Summit Power

CONVENIENCE IS POWER

TESTING
PROCESS & CAPABILITIES

1800 648 070 | summitpower.com.au

Testing Process & Capabilities

At Summit Power, we take immense pride in our unwavering commitment to delivering top-tier products and services to our valued clients. A cornerstone of our success lies in our exceptional process and testing capabilities, which enable us to consistently meet and exceed industry standards and client expectations.

Our dedication to process excellence is deeply ingrained in our organisational DNA. We understand that the foundation of any reliable and high-quality product or service rests upon robust, well-defined processes. This commitment to excellence extends across allfacets of our operations, from design and development to manufacturing and beyond.

In tandem with our meticulous processes, our third-party testing facilities serve as the ultimate assurance of quality and reliability. We employ cutting-edge testing methodologies and equipment to rigorously assess the performance, safety, and compliance of our offerings, ensuring they meet the most stringent industry requirements.

This introduction provides a glimpse into our comprehensive process and testing capabilities, which play a pivotal role in delivering products and services of the highest calibre. We invite you to explore further to discover how Summit Power can partner with you to achieve excellence in every Project.

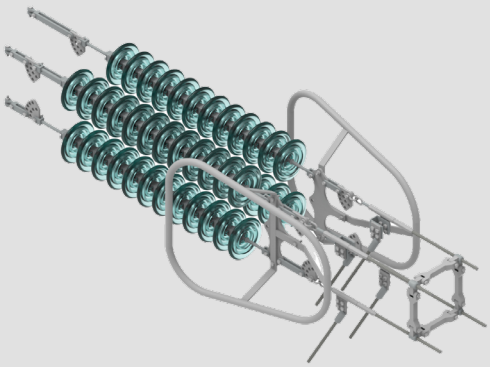
Type Testing to Australian Standards

Summit Power collaborates with National Measurement Institute (NMI) located in Sydney for conducting high-voltage (HV) electrical testing, capable of handling voltages up to 500kV.

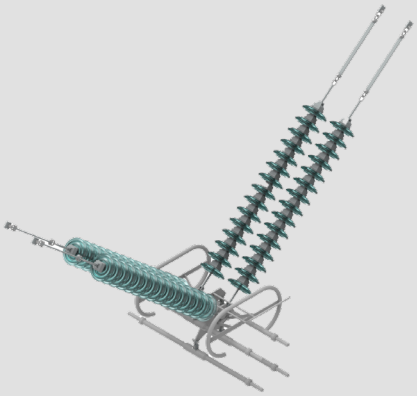
Our approach to testing aligns with best practices, involving the examination of complete stringing arrangements, assembled as an integrated system. This methodology ensures the compatibility of individual components with one another and facilitates comprehensive type testing for each component within a more realistic real-world context.

To enhance our communication with customers, we utilise 3D modelling to visually represent how these assemblies will be constructed and subjected to type testing. Please refer to the two 3D model samples provided below for a clearer understanding.

Sample Assembly



Model No. 1
500kV Tension Insulator Assembly



Model No. 2
500kV V String Suspension Assembly

Testing Standards

- IEC 60383-2 - Lightning Impulse Voltage Test
- IEC 60383-2 - Wet Power Frequency Voltage Test
- IEC 60383-2 - Wet Switching Impulse Voltage Test
- IEC 60437 - Radio Interference Test
- IEC 61284 - Corona Extinction Voltage (Section 14)
- IEC 60797 - Residual Strength Test
- IEC 61211 - Impulse Puncture Testing in Air - Steep Front Test
- ASTM C151 - Test Method for Autoclave Expansion of Portland Cement – where Portland cement is used
- ANSI C29.2 - Thermal Shock Test

Quality Standards & Compliance

All items will adhere to the regulations set by the Australian standards board. The supply of Transmission Line Hardware and Substation Busbar and Fittings is facilitated by well-established and reputable companies from around the globe with whom Summit Power has maintained a strong relationship for over 17 years. Summit Power always extends a warm invitation to its clients to visit the testing facilities and witness the type testing.

As part of Summit Power's QA procurement policy, Summits Senior Transmission Engineers visit our supplier factories at every critical stage to conduct comprehensive inspections, witness the manufacturing process, complete audits, and provide detailed reports, as outlined below:

- Inspect the quality of raw materials.
- Verify quantities and allocations of materials.
- Examine manufacturing procedures and workmanship.
- Inspect the final product to ensure compliance with drawings and specifications.
- Witness factory testing procedures.
- Inspect packaging for quality and adequacy.

Additionally, Summit Power conduct 3-monthly Supplier Assessment Reports covering the following aspects for each factory:

- Factory Profile
- Human Resources
- Product and Marketing Capacity
- Production Process
- Production Capability
- Quality Control Management System
- Product Research and Development
- Client's Special Requirements

These measures are taken to uphold the highest standards of quality and ensure the reliability of the supplied products. The auditing and inspections mentioned above are reported monthly, to our clients which significantly aid in adhering to the timelines set out by our clients.

QA Compliance

Glass Factory - QA Compliance

Mechanical Hardware Type Testing - NATA QA Compliant

Timeline and Milestones

Project timelines are clearly set out to our clients, encompassing essential milestones fortesting and hardware development, outlined as follows:

1. Item design and approval
2. Procure samples
3. Type Testing & Approve Samples
4. Ship samples
5. Receive, inspect, and assemble stringing arrangements
6. Type testing, report creation, copies issued to the client

Conclusion

> Summit Power covers the cost of type testing general items, for project specific or specialist items please consult with Summit Power for a costing analysis.

In summary, Summit Power possesses the expertise to fully mitigate any technical risks associated with the supply of Transmission Line Hardware and Substation Busbar and Fittings. We are committed to going above and beyond to ensure a successful partnership by delivering high-quality products in a prompt and professional manner.

Reach out today with any enquiries
- our team would love to help!

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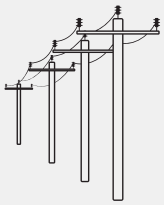
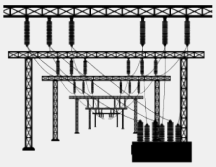
TRANSMISSION

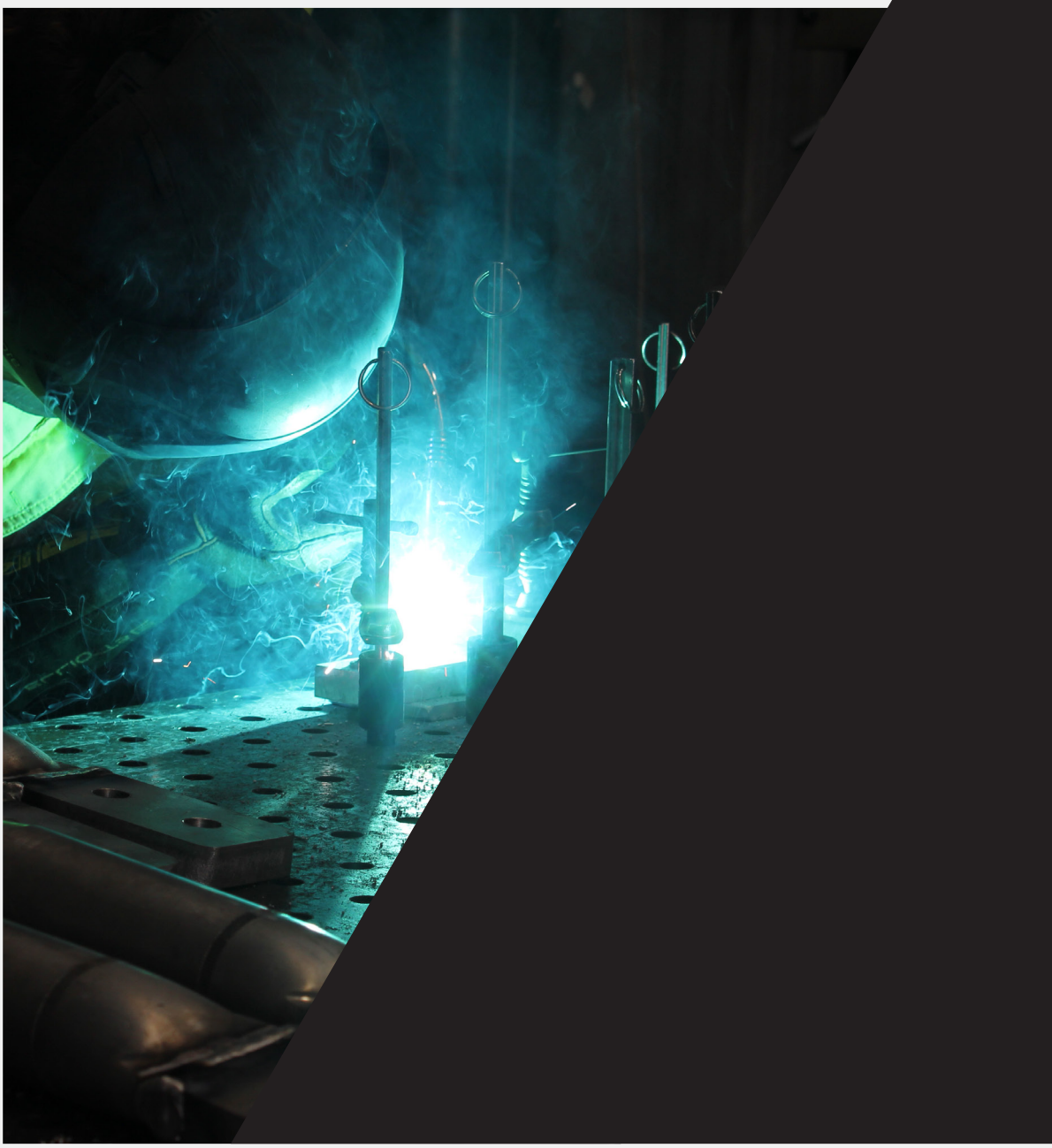


DISTRIBUTION



SUBSTATION

SAFETY MARKERS



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