ENGINEERED SEALING SOLUTIONS FOR DEMANDING ENVIRONMENTS





Engineered seals and components that reduce fugitive emissions and are reliable under pressure.

For more than 50 years, Technetics Group has been the leading designer and maker of valve solutions. Our products meet and exceed industry expectations and are driven by our customers' demands for quality and customized service.

At Technetics Group we know that reducing fugitive emissions is critical. Our sealing solutions reduce leakage and ensure caustic gases and liquids do not seep into your environment. We have earned the reputation of providing engineered seal and component design solutions for the most extreme applications in critical industries, including nuclear, chemical processing and oil and gas.

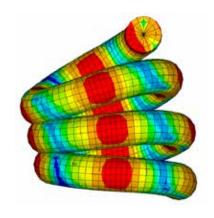
Technetics Group sealing solutions help customers achieve control valve leakage Class 5 and Class 6 requirements and routinely go through API 607 fire testing, in addition to customer specific testing, ensuring we are surpassing expectations and requirements in the field.

Innovative sealing solutions for severe service valves.

Technetics Group offers innovative solutions for the design and production of ball valves, butterfly valves, relief valves, globe valves and gate valves. These solutions include metal seals, performance polymer components, inflatable seals, graphite seals and edge-welded metal bellows.



Providing superior testing and analysis support.



APPRAISAL AND FAILURE ANALYSIS

With its next-generation characterization resources, our maestral® sealing laboratory can analyze your seals comprehensively and rapidly. Damaged seals can be appraised by determining the degradation modes and identifying the probable causes. Your existing seals can also be analyzed and improved to optimize their operation and lifetime with unique solutions relating to the key parameters of the seal.

Your relationship with Technetics Group does not simply end with the sale of a product. Our engineering and service teams work with you to install and test your sealing solutions to ensure our products meet your highest performance standards. Design issues are solved through finite element analysis as well as through test-bed simulation of your application, hardware and operating parameters.

With our in-house engineering department, calculation tools and numerical modelization, Technetics Group adapts and designs seals that respond to your most specific demands: high-viscosity products, abrasive materials, high temperatures, high speed, and high pressure.

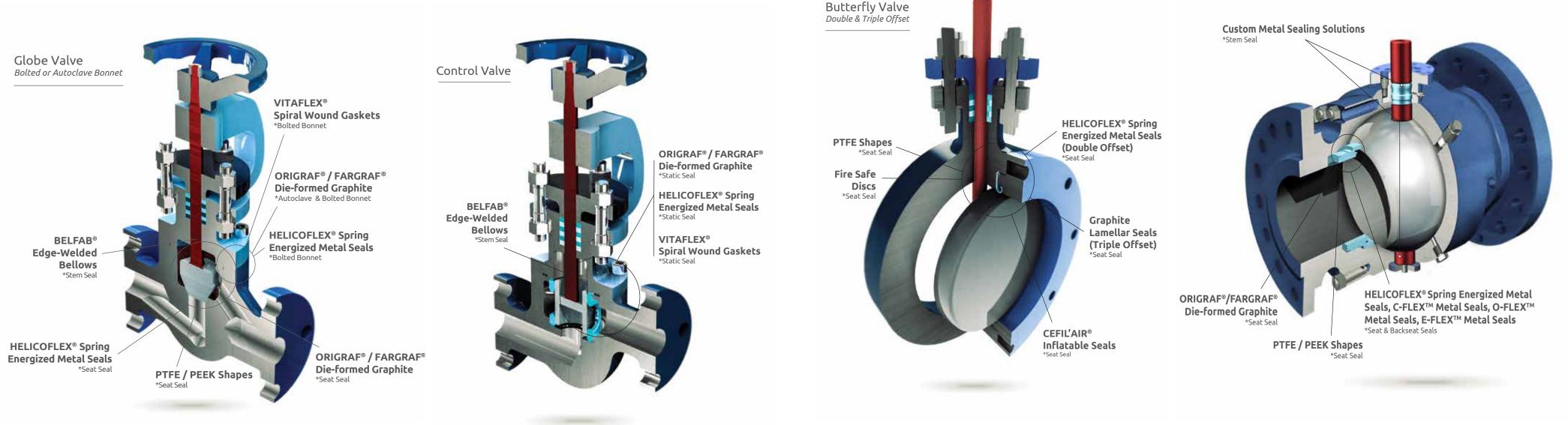
TEST RESOURCES

Technetics Group owns a number of instrumented test benches to develop and characterize our seals under extreme operating conditions (abrasion, speed, etc.), by reproducing all the principal working conditions. These test benches help assess the leakage rates of the seals as well as their tribological properties.





Advanced sealing technologies serving extreme environments and applications.



Trunion Mounted Ball Valve



Custom sealing solutions for exploration & production.

From the inner workings of a semi-submersible platform floating 2,000 meters above the ocean floor to the center of a blowout preventer ensuring the safety of your operations, Technetics Group is your globally trusted source for sealing, component, subsystem and assembly solutions custom-designed to meet your critical requirements and extreme applications.

WE THRIVE ON CHALLENGE

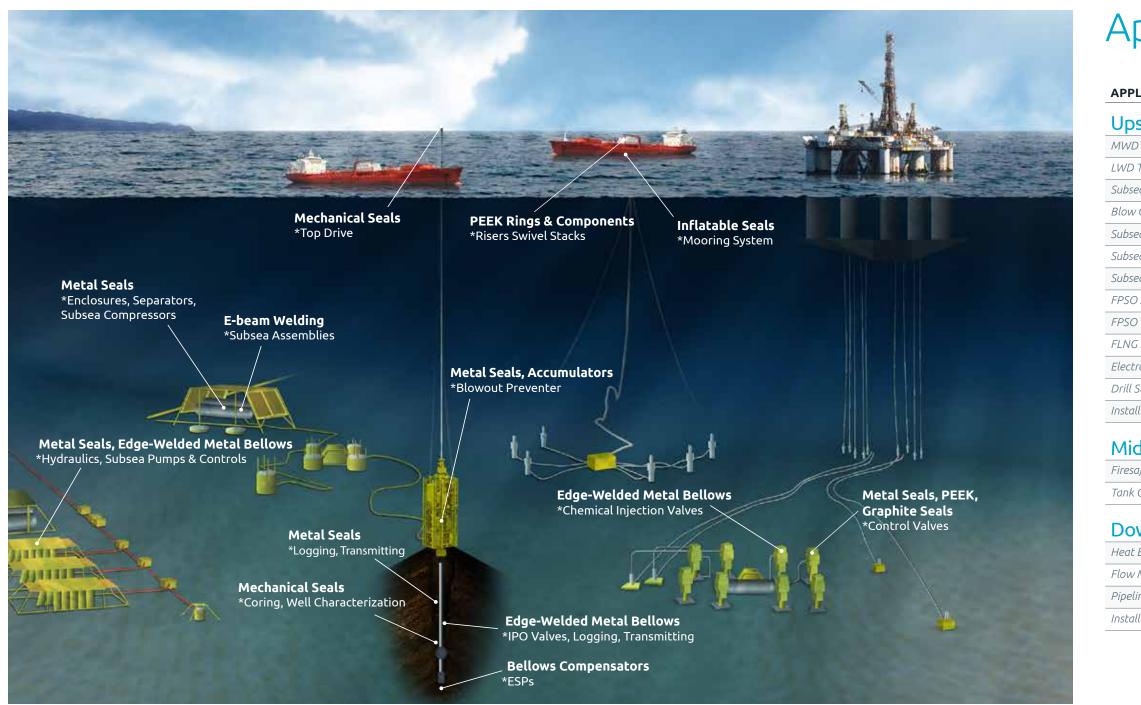
We're experts at designing solutions for applications in the world's most demanding environments. Our products support industries vital to the well being of people all around the world, including oil and gas, nuclear, power generation, aerospace, semiconductor, pharmaceutical, medical and industrial turbines. In these markets, details are essential to safety and reliability. That's why we remain dedicated to providing the utmost dependability and customized solutions from inception through installation, inspection and service.





ENGINEERED SOLUTIONS FOR DEMANDING ENVIRONMENTS®





Tank

Application/Product Chart

PLICATION	PRODUCT
ostream	
/D Tools	Mechanical Seals, C-FLEX TM Metal Seals, O-FLEX TM Metal Seals
D Tools	C-FLEX™ Metal Seals
sea Couplings	BELFAB® Edge-Welded Metal Bellows, C-FLEX™ Metal Seals, HELICOFLEX® Spring Energized Seals
w Out Preventers (BOP)	Pressure Balanced Accumulators
sea Compressors	HELICOFLEX® Spring Energized Seals
sea Enclosures/Vessels	HELICOFLEX® Spring Energized Seals
sea Christmas Trees	HELICOFLEX® Spring Energized Seals
O Swivel Stack	PEEK
O Turret	CEFIL'AIR® Inflatable Seals
IG Risers	PTFE and PEEK Machined Components
tronic Submersible Pumps	Mechanical Seals , BELFAB® Edge-Welded Metal Bellows, HELICOFLEX® Spring Energized Seals
l String Components	Electron Beam Welding
allation and Training Services	PREST

Midstream

		1.	61.1
esafe Pipeline Seals	E-FLEX™ Metal Seals	1	1
nk Car Manway Covers	V-FLEX™ Metal Seals		

Downstream

at Exchangers	ORIGRAF® Graphite, Metallic Seals		
w Meters	HELICOFLEX® Spring Energized Seals		
eline Pressure Compensation	BELFAB® Edge-Welded Metal Bellows		
tallation and Refurbishment of Sealing Technology	PREST		









Technetics Group offers a powerful lineup of sealing solutions custom-engineered to your exact specifications.



MACHINED METAL SEALS

Our custom machined metal seals come in materials such as Inconel 718, Inconel 909, Aluminum and Copper. The Ultratech seal performs well in extremely corrosive and radioactive environments.



O-FLEX[™] METAL SEALS

Technetics Group O-FLEX[™] seals offer optimum strength, spring back and resistance to radiation and corrosion.



C-FLEX[™] METAL SEALS

Our C-FLEX™ metal C-rings are based on the elastic deformation of a metal "C" substrate which, during the



HELICOFLEX® SPRING ENERGIZED SEALS

HELICOFLEX[®] spring-energized seals are high-performance, flexible metal seals that have exceptional compression and elastic recovery properties.



ORIGRAF[®] GRAPHITE PMUC

Unlike flexible graphite cut gaskets, the compression of the ORIGRAF[®] dieformed seal is limited by a mechanical stop: groove or inner and/or outer ring.



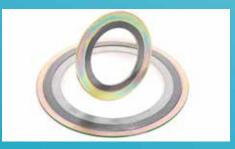
CARBON FACE MECHANICAL SEALS

Our carbon face seals have been specially designed for high temperatures (up to 1000°F) and operate at high speeds (up to 70,000 RPM).



GPA® MECHANICAL SEALS

The GPA[®] seal is a simple and reliable mechanical seal suited for applications involving very difficult media, including abrasive, corrosive, clogging and crystallizing fluids.



VITAFLEX[®] ENHANCED PMUC SPIRAL WOUND GASKETS

VITAFLEX[®] gaskets are offered in standard or custom designs offering low stress technology or a controlled curve.

POLYMER SEALS AND CUSTOM-ENGINEERED COMPONENTS

Technetics Group is your trusted resource for polymer seals and components. We offer PEEK and PTFE machined components. CEFIL'AIR® inflatable seals and many other custom-engineered solutions to meet the needs of your critical applications.



PEEK AND PTFE MACHINED COMPONENTS

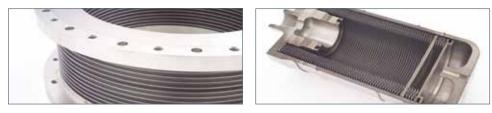
We manufacture large We offer a range of semi-finished sealing extruded, transfer rings up to 2.4m diameter in PEEK and semi-finished parts filled PEEK grades.

BELFAB® EDGE-WELDED BELLOWS AND ACCUMULATORS

in hundreds of

polymers.

high performance



BELFAB® EDGE-WELDED BELLOWS

Our bellows and assemblies come in a large Our bellows accumulators provide high range of materials and have features that reliability and low maintenance costs even include low magnetic permeability, low under the most extreme environments. outgassing rate, and corrosion resistance



HIGH



PERFORMANCE

POLYMERS



PTFE PRODUCTS

Our PTFE tapes, rods, cylinders, and sheets are manufactured from a variety of and injection molded blends and compounds temperatures from to create optimal physical properties for custom solutions.

INFLATABLE SEALS CEFIL'AIR® inflatable seals meet the highest demands of -100°C to + 250/280°C, as well as pressures from 10⁻¹ to 10⁻³ mm Hg to several bar.

CEFIL'AIR®

As a "supplier of choice," Technetics Group's proven record for performance, reliability and quality provides the confidence customers need. Technetics Group offers bellows assemblies and subsystems, edge-welded metal bellows, and accumulators that come in a wide range of materials and configurations and are customer designed to meet the needs of the customer.

ACCUMULATORS

PREST ON-SITE SERVICES

PREST on-site services from Technetics Group is dedicated to optimizing your scheduled shutdown periods. We review your technical data, issue technical files for each product line, consult with your firm on sealing solutions and train all involved manpower on the basics concerning sealing applications. In addition to scheduled shutdown services, we also provide expertise in engineering, installation and emergency on-site maintenance.







For more information on how Technetics Group affects the valves industry, visit technetics.com/valves.

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