

APPLICATION SHEET

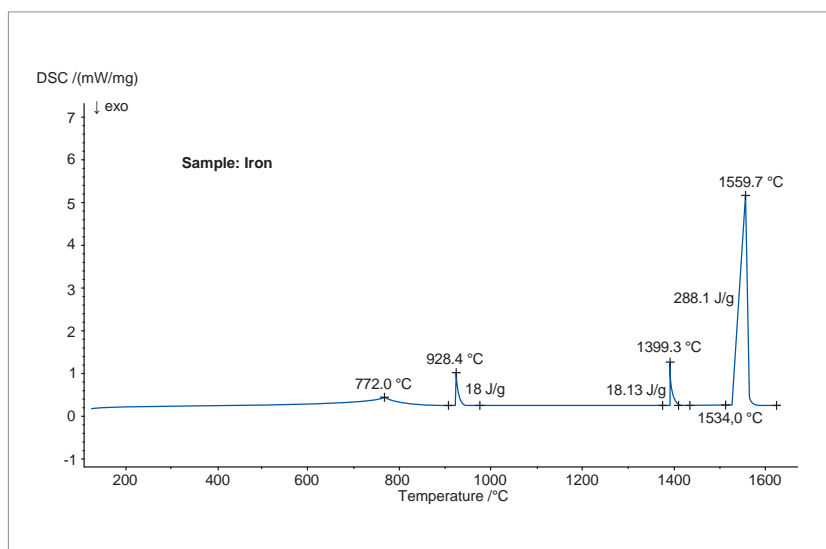
STA/DSC Accessories – High-Temperature DSC Sensor and Crucible

Detection of Weak Effects with the High-Temperature DSC Sensor

The vacuum-tight STA 449 **F1/F3 Jupiter®** and DSC 404 **F1/F3 Pegasus®** systems are unique in their flexibility. One of their outstanding features is their capability for easy insertion of different DSC sensor types and DTA sample carriers in a matter of only a few seconds. Selection of the right crucible, together with the most appropriate furnace out of nine options, allows a single instrument to cover an extremely broad application range.



TGA-DSC sensor, see also *Accessories for Differential Scanning Calorimetry and Thermobalances*



DSC measurement of an iron disk up to 1650°C

This example shows a DSC measurement of an iron disk between room temperature and 1650°C. The iron disk was placed in a Pt+Al₂O₃ liner crucible set and closed with a Pt lid. The sample mass amounted to 129.68 mg and was heated in an argon atmosphere at a rate of 20 K/min.

The DSC type S sensor is especially designed for c_p determination and exhibits outstanding sensitivity. Even the weakest of effects such as iron solid-solid transitions can clearly be detected. Melting occurs at 1534°C (onset).