AST
Accurate Sensors Technologies

Kiln Monitoring System

Improvement of kiln efficiency has been the central concern of cement manufacturing technology. In order to save money on fuel, a kiln was required that could run almost continuously. Heating up of kiln and cooling down are long, wasteful and damaging processes. The objective of kiln operation is to make clinker with the required chemical and physical properties, at the maximum rate that the size of kiln will allow, while meeting environmental standards, at the lowest possible operating cost. A poorly run kiln can easily double cement plant operating costs. A kiln operator must have reliable data from the kiln to make the best firing decisions. The traditional method of assessment was to view the bed of clinker and deduce the amount of liquid formation by experience. As more liquid forms, the clinker becomes stickier, and the bed of material climbs higher up the rising side of the kiln. Kiln monitoring cameras, are mounted on the kiln hood to facilitate this.

Features

- Auto Pneumatic retraction and insertion in case of failure of air, water supply and increased temperature.
- Water cooled lens tube assembly.
- Vortex air cooled camera chamber.
- Auto shut off gate.
- Air purged wall sleeve.
- Long pin hole optical tube.
- Wide angle of view.
- Front lens withstand high temperature.
- Manual Focusing, Iris Control, Zooming.
- Control Cabinet with PLC, Pneumatic control system.
- Air Tank with filters.
- Ethernet output / fiber optic communication for distortion free data transitions.
- High dynamic CMOS Camera

AST TFV 750 Furnace monitoring system provide plant engineers and operators in the control room with views of burner flames, material alignment and movement, and other process conditions in furnace, kiln, heating stove or other combustion chamber. We use special color camera above 480 lines for crispy picture quality. Pinhole lens and stainless steel camera housing with water and air cooling system, enabling the system working in high temperature environment. The system has auto retraction and auto insertion function. The camera will exit out of the furnace, when the temperature of the inner camera housing is higher than the setting value or the pressure of compressed air and flow of water is lower than the setting value or the power failures.