High-Voltage Test Cage

The high-voltage test cage provides capability for testing electrical components under high-voltage conditions, including dc leakage and breakdown testing to 150 kV, and ac partial-discharge and corona testing to 40-kV ac. The test cage includes a completely enclosed testing area and a dedicated personnel safety interlock system that monitors a single interlocked access door and controls the application of high voltage to components under test to provide personnel protection against high-voltage safety hazards inside the chamber.

Examples of use:

- High-voltage partial discharge testing:
  - Calibration of radio-frequency system grounding sticks
- Full-voltage test of linac modulator cables
- Full-voltage test of kicker cables
- Hipot testing of vacuum interrupters for UVC power supplies
- Ignitron conditioning for UVC power supplies
- Full-voltage testing of new UVC T-R Set capacitors before installation
- Testing of 150-kV Marx generator electronics at full voltage prior to final assembly