

SKZ1052C Differential Scanning Calorimeter



Introduction:

DSC is designed to determine the inner heat transition relating to temperature and heat flow, it is widely used in the field of polymer development, performance testing & quality control. DSC research and development includes the following field: glass transition temperature, melting point, cold crystallization, crystallization, phase transition, oxidation induction time (OIT).

Standards:

ISO/TR10837:1991, ASTM D3895-1998, ASTM E 967, ASTM E 968, ASTM E 793, ASTM D 3895, ASTM D 3417, ASTM D 3418, ISO 11357-6

Main Features:

1. Technical innovations semiconductor refrigeration technology, green safe, simple user operation, no consumables.
2. LCD touch screen display with blue backlight, display information-rich: the set temperature, sample temperature, oxygen flow, nitrogen flow, differential thermal signal, a variety of switching states.
3. USB communication interface, versatile, reliable and uninterrupted communication, support self-healing connection.
4. Compact furnace structure, ramp rate is adjustable.
5. Improve the installation process, all using mechanical fixation methods, completely avoid contamination of the furnace interior colloidal differential thermal signal.
6. The two temperature probes to ensure reproducibility of sample temperature measurement. Single temperature probe mounted on the furnace wall, with PID control of the furnace temperature, due to the temperature of the thermal inertia, transmission to the temperature of the sample standard deviation, and the four seasons difference are not the same, therefore, single temperature sensor controls temperature and measuring temperature, thermal differential signal and temperature signal of error is larger. SKZ1052C is installed one more temperature probe in the bottom used to measure the real temperature of samples, and using our exclusive temperature control technology, control of furnace wall temperature the sample temperature reaches the set temperature.
7. Digital gas flow meter, automatic switch two way air flow, fast switching, stabilization time is short.
8. Offer standard samples, user-friendly calibration temperature coefficient.

9. software Adaptive computer screens, the software automatically depending on how your computer screen size, adjust the curve display. Support notebook, desktop and supports operating systems such as Win2000,XP,VISTA,WIN7.

Technical parameters:

1. The range of temperature: -10°C to 500°C (semiconductor refrigeration)
2. The temperature resolution: 0.1°C
3. Heating rate: $0.1 \sim 80^{\circ}\text{C} / \text{min}$
4. DSC range: $0 \sim +200 \text{ mw}$
5. DSC resolution: 0.01 mW
6. DSC sensitivity: 0.1 mW
7. Crucible aluminum: $\Phi 6.6 \text{ mm} \times 2.4 \text{ mm}$.
8. Atmosphere control
Gas flow $\leq 200 \text{ ml/min}$ (nitrogen or oxygen gas channel can change each other)
Gas pressure: 0.2 MPa .
9. Working power supply: AC 220V, 50HZ
10. Working condition
Cooling water flow rate: $200 \sim 300 \text{ ml/min}$
Room temperature: $15^{\circ}\text{C} \sim 25^{\circ}\text{C}$
Relative humidity: $55 \sim 75\%$
11. DSC measure both during heating and cooling process,
heating process for melt peak, cooling process for crystallization peak.
12. Double temperature probes, one mounted on the furnace wall, the other in the bottom,
to ensure the Repeatability
13. Digital gas flow meter, automatic switch
14. Offer standard samples
15. Data process system can be used in system Win2000,XP,VISTA,WIN7
Data curve collection, storage, screen display and result report: temperature calibration and correction, extension starting point temperature enthalpy variable, glass transition temperature, enthalpy change ratio (reaction conversion), oxidation induction period, and the dynamic parameters of the treatment.

Test interface on the equipment for reference:

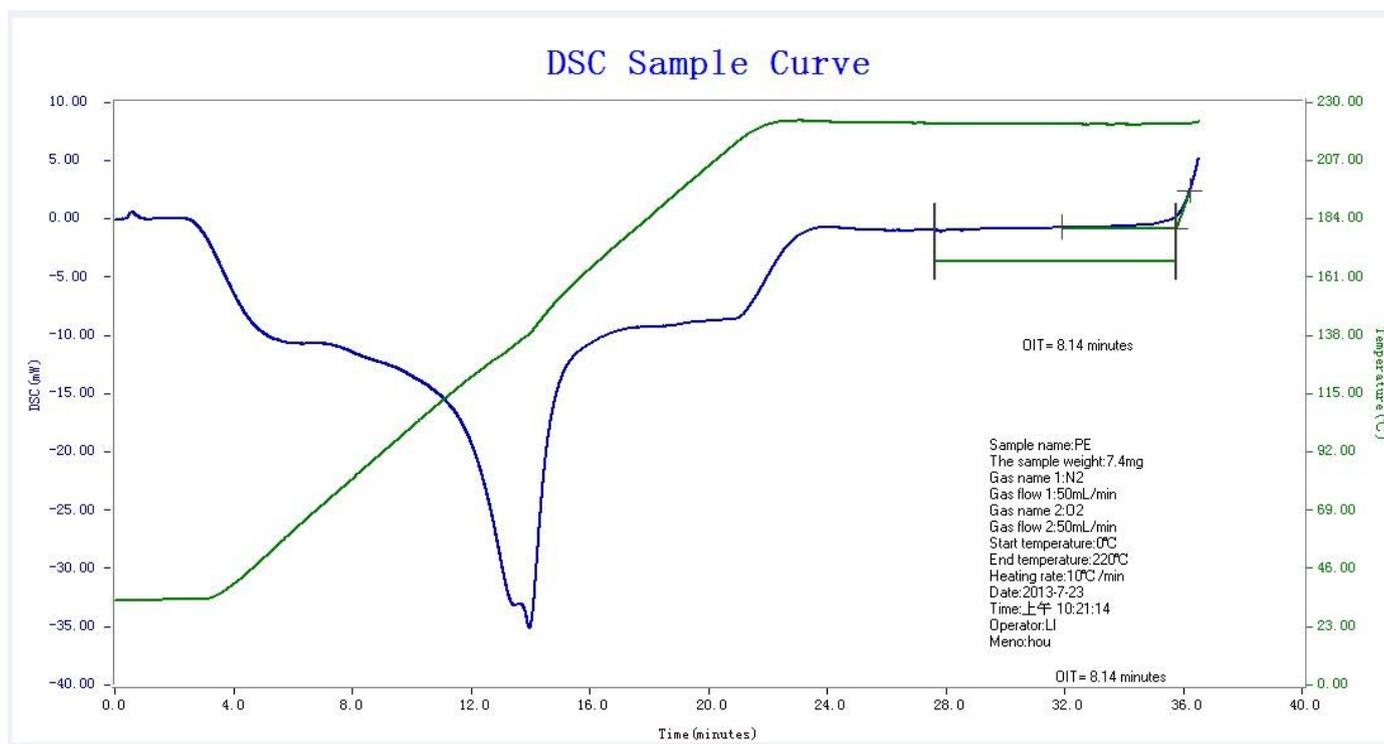
Test interface on computer:

The screenshot shows the 'DSC thermal analysis program' interface. It includes several control panels:

- Parameter protection:** A password field and a list of parameters to be allowed for change (e.g., The test information, Instrument parameters).
- The test information:** Fields for Sample name, Provide sample unit, Test sample units, Operator, Note, The sample weight, Gas name 1, Gas flow 1, Gas name 2, and Gas flow 2.
- Instrument parameters:** Heating rate, Start temperature, End temperature, Hold temperature, Measuring time timing, and The oxidation peak.
- Printing parameters:** The company information and Company Logo.
- Measurement methods:** Manual intervention measure and Automatic operation mode.
- Temperature curve:** A graph showing Temperature (°C) vs Time (minutes) with a table below it.
- Data parameters:** Fitting points, Baseline deduction options, and Data smoothing.

ID	Start temperature(C)	End temperature(C)	Duration(minutes)	Heating rate(C/minute)
1	0	200	20	10.0
2	200	200	500	0.0

Curves:





CERTIFICATE

of conformity

Low Voltage Directive 2006/95/EC & EMC 2004/108/EC

Certificate No. 0050120100324f

Holder: SKZ Industrial Co., Limited
Huaiyin District, Jinan, Shandong province, China

Product Description: Differential Scanning Calorimeter

Type And Model: SKZ1052

Codes/Standards Applied: EN 61000-6-3:2007, EN61010-1-2010,
EN61000-3-2:2006, EN61000-3-3:2008

Technical Construction File

Report Number: KZ-E069

This certificate of conformity is based on the technical construction file, We hereby certify that the above-mentioned product meets the requirements of Low Voltage Directive 2006/95/EC & EMC 2004/108/EC. Applied Codes And Standards.




David Smith
Manager

Certificate of Conformity

ETL

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