Porcelain Insulator

Ball and Socket Type Suspension Insulators For UHV

[Overview]

Insulator is widely used insulation product on overhead line, classify suspension insulator; which is perpendicularly connected to support structure, strain insulator; which is horizontally support to line that is connected to tower to tower.

Depending on voltage, classify high voltage insulator, extra high voltage insulator and ultra-high voltage insulator in distribution(transmission) line.

In 22.9kV distribution line using 70kN suspension insulators, in 154kV transmission lies (high voltage) using 120kN and 160kN suspension insulators. In 345kV transmission line (extra high voltage) using 210kN, 300kN insulators, in 765kV transmission line(ultra-high voltage) using 300kN, 400kN suspension insulators.

Also, it used anti-pollution type insulator in the pollution areas, anti-pollution property is excellent because the leakage distance is 1.5 times longer than normal type insulator.

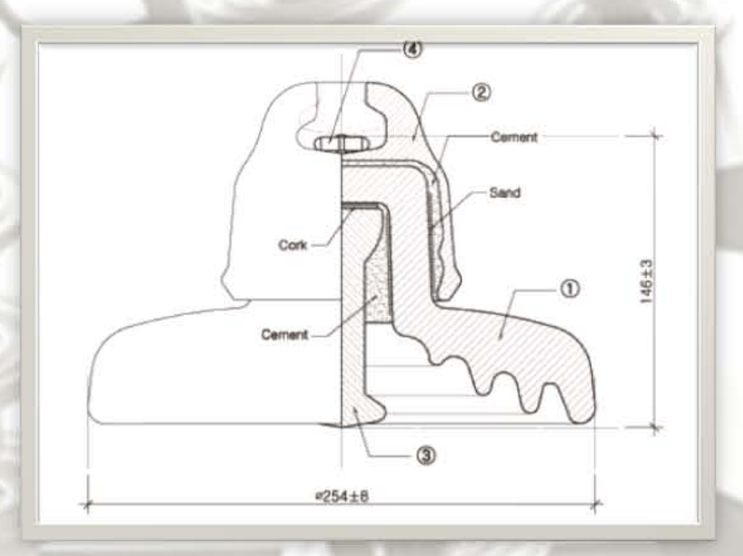
[210 kN]

[300 kN]

[400 kN]

[Applied Iron tower1]

[Applied Iron twer2]



[Drawing: UHV suspension insulator]

[Specification]

Test item		Rating				
		120KN	160KN	210KN	300KN	400KN
Low-frequency Dry flashover, kV		80	80	80	90	95
Low-frequency Wet flashover, kV		50	50	47	53	53
Critical impulse flashover voltage (1.2 x 50㎲), kV	Positive	125	125	125	140	140
	Negative	130	130	130	145	150
Power-frequency puncture voltage, kV		110	110	140	140	140
Radio Influence Voltage	rms to ground (rms), kV	10	10	10	10	10
	Max, RIV, dB at 50kHz	37	37	37	37	37
Electro-mechanical failing load, kgf		12,000	16,500	21,400	30,600	40,800
Impact test, kg-cm		69	104	115	115	115
Tensile proof load, kgf		6,000	8,250	10,700	15,300	20,400
Surface creepage distance, mm		Min. 280	Min. 280	Min. 370	Min. 460	Min. 525

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