



550 N. STATE STREET  
 YORK, PA 17403 USA  
 Phone 717-848-2801  
 www.readco.com



## Battery Paste Case Study

### Application:

**Fully disperse** ingredients in a continuous process to produce a lithium **battery paste** formulation with the **proper stiffness, conductivity, and homogeneity.**

### Challenge:

Produce a **homogeneous** paste with the **proper consistency** to work properly in downstream equipment. An additional challenge was to produce a paste **free of carbon black agglomerations.**

### Process Conditions:

Graphite	58%
Carbon Black	3%
Electrolyte	39%
Jacket Temperature	30°F constant
Shaft Speed	10-300 rpm variable



### Solution:

The Continuous Processor's **versatile paddle and screw arrangement** allowed for the necessary configuration to increase the **mixing intensity** needed to eliminate carbon black agglomerates.

**Multiple fluid injection ports** allowed for precise timing of fluid introduction to achieve proper consistency.

### Benefits:

**Precise control** over shear and mixing. High level of dispersion in **significantly less time** without the aid of alcohol or other additives. Ability to process **high viscosity products** wherein a stiff, dough like material can easily be made **reducing further processing or drying stages.**

## Continuous Processor—CP

### Features and Benefits:

*Customized Paddle Arrangement*

*Shorter Cycle Time*

*Fewer Process Steps*

*Less Waste*

*Product Consistency*