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NETZSCH

Thermal Analysis Methods used in the field of Technical Ceramics

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Historically thermoanalytical methods like Differential Thermal analysis (DTA), thermogravimetry (TGA) or dilatometry (DIL) have been used to optimize the production and the quality of traditional ceramics. This includes the characterization of raw materials or precursors, binder burn out and sintering during the firing process. For technical ceramics we have to look additionally also for thermophysical properties like coefficient of thermal expansion (CTE), thermal conductivity determination, specific heat or thermal stability.

Typical application examples on oxide and non-oxide ceramics will be given in order to show the measurement capabilities of modern thermal analysis and give an overview of the instrumentation.



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