

CAPABILITY STATEMENT

WHAT MAKES US UNIQUE



FREUDENBERG
SEALING TECHNOLOGIES

 **FREUDENBERG**
INNOVATING TOGETHER

INDEX

1	COMPANY OVERVIEW	3
	Freudenberg Sealing Technologies Australia	4
	Values and Principles	5
	Sustainability	6
	People at Freudenberg	7
<hr/>		
2	PRODUCT AND MATERIAL COMPETENCE	8
	Product Portfolio	9
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3	FREUDENBERG XPRESS®	10
	Customized seals for Heavy Industry	11

YOUR STRATEGIC PARTNER IN SEAL SUPPLY



Freudenberg Sealing Technologies (FST) is the largest operating subgroup within the Freudenberg Group, a family-owned company with more than 40,000 employees in 60 countries.

Freudenberg Sealing Technologies is the world's foremost supplier of specialised sealing solutions, combining cutting-edge technological development and market knowledge to serve as a global leader in superior quality sealing solutions.

We strive to enable our customers to reach their technical benchmarks and economic targets by offering the best in value-for-money sealing solutions. We provide the most durable and reliable sealing technology available, both in standard and customised seal products. We rely on our people, our outstanding research and development, our operational excellence and a strong dedication to quality to retain our qualitative edge.

To meet our customers' varied requirements FST is divided into market segments ranging from Construction, Mining and Aerospace to Food and Beverage, Electronics and Pharmaceutical to name just a few. Freudenberg Sealing Technologies rounds off its service portfolio with the brands Dichtomatik as an industry standard solution, as well as Corteco as a specialist in the independent automotive aftermarket.

In summary, there is practically no sealing solution that we cannot offer.

OUR STRENGTH'S AT A GLANCE

- Broad global competencies with an extensive knowledge of local market demands
- One of the world's largest standard programmes with more than 200,000 different seals
- Unique material expertise with more than 1,800 recipes and 1,000 raw materials
- Highest quality standards for production and customised products (from raw material to finished product)
- Commitment to continuous innovation as a foundation for the future success of our customers
- Value adding services such as Freudenberg Xpress®
- Co-engineering and ongoing support for identifying various technical solutions
- Local expertise and technical support
- Globally certified materials for the food, beverage and pharmaceutical industries



COMPETENT AND STRONG LOCAL PARTNER IN AUSTRALIA

GLOBAL EXPERTISE WITH LOCAL REPRESENTATIVES

Freudenberg Sealing Technologies acquired Ludowici Sealing Solutions in 2015 which was originally founded in 1858 by Johann Carl Ludowici. Today there are 40 people working for the company. In addition to the headquarters in Brisbane there are four additional offices in Australia. FST Australia is one of the most leading seal suppliers in Australia, servicing a broader range of market sectors.

By integrating into Freudenberg Sealing Technologies, FST Australia has joined the broad portfolio of FST, Dichtomatik and Corteco, now all available from one source and one local warehouse in Australia for maximum availability and speed.

MULTIPLE BRAND STRATEGY TO MEET ALL CUSTOMER REQUIREMENTS

FST Australia offers both premium standard and customised seals from FST as well as third party industrial standard Dichtomatik seals. We also offer Automotive aftermarket seals through Corteco. This unique combination of branded product ranges enables you to capitalise on a broad-based alignment of technically complementary products.

SEALING SOLUTIONS FOR NEARLY EVERY MARKET SEGMENT

As a full service provider, Freudenberg Sealing Technologies Australia offers sealing solutions for a wide variety of market segments such as Food and Beverage, Heavy Industry, Agriculture, Hydraulics and many more.

YOUR ADVANTAGES AT A GLANCE

- Complementary product portfolio
- Full range of premium and industrial standard quality seals
- Single point of contact for several Freudenberg brands
- Local warehousing
- Freudenberg Xpress® custom seals

VALUES AND PRINCIPLES

THESE PRINCIPLES ARE THE GUIDE TO ENTREPRENEURIAL ACTION AT FREUDENBERG

When the company's founder, Carl Johann Freudenberg, introduced his two sons as business partners in 1887, he expressed initial guidelines in his General Observations.

Modesty, honesty, financial solidity and the ability to adjust to changing conditions are fundamental values of a successful entrepreneur. In 1994, 10 Business Principles, derived from Freudenberg's successful history, were written down for the first time. These Business Principles were considered a framework and a legacy for future generations of Members of the Board of Management.

The Guiding Principles are based on the Business Principles and define the value basis for all our conduct vis-à-vis employees, business partners, other stakeholders and third parties.

Since then, Freudenberg has become a more international company in many senses. Portfolio decisions, new business developments, increased regional and cultural diversity as well as rapid changes in the general business environment have challenged the group's traditional ability to adjust to new market needs. In the face of such changes, our core principles and values continue to provide guidance and orientation.

The Business Principles state that Freudenberg will remain a 100 percent family-owned enterprise. That principle goes beyond pure legal ownership. Our corporate governance structure, with its system of checks and balances, the delegation of responsibility between the Partners, the Partners' Board and the Board of Management, ensures a strong commitment to values, responsible behavior and ethical standards. These include, among others, a ban on the manufacture and distribution of products intended to harm people. The Business Principles also state that the Freudenberg Group must remain broadly diversified. This serves as a stabilizing factor, along with the requirement to uphold a minimum equity ratio of 40 percent. Such stability, combined with Freudenberg's openness towards strategic alliances, allows us to maintain a high degree of independence.

Upholding long-term profitability serves as a precondition for achieving all other goals in a wider social context and assures sustainability: Economic efficiency, social responsibility and environmental protection are firmly linked.

The Guiding Principles reflect our common, consistent and firm value basis. To foster a better understanding and ensure consistent interpretation, further explanations entitled "Conduct and Behavior" have been added. It is our expectation that all employees will make this document a part of their daily working conduct and behavior. In doing so they set an example and spread the spirit that makes our company unique.



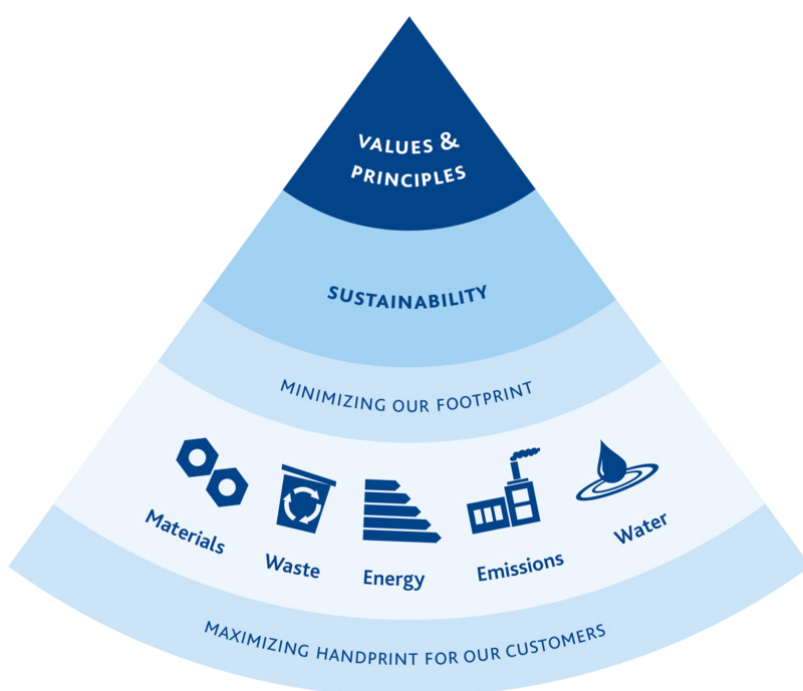
OUR UNDERSTANDING OF SUSTAINABILITY

As a value-based, family-owned technology group, our corporate goal is not merely financial success but always involves responsibility for society and the environment. The two goals have been inextricably linked since the company's founding.

Humanity is known for its wastefulness: If we continue on our same path and do not change our mentality, we would need the resources of three earths to cover our requirements by 2050. This scenario seems frightening and unreal. To give future generations access to finite resources and to keep the earth livable, Freudenberg Sealing Technologies, under the umbrella of the Freudenberg Group, is setting an example. Within the Freudenberg Group, sustainability is defined as follows:

We want to shrink our footprint and enlarge hand print for our customers and the end users.

What do we mean by that? The footprint represents our efforts to minimize the negative effects of our production processes on the environment. We achieve this by using natural resources more efficiently, reducing emissions, and optimizing our (transport) processes. The hand print represents the active promotion of sustainability among our customers, for example, through our products and services. We are convinced that the more innovative we are, the more sustainable our own processes and products will be.



MATERIALS

Material efficiency
Recycled, renewable and substitute materials
End-of-life handling of products

WASTE

Waste handling

ENERGY

Energy efficiency
Renewable energy

EMISSIONS

Air pollution/emissions

WATER

Water pollution
Water withdrawal

HEALTH

Impact of products on health



PEOPLE AT FREUDENBERG – CULTURE, DIVERSITY AND PERSONAL GROWTH

AROUND THE WORLD, EMPLOYEES FROM MANY DIFFERENT CULTURES WORK PRODUCTIVELY TOGETHER

Throughout the world, Freudenberg's values provide a solid basis for cooperation, both within the Group and with other companies.

In the course of 170 years of corporate history, these values have become a deeply embedded culture, a DNA so to speak. They provide clarity for our employees, reliability for our business partners and coherence for the entire Group.

Customer value, a culture of innovation, leadership, trust, respect, responsibility and long-term orientation: wherever we are in the world, these are the values that Freudenberg lives every day.

Employees are given the opportunity to contribute their performance and their knowledge to the company. This is best achieved in an open organizational culture where creativity and innovation can flourish. Therefore, Freudenberg promotes cultural diversity and gender equality to best create this culture.

Talent Management – the right measure for every individual

As an innovative and value-oriented family-owned company, we know that our key success factors are professional competence, inventiveness and, above all, the motivation of our employees. So it is very important for us to offer development activities enabling them to successfully perform their challenging tasks and meeting their personal needs. This guarantees lifelong learning.

Freudenberg Sealing Technologies' diverse international landscape offers many interesting development opportunities. We help our employees acquire up-to-date knowledge, master promising methods and develop new skills, preparing them optimally for future challenges. This includes further education with the opportunity to learn in a motivating, hands-on and practical environment. Additionally, learning on the job and exchanges of information with others play an important role in employee development. All our learning and development activities are based on our guiding principles.



PRODUCT AND MATERIAL COMPETENCE

ELASTOMERS WITH EXCELLENT CHARACTERISTICS – THE BASIS FOR INNOVATIVE SOLUTIONS

Well founded material know-how

Freudenberg Sealing Technologies has now been developing innovative brand products at the highest level for decades. With in-depth experience on materials, well-founded knowledge of processing and extensive product know-how, again and again we create ideal pre-conditions for your success. However, the quality of the elastomer material is decisive for the optimum operation of seals and components used in vibration control. Therefore, we are particularly proud of our pioneering role worldwide in this sector.

Deliberately targeted development of materials guarantees the highest possible quality and long life

Engineers and chemists worldwide are developing new materials every day for highest possible functional requirements in joint development ventures with various research institutions plus leading manufacturers of polymers and chemicals. The materials we develop must fulfil the respective

customer-specific requirements and withstand all the loadings feasible in their branch of industry – both with regard to temperature, pressure and resistance to media and in the presence of static or dynamic loadings. The length of life of our products is constantly being improved by optimising our materials. Constant monitoring on the road to these products becoming mass production materials also guarantees you the highest possible quality.

Uniquely wide range of standard materials

We produce more than a billion seals annually from a production volume of more than 15,000 tons. When considered as a whole, a range of material, which is unique in its quality and quantity, is available to you with more than 1,800 mixtures of 1,000 raw materials for your individual applications in seals. A large proportion of these are standardised mixtures. Of course, our competent team of experts will advise and assist you fully – from the selection of the right materials via the test phase to the start of production.

THE INDIVIDUAL MATERIALS WE HAVE DEVELOPED ARE LEADERS WORLDWIDE

Comprehensive performance package and much more

Materials manufactured individually to your wishes and requirements are unusually important in the comprehensive performance package from Freudenberg Sealing Technologies. The use of polymers, based on our own raw materials and tailored to your requirements, enables Freudenberg Sealing Technologies to develop high performance materials which satisfy the highest functional demands. We use our global materials database for the selection of application-specific materials, which groups together the know-how of our experts, working worldwide, to form a network of top technological services which we can call on at any

time. Finally, the appropriate material with the optimum characteristics for your application is manufactured using computer-controlled procedures, from the selection of the raw material to the compounding process. Of course, always adhering to the highest standards in quality and processing and complying with ecological guidelines – in the interest of your success and the environment.

Freudenberg Sealing Technologies offers you a variety of options at www.fst.com/services to get an overview of our products: from technical data to CAD models to direct ordering.

EXCERPT OF PRODUCT PORTFOLIO

FST stocks an extensive range of over 25,000 off-the-shelf products in Australia for immediate delivery. In addition

to this standard range, we are able to design and produce customer specific seals.

STANDARD SEALS



TOOLS AND ACCESSORIES

FST also stocks a wide range of fitting, installation and removal tools as well as accessories like seal stretching tools, seal picks, greases and lubricants in our Australian warehouses.

SPECIALTY PRODUCTS

In addition to our large range of standard seals, FST offers numerous different special products like industrial spray nozzles, food and beverage manufacturing accessories, automotive accessories and more.

FREUDENBERG XPRESS®

IMMEDIATE SERVICE FOR SEALS AND MOULDED PARTS

Repair demands, small series, prototyping – Sealing solutions and moulded parts in the quality standard of the series, manufactured using state-of-the-art production technologies.

Freudenberg Xpress® produces machined seals, individually tailored seals, as well as customer-specific seals and parts. This allows costly and time-intensive downtimes to be avoided. A worldwide network of local Freudenberg Xpress® partners and production sites is available, so help is never far away. The locations are integrated in our production operations. This ensures that our customers always have a local contact person at their side, allowing fast deliveries to be scheduled.

Thanks to the use of original materials and sealing edge geometries, the Freudenberg Xpress® products boast the same quality as series production parts. This means that you do not have to accept any kind of compromises in terms of the safety of your seals.

PRODUCT PORTFOLIO

Freudenberg Xpress® offers all common rod and piston seals, wipers, guides, and O-rings in series production quality. Our original Freudenberg profiles and materials form the basis for this.

In addition, Freudenberg Xpress® not only offers the standard portfolio, but also customer-specific seals and parts produced from elastomers and plastics.

Machined seals are a particularly interesting alternative in cases where production of a series tool would be too expensive or not even possible due to the special design.

This is often the case in prototyping, which in most cases then requires multiple functional specimens to be produced. In terms of new developments, the limit ranges represent a critical factor that requires testing. Freudenberg Xpress® can produce particularly large seal profiles of up to 20 meters without any issues thanks to use of state-of-the-art welding technologies. Extruded seal profiles produced from the orig-

inal Freudenberg polyurethane materials form the basis for the welded seals.

SEGMENT-SPECIFIC SOLUTIONS

Freudenberg Xpress® provides highly resistant seals and formed parts for the special requirements of the process industry. Product modifications are no problem for us either. For example, the dead spaces of lip seals can be lined with silicone in order to allow for use in the food industry.

So you will find the right material for every application. Special materials such as the blue Fluoroprene® XP or the black 70 EPDM 291 are available for the special requirements of the food, beverage and pharmaceutical industries.

YOUR BENEFITS AT A GLANCE

- Original profiles and materials from series production
- Standard profiles and custom solutions
- Fast delivery for repair requirements – if necessary within 24 hours
- Cost-effective small-lot production and prototyping
- Long service life thanks to unique material characteristics and production processes
- No need for serial tools
- High degree of consultancy expertise





CUSTOMIZED SEALS FOR HEAVY INDUSTRY

ORIGINAL MERKEL DESIGNS AND MATERIALS

Freudenberg offers 10 product lines for heavy industry applications that are currently available in the fast delivery service – cut to size, precision-joined or endless versions.

The basic rings come from the series production. Guide bands and V-packings are cut to size and supplied as open versions. A specially developed joining method allows individual diameter specifications for wipers, water guards and radial shaft seals.



Merkel Radiamatic RPM 41
Radial shaft seal, particularly
suitable for work rolls in steel
mills



Merkel Enviromatic EA*
Innovative water guard, re-
places V-rings in demanding
applications



Merkel Guivex SBK and KBK, as well
as the types SB and KB. Guide bands
made of laminated fabric



Merkel wiper P 6* and P 9*
Featuring support elements or additional
sealing function



Merkel V-packing set EK resp. ES
Particularly for cylinders
in existing installations

*Delivery time upon request

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