

Hybrid Insulator

HYBRID SUSPENSION INSULATORS

[Background research & development]

- Weak point of polymer insulator
 - FRP rod which is used the core is main factor of environmental pollution.
 - Difficult fitting technics of FRP rod and fitting metal.
- Weak point of porcelain insulator
 - Handle with care because it is breakable.
 - Hard installation because of heavy weight.



[Tyco Electronics' hybrid Line Post]

[Present situation]

Hybrid type insulators are being developed in the company of Germany, and etc.

Some of products are installed the electric line.

[Target of research & development]

Combine the advantage of porcelain and polymer insulator.

- Light weight
- Excellent anti-pollution
- High reliability
- Easy replacement with other products.



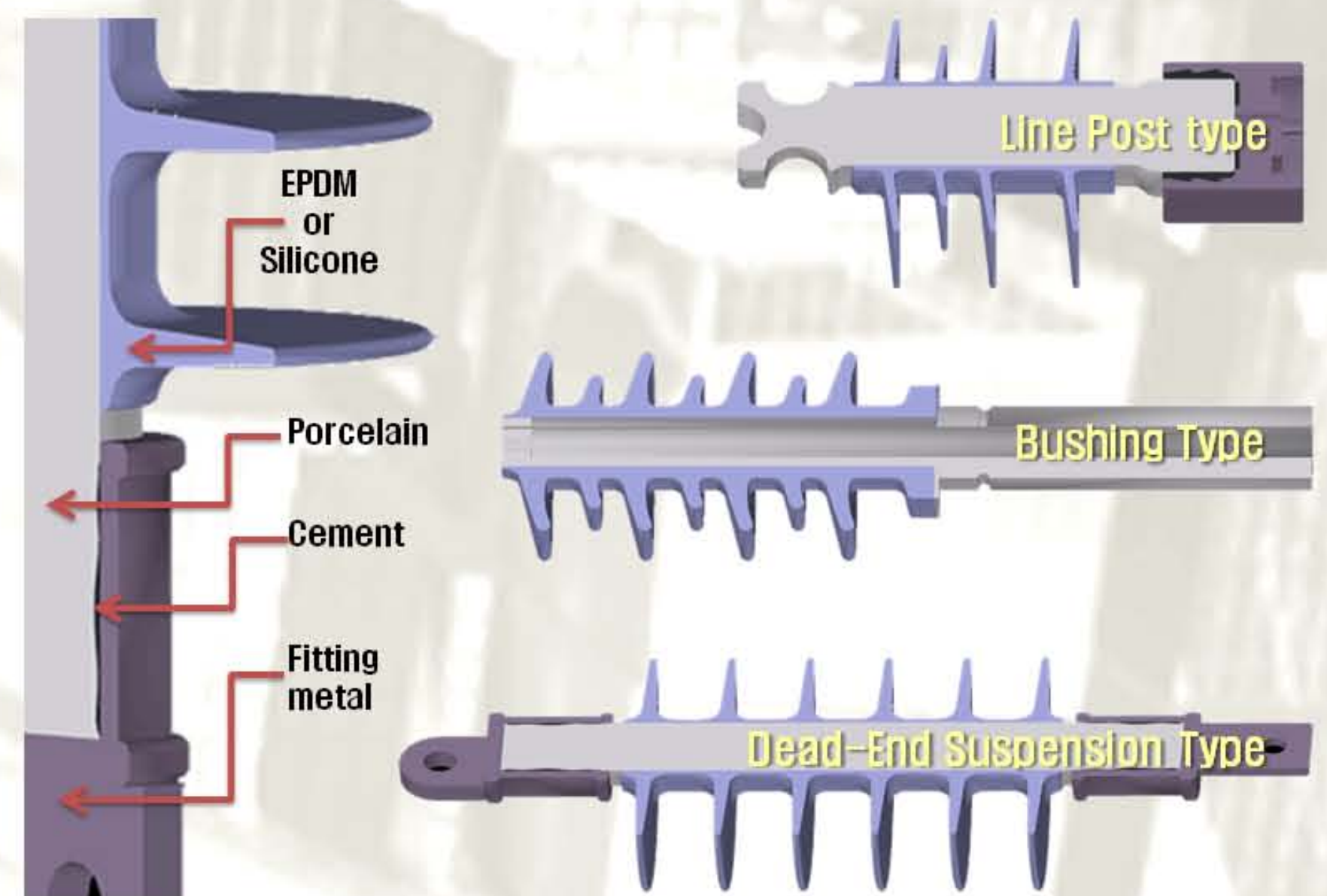
[Aim of research & development]

Korea Electric Power Corporation demands new product development and our company has various patent license, original technology(material mix technology, design technology), manufacturing know-how and inspecting devices.

We develop high reliability(excellent mechanical & electrical property) and economical product.

[Specification of 15,000lbs Hybrid suspension insulator]

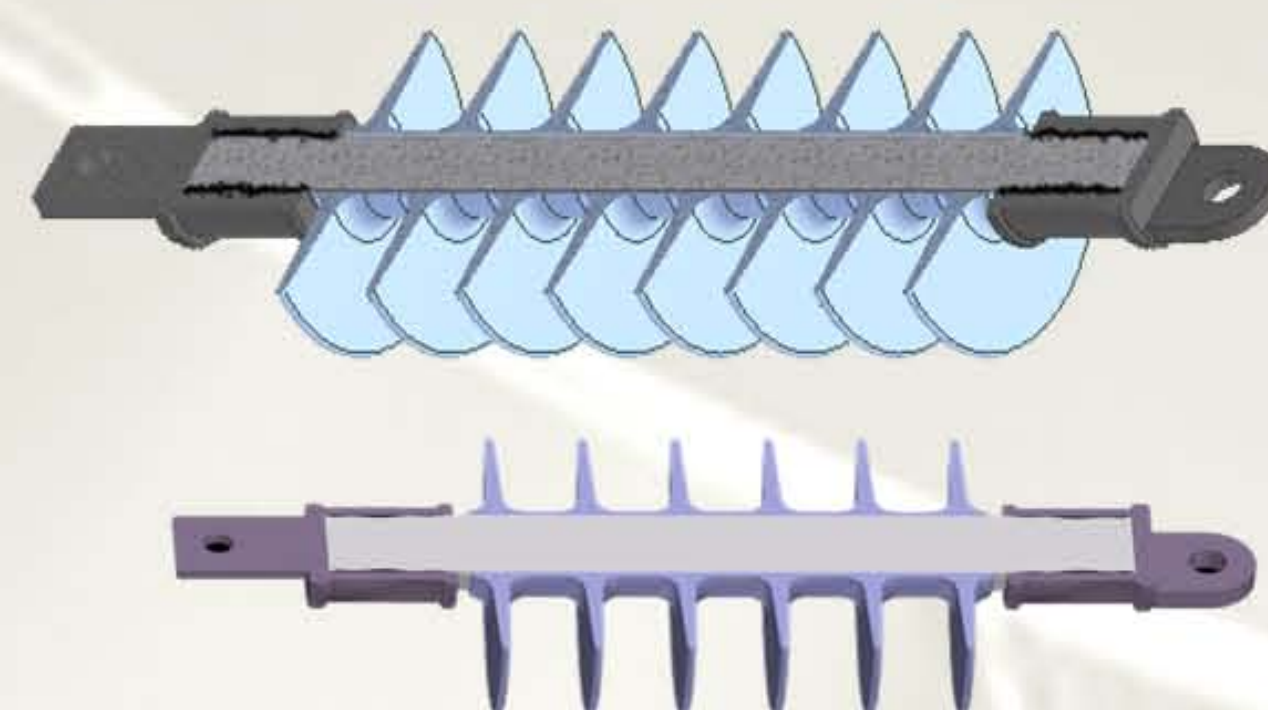
Test item		Rating
Power-frequency puncture voltage, kV		90
Electro-mechanical failing load, kgf		7,000
Time-load, kgf		4,600
Tensile proof load, kgf		3,500
Low-frequency Dry flashover voltage, kV		65
Low-frequency Wet flashover voltage, kV		35
Critical impulse flashover voltage[$1.2 \times 50 \mu s$], kV	Positive	115
	Negative	115
Radio Influence	RMS to ground (rms), kV	7.5
Voltage	Max. RIV, μV at 1000kHz	50
Artificial contamination[S.D.D]		0.125mg/cm ²



[Various type of WEP' s Hybrid products]

[Contents]

- Developing high-strength alumina porcelain rod.
- Developing housing which inject the EPDM or silicone rubber on porcelain rod.
- Use the portland cement in the assembling.



Dead-End Suspension Type A

Dead-End Suspension Type B

[Developed item: Hybrid suspension insulator]

[The result of study and analysis of Hybrid suspension insulator]

