

Thermal Imaging, Flue Gas Analysing and Pressure Pipes Monitoring within the scope of Energy Saving, Maintenance and Product Quality on High Energy Processes

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For production processes which need high energy, for example, ceramic and glass production as well as brick, iron and steel production, Thermography is used for the equipment condition monitoring of industrial kilns and other energy intensive facilities. Especially measurements in the high temperature sector are of interest. Irregular temperature developments and cooling processes are critical issues for production quality.

As part of mechanical maintenance works, thermal imaging method is used for machines, arbors and bearings. Because these are stressed by the high temperatures and have to be checked preventively. As for electrical maintenance, thermal imaging method has a very important roll. The main task of the electrical thermography is to find defective electrical connections and to localize anomalies of overload on wires, components and switchboards.

Flue gas analyzers play a vital role, in order to monitor emission levels to keep them within official limits defined by regulations and determine the process efficiency values. They can be used for various applications in a wide range of industries including cement production, turbine and engine manufacturing, burner and heating systems manufacturing.

Pressurization of the air is pretty hard and also an expensive technology due to initial investments, operating and maintenance costs. It is crucial and also possible to make compressed air usage analysis, the peak load management, protection of valuable compressed air consumers through min./max. monitoring, consumption-dependent maintenance strategy and automatic, exact dosing with the use of compressed air meters.