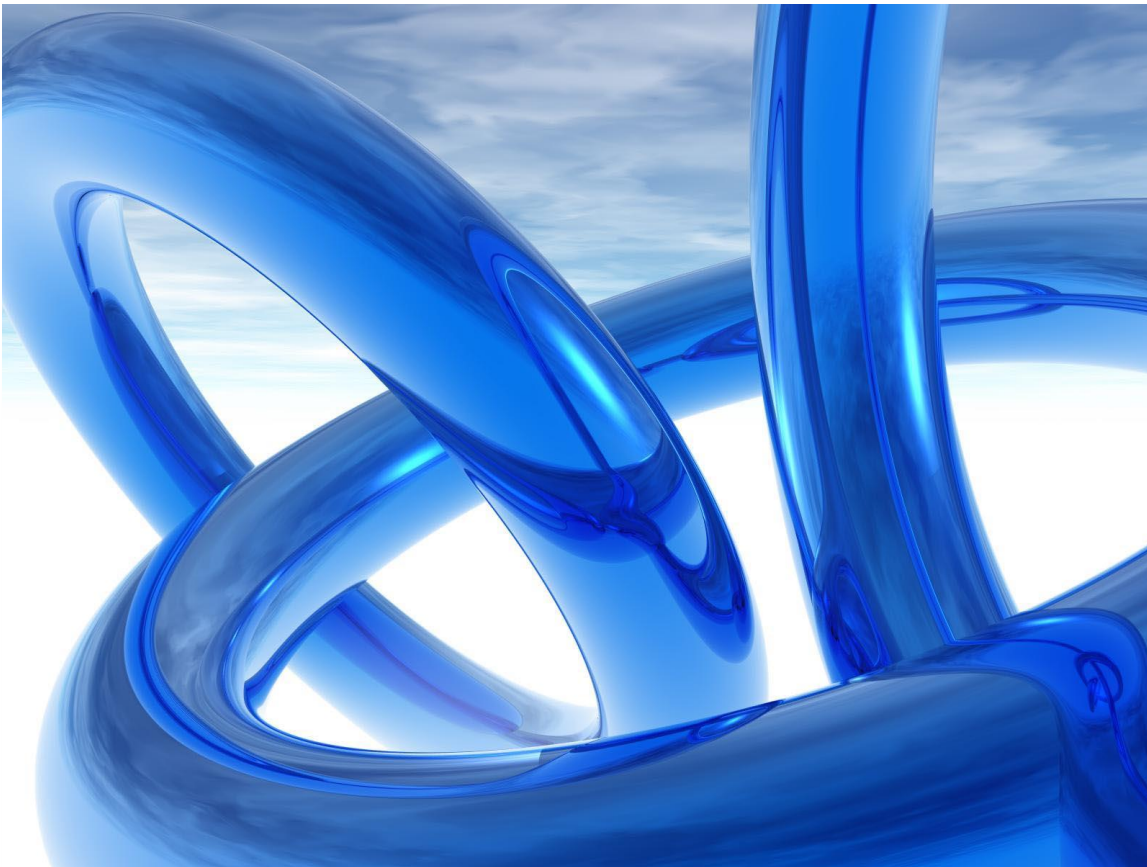

SmartMini



Technology designed to provide highly loaded solid masterbatch to allow for very low usage rates and fast color change-over.

Summary

With SmartMini technology, Ampacet combines pigment, carrier resin, mixing, pelletizing, and feeder technologies to enable our customers to color their products in the most cost-effective manner possible. Extremely high pigment loadings lead to very low usage rates, resulting in lower inventory levels and reduced costs to color a plastic part. Coupling this technology with Ampacet's unique access to fast color-change pigments results in an optimized extrusion paradigm.

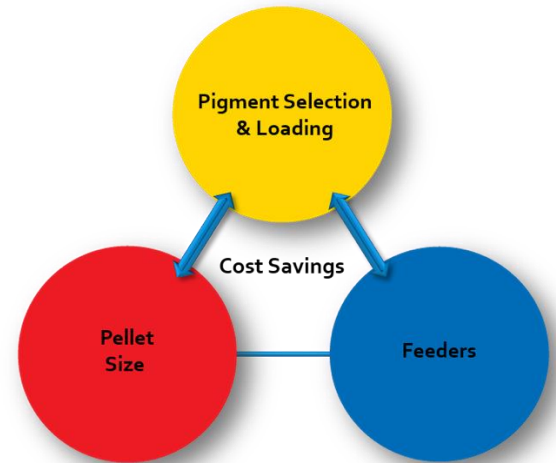
Product Overview

Addresses four critical processing challenges:

- Quick color change-over
- Lower colorant usage
- Quick melting for fast pigment dispersion and distribution
- Proper metering of very low LDR formulations

Quick Color Change-Overs

- Proprietary pigment technology that reduces change-over times by 30% to 80%.
- Preventive solution vs. extensive purging
- Lower staining and less build-up than normal pigments

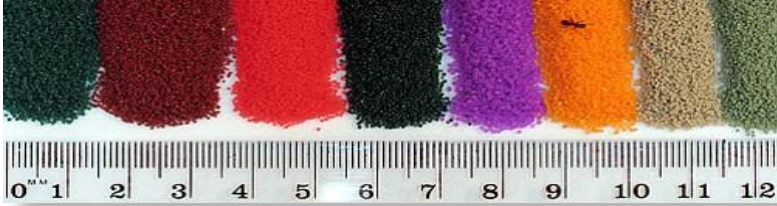


Lower Colorant Usage Levels

- Technology to allow for highly loaded colors to be formulated to reduce LDRs.
- Colors at 2% LDR can potentially be formulated well below 1% LDR, which provides well over a 50% reduction in masterbatch use.
- Translucent and semi-translucent colors can be formulated at LDRs between 0.1% - 0.8%.

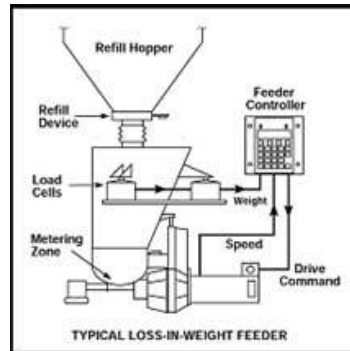
Quick Melt Pellets

- Technology to produce Mini Pellets allows for a faster melt in the extruder (greater surface area of the pellet).
- Faster melt equates to better dispersion or distribution of the color with the base resin.



Metering

- Pellet size can be customized depending upon process, resin type, and LDR desired.
- Wide availability of feeders able to accurately meter masterbatch at very low LDRs.



Other Benefits:

- No special handling required, clean work environment
- Highly dispersed pearls and effects, no settling issues
- No special training required
- Suitable for small lot production
- No screw slippage that can cause production delays
- Greater than 12 month shelf life, no suspension issues required stirring
- No hazardous waste to dispose of or need to return drums.
- Cost effective for both opaque and translucent colors
- No delamination issues

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

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