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#### LA GRANJA INSULATORS

# **LaGranja** Insulators

# **Quality Toughened Glass Disc Insulators**

LaGranja glass discs provide the most cost effective transmission insulation technology when considering safety, reliability and resilience.

#### Features and benefits

- Glass shells undergoing three thermal shock cycles followed by a soak test
- Automation incorporated with cap and pin assembly and using alumina cement - hot cured
- Cap flocking (polyamide fibres) incorporated in caps reducing Corona and RIV
- Approvals for use with the most demanding utilities in the world
- Almost 90 years of manufacturing, headquartered in Spain



#### Standard profile insulators

These are the most common and most frequently used insulators for lines in low pollution environments, where they perform well due to their small, well-spaced ribs and a creepage distance which exceeds the requirements of the IEC 60305 and ANSI C29.2 standards.



We offer two different shapes which are recommended for areas with medium to heavy pollution. Their longer creepage distance, which exceeds the requirements of the IEC 60305 standard, is achieved due to deeper ribs and reduces the effects of pollution without increasing the length of the string.



Due to their completely flat dielectric profile, this type of insulator is highly recommended for desert areas because the absence of ribs helps to reduce the accumulation of residues, particularly on the inner surface of the dielectric. At the same time, its shape permits regular and constant airflow which enables the wind to perform a self-cleaning process.

These can also be used in areas of critical industrial or mixed pollution (desert and industrial pollution).



<sup>\*</sup>Z = Anti-corrosion zinc sleeve collar on pin













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## Factory applied RTV silicone coating

Silicone-coated insulators offer an excellent alternative which guarantees optimum performance for high voltage overhead lines in areas with heavy pollution. They minimise leaking currents and thereby reduce operation and maintenance costs. The product used to coat the insulators is Room Temperature Vulcanization (RTV) silicone which contains mineral fillers embedded in the silicone itself. SILGLASS® insulators are made using Si-COAT® RTV Silicone HVIC Technologies by CSL Silicones Inc.

This silicone increases the hydrophobic nature of the insulator's surface, with a Lotus leaf effect, thereby improving its performance in polluted areas. Furthermore, the fillers absorb the energy of any possible electric arcs and serve to protect the integrity of the coating. Silicone-coated insulators are an economical solution because they eliminate the need to regularly clean glass insulators whilst still maintaining the mechanical reliability that glass suspension insulators have demonstrated over the years.

Industrial application pre-coated insulators:

The inherent characteristics of an industrial process and the quality and process controls done in LGI exceed far beyond the most demanding requirements of the RTV silicone application guide. The industrial application allows to obtain even and homogeneous coating thickness, minimizing waste of material and ensuring an excellent adherence to the glass surface. This translates into a long service life.

Silicone-coated insulators are the result of bringing together high quality insulator technology and high performance silicone, combined by the most advanced application technology. It has the heritage of mechanical reliability together with excellent performance against pollution.

This is a fantastic solution being used the more and more on a large scale in the world's main transport and distribution networks.

- Combines toughened glass with hydrophobic properties of polymers
- Available fully coated or undercoated shell
- Suitable in severely polluted areas where washing was previously required

Capacity (kN)	STANDARD	ANTI POLLUTION	OPEN PROFILE
	Part no.	Part no.	Part no.
120	E-120Z-146_SIL*	E-120PPZ-146*	E-120PPZ-146_SIL*
160	E-160Z-146_SIL* E-160Z-170_SIL*	E-160PZ-146* E-160PZ-170*	E-160PZ-146_SIL* E-160PZ-170_SIL*
210	E-210Z-170_SIL*	E-210PZ-170*	E-210PZ-170_SIL*

\*Z = Anti-corrosion zinc sleeve collar on pin

# SILGLASS® THE SMARTVALUE SOLUTION





High solids content RTV Silicone "Si-COAT 570 hs", with optimally-sized alumina trihydrate (ATH) particle including good tracking and erosion resistance & excellent hydrophobicity

### SHIPPING - SPECIAL CARE IS TAKEN

Insulators are packed in short strings inside wooden crates which are custom-made for each model. The crates also have a plastic strap or band to guarantee stability and easy handling. LGI has a reinforced packing system that provides additional protection appropriate for their surface treatment.

Special care is taken during the transport and storage of these products.



# **Contact us**

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