



Insulators

Station Post Insulators • Line Post Insulators • Disk Insulators

Insulators provide critical mechanical support and dielectric separation in high-voltage substations and overhead networks. Engineered for Australian conditions and compliant with IEC/AS standards, our range offers durability, flexibility, and proven performance even in the harshest operating environments.



What's in the Range

- **Station Post Insulators (Porcelain, Solid-Core):** For substations and switchyards with voltage capabilities (12-550 kV), with high cantilever strength and long creepage paths.
- **Line Post Insulators (Polymeric and Porcelain):** For overhead line applications (12-145 kV) with specified SML and impulse withstand levels.
- **Disc (Suspension) Insulators (Porcelain & Glass):** Modular stringing for transmission lines with 70-160 kN electro-mechanical strength options and standard ball & socket or tongue & clevis hardware.



High Voltage Reliability

All insulators comply with IEC and Australian standards and are batch and type tested at NATA-equivalent laboratories to verify dielectric and mechanical performance.



Robust Materials

Available in non-porous electrical porcelain (solid core posts) and polymeric designs for line applications; porcelain units supplied in Munsell Grey glaze unless specified.



Optimised Creepage Performance

Multiple pollution levels (up to Level IV/Very Heavy) with extended creepage distances to reduce flashover in harsh environments.



Proven Mechanical Strength Expanders

Ratings from 70-160 kN (disc units), high cantilever station posts, and defined SML for polymeric line posts ensure reliable hardware interfaces.

Functionality & Options

- **Electrical Insulation & Support:** Solid-core station posts insulate and mechanically support busbars, switches, and apparatus; line posts and discs support and insulate conductors on overhead lines.
- **Voltage Coverage:** Offerings cover LV/MV to 550 kV across porcelain and polymeric families (application-dependent).
- **End-Fittings / Interfaces:** Ball & socket, tongue & clevis, clevis & tongue, and tie-top variants are available to match line hardware standards.
- **Pollution & Creepage Options:** Multiple creepage selections to match site pollution severity classes.
- **Glaze/Color:** Munsell Grey standard; special glaze on request.

Key Components

- **Porcelain Body:** Non-porous electrical porcelain per industry standards (solid-core posts).
- **Metal End Fittings:** Hot-dip galvanized caps/flanges; standard hole patterns for common bolt circles on station posts.
- **Sealing/Cementing:** Portland cement/quartz sand systems used in porcelain assemblies.

Standards & Testing

- IEC & Australian Standards compliance across dimensional, electrical, and mechanical requirements; products are batch tested to Australian Standards and type tested at NATA-equivalent labs.
- Capability up to 800 kV is indicated for porcelain portfolios from listed manufacturers.

Selection Checklist

- **Application & Location:** Substation equipment support (choose Station Post); line suspension/tension (choose Disc); distribution/tap points (choose Line Post).
- **System Voltage & BIL:** Match rated voltage and verify BIL / impulse withstand margins per system protection studies.
- **Pollution Severity & Creepage:** Select creepage distance for site pollution class (up to Level IV / Very Heavy).
- **Mechanical Requirements:** Confirm cantilever for posts and electro-mechanical / SML for line/disc units to meet span loads, wind, and hardware geometry.
- **End-Fitting Compatibility:** Choose ball & socket, tongue & clevis, clevis & tongue, or tie-top to integrate with existing hardware.
- **Standards & Testing:** Ensure project specs reference IEC/AS and require batch/type testing documentation.

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