LEARN • DESIGN • TEST

Experts in High Voltage Electric Propulsion

Insulation System Validation at Every Stage of the Development Cycle

Partial Discharge
Breakdown Voltage Testing
Electrical Endurance
Multifactor Aging
Thermal cycling

Learn more at

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LEARN

Visit portal.ahv.solutions for up to date high voltage design resources:

- **On-demand training -** dedicated courses from basic to advanced
- **Software calculation tools -** Independent verification of user design calculations
- **Materials Database -** Independent and consistent empirical data on frequencly used materials and components
- **Frequently asked questions -** Access to world leading expertise to answer questions and solve bespoke engineering challenges

DESIGN

aHV works with the biggest names in transportation and contributes to new standards supporting reliable, efficient, and power-dense solutions.

- Initial concept design support services
- Insulation system design appraisals
- Test and validation campaign structuring
- Support regulatory self-certification in absence of established standards

TEST

Dedicated high voltage test lab with 'beyond-the-standards' test capabilities combining altitude, temperature, mechanical and chemical.

- BDV: 30kV DC, AC (to 2kHz) and Squarewave (to 100kHz)
- AC and DC PDIV using Omicron MPD800 test equipment
- On-line PDIV using antenna based detection methods
- Thermal Rise up to 2000A, DC and AC between 50Hz and 2kHz
- Creepage and Clearance
- AC and DC Partial Discharge endurance up to 24kV, 100kHz
- Thermal cycling up to AC 2000A, 2kHz and DC 10V / 1020A
- Vibration shaker, max force c. 1.5kN / 100g max acceleration
- Comparative Tracking Indices (CTI) < 600V at 50 Hz
- Oil flow chemical endurance testing