

Color Masterbatch Production

How to Achieve the Best Price-Performance Ratio

Requirements In Masterbatch Processes

Easy cleaning for quick change of recipes



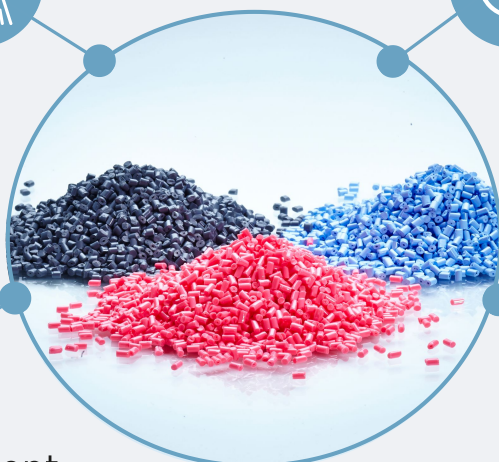
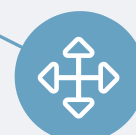
Intensive homogenization in the twin screw extruder for color pigment dispersion and high product quality



High reliability for consistent product quality



High flexibility for different process requirements and batch sizes



Masterbatch Mechanism

Compounding Process

Wetting of the pigments



Shearing the pigments from D_o to D_t

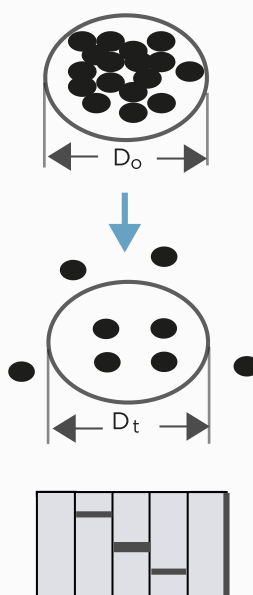


Mixing and distributing the pigments into the carrier

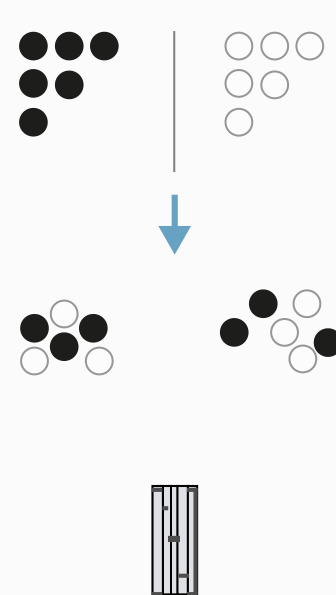


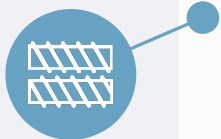
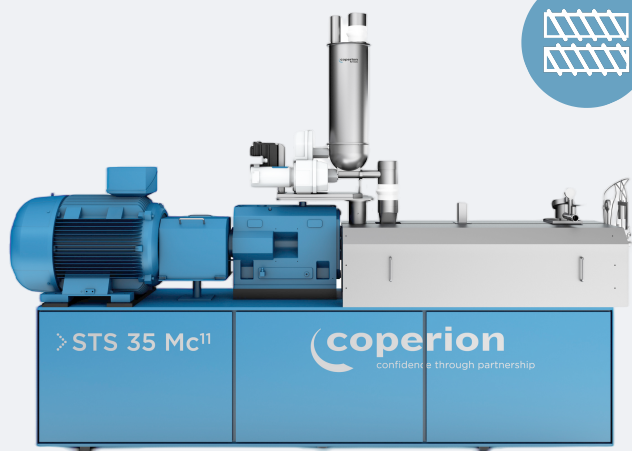
Stabilization against re-agglomeration

Dispersive Mixing



Distributive Mixing





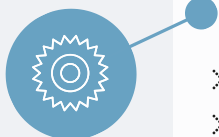
STS 35 Mc¹¹ Twin Screw Extruder in Masterbatch Design

- › Screw diameter of 35 mm [1.38 in]
- › Max. specific torque of 11.3 Nm/m³ and throughput rates up to 300 kg/h
- › $D_o/D_i = 1.55$ (outer to inner screw diameter) - across the entire STS Mc¹¹ series (identical to ZSK Mc¹⁸ series)
- › Compact design, dust-free and easy to clean thanks to smooth surfaces
- › Water supply and electrical wiring are integrated and physically separated in the base frame
- › Feed hopper in quick-change design for fast disassembly
- › Self-cleaning

S60 Volumetric Single Screw Coperion K-Tron Feeder



- › Continuous operation for consistent, accurate feeding of ingredients
- › Gentle product handling of the horizontal agitator and feeding screw
- › Interchangeable feeding tools
- › Fast disassembly and very good cleanability of the feeder



Strand Pelletizer SP 50 EN

- › One-side bearing
- › Working width 50 mm [1.97 in]
- › Up to 8 strands and throughputs up to 300 kg/h - depending on the recipe
- › Easy access for quick cleaning
- › Many other useful options, such as pellet length regulation, drive for top feed roll, die head cooling, etc.