

Application Note

Comparison of Flour (Wet & Dry) ADS107

A Comparison of Flour Run Wet and Dry on the Partica LA-960

Introduction

Flour is the product of milled grains. Typically the distribution is wide and the size varies depending on the desired final product. Flour particles have a tendency to swell when run wet. The solution is to use ethanol and a sequence program to automate the process as much as possible. When flours are run dry they will closely match wet data without the threat of the particles swelling.

Analytical Test Method (Wet)

RI (particle): 1.53-0.00i (starch) Dispersant fluid: Ethanol Sonication: none Circulation speed: 3 Agitation speed: 2

Note: Add the dry powder directly to the analyzer. Do not make slurry, particle swelling may result.

Analytical Test Method (Dry)

RI (particle): 1.53-0.00i (starch) Air pressure: Low Feeder: ~180

Example data

SAMPLE I.D.	Median Particle Size (D50, microns)
Flour, Dry	102.66
Flour, Wet	113.31

Results

The LA-960 offers outstanding range of measurement with accuracy and precision for both wet and dry analysis.

labinfo@horiba.com • www.horiba.com/scientific • USA: +1 (800) 446-7422 • France: +33 (0)1 64 54 13 00 • Japan: +81 (0)3 38618231