

# Single Screw Mixing

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Mixing of additives in a single screw can be greatly improved by being certain they enter the screw well distributed throughout the base polymer. Single screws can provide localized high levels of mixing, but are not capable of broad distribution of small amounts of additives. When adding colors or other additives, the better the initial distribution entering the screw, the better the anticipated mixing. For example, the use of highly loaded concentrates can be a disadvantage as the screw may not be able to distribute a single concentrate pellet effectively among 50-100 virgin pellets. The use of lower loadings, or the use of smaller concentrate pellets, will improve this situation. Regardless, the better the mix entering the extruder, the better the output mix.

- Jim Frankland, New Castle Industries

See also:

- Additives - be careful!
- Compounding of blends
- Mixing myths

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