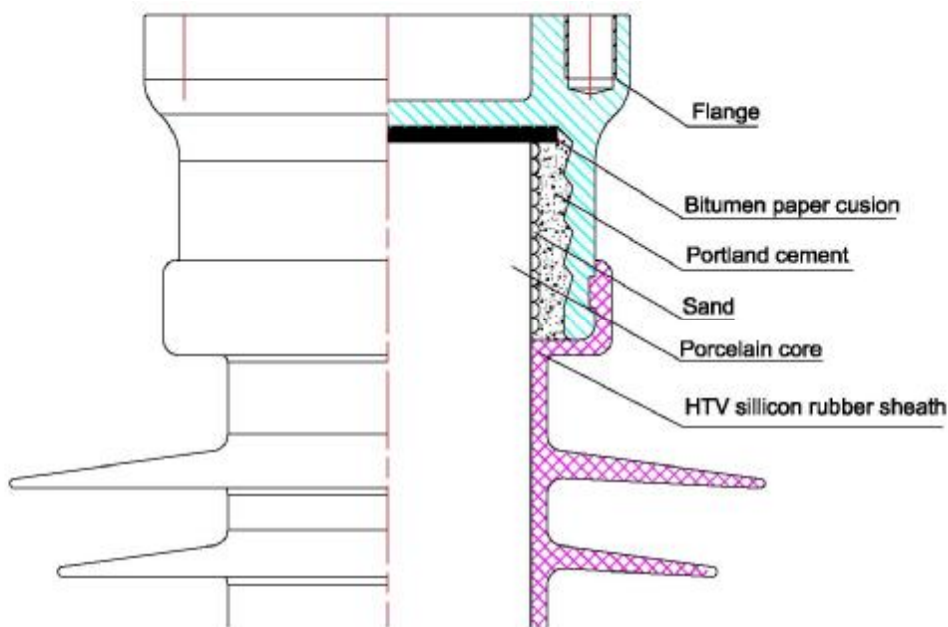


# ANTI-POLLUTION TYPE COMPOSITE POST INSULATOR WITH PORCELAIN CORE

## Introduction

Composite Post Insulator with Porcelain Core is consisting of porcelain core, sheds and metal fitting. The inner insulation is made of high-strength porcelain by isostatic pressing processing technology, and bears the whole mechanical load in the running. Shed is made of composite material and the raw material is silicone rubber by the high-temperature injection technology, it has provided insulation and necessary creepage distance, to ensure the composite post insulator running long-term and safety in the atmosphere environment. When the porcelain insulator breaks due to the brittleness, the wrapping to porcelain core by shed can reduce the harmful influence to the workers at working site and other electrical equipments around.

## Structure:



Composite post insulator with porcelain core was developed at 1998, and got the National new production award at 1999, and registered the National new production patent at 2000.

With the development and prosper of domestic manufacturing of machines and equipments, the domestic manufacturing of large scale rubber injection machines has greatly reduced the procuring cost of production equipment, through the 10-year constant efforts of the developing crew, and the breaking through of the bottom neck problem on the surface connection of porcelain and silicon rubber, composite post insulator with porcelain core has developed greatly.

The application field has boosted from the original Isolators on 110kV ~ 220kV AC systems to Isolators on 110kV ~ 1000kV AC and DC systems, supporting of large electric equipments(For example: Shunt reactors) and other fields. In the meantime, it has gained almost ten National invention and utilizable new patent right awards.

Composite post insulator with porcelain core has gained the reorganization from many international electric equipments manufactures (such as Siemens, ABB and GE), and developed a more comprehensive technical cooperation with them.

### **Standard applied:**

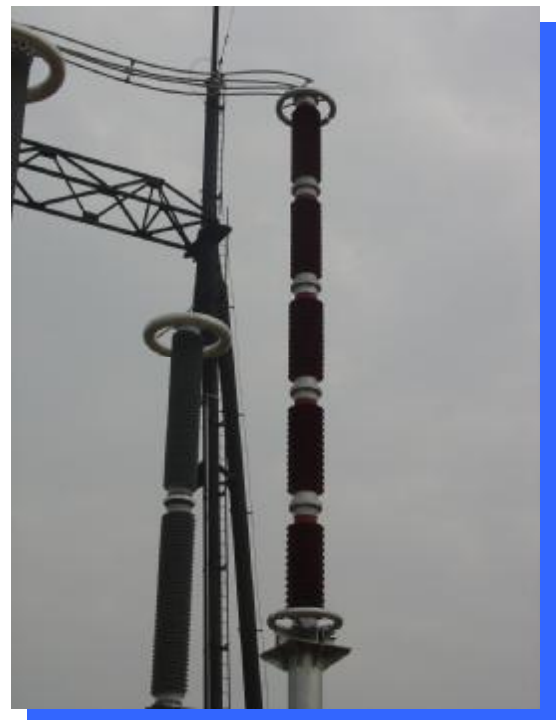
IEC 62231: 2006, MOD Composite station post insulators for substations with a.c. voltages greater than 1 000 V up to 245 kV - Definitions, test methods and acceptance criteria

GB/T8287.1-2008 (idt.IEC 60168: 2001, MOD)Indoor and out door post insulator for systems with norminal voltage greater than 1000V-part 1:The test methods of porcelain and glass insulator

GB/T8287.2-2008 (idt. IEC 60273: 1990, MOD) Indoor and out door post insulator for systems with norminal voltage greater than 1000V-part 2:Dimensions and characteristics



500kV shunt reactor supporting composite post with porcelain core



±500KV composite post with porcelain core in service at Guangzhou



$\pm 800\text{kV}$  composite post insulator with porcelain core finished its site installation at the first  $\pm 800\text{kV}$  DC electric transmission project in the world.(Chuxiong, Yunnan—East Guangzhou)



220kV composite post insulator with porcelain core in service at Xingye Substation in Guangxi.



110kV composite post insulator with porcelain core