TECHNICAL BULLETIN



MULTI-COLOR BLENDS

Multi-Color blends are a combination of base powder and specially processed powders which are then homogeneously blended together. The result is a unique visual appearance that provides a uniform multi-color finished film.

Multi-color dry blended powders can be formulated in Epoxies, TGIC Polyesters, Primids (HAA), Hybrids and Urethane chemistries.

Color Match - Multi-Color Blends are subject to minor lot to lot variation in visual appearance. This technology is not recommended for critical color match or tight visual/color tolerance applications. Different lots of powder placed directly next to one other may demonstrate some minor visual appearance differences due to natural variation in particle size and from variation in application parameters.

Multi-Color Blends Challenges - Application and reclaiming are the most common challenges associated with Multi-Color powders. The same container of powder may exhibit a different appearance depending on the handling and application practices of the end-users.

Application Recommendations - Gun voltage, gun to part ratio, film thickness, and spray technique can affect the appearance of the final film and are variables that should be minimized to achieve a consistent appearance. Depending on the particle size and chargeability of the different colors within the Multi-Colored product line finish, charge-to-mass ratio will affect the appearance. A possible solution to obtain the proper Multi-Colored look would be to reduce and/or limit the µA (micro-amp) settings on the spray gun to assist with achieving a consistent appearance.

Reclaiming - Particle size control is key to successful application and final appearance of the Multi-Color dry blend platform. Reclaiming with a cartridge booth system can introduce smaller size particles (fines) into the multi-color powders and change the finished part appearance. To insure consistent appearance, reclaim is not recommended when using Multi-Color powders. If reclaim is required, then the ratio of virgin to reclaim powder (70/30) must be kept to a minimum to maintain consistent appearance. It's also recommended to maintain low amounts of powder levels within the reclaim module.

TCI offers a variety of colors and chemistry options. Please refer to the TCI Technical Department for additional information.