



PPC INSULATORS
ELECTRIFYING THE WORLD



PPC Insulators

Hybrid Post Insulators

PPC's Hybrid Insulator solutions offer the highest combination of mechanical strength and pollution performance

www.ppcinsulators.com

PPC's Hybrid Insulator Solutions

The Strength of Porcelain Meets Composite Pollution Performance

PPC's Hybrid Station Post Insulators and Hybrid Line Post Insulators are a one-end-solution to insulators that need to operate at high / extremely polluted environmental and service conditions. They are designed to prevent electrical activity on insulators, such as leakage currents that results in unintended flashovers and power system outages.



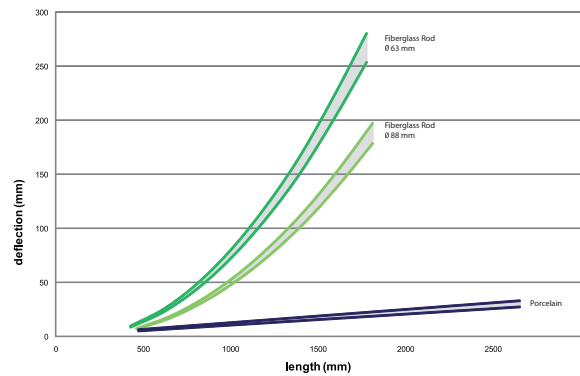
PPC Hybrid Line Post Insulators
15 up to 35 kV

Hybrid Insulators offer the best of both worlds:

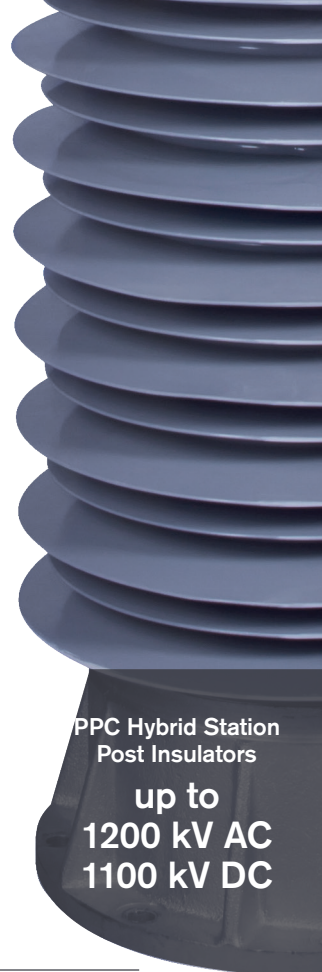
- undisputed mechanical strength due to porcelain core
- excellent pollution performance due to hydrophobic HTV silicone sheds.

The need for reliable power networks, avoidance of blackouts and substation shutdowns due to frequent maintenance procedures like substation washing, etc. led the insulation industry to react and develop Hybrid Insulators.

PPC's Hybrid Insulators consist of an isostatically produced porcelain core and an injection molded HTV silicone rubber housing. This combination provides the proven strength of porcelain core with excellent pollution performance due to HTV silicone sheds. The graph as shown below depicts the mechanical strength offered by PPC's Hybrid Insulators when compared with Composite Posts Insulators.



Deflection under bending loads is one of the most important characteristics of an insulator. Large bending loads are known to present problems for composite post insulators with fiberglass cores.

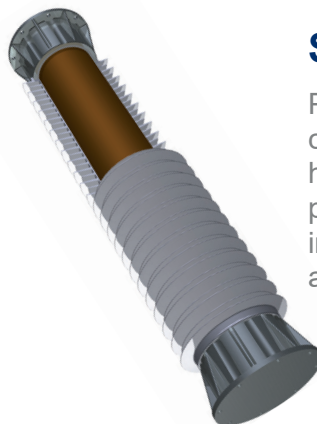


PPC Hybrid Station Post Insulators
up to
1200 kV AC
1100 kV DC

PPC's Hybrid Insulators have porcelain core of high mechanical strength that offers unique stability added with long-time service performance. The design and production of these insulators employ a specific and superior silicone compound with at least 45% of ATH by weight that enables advanced shed profile thereby maintaining the excellent mechanical strength due to porcelain core.

Porcelain Core

The porcelain core is manufactured with PPC's isostatic manufacturing process that offer tightest possible tolerances and excellent lead times. Ceramic granulates are pressed at a very high pressure to form cylindrical blanks. After turning, glazing and firing - the porcelain core is cut to the required height. Hot-dip galvanized fittings made of spheroidal cast iron are then cemented onto the porcelain core.



Silicone Rubber Housing

Proper bonding between the porcelain core and the HTV silicone rubber housing is achieved through high-pressure and high-temperature injection molding without the need for an artificial sealing.