



Paint

The manufacturing process of paint involves several mixing steps.

Most people don't give paint much thought. However, paint is more than just a color, it takes a complex chemical process to manufacture paint. The Incipientus in-line rheology system was used in a paint mixing application in conjunction with the Centre for Process Innovation, UK. The Incipientus instrument was capable of measuring variation in rheological parameters of different concentrations of viscosifiers mixed with a base liquid under realistic industrial conditions. During each mixing stage a stable viscosity was reached before continuing to the next stage as data was recorded in real time and continuously. Incipientus technology can now be used for improving the efficiency of the mixing process by reducing the time between stages and thereby operating costs.

"By reducing the time between mixing stages the manufacturing process is optimized"

Benefits

Improve the manufacturing process and control system

Test variation in paint rheology over time

Reduce mixing time and operating costs

Link important process parameters to in-line rheology measurements



Process monitoring

Significant changes in viscosity was observed during the different mixing steps. For the first time important data were obtained from actual tests under realistic industrial conditions during the process, in line and in real time.



Pilot plant installation

The Incipientus in-line rheology system was successfully installed in a pilot plant where the industrial conditions were mimicked.