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**PDEU** PANDIT  
DEENDAYAL  
ENERGY  
UNIVERSITY

Formerly Pandit Deendayal Petroleum University (PDPU)



# SCHOOL OF ENERGY TECHNOLOGY

**Department of Electrical Engineering**  
**Name of Laboratory : High Voltage Engineering Lab**

[www.pdeu.ac.in](http://www.pdeu.ac.in)

## NAME OF EQUIPMENT :

### AC/DC & IMPULSE TEST SET

#### TECHNICAL SPECIFICATIONS :

- 100KV AC, 140KV DC, 140 KV peak Impulse.
- AC High Voltage Output: 100 kV RMS
- DC High Voltage Output: 140 kV
- Impulse Voltage: 140 kV peak (lightning & Switching waveform)
- Test Frequency: 50 Hz (AC mode)
- Transformer Rating: 5 kVA
- Voltage Control: Motorised variac, 0–100%
- Measurement: Sphere gap & capacitive divider
- Safety: Earthing rod, interlock system, safety fence
- Standards: IEC 60060-1 compliant

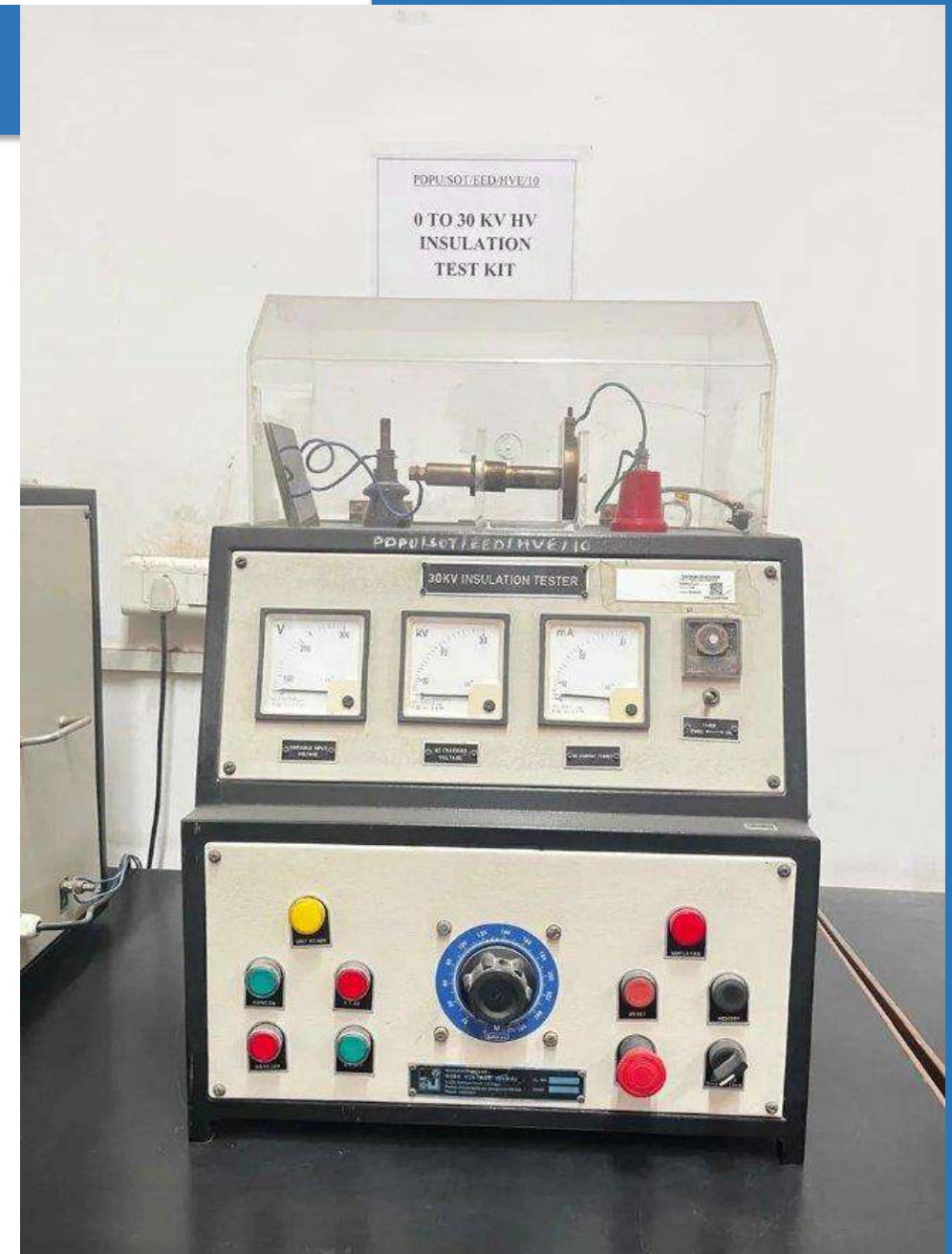


## NAME OF EQUIPMENT :

0 to 30 KV HV Insulation Tester

### TECHNICAL SPECIFICATIONS :

- 0-30 KV
- Output Voltage Range: 0 – 30 kV
- Test Voltage Steps: 500V, 1kV, 2.5kV, 5kV, 10kV, 15kV, 30kV
- Insulation Resistance Range: 1 k $\Omega$  – 10 T $\Omega$
- Measurement Accuracy:  $\pm 5\%$  of reading
- Timer: 1 min / 10 min programmable (PI & DAR)
- Short Circuit Current:  $\leq 30$  mA (safety limited)
- Display: Digital LCD with auto-ranging
- Protection: HV auto-discharge on test completion
- Standards: IEC 61010, IS 2500



## NAME OF EQUIPMENT :

### MOTORISED SPHERE GAP

#### TECHNICAL SPECIFICATIONS :

- 150mm
- Sphere Diameter: 150 mm (each sphere)
- Gap Adjustment: Motor-driven, 0 – 150 mm range
- Position Accuracy:  $\pm 0.1$  mm
- Material: Polished brass spheres
- Mounting: Vertical axis, HV on upper sphere
- Standards: IEC 60052 – Voltage measurement by sphere gaps
- Application: Calibration of HV test sets, peak voltage measurement
- Peak Voltage Measurable: Up to 140 kV dc (with 100kV AC source)



## NAME OF EQUIPMENT :

### OIL BDV TEST KIT

- 0-100 KV
- Output Voltage Range: 0 – 100 kV
- Test Voltage Steps : Auto Variable
- Measurement Accuracy:  $\pm 5\%$  of reading
- Short Circuit Current:  $\leq 30$  mA (safety limited)
- Display: Analog meter by memory push button
- Protection: HV auto-discharge on test completion
- Standards: IEC 61010, IS 2500

