

ELECTRIC & HYBRID

MARINE
RAIL
POWER GENERATION
RENEWABLE ENERGY



GEISLINGER[®] 
COUPLINGS AND DAMPERS. **BUILT TO LAST.**

BUILT TO LAST.

THE LIGHTWEIGHT AND COMPACT GESILCO® DESIGN PAVES THE WAY FOR INNOVATIVE SOLUTIONS FOR YOUR ELECTRIC & HYBRID DRIVE SYSTEM.

For more than 60 years Geislinger has been driven by its inventive spirit to develop innovative, individually customized coupling, damper, and shaft solutions for drive systems.

Geislinger is not only the expert in torsional vibration solutions, but also has more than 25 years of experience in manufacturing products made from fibre composites. The Gesilco® product group underlines the innovative spirit of the company.

Innovative electric & hybrid drive systems demand sophisticated solutions. Geislinger offers tailor-made coupling, damper, and shaft solutions for your drive system. In particular, the Gesilco® product line with its super lightweight displacement couplings is ideally suited for electric and hybrid applications. A weight reduction of up to 90% compared to standard solutions leads to a significant improvement in the dynamic drivetrain behavior. Electric and hybrid drive systems benefit from low, almost linear reaction forces.

The intense collaboration and exchange between the Geislinger R&D department, the production team, and our focus on tailor-made solutions gives Geislinger Gesilco® products a unique advantage.

At Geislinger, we believe that the secret to creating the best product solution for our customers is to precisely design and craft every key element. With more than 60 years of experience in manufacturing tailor-made product solutions, we have learned how to get it exactly right.



ONE CENTER. SEVEN BENEFITS.



TAILOR-MADE SOLUTION

Geislinger offers innovative, individually customized coupling, damper, and shaft solutions for your drive system. The design, size, function, and fibre orientation of your Gesilco® products can be adapted to the specific requirements of your application.



LIGHTWEIGHT AND COMPACT DESIGN

Gesilco® products are characterized by their lightweight and compact design. This results in a weight reduction of up to 90% compared to standard solutions and leads to a significant improvement in the dynamic drivetrain behavior.



LOWEST, ALMOST LINEAR RESTORING FORCES

Electric and hybrid drive systems benefit from low, almost linear restoring forces as well as from the highest torque transmission with best dynamic behavior.



ELECTRICAL INSULATION AND NON-MAGNETIC PROPERTIES

Gesilco® products offer electrical insulation and non-magnetic properties as an option, which is extremely important for many electric and hybrid drive systems.



MAINTENANCE-FREE

Our Gesilco® product range is maintenance-free and according to our company motto: "built to last". The use of advanced materials and our state-of-the-art manufacturing methods give customers a competitive edge and lead to the lowest cost of ownership.



EXTREME ROBUST PRODUCT PROPERTIES

Even under extreme conditions, the highest shock resistance of our products is a great benefit. Additionally, Gesilco® products are resistant in hot ambient temperatures.



OPTIMIZED ACOUSTIC ATTENUATION

Acoustically optimized product solutions are possible as well. The acoustic competence of Geislinger is underlined by its worldwide unique Geislinger Acoustic Test Bed.



LIGHTWEIGHT

TAILOR-MADE

PERFECT FUNCTIONAL INTERACTIONS FOR PERFECT SOLUTIONS.

Innovative tailor-made solutions with the lowest cost of ownership for electric and hybrid propulsion systems are our strength. No matter what challenge you are facing – with our engineers you will find congenial partners on your side. Benefit from these advantages:

Advanced materials:
Benefit from advanced materials such as high-grade steel, composite materials and elastomer.

Top-notch engineering:
The experienced and highly-qualified Geislinger team provides well-engineered solutions and masters all common manufacturing processes.

High manufacturing depth:
From development, design, mould design, and production, everything is handled in-house.

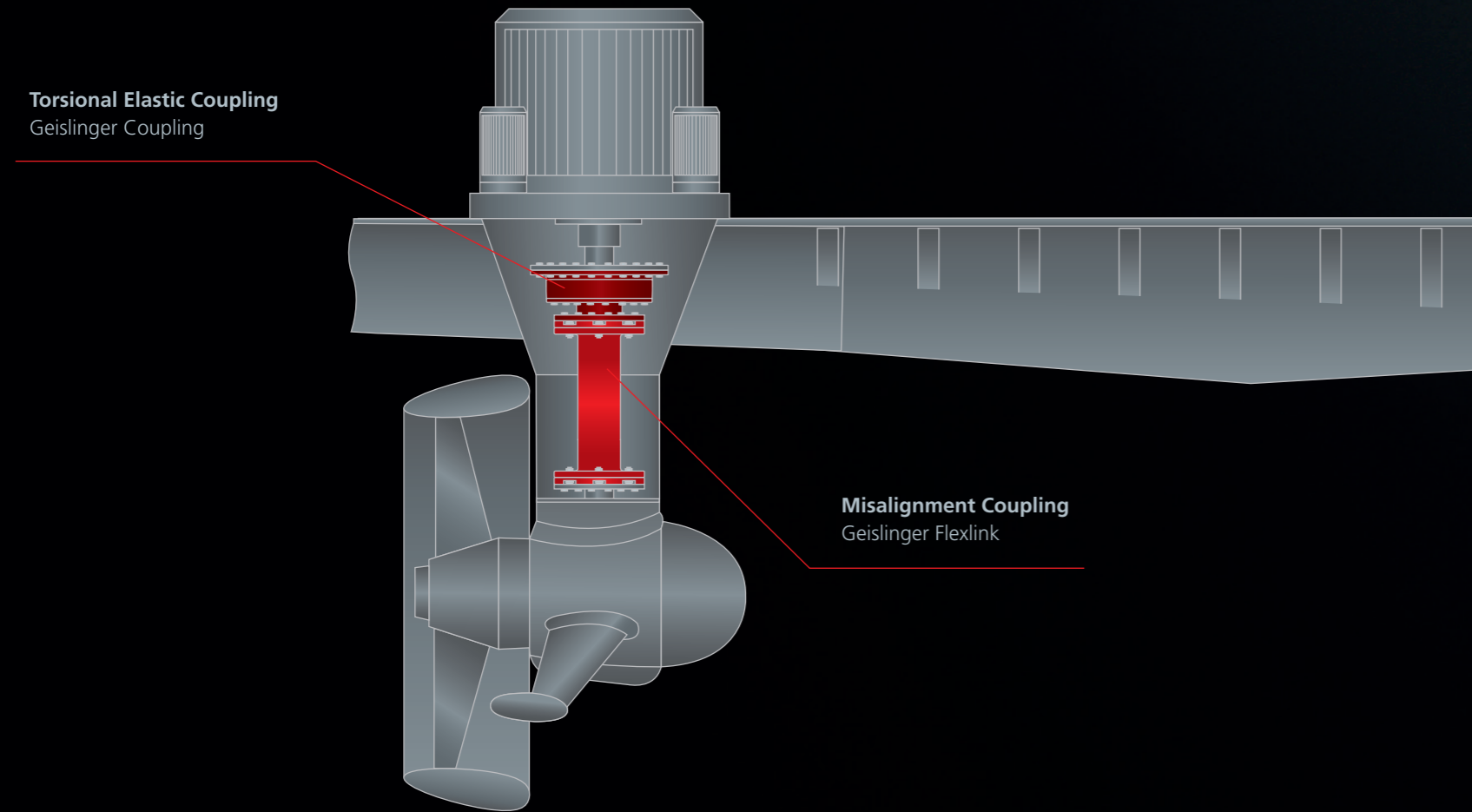
Measurement & Testing:
Ultra-modern test benches are available for our products. Benefit from the latest measurement techniques and our most outstanding software tools.

Experience:
The family-owned world market leader has more than 60 years of experience in manufacturing tailor-made product solutions for drive lines.

Tailor-made solutions:
We like to “think outside the box” and find the perfect, individually customized product solution for your individual demand.

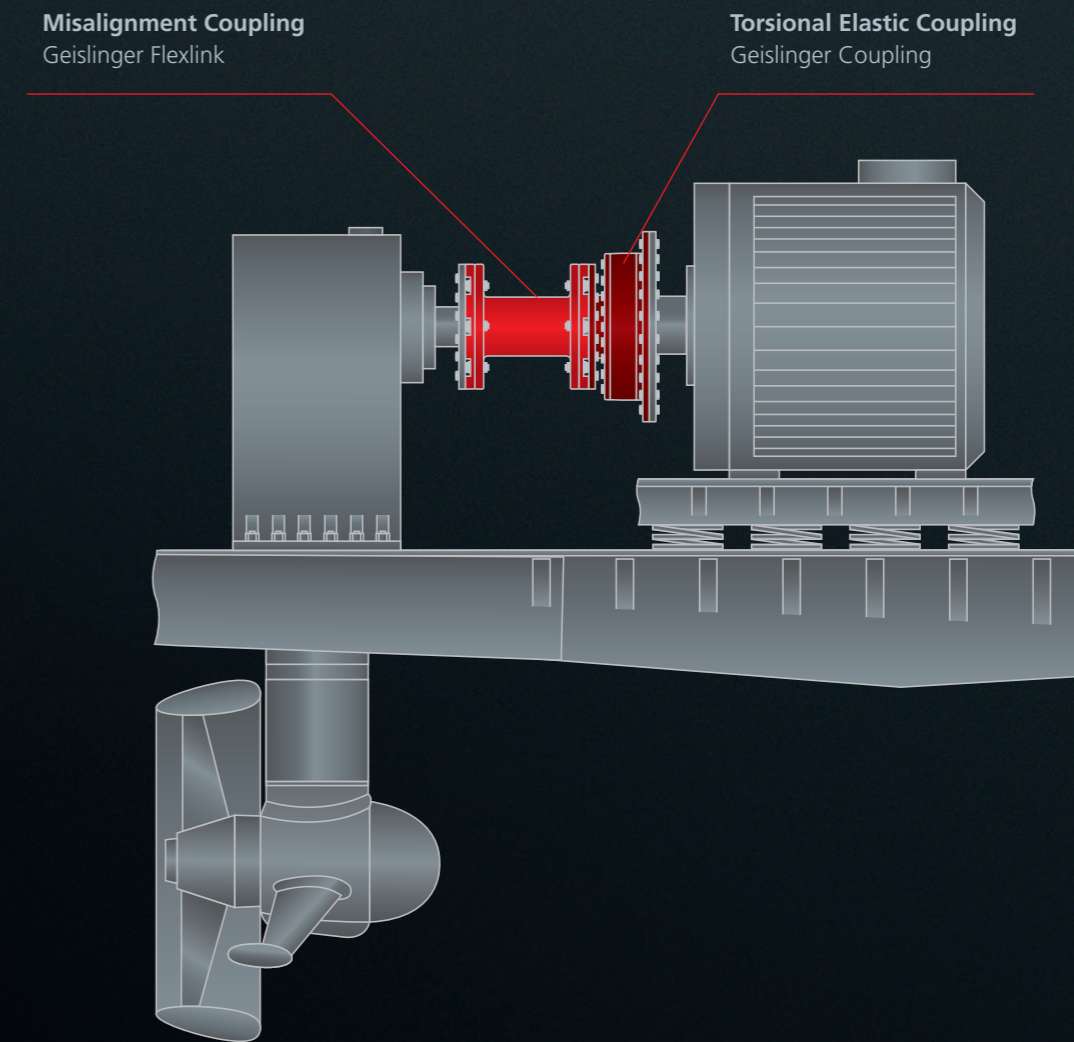
01

AZIMUTH THRUSTER DRIVEN BY AN ELECTRIC MOTOR



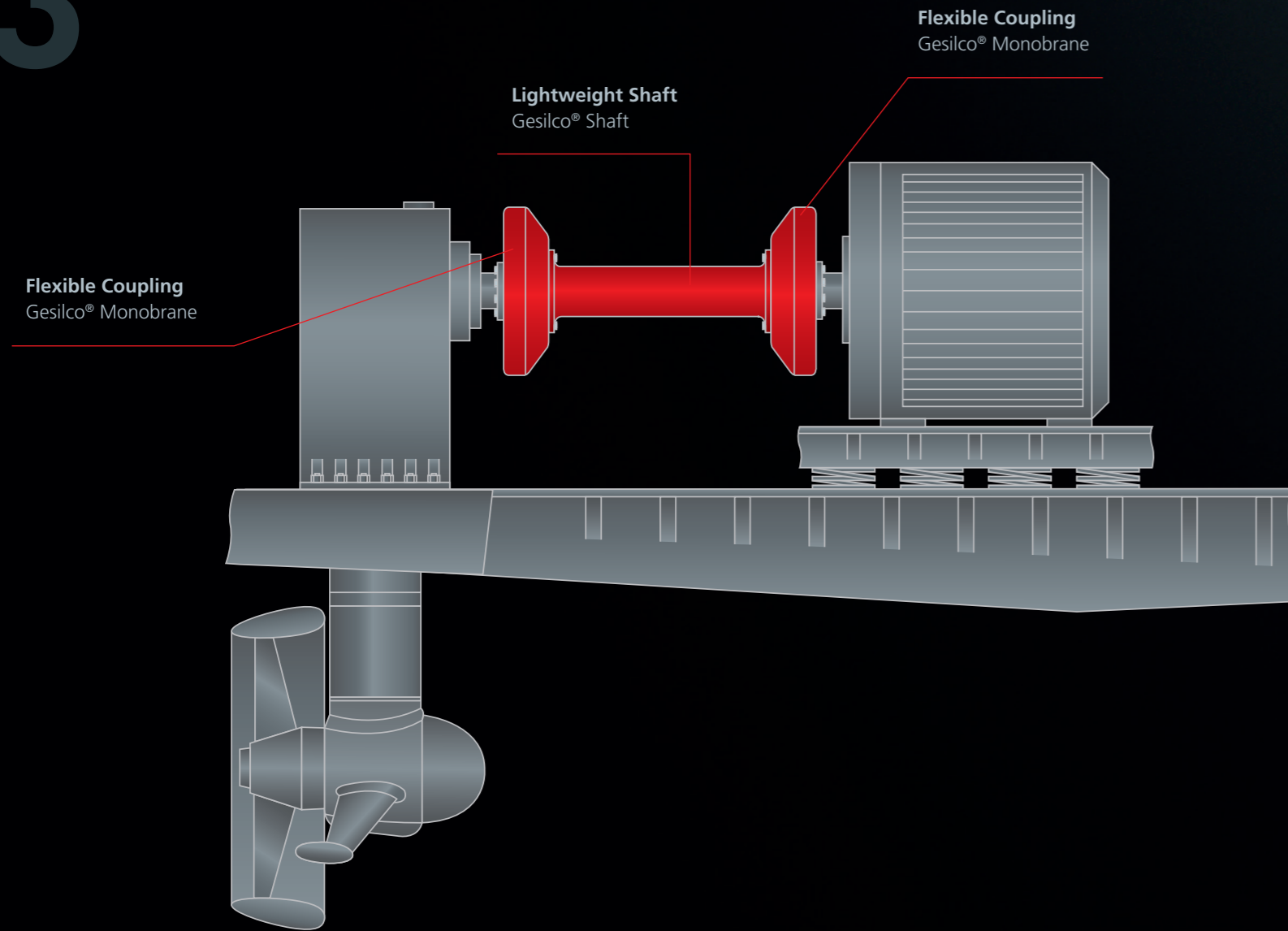
02

ELASTICALLY MOUNTED ELECTRIC MOTOR WITH A AZIMUTH THRUSTER



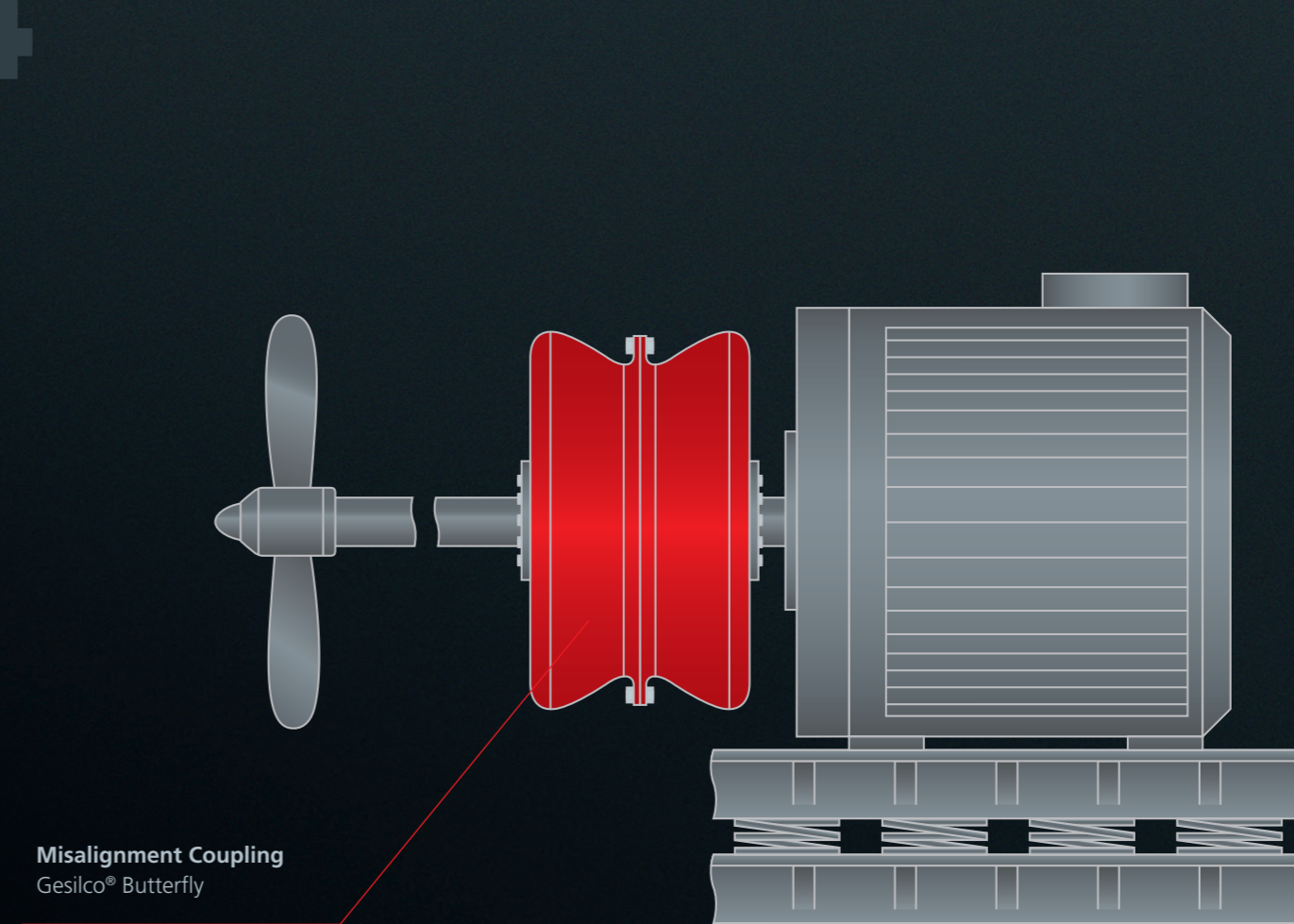
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MECHANICAL AZIMUTH THRUSTER WITH AN ELASTICALLY MOUNTED ELECTRIC MOTOR



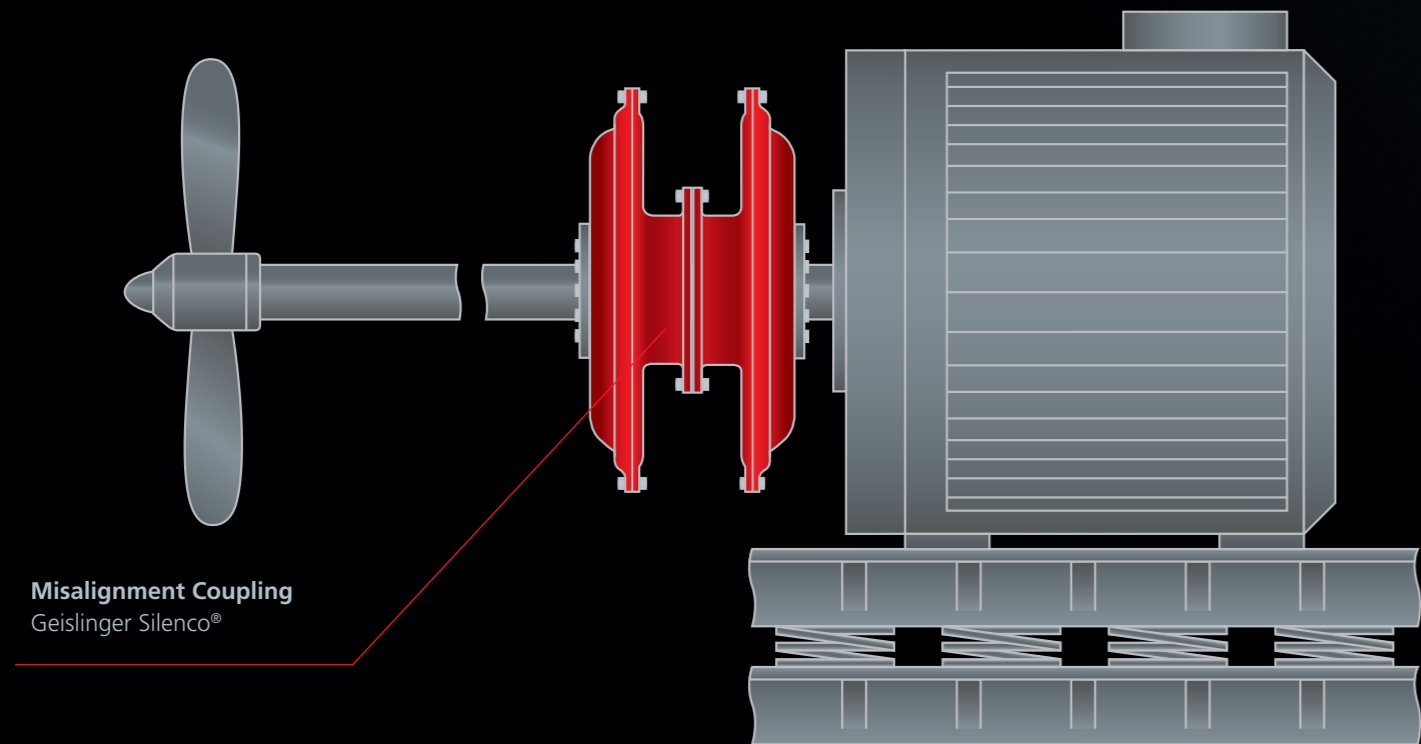
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ELASTICALLY MOUNTED ELECTRIC MOTOR WITH A DIRECT DRIVEN PROPELLER SYSTEM



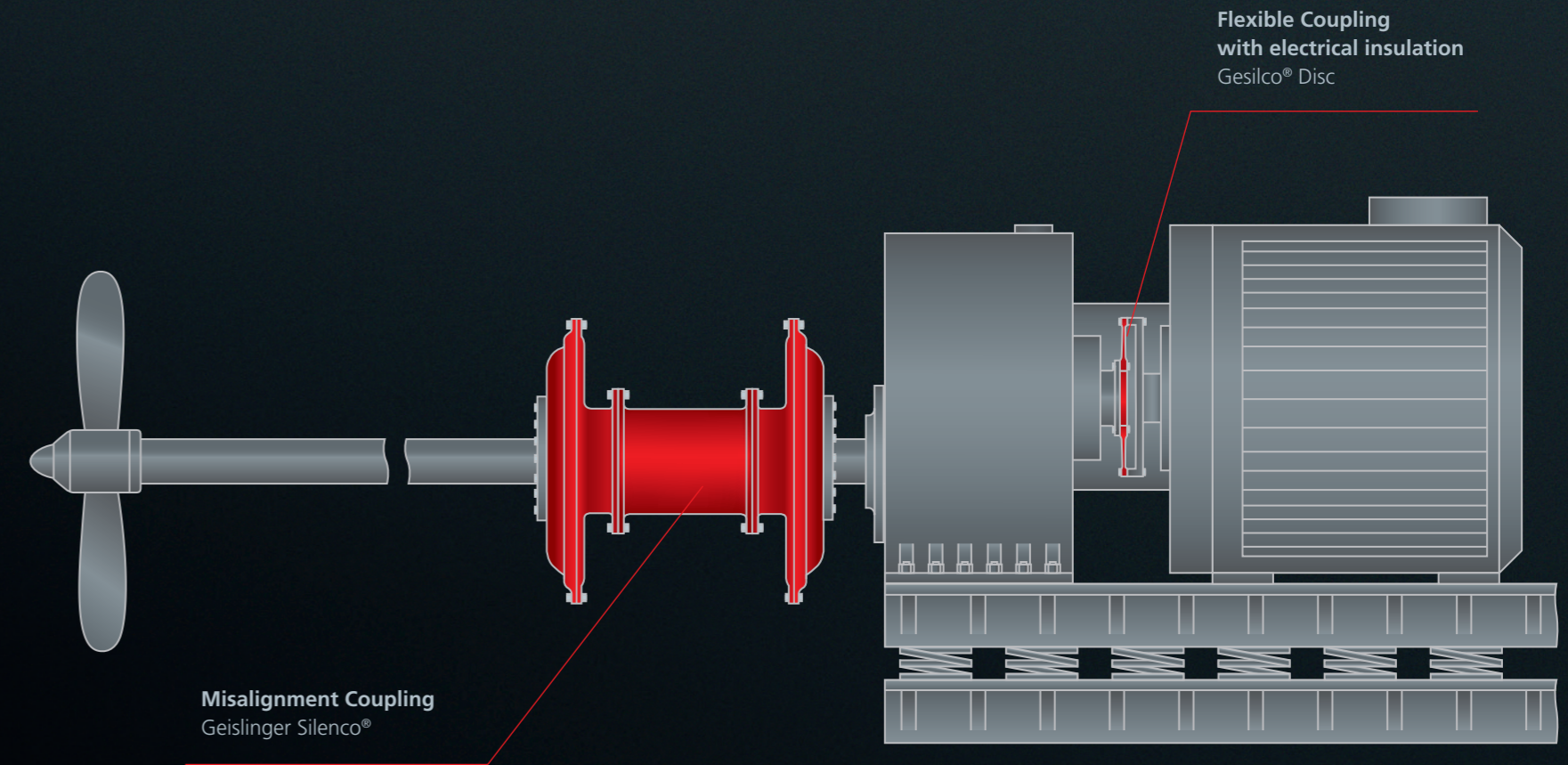
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ELASTICALLY MOUNTED ELECTRIC MOTOR WITH A HIGH ACOUSTIC SOUND INSULATION



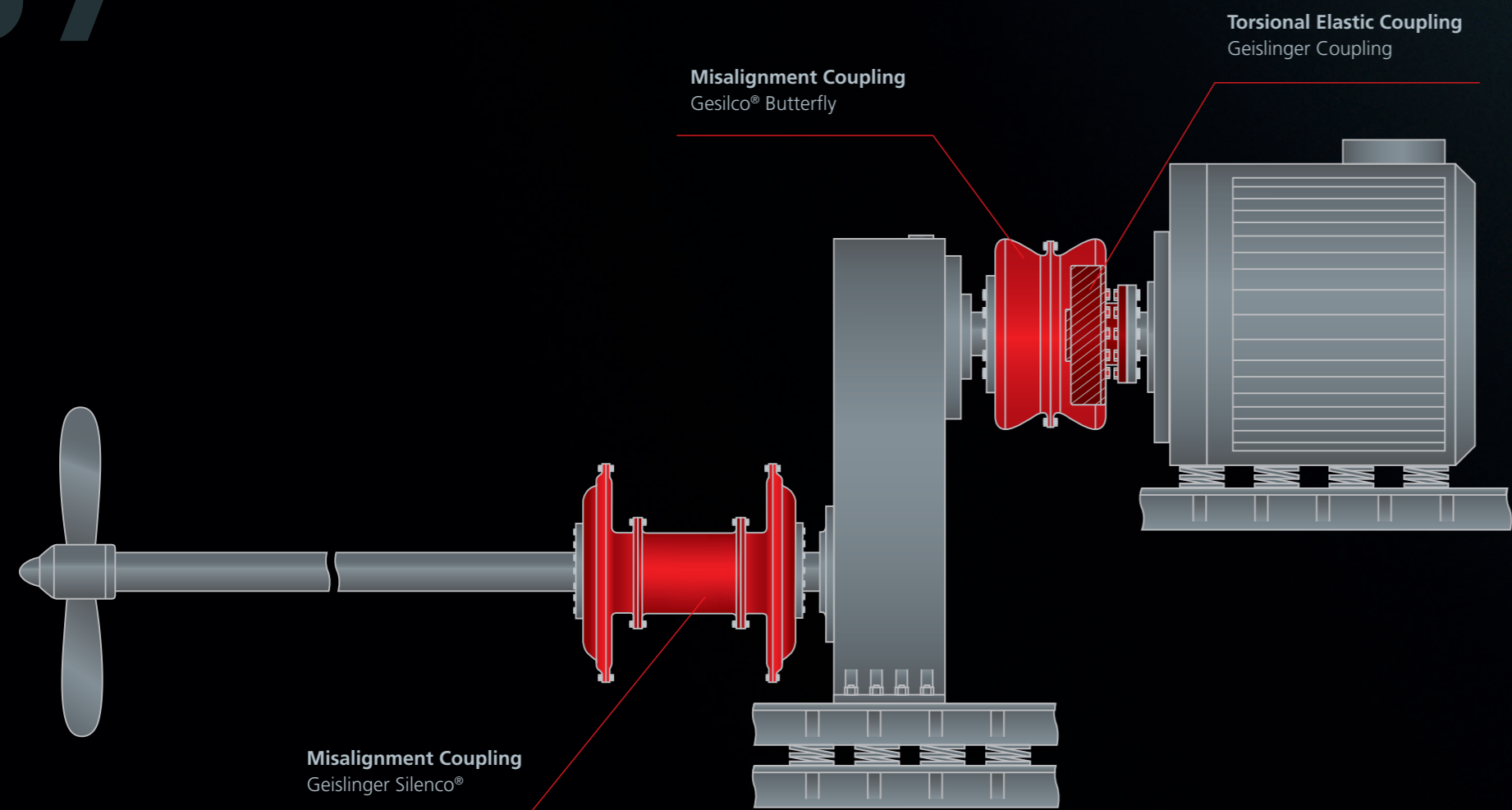
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HIGH ACOUSTIC SOUND INSULATION FOR AN ELASTICALLY MOUNTED ELECTRIC PROPULSION SYSTEM



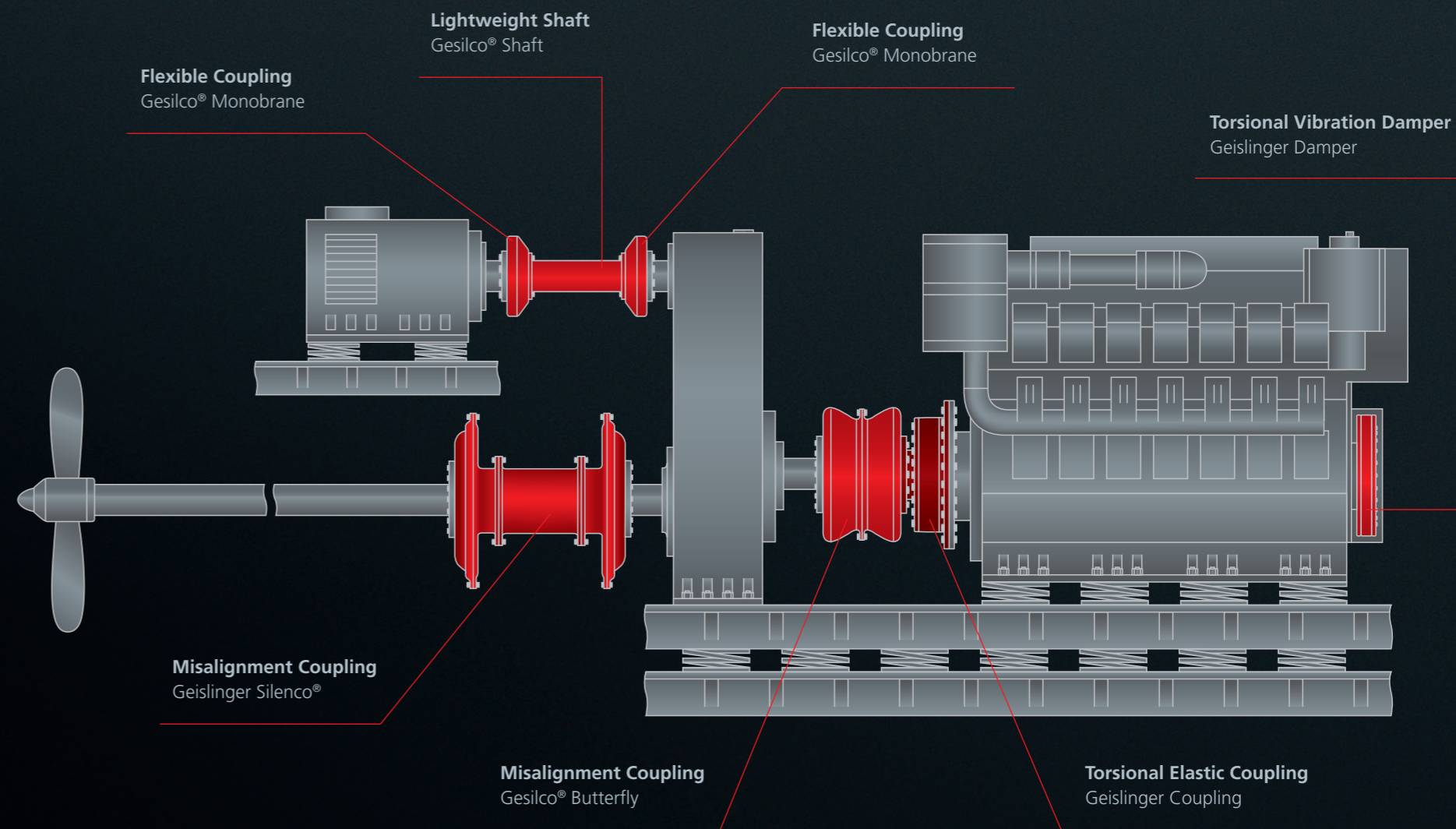
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ACOUSTICALLY OPTIMIZED ELECTRIC DRIVELINE



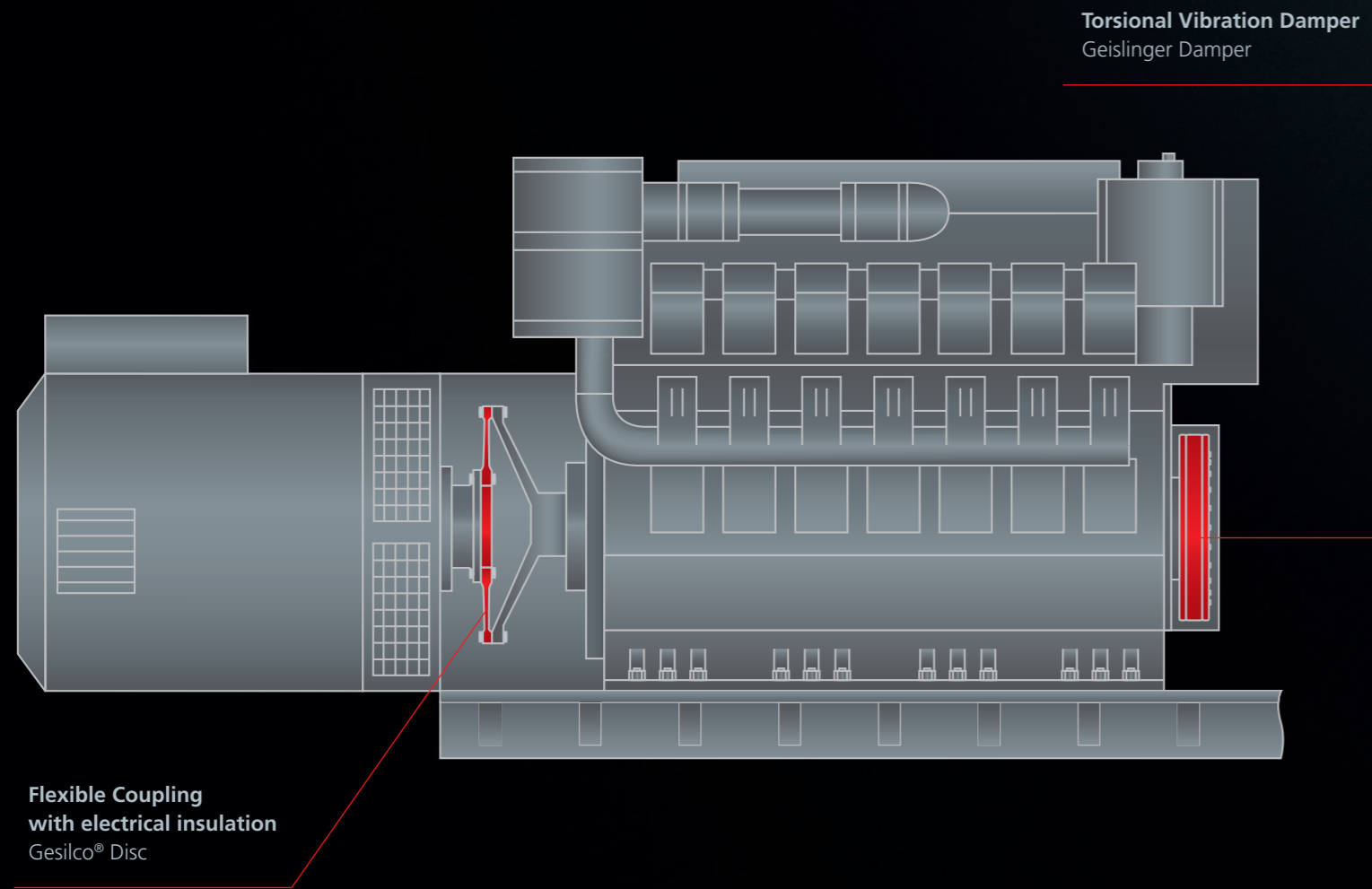
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ELASTICALLY MOUNTED HYBRID MARINE POWERTRAIN



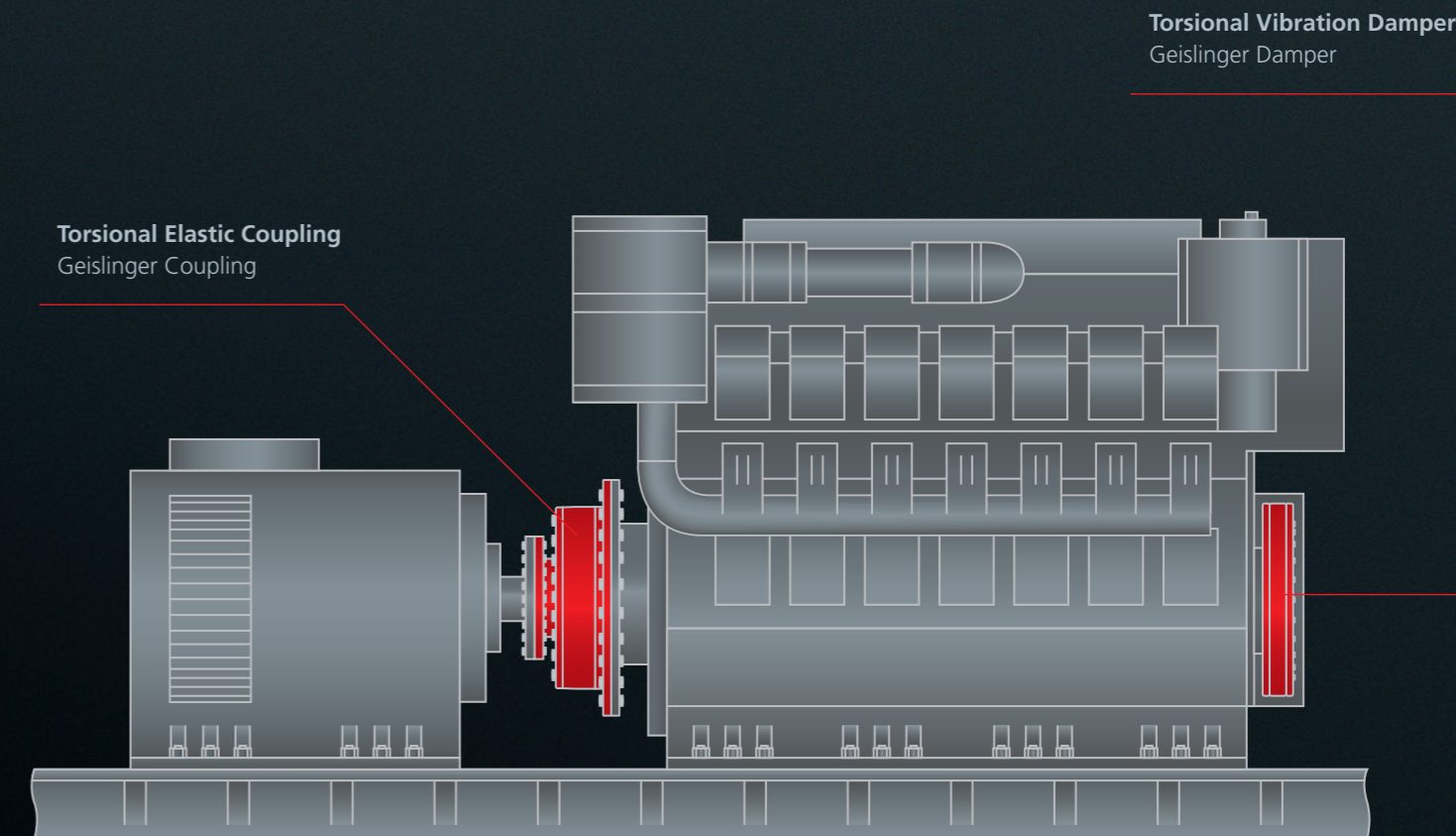
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RIGIDLY MOUNTED SINGLE BEARING GENSET



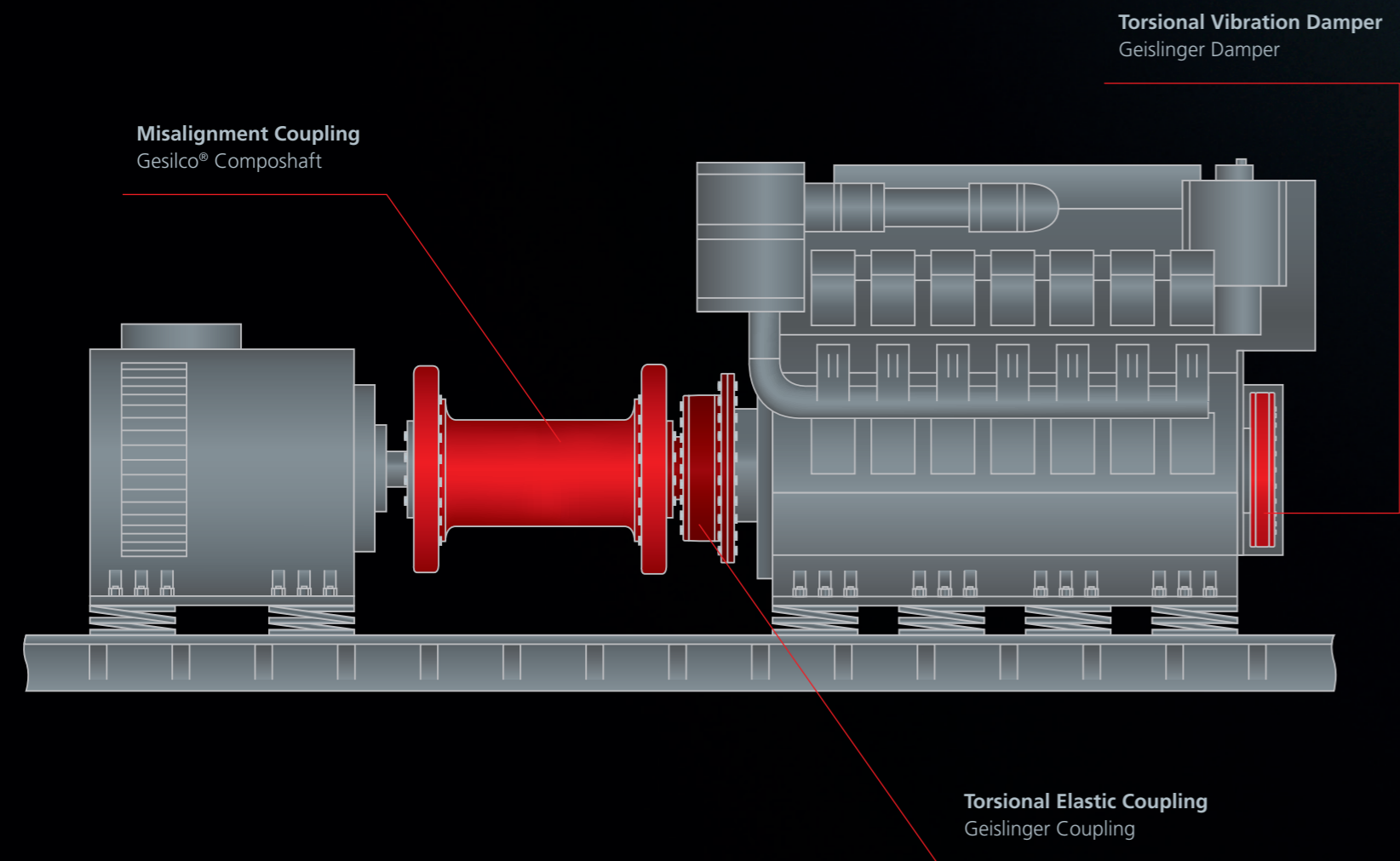
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RIGIDLY MOUNTED GENSET



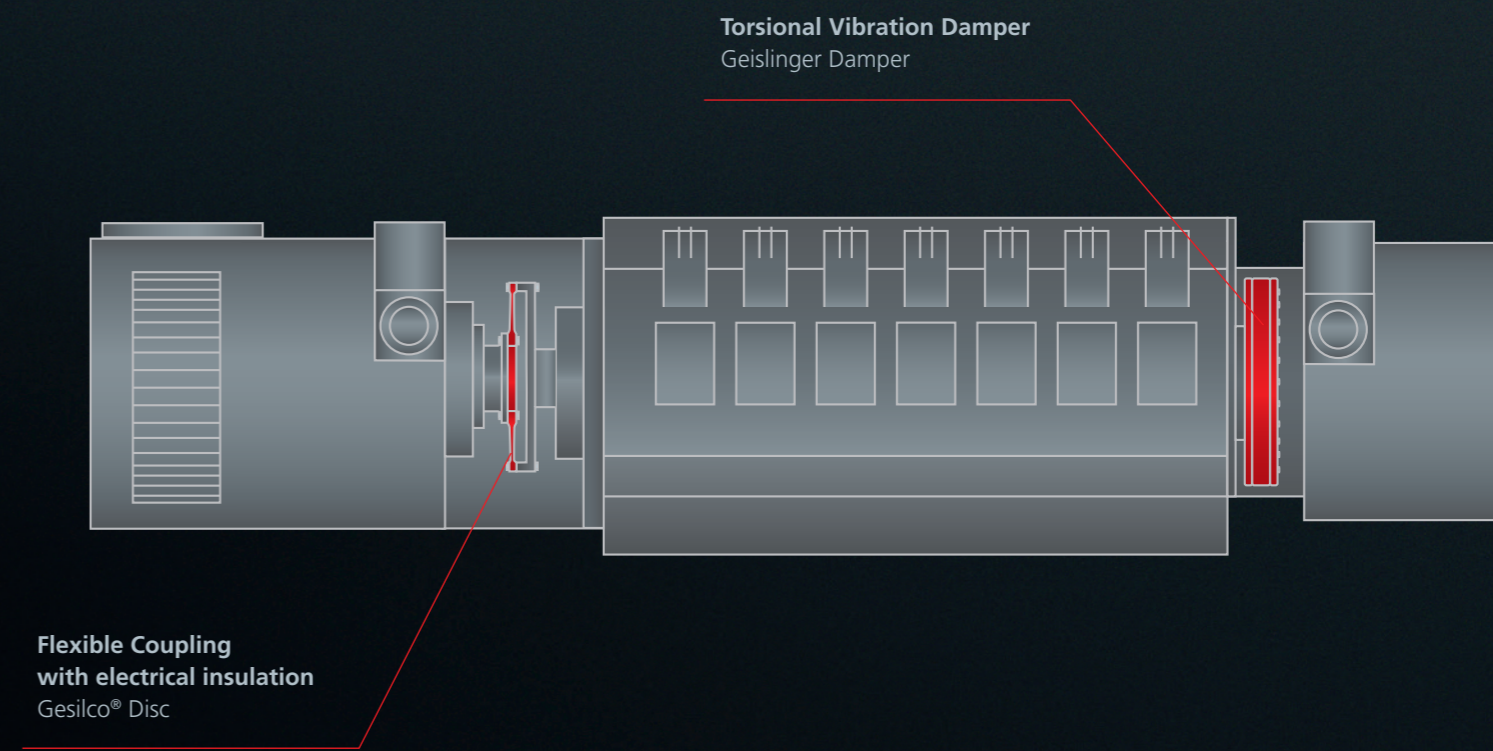
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ELASTICALLY MOUNTED GENSET

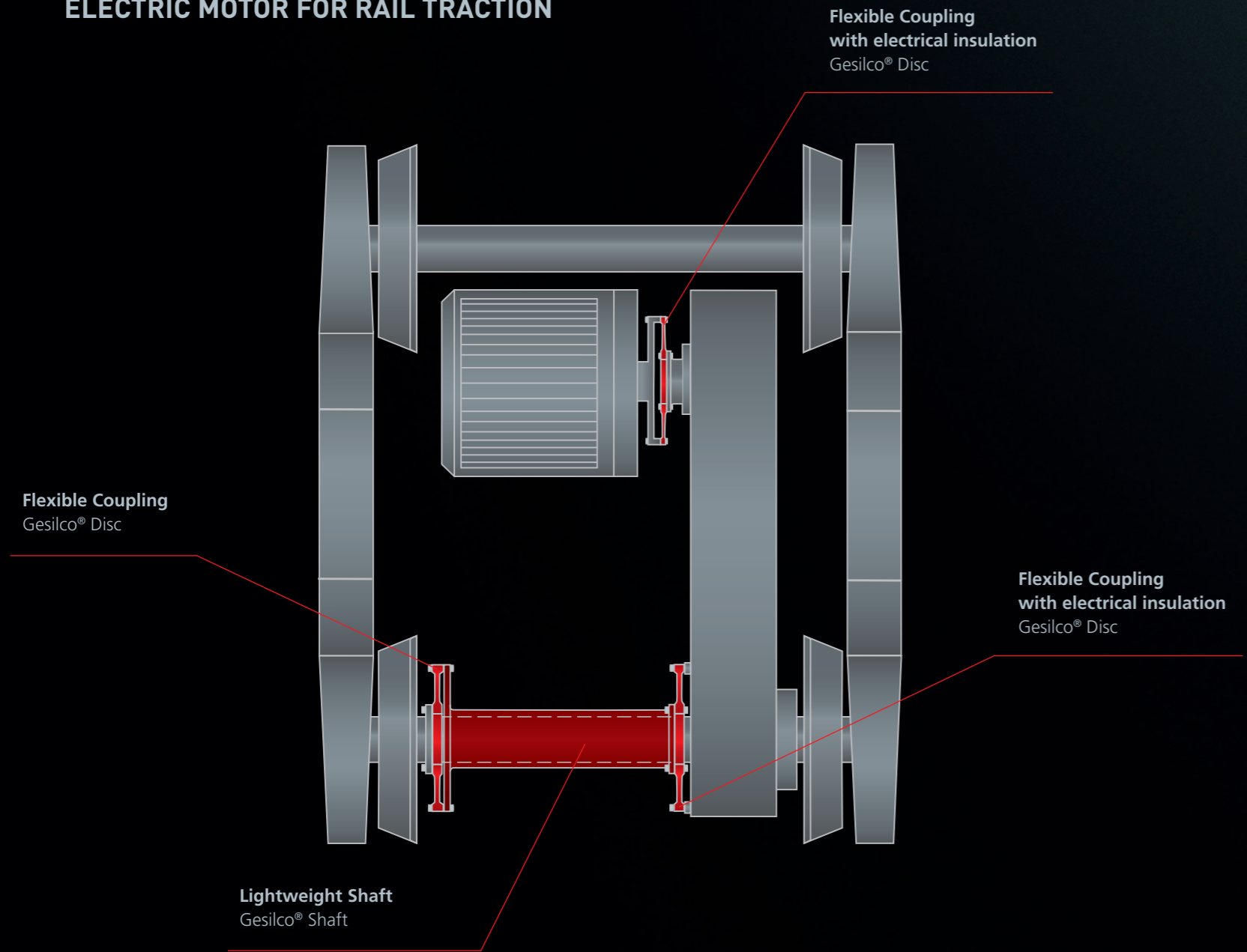


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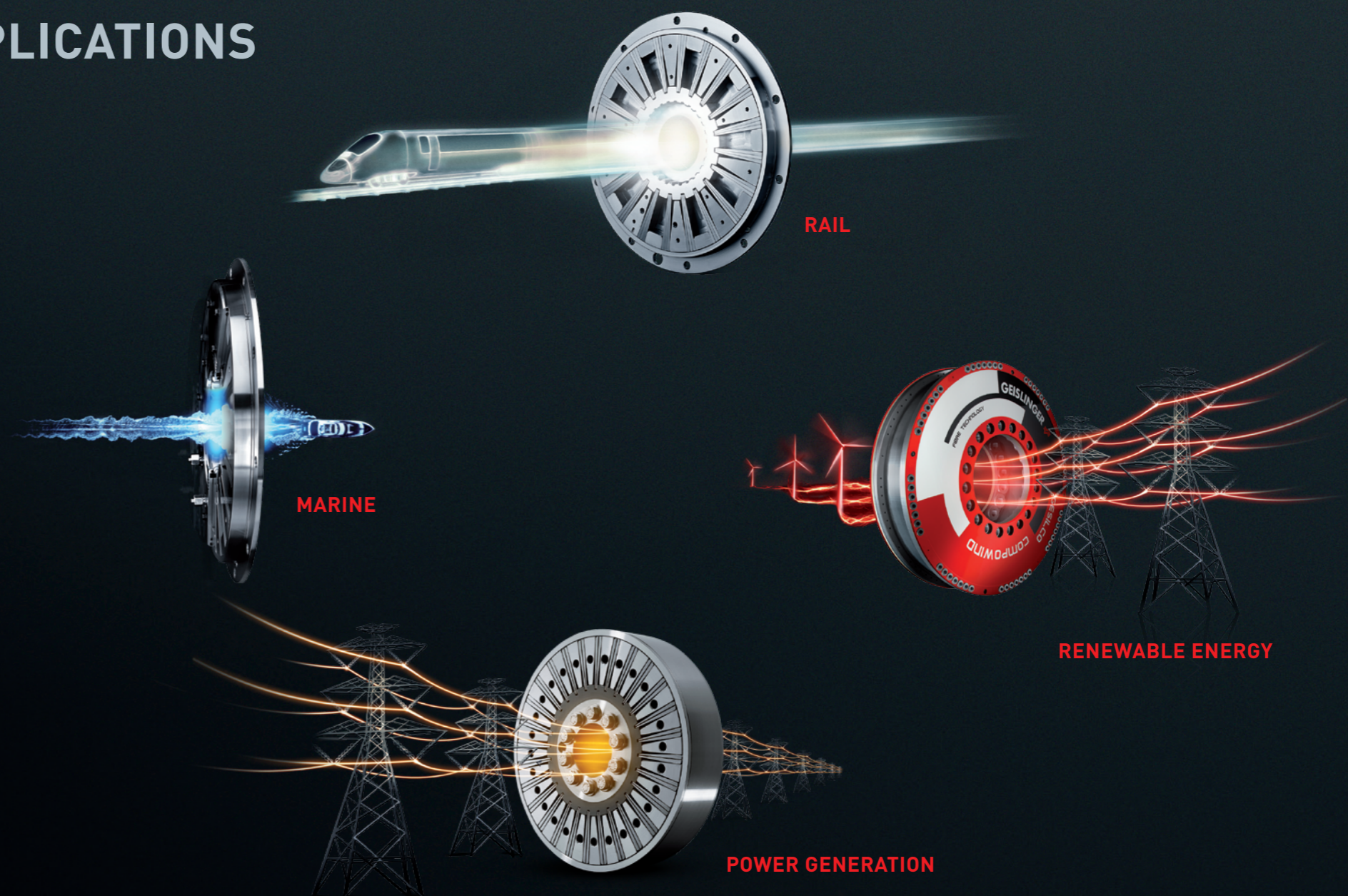
GENSET FOR UNDERFLOOR RAIL APPLICATIONS



ELECTRIC MOTOR FOR RAIL TRACTION



APPLICATIONS



GEISLINGER PRODUCT LINE.



Geislinger Damper

Tuned torsional vibration steel spring damper

The Geislinger Damper is a tuned torsional vibration damper. The steel springs optimize the natural frequency of a system in order to eliminate most of the critical resonance. The Geislinger Damper is specifically designed for large engine applications. It provides constant stiffness and high damping throughout its service life. The Geislinger Damper is often used in combination with a Geislinger Monitoring System which enables an early detection of critical loads.

Applications: Marine, Rail, Power Generation, Mining, Oil & Gas



Geislinger Silenco®

Lightweight, maintenance-free coupling with high acoustic sound attenuation

The Silenco® coupling is an acoustically optimized misalignment coupling. It consists of flanges, maintenance-free composite membranes with increased damping properties, composite shafts, and steel spacers. The coupling provides resistance to heat, frost, oil and offers electrical insulation as an option. Depending on the acoustical needs and the required torque, different versions of flanges, membranes and shafts are available.

Applications: Marine, Rail, Power Generation, Mining, Oil & Gas, Wind Power



Geislinger Gesilco® Disc

Electrically insulating coupling solution

The Gesilco® Disc coupling is specifically designed for closed coupled generator sets. The flat membrane allows the transmission of high torsional vibratory torques and radial forces at high engine speeds. The Gesilco® Disc with its homokinetic, non-magnetic and non-conductive properties, is a maintenance-free coupling solution, which can even be used in rough environmental conditions.

Applications: Marine, Power Generation, Rail, Mining, Oil & Gas, Wind Power



Geislinger Gesilco® Monobrane

Coupling for long installation lengths

The Gesilco® Monobrane misalignment coupling consists of one single membrane made of advanced composite material. The Monobrane coupling is the modified design of the Gesilco® Butterfly Coupling. While the design of the Monobrane and Butterfly membrane is the same, the intermediate flange is arranged with a smaller diameter. This design allows the coupling to be directly connected to a Gesilco® composite shaft-line and therefore increases the misalignment capacity of the system.

Applications: Marine, Power Generation, Rail, Mining, Oil & Gas, Wind Power



Geislinger Gesilco® Butterfly

Lightweight, maintenance-free coupling for short installation lengths

The Geislinger Gesilco® Butterfly is a maintenance-free misalignment coupling. The membranes of the coupling are made of lightweight and highly flexible composite materials in order to achieve the lowest reaction force possible, which increases the system's reliability by protecting the driveline and bearings from possible overloads. This unique coupling is suitable for a wide range of applications. Its multiple designs make it compatible with a variety of connection interfaces.

Applications: Marine, Rail, Power Generation, Mining, Oil & Gas, Wind Power



Geislinger Gesilco® Shaft

Lightweight, maintenance-free shaft solution

The Gesilco® shaft lines are made of advanced composite material and are characterized by their one-piece manufacturing with an integrated fibre flange connection. The Gesilco® shafts can easily be adapted to your requirements. Complete packages with steel adapters, bearings, bulkhead seals and Gesilco® composite misalignment couplings are possible. Outstanding shock capabilities and good acoustic attenuation further underline the use of Geislinger shafts for vessels running at high speeds.

Applications: Marine, Wind Power, Cooling Towers, Industrial Applications



Geislinger Coupling

Robust torsional elastic, high-damping steel spring coupling

The Geislinger Coupling is a torsional elastic high-damping steel spring coupling with hydrodynamic damping properties. High reliability, long intervals between overhauls, and low operating costs are some of the main features of this coupling. The Geislinger coupling is perfectly suited for all types of machinery, but in particular for diesel and gas engines

Applications: Marine, Rail, Power Generation, Mining, Oil & Gas, Wind Power



Geislinger Gesilco® Composhaft

Lightweight, maintenance-free coupling with modular installation concept

The Gesilco® Composhaft misalignment coupling consists of two double membranes and an intermediate shaft made of advanced composite materials. The membranes are corrugated with a decreasing wall thickness as the diameter increases. The superior advantages of the corrugated membrane design, in comparison to a flat membrane, are a higher deflection capacity and lower, almost linear reaction forces.

Applications: Marine, Rail, Power Generation, Mining, Oil & Gas, Wind Power

DISCOVER THE WORLD OF GEISLINGER



geislinger.com

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