

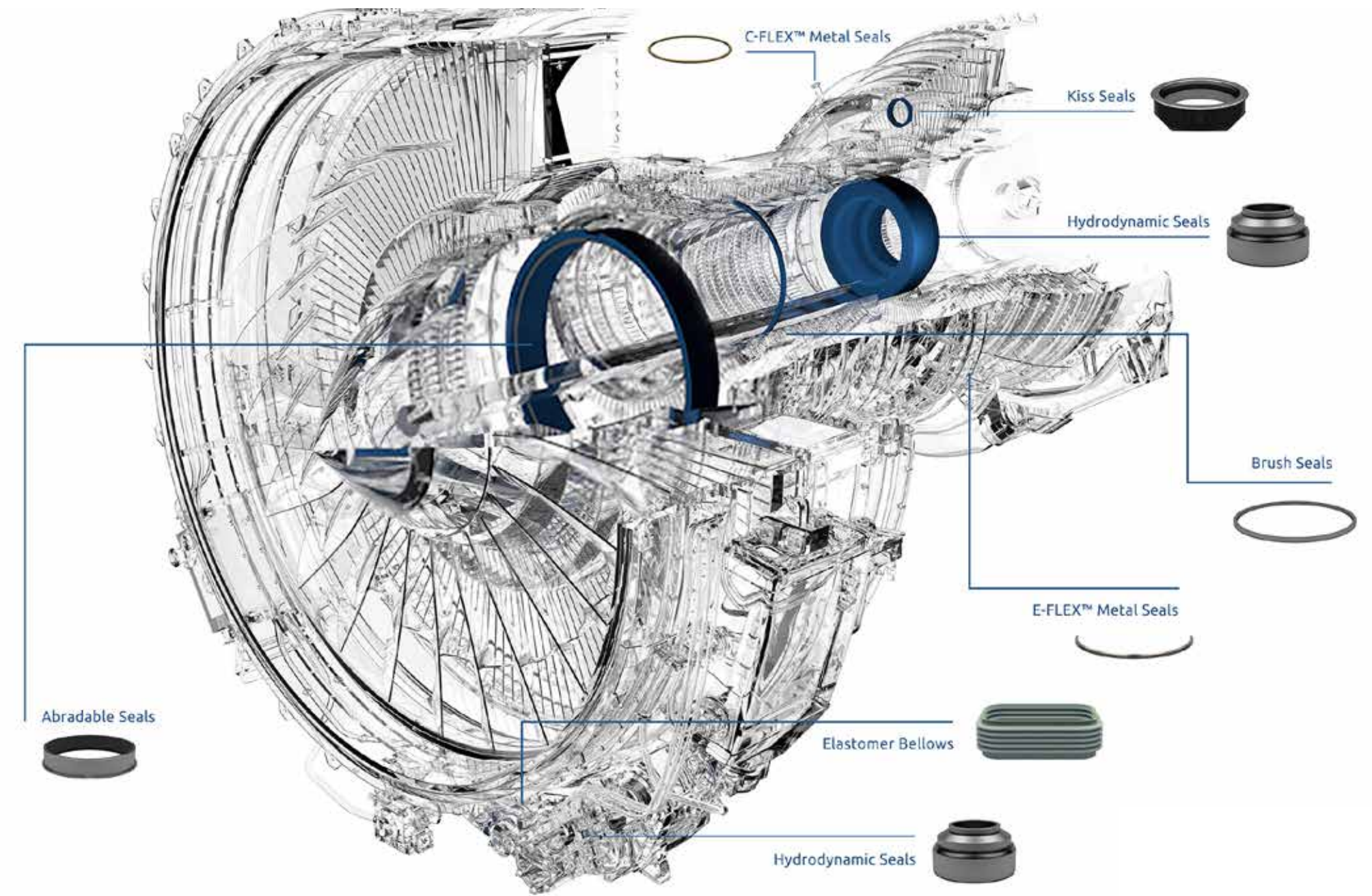
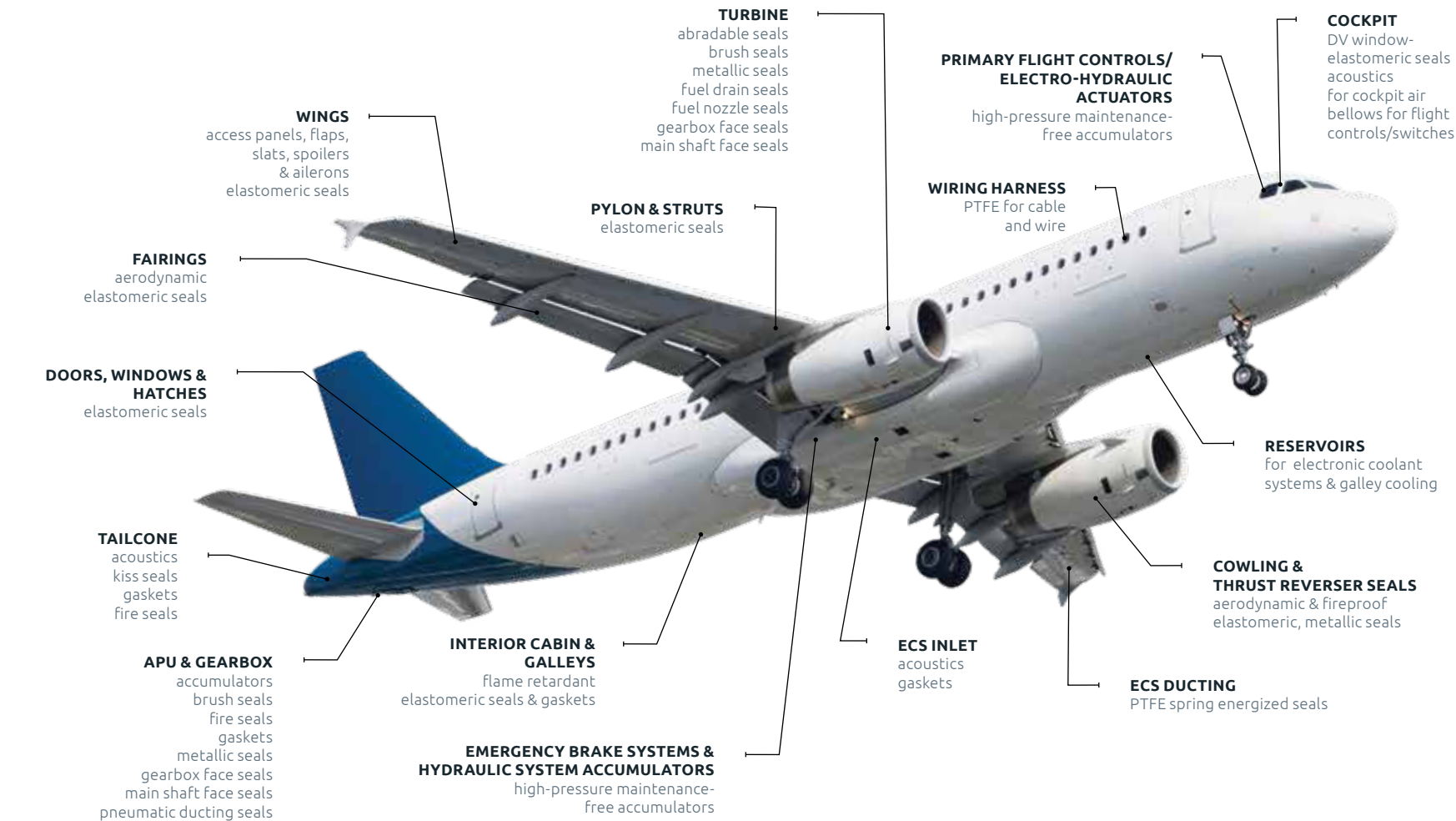
AEROSPACE ENGINEERED SOLUTIONS FOR DEMANDING ENVIRONMENTS®



Technetics
GROUP
EnPro Industries companies

Inside the world's most critical and demanding applications, you'll find innovative solutions from Technetics.

From the deepest recesses of a jet engine to the window seals ensuring passengers' comfort and safety, Technetics is your globally trusted source for sealing, component and assembly solutions that are custom-designed to meet your critical requirements and extreme applications in the aerospace industry.



Engineered seals and components for the aerospace industry.

At Technetics, we strive to develop the most efficient and durable engineered seals, components and subsystems in the aerospace industry. From the extreme operating conditions found in the compressor and turbine sections of a jet engine to the critical requirements of a cryogenic LOX turbopump, Technetics designs and manufactures the most efficient, reliable and durable seals, components and subsystems in the aerospace industry.

We are a global leader in the design and manufacture of custom metal and elastomer seals, brush seals, engineered acoustic materials for noise attenuation, burst discs, high temperature, high-pressure accumulators, as well as ultra-low-leakage rate PEEK and PTFE components.

WE THRIVE ON CHALLENGE

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



ENGINEERING, TESTING, SERVICE AND SUPPORT

Your relationship with Technetics does not simply end with the sale of a product. Our engineering and service teams will work with you to ensure that 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.

Aerospace Applications:

*Airframes
Braking systems
Cabin and flight controls
Environmental control
Avionics cooling
Fuel controls
Hydraulics
Pumping systems
Turbomachinery
High-pressure compressors
Low-pressure compressors
High-pressure shafts
Low-pressure shafts
Combustion chambers
High-pressure turbines
Low-pressure turbines
Fuel nozzles
Fuel drains*

Inside a jet engine, seals are required to withstand tremendously high temperatures and ultra-fast speeds.

Technetics FELTMETAL™ abrasable seals, brush seals and carbon face shaft seals are designed to not only withstand these extreme conditions, but to do so while also increasing output and efficiency.

BRUSH SEALS

- Reduce air leakage in turbomachinery
- Reduce heat generation ensuring a cooler rotating assembly
- Seal sizes range from 2 in. to 200 in. (50 mm to 5080 mm)
- Temperatures up to 1250°F [680°C]
- Delivered as a complete seal or in multiple segments
- Bristles can be configured radially inward, radially outward or axially



FELTMETAL™ ABRADABLE SEALS

- Reduce interstage leakage in the compressor and power turbine sections of gas turbine engines
- Seal material can be manufactured to custom sizes and thicknesses and can be rolled, formed, or machined to its final configuration
- Available as seal segments .03 in. to .60 in. thick
- Temperatures up to 1300°F [700°C]



CARBON FACE SHAFT SEALS

- Increase efficiencies by lowering coefficients of friction
- Resist wear, offer high thermal conductivity, lower operating temperatures, and are resistant to oxidation

Technetics offers a powerful lineup of seals, components, and sub-systems custom-engineered specifically for your aerospace application.



HELICOFLEX® SPRING ENERGIZED METAL SEALS



C-FLEX™ METAL SEALS



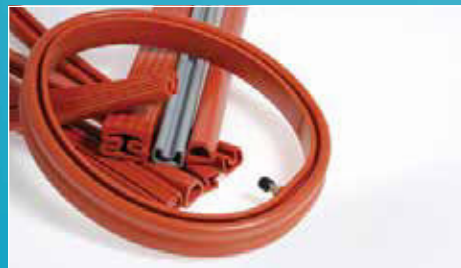
E-FLEX™ METAL SEALS



MECHANICAL FACE SEALS



CIRCUMFERENTIAL SEALS



CEFIL'AIR® INFLATABLE SEALS



ELASTOMERIC AIRFRAME, FIRE SEALS & BELLOWES



HELICOCARB™ CARBON FIBER BRUSH SEALS



PLATE SEALS



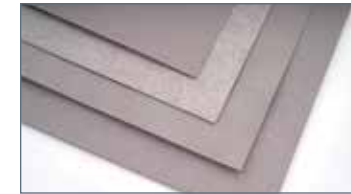
BELFAB® EDGE-WELDED METAL BELLOWES



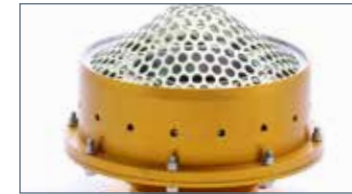
K-PORT™ SEALS

ADDITIONAL CAPABILITIES

Technetics offers other capabilities, including the production of custom accumulators, PTFE tapes and films, fuel drains, burst discs, and FELTMETAL™ acoustic materials.



FELTMETAL™ ACOUSTIC MATERIALS



BURST DISCS AND RELIEF VALVES



ACCUMULATORS



PTFE TAPES AND FILMS



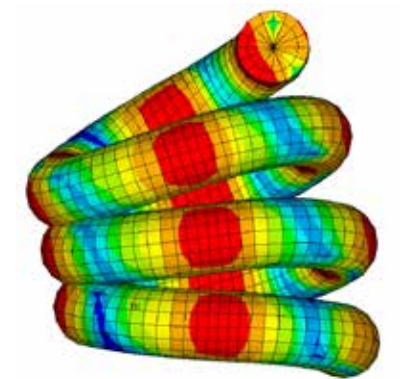
FUEL DRAINS

TEST RESOURCES

Technetics 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.

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.



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

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