High Power Short-Circuit testing services

Facilitating the development of your MV & HV substation equipment, all in one place

Our unique and independent 3000 MVA high-power laboratory performs development and type testing under medium or high voltage, completing our offer of tests performed in our dielectric test platform, to validate your AC and DC switchgear equipment designs.

OVERVIEW

This new test platform, the first of its kind in Europe, was developed to support industrial players' development of new high and medium voltage technologies for the massive integration of renewable energies into the power grid.

We assist manufacturers, distribution & transmission system operators or EPCs in performing various tests on their medium and high voltage AC and DC equipment such as:

- AC & DC, MV & HV circuit breakers
- AC & DC, MV & HV disconnectors
- AC & DC, MV & HV cables & cable accessories
- MV transformers
- Current limiters
- AC & DC contactors

The 3000 MVA generator.

OUR SERVICES

This platform is operated by CERDA Labs, an ISO 17025 laboratory accredited by COFRAC, laboratory member of STL and ASEFA, which is accredited ISO 17065.

Our high power short-circuit test platform can be combined with the CERDA Laboratory's platform to enhance the testing performances we offer, with higher short-circuit currents and access to further voltage sources for synthetic tests.

We perform tests to check that your equipment meets the required standards for its use. Alternatively, we can assist you during your design phase by performing investigation tests.

FOCUS ON DC TESTS

We provide the following support for your DC tests:

- Assisting you in defining your test's specifications
- Proposing protocols and means of testing
- Accompanying you during tests
- Guiding you and providing support during the development of your equipment
- Supporting you during the prototype building phase

OUR ADDED VALUE: *All in one place*

- Expertise in DC
- Unique DC tests
- Transversality of expertise in AC & DC within one development centre

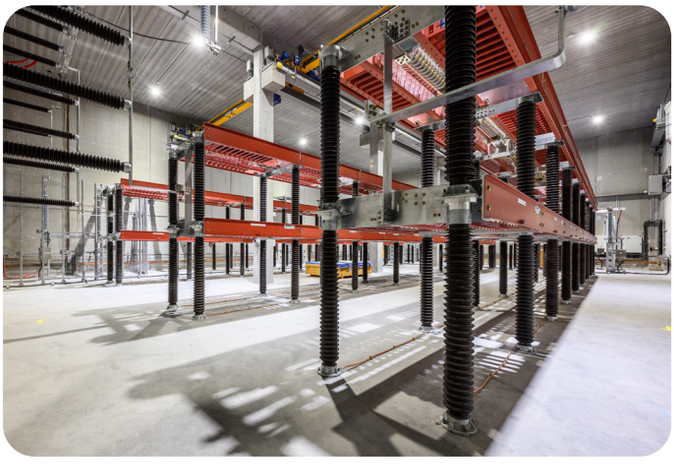
Shaping power transmission

SuperGrid Institute
Shaping power transmission

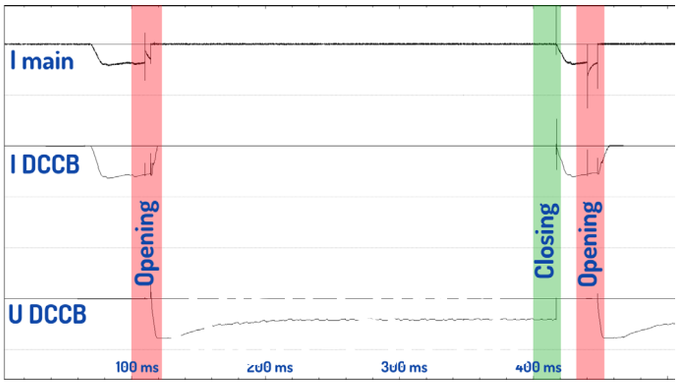
www.supergrid-institute.com

TESTING CAPABILITIES

Type of test	Capability
DC making and breaking tests	• 200 kV DC / 20 kA • 120 kV DC / 40 kA
AC making and breaking tests • Synthetic test • Direct test	• Up to 140 kA (single phase) • 63 kA (Three-phase) • 38 kV / 40 kA (Three-phase)
Capacitive switching test • Direct three-phase test	• 72 kV
Capacitor bank switching test • Direct three-phase test	• 38 kV
AC & DC Fault Current Limiter quenching test • Direct	• 245 kV
AC & DC Short-time current (STC) test	
AC test 50, 60 and 16 Hz ⅔	Other frequencies on request



The diode rectifier room (for DC current generation).



Opening – Closing Opening (O-CO) breaking cycle performed at the High Power Short-Circuit testing platform on a DC circuit breaker.

COMPLEMENTARY TESTING PLATFORMS

We also support your equipment development with our other MV & HV platforms and expertise.

SuperGrid Institute's High Voltage test platform.

The High Power Short-Circuit test platform - 25m (L) x 25m (W) x 25m (H).

CONTACT

For additionnal information or to ask for a quote, please contact:

sales@supergrid-institute.com

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