Abstract

Process industries need a system that can image flow so that they can monitor the effectiveness of their process plant as well as detect any possible leakage or damages that might occur. This paper presents an optical tomography system which made use of infrared sensors to monitor the concentration profiles of solid flow in air conveyed by a vertical gravity flow rig. Several tests were conducted involving single pixel flow, multiple pixels flow, half flow
and full flow. The results showed that the system is capable of providing vital information on the flow inside the rig in the form of concentration profiles.

References


Index Terms

Computer Science

Information Science

Keywords

Tomography  Fiber Optics  Sensors