



“Speed, Quality, Economy...”

Selecting Coloring Systems

FACTORS IN SELECTING COLORANT FORM

- ▶ Volume requirements
- ▶ Handling provisions
- ▶ Regulations
- ▶ Inventory costs
- ▶ Metering equipment
- ▶ Color consistency
- ▶ Labor costs

COLORANT

Dry Color Process

ADVANTAGES

- ▶ Lowest Cost
- ▶ Fastest delivery
- ▶ Minimal floor space
- ▶ Unlimited shelf life
- ▶ Even color distribution
- ▶ Universal in most resins

DISADVANTAGES

- ▶ Requires good equipment to process
- ▶ Color change time
- ▶ Capital investment required to automate
- ▶ Disposal required (due to recent EPA rulings)
- ▶ Dusting
- ▶ Potential for poor dispersion

Concentrates

- ▶ Cleanliness
- ▶ Ease of incorporating
- ▶ Easy to automate
- ▶ Pigments are pre-dispersed in carrier resin
- ▶ No hazardous dusts or residues

- ▶ Higher cost
- ▶ Requires adequate mixing within screw/barrel
- ▶ Larger inventory required compared to other colorants
- ▶ Longer lead times required
- ▶ Potential carrier resin incompatibility

Liquid Color

- ▶ Cleanliness
- ▶ No pre-blending required
- ▶ Easy color changes
- ▶ Relatively low cost additives
- ▶ No heat history

- ▶ Potential surface bloom/migration
- ▶ Lack of sheer within processing machine may cause uneven color
- ▶ Potential plate-out on mold surface
- ▶ Potential setting problems
- ▶ Disposal (due to recent EPA rulings)
- ▶ Requires special metering equipment
- ▶ Shorter shelf life than other colorants