



PPC INSULATORS

ELECTRIFYING THE WORLD



PPC Insulators

Long Rod Insulators

A comprehensive range of products for overhead transmission lines up to the highest AC and DC system voltages

www.ppcinsulators.com

PPC Long Rod Insulators.

Mechanical Proof Design for Reliable Overhead Transmission Lines

PPC Long Rod Insulators are designed for distribution and transmission overhead applications. Suitable for use in high voltage power lines, PPC Long Rods are a reliable and safe solution, thanks to their superior porcelain strength and advanced design for various demanding environmental conditions.

Porcelain Core

PPC Long Rod porcelain body is made from C-130 high strength aluminum oxide porcelain. Conforming to IEC 60672, PPC porcelain has the best strength to weight ratio and top-of-the-class tensile strength, guaranteed for long and safe performance. Containing less than 1% of quartz residue, PPC porcelain body has uncomparable structural rigidity with no internal stresses and minimum porosity.

Marking

Each porcelain long rod insulator carries the trademark of the PPC Insulators, which is a guarantee for the PPC quality control process, a comprehensive management and process command for improved conformance and top quality products.



Cementing

Cementing is provided with a lead-antimony alloy (also Portland or sulfur cement) with a carefully applied bitumen layer, essential for compensating the different thermal expansion of cast iron, cement and porcelain, giving the system elasticity to improve the mechanical strength (up to 30 %).



Inspection and Testing

	Type	Sample	Routine
Dry lightning impulse withstand voltage test	x		
Wet power-frequency withstand voltage test	x		
Mechanical failing load test	x	x	
Thermal-mechanical performance test	x		
Verification of the dimensions	x	x	
Verification of the displacements		x	
Verification of the locking system			x
Temperature cycle test			x
Porosity test		x	
Galvanizing test			x

Suspension insulators are exposed to heavy electrical and mechanical stresses, affecting their short and long-term performance. PPC long rod insulators have the best material composition and advanced design, critical for reliable performance.

- Manufactured and tested under strict PPC quality control
- Selection and composition of high-quality components for optimum product properties with below 1% quartz residue
- Porcelain body made of high strength aluminium oxide porcelain - C130 withholding the highest mechanical stresses
- High consistency, low mechanical strength deviation and no known self-fractures of aluminum oxide porcelain long rod insulators
- Low surface leakage current design resulting in reduced transmission losses
- Protected against power arcs protective fittings shield
- No corrosion problems due to minimum use of metal parts
- Appropriate for use in direct current applications
- Appropriate for use under tension and compression loads
- Lowest maintenance costs

Porcelain long rods are also available with RTV silicone coating to further improve their performance in polluted environmental conditions.