

Dynamic Imaging Particle Analysis of Pigment in Paint and Ink

Particle size measurement of pigment in paint and ink is critical for controlling a number of properties associated with the final product performance. Particle size is crucial for optimizing properties such as surface finish, tint strength, viscosity and stability of the final product. Furthermore, particle size of the pigment in ink is essential to avoid plugging of nozzles on the ink head printing systems. Traditional methods for measuring pigment particle size in paint and ink are limited to offline lab environments, which are time consuming, resulting in the inability to respond immediately to process upsets. In addition, there are several associated challenges with obtaining a representative sample along with processing the sample.

The combination of JM Canty's ground breaking auto dilution technology with their dynamic imaging particle analysis system provides at-line real-time particle size analysis of the pigment slurry. Combining the latest CCD Ethernet camera technology, with Canty fused glass technology, high intensity light source and CantyVisionClient software, the 2-dimensional vision technique not only delivers a true particle size analysis, but also

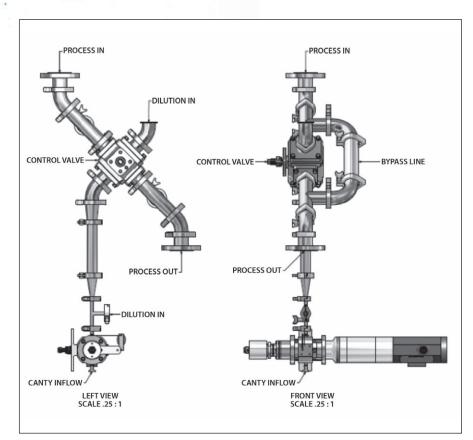


Figure 1 JM Canty At Line Auto Dilution Dynamic Imaging Particle Analysis System

provides concentration and shape information. This allows for further characterization of the pigment slurry in order to optimize the final paint or ink product. JM Canty's auto dilution system overcomes several challenges associated with sampling and presentation of the sample to the

measurement device, which reduces errors and enhances accuracy, reproducibility, and repeatability. The system delivers the operators the ability to actively control their process allowing them to meet the tight tolerances and specifications imposed on them by the industry.





