

智能漆包线介质损耗测试仪

Intelligent Tangent Delta Tester of Enamllled Wire



仪器说明

用于漆包线固化程度的测试,通过 tg8 曲线变化直观的反应出漆包线的固化程度,并根据曲线的变化来调节炉温烘培时间,使漆包线的固化程度达到最佳状态,有效的控制漆包线的产品质量。

快速检测漆包线的耐温等级,可以初步确定漆包线漆的品种。

Tangent Delta Tester is used for testing the curing degree of enamel cover. The curve variation of tg 8 shows the curing degree of enamelled wire directly, then adjust the heating temperature of enameling oven, to get a optimal curing degree of enamel led wire, control the wire quanlity effectively.

The temperature class of enamelled wire can be tested rapidly; the enamel type of wire can be determined preliminarily.

仪器特点

符合 GB/T4074.5-2008、IEC60851-5.6:全新外形,轻巧美观,操作更方便:

作为第三代智能介质损耗测试仪,夹具和加热系统有了彻底的升级;

夹具的送进、就位和退出实现自动化,减小人为因素对测试的影响,确保每次样品均处于同一位置,更有效的提高了测试精度和一致性:5条 $\tan \delta$ 曲线的比较功能。

Comply with standard GB/T4074.5-2008, IEC60851-5.6.

New appearance, light and beautiful, the operation is more convenient.

As the third generation intelligent Tangent Delta Tester, there are complete update on damping jaw and heating unit.

The feeding, positioning and exit of the clamping jaw are operated automatically, reduce the influence of human factors act to the testing result, ensure samples are placed at the same position while testing, improve the accuracy and consistency of the tests more effectively.

Comparison function of 5 $\tan \delta$ -T curve

测试曲线

软件自动绘制介质损耗随温度变化的 $\tan \delta$ 曲线。 $\tan \delta$ 曲线形状大致由漆包线漆分子链中的偶极子情况决定,不过树脂结构中的一些未交联反应完全的极性基团:如羟基和异氰酸根等可导致 $\tan \delta$ 曲线变化,而催化剂和添加剂通常有其自身的偶极子,对曲线也有影响。有些助剂因为与漆基树脂反应,对曲线也有影响,并且溶剂中含有极性基团的甲酚、NMP 等如果在漆膜中有残留,在 $\tan \delta$ 曲线上也会反映出来。

仪器参数

工作温度:室温-350℃;具有快速冷却系统

working temperature, normal atmosphere temperature-350℃;with rapid cooling system

可测 0.018-5.0mm 的清包圆线

Testrange of enamiled round wire: 中 0.018-5.0mm

可测最大边 5x16mm 的漆包扁线

Testrange of enamelled flat wire: $\leq 5 \times 16\text{mm}$

测试时间:约 2-3 分钟

Testing time: about 2-3 minutes

测试频率:1KHz

Testing frequency:1KHz

测试精度: $\pm 1^\circ\text{C}$

Testing accuracy: $\pm 1^\circ\text{C}$

电源: AC220V $\pm 10\%$

Power supply: AC220V $\pm 10\%$

介质损耗分辨率: 0.0001 或 0.00001

Resolution: 0.0001 or 0.00001

两种 D 值测量上限: 0-0.1、0-0.2

Two upper limits of D value measurement: 0-0.1、0-0.2

尺寸: 480mmx500mm x320mm

Dimension: 480mm x500mmx320mm

重量: 35kg

Weight: 35kg

可选:

TD-7S: 高分辨率、高精度。

TD-8S: 测试频率 1KHz、1MHz (可切换), 可测 1MHz 下漆包线的介质损耗

值、导体电阻、电容。 tg δ 曲线比较 comparison of lg δ -T curve

TD-7S: High Resolution and High Precision.

TD-8S: testing frequency: 1KHz, 1MHz (switchable), tg δ of enamelled wire with 1MHz can be tested, as well as electric resistance and capacitor.