DSC Sensor Types P and S

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}).

In the lower temperature range up to 1000°C, the DSC sensor type P has excellent sensitivity and well-pronounced resolution compared to the high-temperature sensor type S. The latter is designed for measurements up to 1650°C. Its sensitivity increases with temperature. This example shows that the DSC sensor type P is a good alternative to the DSC sensor types E and K (max. 700°C/800°C in an inert atmosphere) when temperatures up to 1000°C are required.