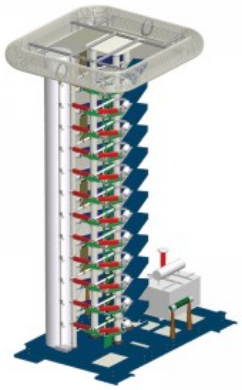
Impulse Voltage Test System



1. Introduction

In the development of a modern society, the development of various fields has increased the demand for power. In order to ensure the stability of the power system, it is necessary to increase the emphasis on high-voltage power cable management and choose its test methods and tests reasonably. Technology to find problems in power cables in time. Using reasonable test methods and detection techniques can improve the efficiency and quality of the power sector, reduce energy consumption and waste, and enhance the stability of the power system.
The most common reason for the failure of high-voltage power cables is their own unqualified quality, which will cause huge safety hazards during their operation.
The impulse voltage test system is a test device for high-voltage power products such as power transformers, high-voltage transformers, high-voltage switches, and power cables. Carrying out voltage tests on high-voltage power products can produce standard lightning waves, operating waves, and cut-off waves. It is an essential test instrument for detecting high-voltage power products.

2. Environment

- Maximum altitude: 1000 m
- Altitude increases 100m, and rated voltage lowers 1%
- Operation temperature for HV component: +10 ~ +45℃
- HV component relative humidity (non-condensing) ≤ 95 %
- Temperature for electronic control & measuring: +10 ~ +45℃
- Relative Humidity of electronic components: ≤ 80%
- Components storing and transport temperature: 20 ~ + 60℃
- Anti-seismic: Grade 8
- Grounding resistance: < 0.3Ω
- No dust

3. Main Technical Parameters

- Rated voltage: ±100kV ~ 6000kV (and above)
- Rated energy: 2.5kJ ~ 600kJ
- Rated charging voltage: ±100kV ±200kV
- Stage capacitance: 1.0 F/200kV 2.0 F/100kV(According to total capacitance)
- Standard lightening impulse: 1.2/50 S efficiency: 85 ~ 90% (1.2±30%/50±20%uS)

 Switch impulse: 250/2500 S efficiency: 65 ~ 70% (250±20%/2500±60%uS)

4. Features

(1) Large in voltage utilization coefficient;
(2) Convenient in wave adjustment, simple in operation, excellent in synchronization performance and reliable in motion;
(3) An automatic control technique is adopted in the constant-current charge, which is high automation and strong anti-interference capacity;
(4) A digital measurement and analysis system for the impulse test date are adopted, which increase the technical level and the efficiency of the impulse voltage tests;
(5) High Automaticity;
(6) Optical communication, strong anti interference ability;
(7) Large energy, wide application range.

Product link：https://www.linttop.com/impulse-voltage-test-system.html