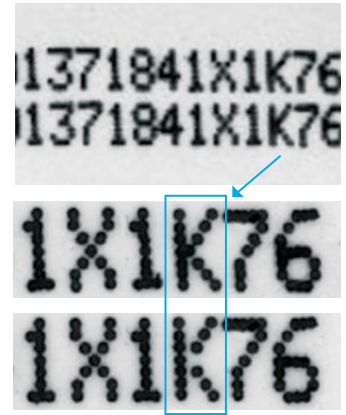# Smart coding solutions

Generate unique single item product codes for individual products on your line - often using the same digital coding technology you use today.

Smart codes, which are difficult to emulate by unintended third parties, are an important foundation to an effective counterfeit and diversion prevention system.

Preventing counterfeiting and diversion is challenging. Participants in gray and black markets often will take drastic measures in order to reproduce or resell your products for a profit. However, smart coding can help make it easier for authorized vendors to guarantee authenticity of your product.

Including a permanent lot or batch code somewhere on your product is the first step of protection. Smart coding takes a basic lot or batch code further by altering and verifying specific characters in the code making it more difficult for unauthorized parties to copy. Below are a few ways to add more security to the lot or batch codes you already print today:

Videojet software generates fully random codes, derived codes and incorporates Electronic Product Code (EPC) structures, or administers codes pre-generated from outside sources, enabling tracking of each unit of product throughout the supply chain system.

Videojet smart coding

- Driven algorithmically
- Impossible to replicate without knowledge of algorithm and keys
- Easy to implement, with minimal incremental production costs
- Able to be aggregated for multiple layers of verification and traceability

Smart Coding Technique	What it is	How it works
Self-verifying codes	These codes follow some type of pre-determined rule or pattern such as the digits adding up to a specific number or certain digits multiples of one another	A basic way to provide your supply partners with a visual check if the product they received is authorized
Interleaved marking	Two or more programmatically selected characters within an alphanumeric code partially overlap	Only accomplished with custom software on both the printer and controller, interleaved marking provides additional code protection because it is easily viewed but is difficult to replicate
Dynamically altered font	Software generated codes with small segments of different letters or numbers missing to create unique codes on each product	Subtle and therefore difficult to recognize by an untrained eye, dynamically altered fonts can still be visually inspected by supply chain partners to prove authenticity of a product
Verifiable code	Codes created by unique software-driven algorithms which can be scanned and tracked with visions systems throughout the supply chain	Impossible to replicate without knowledge of the algorithm and keys, verifiable codes add a unique fingerprint to each item

Call **(65) 6444 4218**
Email **marketing.singapore@videojet.com**
or visit **www.videojet.sg**

Videojet Technologies (S) Pte Ltd
No. 11 Lorong 3 Toa Payoh
Block B #03-20/21 Jackson Square
Singapore 319579

VIDEOJET