

Chapter 4 Composite Insulator Manufacturing Process

4.7 Injection Vulcanization Process

By Orient Power

Injection Vulcanization Process





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There are two common ways of silicone rubber vulcanization process for composite insulators:

- ✓ Compression molding process
- ✓ Injection molding process

How to choose the suitable way of vulcanization when manufacture a composite insulator?

Since injection vulcanization process is better to make position of the reinforced fiber glass core rod, and especially when the insulator is too long, it must need injection molding to make the insulator not off center. Normally above 110kv will use injection molding, but injection way can be used on any voltage of insulators, and it is suggested when producing.

What is injection vulcanization process:

Injection is the way to make the silicone rubber compressed on the reinforced fiberglass core rod. The process is a chemical reaction of silicone rubber, which is called vulcanization. This reaction will happen when silicone rubber under a temperature above 100 degree, the silicone rubber then will have performance of anti-climate.

Advantages of injection vulcanization process:

- ✓ Higher degree of automation
- ✓ Automatic air venting
- ✓ No need silicone rubber tailoring
- ✓ No need silicone rubber setting
- ✓ Easy to do position of fiber glass core rod
- ✓ Multi-cavity structure per mold