



Insulator

What is an insulator?

The insulator is one of the electrical insulation equipment used to preserve and isolate the conductors under voltage. This electrical insulation is necessary for power systems to provide reliability.

Application of insulators in the electrical industry

The main application of insulators is in electric substations, transmission lines, and electrical panels, where different insulators with unique shapes are used according to the atmospheric conditions, pollution, humidity, tolerable voltage, conductor weight, and other similar cases.



Application of insulation in high voltage systems

In power transmission lines, it is necessary to isolate the conductor under voltage from the column (tower); high voltage insulators are used for this isolation.

The main task of high voltage insulators is to isolate the conductor from the tower without having a leakage current. Also, the insulators must withstand the mechanical force applied by the weight of the conductor and the incoming forces due to atmospheric conditions.

The type of high voltage system insulators

Insulators used outdoors for transmission lines and power stations are made of porcelain, glass, and composite materials. According to the voltage and environmental conditions, they use insulators with suitable materials.

Types of high voltage insulators

Airline insulators

Reliable insulators

Bushing insulators



List of some products

- Low voltage double-groove insulators
- Types of ceramic needle insulators (suspension- tension)
- Types of ceramic plate insulators
- Types of silicone insulators (suspension-tension)
- Silicone interphase spacer
- Types of composite insulators (suspension- tension)

Types of airline insulators

1. Needle
2. Plate suspension
3. Tension
4. Restraint
5. Cylindrical suspension
6. Wheel

IRUS Energy Co. has been one of the leading suppliers of insulators for airline insulators and power substations in the country since 2001. The range of insulators supplied by this company includes low voltage, medium voltage, and high voltage insulators up to KV400 for use as high voltage bushings and ceramic, glass, and composite insulators in distribution and transmission lines. At the same time, this company is ready to provide new products according to the needs and specifications of the esteemed customers.