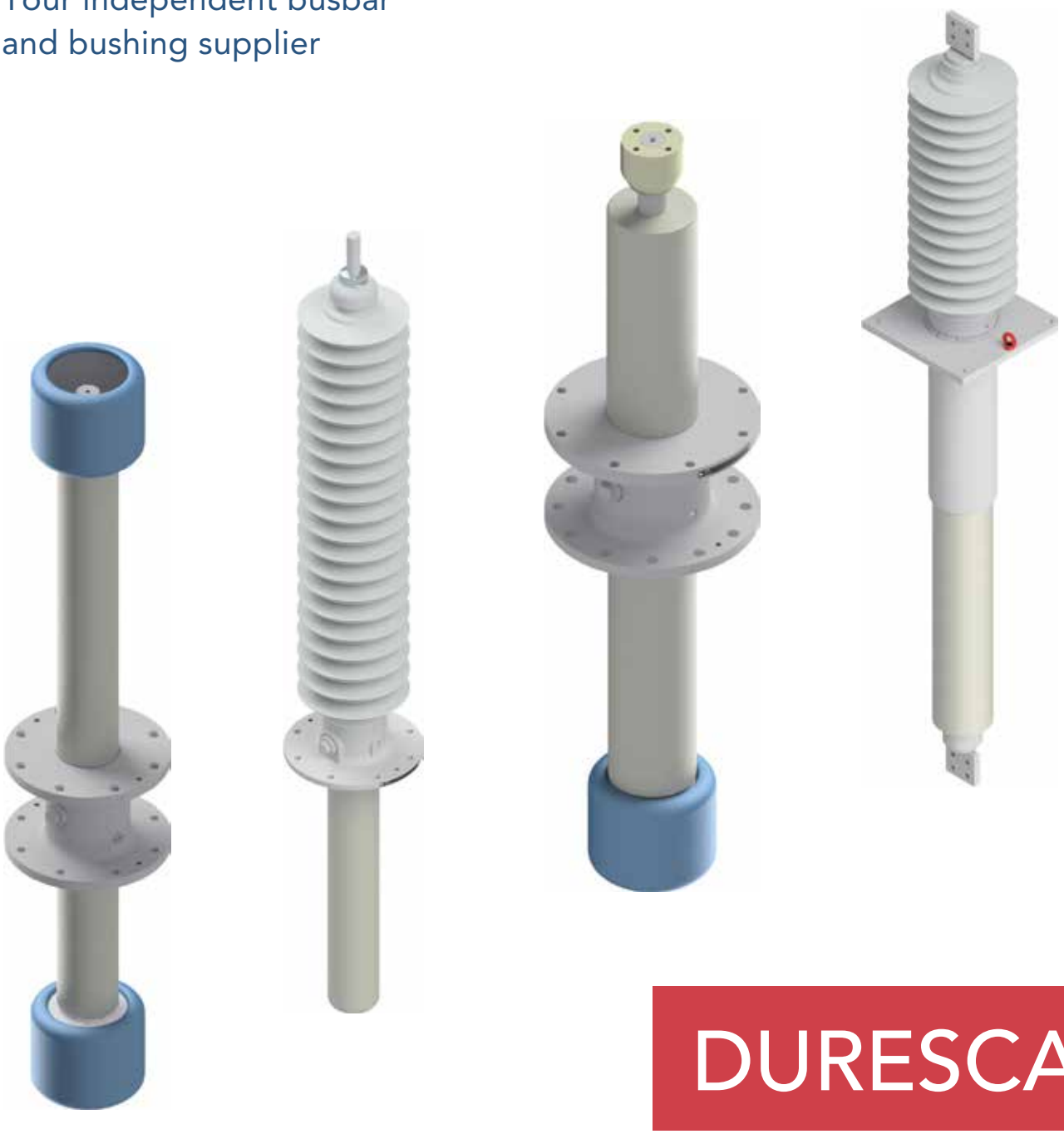
Your independent busbar
and bushing supplier



DURESCA®

Bushings with Resin Impregnated Synthetic insulation, RIS

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

MOSER GLASER

Current and voltage – our passion

DRILCO

Continuous improvement of proven technology

Moser Glaser, 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.

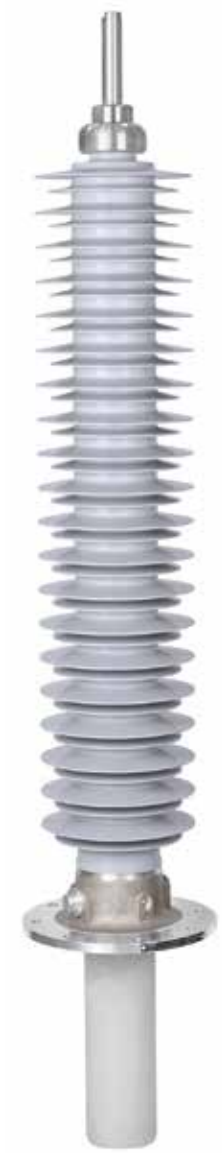
Moser Glaser launched an extensive research and development program in the early 2000's to determine how to improve the materials and performance using the long experience in the company.

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

Moser Glaser undertook this task by performing tests on many materials in order to find a successor to the paper. After research, Moser Glaser found a special polyester structural material which is an excellent alternative to paper. Moser Glaser 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 cantilever load tests
- Temperature cycle test
- Accelerated ageing test under high voltage

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

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 transportationand storage
- Reduced power factor and capacitance
- Not affected by humidity

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

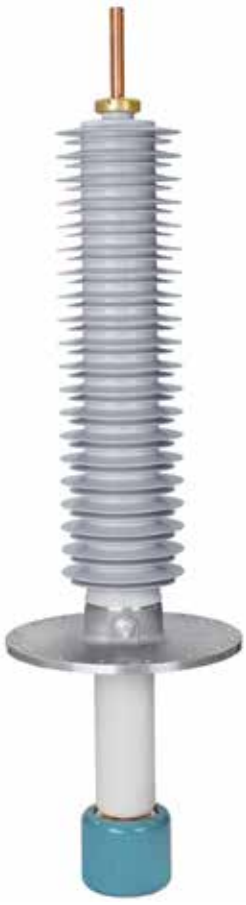
Moser Glaser could maintain its strength by providing a high level of customization. Therefore RIS technology can be applied to the standard range and also can interchange all existing designs. There are no limitation as for the diameter and length.

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

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

Cut from a RIS active part

Cut from a RIP active part



DURESCA®
Busbar system

TIRESCA®
Busbar system

GASLINK®
SF_6 insulatet busbar system

DURESCA®
Wall bushings

DURESCA®
Transformer bushings

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Current and voltage – our passion

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