
SmartColor™



SmartColor™ is a technology of designing color masterbatch products that allow for easier purge-outs and faster color change-overs for plastic extrusion processors.

Summary

Most plastic processors encounter prolonged purge times and resin waste when changing colors using traditional color masterbatch products. Extrusion lines will also accumulate pigment residues over time that can dislodge later and contaminate parts. Traditional purge compounds focus on removing the color contamination in the extruder after it has occurred. **SmartColor™** focuses on contamination prevention. **SmartColor™** products can help reduce purge time, reduce downtime to clean stained screws and dies, and reduce color contamination-related quality issues. Ampacet has developed a line of proprietary formulations where raw materials are selected for their ability to inhibit purging and screw-staining problems. These formulations have the ability to retard staining and screw build-up even before it can cause problems with purging. Ampacet utilizes the **SmartColor™** technology to create new color masterbatches that can outperform traditional pigment-based products for expeditious purge times.



Customers' Screws Stained with Pigments



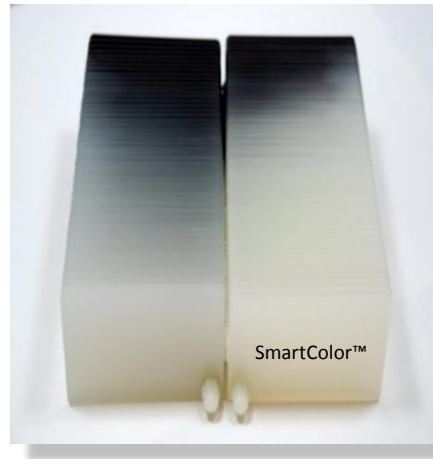
Design

Ampacet has worked with our customers over the decades to identify and address the root causes of prolonged extrusion clean-outs caused by the use of color masterbatches. We have learned that some common materials exacerbate clean-out problems while other materials have shown to retard this build-up. Ampacet has extensively researched these material relationships and devised a technology that allows for the creation of new color masterbatch products custom built to our customers' requirements.

Product Overview

SmartColor™ is most efficient in high-shear operations with simple head tooling, and has proved to be effective in the following processes:

- blown & cast film .
- profile extrusion.
- sheet extrusion.
- injection molding.
- extrusion coating.
- blow molding.
- wire & cable.

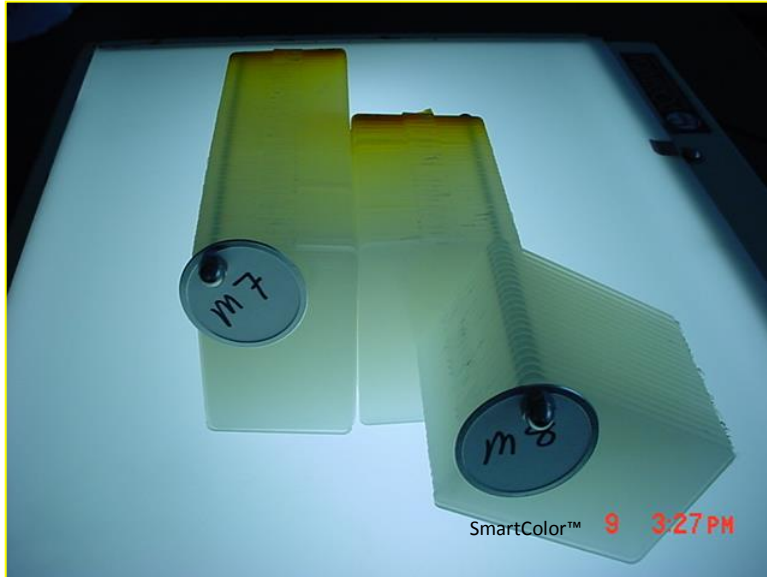


Effectiveness of **SmartColor™** will vary according to the processor's equipment, the selection of color, as well as the severity of purging issues. It is important to understand that assessing the performance of a **SmartColor™** product is best served by beginning with cleaned extrusion equipment, including barrels screws, screen packs and dies. This can be accomplished through the use of purge products like 100400 PURGE PE MB or pulling and cleaning the extruder screw. Remember that a color masterbatch designed with SmartColor technology is not a purge compound but is intended to prevent colorants from building up inside your extruder.

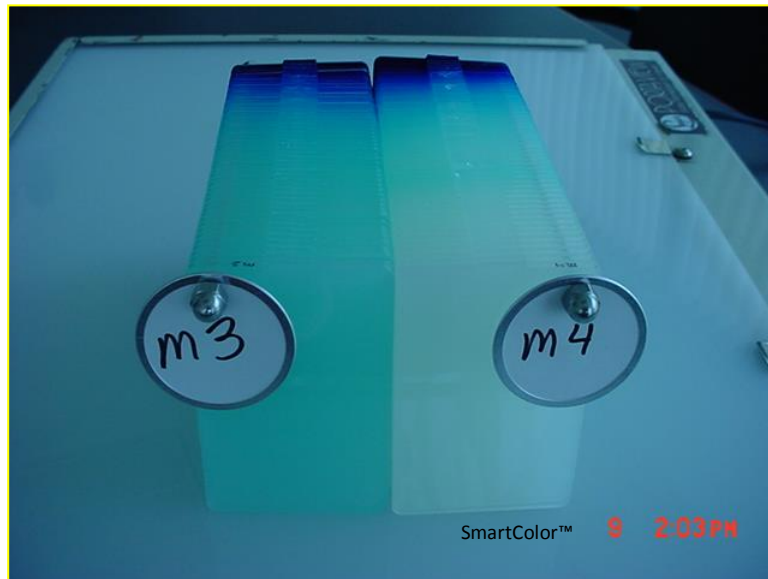


Performance Data Details

- Injection molding: classic yellow vs. SmartColor yellow: 42% reduction.



- Injection molding: classic blue vs. SmartColor blue: 56% reduction



For more information on **SmartColor**, its uses and complete Regulatory Status, contact your Ampacet Account Executive or visit www.ampacet.com.

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