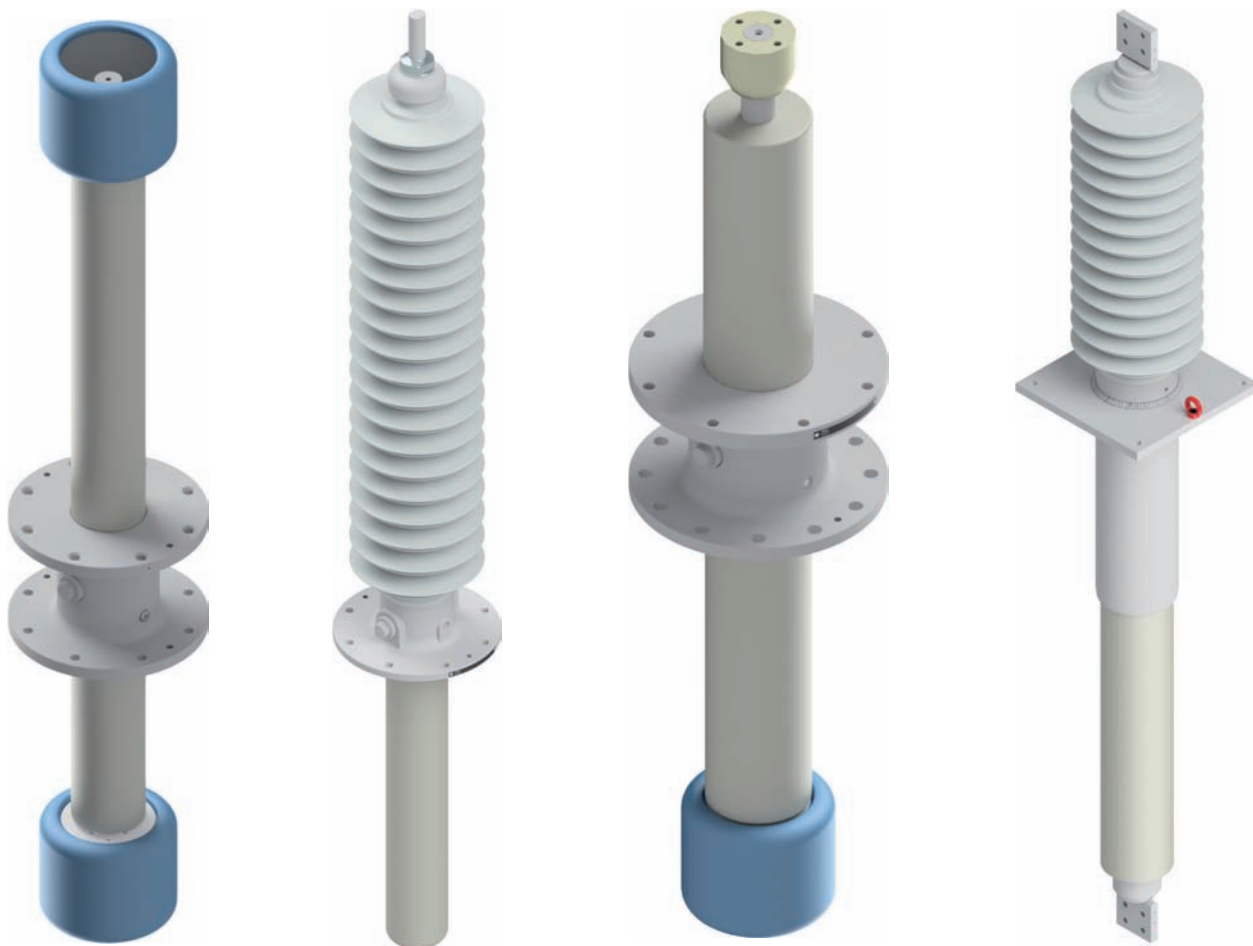


Your independent busbar and bushing supplier



Bushings with Resin Impregnated Synthetic insulation, RIS

Dry-type insulation, paper free, the no-compromises solution for safer applications



inconsistent material parameters, namely the moisture content. Too much moisture will cause high loss values, degrade the insulation system of the bushing, and possibly cause a premature failure. In order to compensate this, modern RIP bushings utilize drying systems during the manufacturing process. For shipment and storage, plastic bags with a dessicate bag or oil containers are used to protect the bushing.

Finding an alternative material to paper was not an easy task, though, due to the fact that paper provides good insulation characteristics and has been used in bushing and transformer manufacturing processes for many years with continual optimization.

Several experimentations were necessary to find an optimal successor.

MGC undertook this task by performing tests on many materials in order to find a better solution for paper. After research, MGC found a special polyester

structural material which is an excellent alternative to paper. MGC performed a sequence of tests to qualify this solution:

Routine and type tests according to IEC 60137-2008. Specifications for the type tests were beyond the requirements of the standard.

In addition several special tests have been developed to challenge this solution.

- Adhesion test of direct moulded silicone on the RIS insulation
- Special humidity test
- Dynamic cantilver load tests
- Temperature cycle test
- Accelerated ageing test under high voltage

The new Resin Impregnated Synthetic RIS is now developed and part of MGC products portfolio.

Continuous improvement of proven technology

MGC, Moser-Glaser Company, pioneer in the RIP insulation has always been focused on the development of the dry type insulation.

After more than 60 years of applying RIP insulation on our products, time was coming to reach the next level of insulating material.

MGC launched an extensive research and development program in the early 2000's to determine how to improve the materials and performance using the long experience in the company.

The main performance and life expectancy restraint in RIP condenser bushings was found to be the paper itself. Paper is an organic material with





Cut from a RIS active part



Cut from a RIP active part

An all-inclusive solution

The result of this project is an ideal association of existing epoxy resin technology and its appreciated characteristics...

- Partial discharge free
- Installation at any angle
- Self-extinguish material (no risk of fire)

enhanced with new features:

- Shorter production cycle
- Easier handling for long transportation and storage
- Reduced tan delta and capacitance
- Not affected by humidity

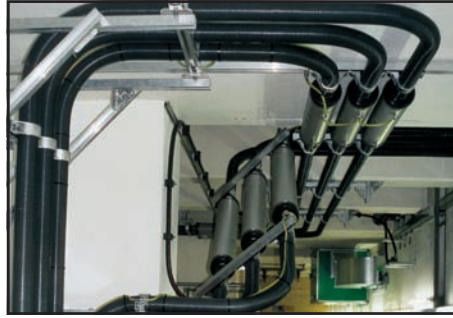
For outdoor application MGC standardized a direct-moulded silicone insulator to provide an ultimate safer solution.

MGC could maintain its strength by providing a high level of customization. Therefore RIS technology can be applied to the standard range and also can interchange all existing designs. There are no limitation as for the

diameter and length. What you get today with RIP technology can be offered with RIS.

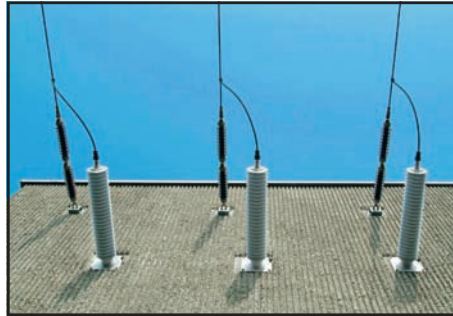
With this important new milestone, MGC is now ready to offer the bushing of the future.





DURESCA®

Busbar system



DURESCA®

Wall bushings



TIRESCA®

Busbar system



MGC Moser-Glaser Ltd.
Lerchenweg 21
4303 Kaiseraugst / Switzerland

Phone +41 61 4676111
Fax +41 61 4676110
E-Mail info@mgc.ch
Internet www.mgc.ch

Member of PFIFFNER Group

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TRAVESCA®

Transformer bushings



GASLINK®

SF₆ insulated busbar system