



ELEKTROPORCELÁN LOUNY a.s.

TOP 10 Advantages of porcelain

Do you know the advantages of porcelain insulators?

- 1. Environmentalfriendly. At its disposal, the porcelain insulator is not dangerous waste**
It is manufactured from natural materials by simple blending and curing; it may be stored in dumps with other waste. It may serve as a recycled material for the production of ceramic and similar products.
- 2. In comparison to the polymer, electrical strength of porcelain is higher: 25+ kV/mm v. 20 kV/mm at the polymer**
The porcelain insulator in the dry state as electric insulation material has better electrical properties than the polymer, type electrical tests show better results, giving longer useful life in terms of loads generated by electric charges and other temporary electrical phenomena.
- 3. The porcelain insulator has demonstrably higher resistance to degradation of the surface, does not degrade or carbonate during charges; the conductive path is created very slowly in comparison of the surface of a composite-material insulator**
High thermal resistance and strength, ceramics is resistant to temperatures as high as 1000°C: the surface is resistant to any type of degradation within the temperature range. The surface is stable against the effects of UV radiation.
- 4. The ceramic material is resistant to rodents, termites, birds and other animals capable of compromising the integrity of polymers**
The surface of the insulator is highly glazed and hard, making the product unfavourable to the tastes of the fauna.
- 5. The ceramic insulator has a wide scope of application: Contactors, disconnectors, equipment transformers, condensers, grommets also with extreme surface, atypical insulators (filters)**
The features of high plasticity during production, the possibilities of precision grinding and quite easy cementation and bonding with excellent mechanical properties permit that a multitude of shapes be created and used in any type of application.
- 6. The ceramic insulator is suitable for extreme hot/cold changes in the environment. It is suitable for environments with dust, salt and high moisture, or for combination of all of the above**
The highly glazed surface gives the product better self-cleaning properties in high-pollution areas. The product shows stable results in charges and short-circuit in this type of environment; it is highly resistant to corrosion in acidic as well as caustic environments.
- 7. The ceramic insulator does not suffer from defects in the ceramics-to-metal interface**
The combination of the ceramic insulator with cast-iron or aluminium structures using traditional cementing agents is resistant to transition phenomena during the discharge or brush discharge.
- 8. The ceramic material offers very high mechanical strength under pressure and hardness**
The ceramic insulator does not deform unless external force is deployed. Long useful life can be guaranteed of lengths up to 40 years. Therefore, many users have provided long-term operational references in a number of applications.
- 9. The design is modified to suit the environment**
The product offers many shapes during production; glazing uses a wide scale of colours based on the needs of the customer, for example grey or sky blue.
- 10. The ceramic insulator is nicer to the eye**
It has a timeless design.