

# ADVANTAGES OF PCORE® ELECTRIC BUSHING TECHNOLOGIES

PCORE® Electric, an affiliate of Hubbell Power Systems, is North America's only company 100% focused on the manufacturing of paper-resin-capacitance (PRC®) and paper-oil-capacitance (POC®) graded bushings and related components for transformers and oil circuit breakers in the ANSI / IEEE and CSA marketplaces. PCORE® was the first bushing company to become ISO certified and currently holds an ISO 9001:2015 registration.

The PCORE PRC® type bushing is available 15kV - 69kV. The construction of a PRC® bushing consists of a capacitance graded core that is wound around a center conductor which is created using high dielectric paper and conductive layering. The bushing core is then impregnated with epoxy resin. Since the core is completely encapsulated in epoxy resin, lower external insulation is not needed. A porcelain insulator is used for external insulation above the mounting flange. Transformer oil may be placed between the upper porcelain and PRC® core or a dielectric gel is used when the bushing construction is considered oil-free.

PCORE POC® type bushings are available from 25kV - 500kV. In the POC® bushing construction a capacitance graded core is wound around a center conductor which is created with high dielectric paper and conductive layering. The bushing core is impregnated with dried, degassed transformer oil. A POC® bushing utilizes an upper and lower porcelain insulator for external insulation.

## DEPENDABILITY

- Proven Transformer - Breaker Interchangeable bushing technologies manufactured since the 1950's. Accepted and used through-out the electrical grid by major electric utilities.
- High mechanical (cantilever strength), high seismic capability per IEEE 693 and superior electrical characteristics.
- Porcelain is able to withstand long-term outdoor exposure without significant contamination collection, deterioration, de-lamination and other performance problems.

## HANDLING

- User is able to lift bushings from flange and / or porcelain making for shorter installation periods and less risk to bushings, related equipment and substation personnel.
- Porcelain sheds will not tear or break from lifting.

## STORAGE

- PCORE PRC® & POC® bushings are able to be stored short-term and long-term without protective measures and / or high maintenance costs.
- Bushing sheds are not prone to bird and / or rodent damage while kept in inventory.

