

# APPLICATION SHEET

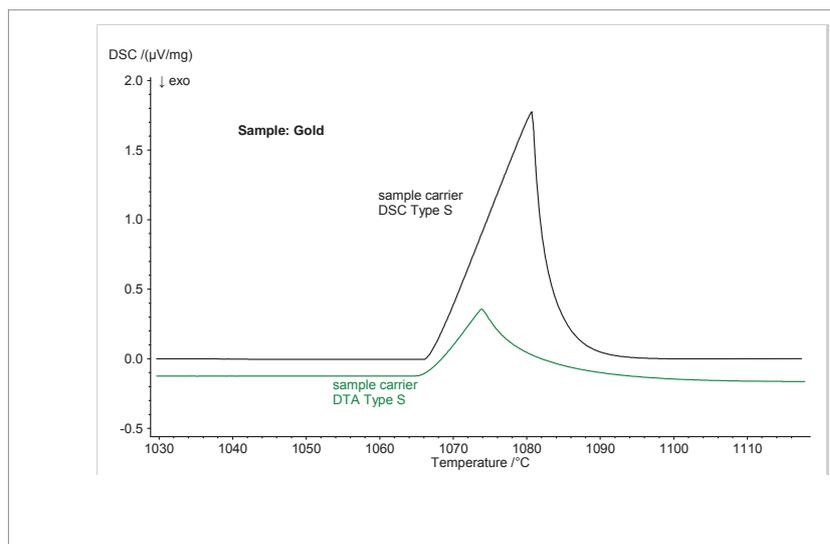
## STA/DSC Accessories – Sensor Types

### Advantages of True DSC Measurements

The 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. Of course, the vacuum-tight design of these instruments further extends the measurement capabilities in the temperature range between -150°C and 2400°C.



DSC and DTA sensor types, see also *Accessories for Differential Scanning Calorimetry and Thermobalances*



DSC and DTA type S sensor comparison

True DSC measurements require special sensors with optimized design and thermocouple positioning. They are not the same as a calibrated DTA test.

- DSC sensors offer a more stable baseline, a higher sensitivity, an improved detection limit, and a shorter time constant.
- Therefore, transition peaks are sharp, reliable and easy to separate from the baseline curvature.
- DSC sensors can detect weak transitions and glass transitions steps and offer excellent reproducibility.
- DSC- $c_p$  sensors are capable of measuring the specific heat ( $c_p$ ).