

# CYCLOALIPHATIC EPOXY RESIN LINE INSULATORS



Cycloaliphatic epoxy resins line insulators have been used successfully alongside silicones and ceramics (porcelain, glass) for the past 30 years in various outdoor environmental conditions. For the past 10 years, Australian company EMC Pacific Pty Ltd (EMCP) has been manufacturing and supplying world class cycloaliphatic epoxy resin insulators, bushings and custom components to the Australian electrical industry. EMCP is Australasia's largest manufacturer of medium to high voltage epoxy resin insulator and bushings.


## ONE PIECE CONSTRUCTION

Network reliability is a major focus for a modern utility. Mechanical failures of insulators can lead to power outages and serious public safety concerns. The EMCP line insulators are manufactured as a one piece construction which eliminates the problematic metal fitting failures and brittle fractures typically associated with ceramics and composites.

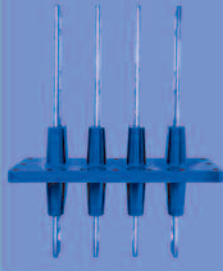
Another major factor that confronts utilities is line interruptions from contaminated insulators with limited creepage distance. Contamination on insulators causes the insulator surface to become hydrophilic or saturated in moist conditions. Combined with limited creepage distances, this can cause leakage currents to develop. EMCP has specially developed a hydrophobic cycloaliphatic epoxy resin line insulator range which provides superior performance in polluted outdoor applications. Due to its intrinsic hydrophobic properties, strength, greater creepage distance and crack resistance, it is the ultimate solution for a line insulator.

EMCP's line insulator offers a number of advantages over traditional installations in the areas of:


- Reduced Weight – in the order of half that of a comparable ceramic installation.
- Improved Reliability – provides dependable insulation in all types of environments as a result of hydrophobic cycloaliphatic epoxy resin.
- Electrical Performance – superior dry arc distance, dielectric strength and self restoring insulation.
- Efficiency – lower losses due to low leakage currents.
- Higher Thermal Shock Resistance – will not shatter due to thermal shock.
- High Puncture Resistance to Lightning Strikes – high density, non porous, homogeneous material.
- Less Damage During Handling and Transport – greater tolerance to physical impact.
- Tough – meets or exceeds mechanical-strength values for comparable installations.
- Compact – due to the moulding process, virtually any practical design possible.
- Economical – competitive initial cost and minimal maintenance required during insulator life equates to overall cost savings to comparable installations.
- Installation Saving – reduced installation, maintenance and inventory control costs, due to one piece construction.



LINE INSULATORS




BUSHINGS



CUSTOM MOULDINGS

## EMC Pacific

Where Innovation and Performance Meet



**Additional products**

Current Transformers	Apparatus Bushings
Voltage Transformers	Castings and Housings
Wall Bushings	Thermo Plastic Products
Metering Units	Stand Off Insulators
Silicone Products	Hybrid Mouldings

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