

A Leading Cause of Plant Down Time: Segregation Accounts for 1/3 of Lost Revenue

Most manufactured products are mixtures of several components. Generally, the ingredients in a mixture separate (segregate) during processing, resulting in an inconsistent final product. No matter the root cause of segregation, the end result is a box of Lucky Charms® with too many (or too few) marshmallow hearts—or an Advil® caplet with too much (or too little) ibuprofen content—or a box of Tide® with too much (or not enough) color-safe bleach particles. Each results in customer dissatisfaction and, ultimately, loss of company revenue. Segregation of granular and powder materials is one of the three main causes of process failure in systems that handle powder materials. It is a global problem, affecting all industries, and conservative estimates suggest that 30% of all unscheduled downtimes are due to segregation and resulting quality issues. The SPECTester's ability to analyze mixture samples of multiple ingredients is significant because it can be used not only during the formulation process, but also on the production line as a quality control measure. It supplies information not only about WHAT a mixture is doing in the processing system, but WHY it is behaving this way. This is important because, in order to design an optimal production system and/or product, engineers and formulators MUST understand how a mixture of ingredients will interact with the process to form the desired final product. To gain this understanding, tests must be performed that quantify some basic characteristics of the powder or granulate components of the product.



- **YESTERDAY:** Industry waited two, four, or more **weeks**, outsourcing testing to busy laboratories, for answers concerning the how and why of product segregation issues.
- **TODAY:** In just 10 to 30 minutes, the SPECTester, a revolutionary technological testing breakthrough, answers the quality control questions – what, where, when, how, and why products segregate in the process system – On-site and in real time.

Who Needs a SPECTester?

- Chemical Industry – Soap Powders, Plastics, Polymers, Pigments, Paints
- Pharmaceutical and Cosmetics Industries
- Mining Industry – Ore & Clay
- Foods Industry

Who Should a Sales Representative Talk With?

- Formulators
- Engineers
- Plant Managers
- Quality Assurance Personnel