

# Particle Insight

## Dynamic Image Analyzer

### PRESS RELEASE

#### *Particulate Systems' New Particle Insight Particle Shape Analyzer Offers Abrasives Market the Ability to Determine Surface Roughness*

The Particle Insight is a state-of-the-art dynamic image analyzer which is ideal for applications where the shape, not just the diameter, of raw materials is critical. In response to the demands of abrasive manufacturers, the Particle Insight particle shape analyzer includes shape measurements that enable users to determine surface roughness, as well as roundness. The characterization of surface roughness enables manufacturers of abrasives to better control their end product.

Both Smoothness and Form Factor measurement capabilities have been incorporated into the automated Particle Insight. Smoothness is a measure of the amount of local fluctuation in the particle cross-section's perimeter. The user has the ability to adjust the sensitivity of this measure as needed for their specific application. Form Factor is affected by the degree of out-of-roundness of the general shape and calculated from the area and perimeter of the particle's image projection. These measures offer two different ways to directly quantify surface roughness rather than using indirect measurements and assumptions of roughness.

The Particle Insight from Micromeritics' Particulate Systems brand offers up to 28 different shape param-



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eters analyzed in either aqueous or organic solvent suspensions. The system operates in a range suitable for a wide variety of industrial specimens from 3  $\mu\text{m}$  up to 300  $\mu\text{m}$  in its standard configuration. Its unique recirculating sample module and precision optics are designed to acquire and report statistically valid measurements quickly, an essential quality control capability in many manufacturing processes. The Particle Insight also has an automated fill-and-rinse feature allowing for true unattended operation.