Chapter 4
Composite Insulator Manufacturing Process

4.3 ECR Fiber Glass Extruding Process

By Orient Power
Fiber glass core rod is also called fiber glass reinforced epoxy resin core rod. It is the main material of composite insulators.

Main material for fiber glass rod:

- Epoxy resin
- Fiber glass

Manufacturing process of fiber glass rod:

Put the fiber glass into the epoxy resin and add some other additives under certain high temperature to extrude the fiber glass rod. The mold size decides the different size of rod.

After get the certain diameter of ECR fiber glass rod, the following process need be done:

- Cutting according to the insulator length
- Abrasion to make it suitable for apply bond
- Cleaning

Different types of fiber glass rod:

- Normal fiber glass rod
- Anti-high temperature fiber glass rod
- Anti-acid ECR fiber glass rod

Tests to be done on fiber glass rod:

- Tensile failing
- Dye penetration test,
- Boiling test

Orient Power fiber glass rod tensile can reach 1700Mpa vs standard 1000Mpa.