FOILING COUNTERFEITERS WITH SPECIALIZED COLOR AND ADDITIVE MASTERBATCHES
THE CHALLENGE
A global manufacturer of water storage, purification, and treatment equipment, had a serious challenge to solve: counterfeiters were harming its business. These ‘pirates’ copied the manufacturer’s products and sold the copies to unsuspecting customers, which not only ate into revenue but also raised the cost of sales and the potential for unjustified product responsibility issues.

At the same time, the situation was adding significant expense to the manufacturer’s bottom line, as it had to defend product failure lawsuits brought by construction companies who had assumed they had purchased genuine equipment. As a result, these legal costs became a significant and completely unforeseen drain on finances. What’s worse, the equipment manufacturer’s reputation for quality products was beginning to take a beating.

When this manufacturer approached PolyOne to explore solutions, it explained how customers had a hard time deciding which equipment was genuine and which was pirated.

As the PolyOne team looked into the differences, it found that the customer was marking its genuine articles with direct or indirect hot stamp foil and ink methods. These marking methods require consumables, frequent tool changes and adjustments, regular quality control checks, and storage of the consumables.

THE SOLUTION
The PolyOne team proposed multiple solutions—including a laser-marking additive, an authentication additive, and colorant—bundled into a single Smartbatch™ concentrate.

OnCap™ laser-marking additive technology made laser marks more visible and indelible to create an overt signal that more easily identified the manufacturer’s genuine products in a difficult-to-simulate fashion. It also meant the end of hassles with hot stamp foil and ink. Percept™ anti-counterfeiting technology created an authentication method not visible to the human eye to help lower the financial result of fighting court cases, once the covert authentication was revealed. The concentrate also included the required color for the manufacturer’s branding and an additive for UV protection. Four performance properties were supplied in a single pelleted product.

PolyOne was able to identify a local supplier of dependable laser-marking equipment, and ran tests on the machinery so the customer could calculate its output rates and also judge the level of marking contrast.

THE EFFECT
After the test, the manufacturer incorporated the Smartbatch™ four-feature formulation into its polymer compound. It enabled the company to defend against counterfeiting in overt and covert ways, and to protect its powerful brand image. Revenue increased, and the cost to fight lawsuits sank. Customers received genuine product backed by the reputation of the manufacturer, not some pirate.

To learn more about PolyOne’s lasermarking and anti-counterfeiting solutions, contact us at info@polyone.com.