Chapter 1

Insulator Definition

1.4 Insulator Material

By Orient Power
Types of Insulator material:

- **Porcelain insulator**
  
  High quality aluminum oxide porcelain
  
  C110, C120, C130
  
  Brown or grey glazed
  
  Wet-process porcelain

- **Composite insulator**
  
  HTV Silicone Rubber
  
  Fiberglass reinforced core rod
  
  Cast or forging steel end fittings
  
  Aluminium grading rings if applied

- **Plastic insulator**
  
  HDPE: high density polyethylene

- **glass insulator**
  
  High strength toughened glass

**How to choose insulator material?**

Each material has its advantages and disadvantages, so the insulator material selection depends on its characters and the requirement of customers.

Porcelain is heavy than other material and hard to transport and install, but it is cheap and has a long-life performance. Silicone rubber insulator is easy to install, excellent pollution performance, excellent mechanical properties, resistant to weathering, resistant to vandalism, resistance to damage and so on. Glass insulator has a better strength.