

Stefa® High-Performance Radial Shaft Seals

DESIGNED FOR LONGER LIFE, HIGHER SPEEDS & GREATER ENERGY EFFICIENCY



Stefa® High-Performance Radial Shaft Seals bring cutting-edge innovation to modern industrial applications. Developed to meet the growing demands of energy efficiency, environmental sustainability and enhanced durability, these seals redefine performance standards.

Modern industrial environments are characterized by high-volume production, 24/7 manufacturing schedules, rapid machinery movement and a critical requirement to minimize downtime to ensure operational efficiency and cost-effectiveness. Rotary sealing systems are subject to extreme duty cycles, higher speeds and challenging operating conditions.

The Stefa® Solution

Stefa® High-Performance Radial Shaft Seals are meticulously engineered to lower energy consumption and increase uptime by reducing frictional torque, thereby lowering operational costs. Breaking conventional design methodologies, these seals deliver more consistent sealing performance over a longer period of time.

This family includes two seal profiles: **Type TRA**, designed without a dust lip, making it ideal for clean environments where contamination isn't a concern and space is limited; and **Type TRE**, which includes a dust lip for robust protection in contaminant-prone environments, ensuring enhanced ingress resistance even in high-IP-rated setups. Together, these seals offer superior performance across diverse industrial applications.

Features and Benefits

- **Extended Lifespan:** Leading-edge designs improve sealing efficiency while reducing wear, resulting in prolonged maintenance intervals.
- **Energy Efficiency:** Significantly reduced frictional torque lowers energy consumption, reducing operating costs and enhancing equipment sustainability.
- **Enhanced Operating Range:** Capable of handling faster rotary speeds, harsh temperatures and heavy-duty cycles.
- **Virtually Zero Leakage:** Proprietary materials demonstrate enhanced compatibility to harsh media and ensure virtually no leakage, even under challenging conditions.
- **Readily Available:** Stocked in common sizes and rapid lead times for other sizes globally. Custom solutions are also available to meet your specific requirements.

YOUR SOLUTION STARTS HERE

Take your sealing performance to new heights with Stefa® High-Performance Radial Shaft Seals. Contact us today to request technical data or discuss your specific application needs:

<https://www.trelleborg.com/en/seals/contact-form>

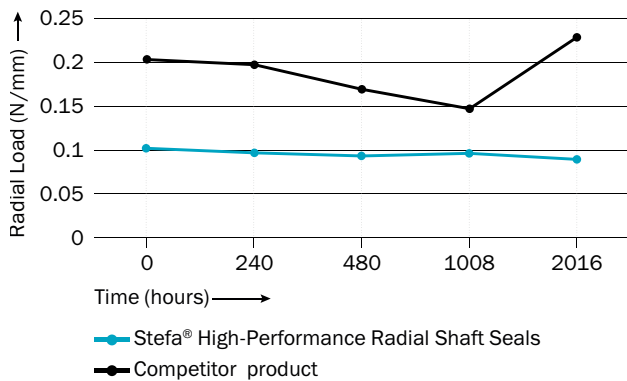


PROVEN PERFORMANCE

Through extensive testing Stefa® High-Performance Radial Shaft Seals are validated to provide superior reliability against conventional radial shaft seals and competitor products, ensuring consistent performance in motors, pumps, gearboxes and robotic systems.

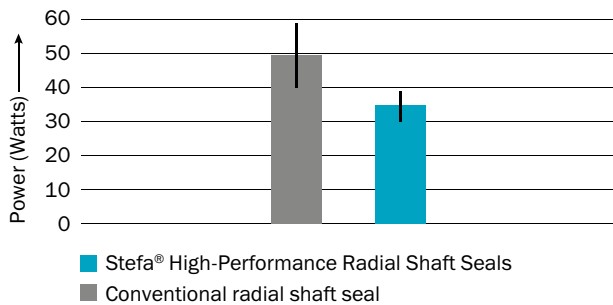
Consistent Lifetime Performance

The precision-engineered geometry of Stefa® High-Performance Radial Shaft Seals ensures consistent, long-lasting performance. This means reduced downtime for maintenance and increased equipment efficiency. This test was conducted with PAG oil.



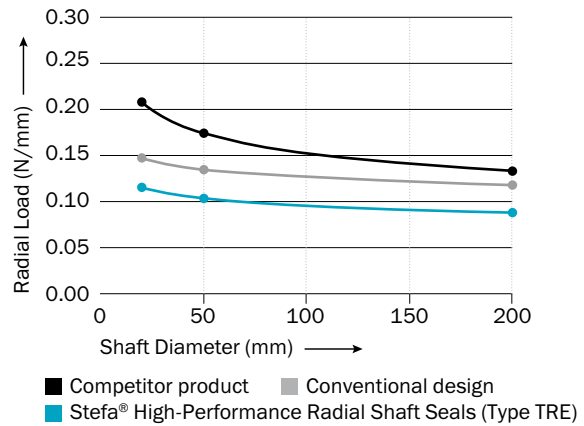
Reduced Power Consumption

By decreasing friction, Stefa® High-Performance Radial Shaft Seals save energy to lower equipment power consumption. This not only cuts costs but also reduces the environmental impact of the equipment and its users.



Reliable Low Friction Torque

Stefa® High-Performance Radial Shaft Seals deliver consistently low friction torque across all shaft diameters, including smaller ones, outperforming both conventional and competitor designs. This innovation ensures enhanced durability and an extended service life.



Applications

Stefa® High-Performance Radial Shaft Seals are perfectly suited for a variety of demanding industrial applications, including:

- Gearboxes and speed reducers
- Motors (AC/DC, induction, servo, brushless, BLDC, stepper, axial and more)
- Pumps and fans
- Conveyor systems
- Index tables
- Machine tools
- Robots

