Chapter 5
Composite Insulator Design

5.1 What is alternative sheds

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What is alternative sheds

Fiberglass rod core, silicone rubber sheds, and metal end fittings are main component for composite insulator.

Composite coat and silicone rubber sheds:

Coat is the external insulation part for composite insulator, is used to provide necessary creepage distance and protect the core rod is not affected by climate.

Silicone rubber sheds as a prominent part of the coat to increase the creepage distance.

What is shed type for composite insulator?

- Alternative sheds:
- Equal sheds:

Picture 1 on the left: alternative shed insulator

Picture s on the left: equal shed insulator

What is the alternative sheds?

Different size of shed mixed together

- One big shed plus one small shed
- One big shed plus two small sheds

What is the advantage of the alternative sheds?

Alternative sheds is a good way to increase Creepage distance of a polymer insulator on the same length than equal shed, so normally alternative sheds is also called anti-pollution composite insulators.

Another advantage is of the alternative sheds is to compare porcelain insulator. Composite insulator makes the Creepage changing easily by adding more sheds or adjust the shed diameter, so it is better to cope with hard environment by changing easily.