



POWER TOOLS

FREUDENBERG-NOK
SEALING TECHNOLOGIES

FREUDENBERG-NOK
INNOVATING TOGETHER



THE POWER OF INNOVATION

The power tool market will continue to grow with the industry focus on reliable tools that offer increased power and safety along with less vibration and weight. Innovations along with new materials constantly redefine the power tool industry and new products are the life of the competitive market.

Used in extreme operating conditions, power tools are expected to work without any performance loss over several hundred hours. With today's innovative materials, manufacturers are able to produce light-weight tools that are extremely durable without sacrificing quality.

Manufacturers are also incorporating smaller customized sealing products that have advanced designs which allow for an increase in horsepower without adding weight from

additional electronics. However, the increase of speed usually intensifies temperature, friction, and vibration. Without the aid of temperature-resistant materials and low-friction designs in your components, the escalation in horsepower can have adverse effects on your equipment.

Vibration in power tools can also have lasting effects. State-of-the-art designs that aid in the comfort and ergonomics of equipment will, in turn, distinguish one power tool from another. Manufacturers are seeking out vibration control components that deliver efficient protection from vibration and noise, ensuring longer service life and enhanced operating comfort. Overall, it is the power of innovation that is driving this market.

GLOBAL POWER

Freudenberg–NOK Sealing Technologies' unique material expertise and advanced technology creates the foundation for our customer satisfaction. The quality and perfection of our products result from best-in-class production processes

and continuous technology and materials innovations. Because we offer the largest product range from a single source, our global network is able to support your application needs wherever you are located.

RELIABILITY AND SAFETY

Creating safe and reliable products is integral to increasing market share in the power tool industry. From our customizable dust caps to our innovative ram seal, Freudenberg–NOK delivers sealing solutions that help create trustworthy and durable products.

DUST CAPS

Our high-quality dust caps come in a variety of different compounds and scraper lip forms to match your specifications. The design of our dust caps have several scraper edges and impact cams protecting components and preventing damage to your product.



O-RINGS

Freudenberg–NOK Six Sigma-quality O-rings feature a full range of materials for the most demanding operating conditions. No matter what the application, you can trust Freudenberg–NOK O-rings to deliver superior sealing.



STRIKER SCRAPER SEALS

Our ultimate scraper seal design allows for a lubrication reservoir between the two sharp sealing edges of the seal. This reservoir assists in avoiding dry runs, therefore increasing reliability and extending product life.



STRIKER OIL SEALS

Our advanced striker oil seal's enhanced design includes additional scraper edges to protect against dust. These enhancements allow for automatic centering to handle the harshest working conditions.



MINIATURIZATION

Our ability to produce sealing products that maintain excellent sealing power even as they shrink in size allows us to assist you in meeting customer demands for a smaller and lighter power tool.

MICRO-SIMMERRINGS

Premium-quality Simmering seals have a proven record of durability and longevity in a variety of sizes. This versatile product can be reduced in size yet still maintains its excellent sealing functionality.



AIRZET SEALS

Our unique and exceptional Airzet seal has a compact design which allows for grooves on both sides of the seal to be pressurized. This ideal product from Freudenberg–NOK can assist you in meeting your customers' demands for smaller power tool products.



SOLENOID PLUNGERS

With sealing and damping functions combined in one component, compact Freudenberg–NOK solenoid plungers can be used in the smallest locations. Our superior design allows for minimal strokes with high frequencies which can reduce the installation space required.



T-RINGS

No matter the size needed for your application, even our smallest T-rings deliver the excellent sealing function that you require. Choose this versatile product to fit your specifications and satisfy customer demands, particularly for small-scale power tools.





VIBRATION CONTROL

From increased product life to reduced physical fatigue on the operator, vibration control is an essential component to creating efficient power tools. Depend on Freudenberg–NOK's innovative sealing solutions to assist you in reducing vibration in your product.

DAMPING ELEMENTS

With their unique design, our damping elements reduce machine vibrations due to our innovative material development process. These product advancements increase the life of your tools by suppressing vibrations that can damage critical components.



PISTON BRAKES

This easy-to-assemble product offers amazing energy absorption in a wide range of temperatures allowing your product to run longer. When reducing excess striking energy is of primary concern, Freudenberg–NOK's piston brake is a trustworthy solution.



BELLOWS

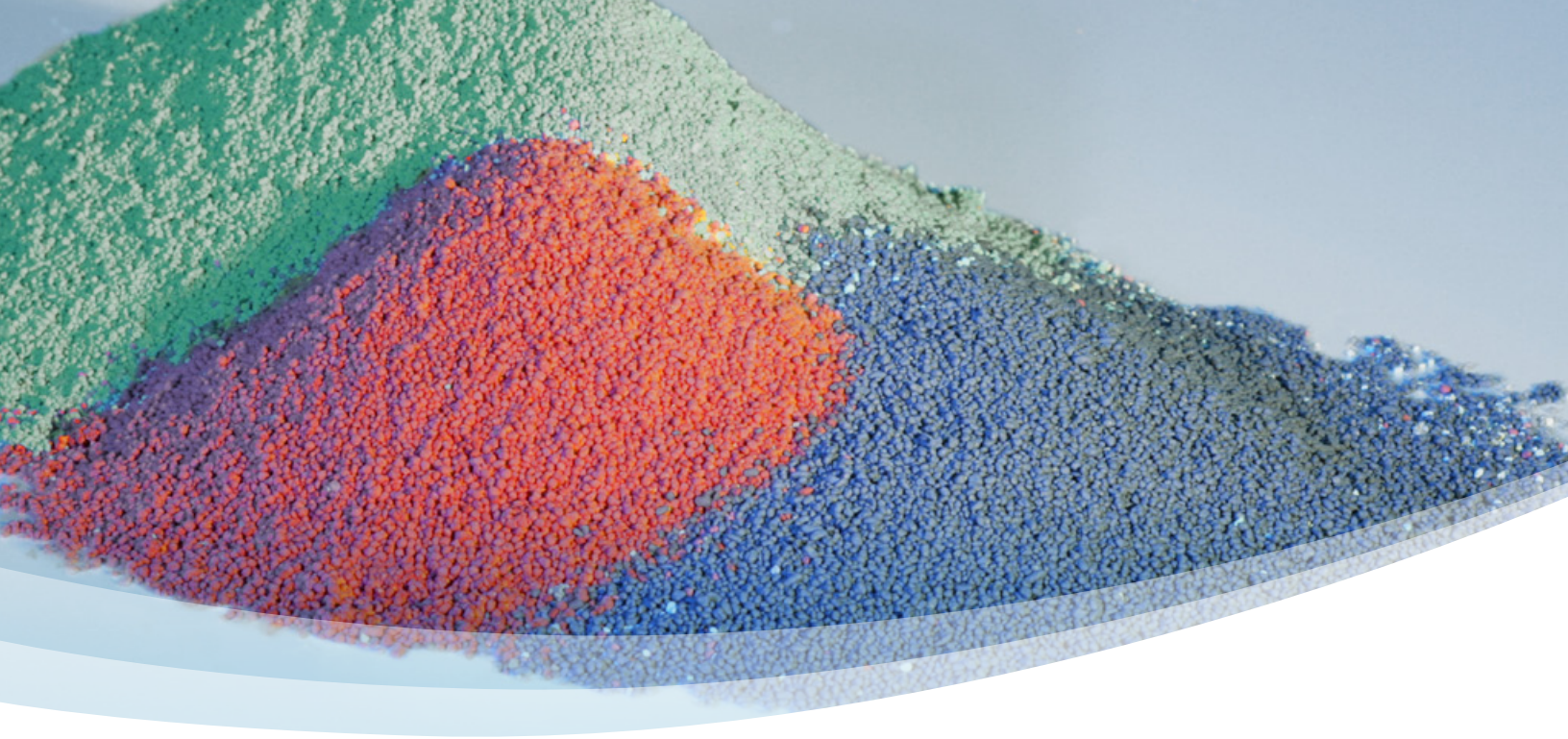
Freudenberg–NOK offers Bellows in over 450 different dimensions along with customer-specific custom designs. We also provide the latest in advanced materials for ultimate safety, extreme temperatures, and protection against the elements that will extend your product's working life.



ENGINE SHOCK ABSORBERS

Our innovative engine shock absorber delivers superior sealing between the ventilated motor area and the rest of the machine. This easy-to-assemble component also reduces motor deflections and controls vibration during acceleration, extending the life of your product.





MATERIALS EXPERTISE

As a leader in seal innovation and material expertise, we continually strive to meet market demands and provide customers with optimal materials for any application. Depend on us to find the perfect sealing solution.

PTFE

PTFE shows excellent chemical resistance that is superior to most elastomer materials and thermoplastics in a wide range of applications. PTFE also offers an extremely large thermal range that exceeds many other sealing materials at both high and low temperatures.



SIMRIZ®/FFKM

Simriz features wide chemical stability similar to that of PTFE in combination with the rubbery properties of an elastomer. Simriz delivers a complete product range of high-class FFKM material which sets new standards for operational durability and temperature range.



HNBR

Extreme wear resistance and exceptional damping properties make HNBR a leading material for the power tools industry. HNBR also offers a wide temperature range with the ability to handle the heat up to 140° C.



POLYURETHANE

Outstanding durability properties due to incredible wear resistance and excellent structural tenacity make Freudenberg's polyurethane top-of-the-line. Our polyurethane material provides extreme flexibility in high temperatures, withstands chemicals, and protects against crack formation and growth.



CUSTOMIZATION

Creating unique products that fit a customer's specifications is a must in the power tools industry. Our ability to innovate together with our customers is what makes us a sealing leader in the world

TAILOR-MADE PRODUCTS

In a world where customers are creating smaller and lighter power tools, Freudenberg-NOK Sealing Technologies rises to the top of the competition with our ability to create tailor-made solutions to fit any design or space requirement. We work directly with our customers to solve their complex design problems with innovative sealing solutions. And, because we are an industry leader, they know that our expertise will keep their products running long into the future.



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