# HUTCHINSON®

We make it **possible** 

# PRECISION SEALING SYSTEMS DEFENSE

# SECURING DEFENSE WITH INNOVATIVE SOLUTIONS

Defense requires constant innovation to remain at the cutting edge of technology. Guaranteeing security is crucial to provide strong protection for people and territory in an ever-changing global environment.

# PROVIDING RELIABLE AND HIGH-PERFORMANCE SEALING SOLUTIONS

The defense market, whether on land, on sea or in the air, requires high-performance sealing, insulating and sensing solutions that can withstand extreme conditions and guarantee the safety of equipment and personnel.

These solutions must also meet strict standards of confidentiality and traceability, to protect sensitive data and technological innovations.

Hutchinson offers optimal solutions tailored to customers needs, thanks to a deep expertise in materials, design and the mastery of different manufacturing processes. We support our customers throughout the life cycle of their product, from development to validation, by carrying out customized tests and qualifications in line with their specifications.

We put our know-how and experience at the service of the defense sector to offer reliable, durable and highperformance sealing, insulating and sensing solutions for applications in the harshest environments.

### MATERIAL EXPERTISE

For 170 years, Hutchinson has been specialized in the in-house rubber formulation offering compounds with certifications for PMUC, drinking water, or fire resistance. Today, we are using our expertise to develop tailored materials, including a wide range of rubber compounds, foams, composites, bi-material and reinforced solutions, showcasing our innovative approach to material development.

- > Rubber families: NBR, Silicone, EPDM, FKM, Neoprene, Butyl...
- > Reinforced materials: Polyester and Glass Fibers Fabrics, Carbon Fiber, Aramide...
- > Specific materials for elastomer foams, molded parts and others on demand



Our manufacturing and testing capabilities ensure top-tier quality and strict confidentiality for defense projects.

# CUSTOM PRODUCT DESIGN



# **OUR SOLUTIONS**





#### STATIC SEALING

- > O-Rings, X-Rings, Bonded Seals...
- > Wide range of rubber compounds
- From very low to high temperatures
- > Wide range of dimensions
- > Applications: water, fuel, engines...



#### PLATE SEALS

- > Wide range of dimensions
- > Wide range of rubber compounds
- Applications: engines, fuel systems, hydraulics, oil systems, gearbox...



#### DYNAMIC SEALING

- Low-torque rotary shaft seals, pack seals
- Custom designs
- Adapted to heavy duty applications and severe environments
- Applications: motors, gearboxes, bearings, actuators...



#### **RUBBER SEALING PROFILES**

- Sealing profiles and inflatable seals
- Wide range of technical rubber compounds
- Applications: tank turret, openings, hatch seals...



#### MADE UP PARTS

- Sealing solutions from rubber sheets or rubber-coated fabrics
- Available with metal, textile or plastic inserts
- Applications: rocket launcher, bellows, submarine sealing...



#### MOLDED RUBBER PARTS

- Spacers, isolators, bumpers, wire grommets...
- Available with metal, textile or plastic inserts
- Applications: insulation and sealing of devices exposed to vibrations...



#### SENSING SOLUTIONS

- > Inductive sensor for absolute rotary measure
- Magnetic targets for sensors: rubber-to-metal bonding, ensure good performance in extreme environments
- Applications: precision sensors, multiple actuator applications and positioning systems (missile, trim, flaps, robotics...)



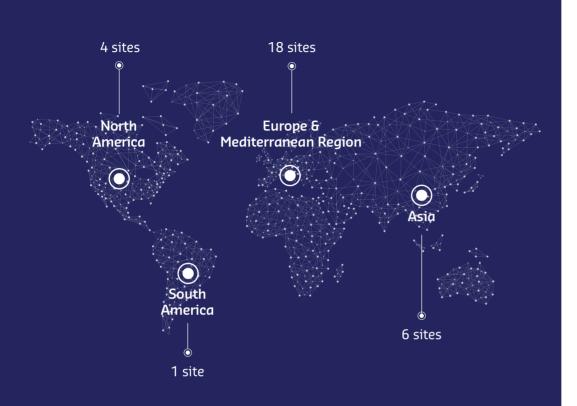
#### **INSULATION & CONTAINMENT**

- Fire protection
- Thermal insulation
- Acoustic protection
- > Cut parts, bonded with or without adhesive tape, sleeves, pads...
- Applications: EV battery pack containment, acoustic protection of rotation noisy equipments, cryogenic protection





#### HUTCHINSON PRECISION SEALING SYSTEMS **AROUND THE WORLD**



# ABOUT HUTCHINSON PRECISION SEALING SYSTEMS

Hutchinson Precision Sealing Systems is a leading manufacturer of sealing solutions. We design and manufacture static and dynamic sealing solutions, magnet rings, foams and composites to meet the most demanding requirements.

Our 170 years experience has earned us the trust of the major players in the automotive, aerospace, defense, energy, rail, and industrial markets.

With 28 sites in 15 countries, Hutchinson PSS employs nearly 6,650 people and has a turnover of more than €707M.



pss.hutchinson.com

# CONTACT

#### **EUROPE**

Sealing Solutions Sartrouville - FRANCE sales.sartrouville@hutchinson.com

O-Rings & Bonded Seals Château-Gontier - FRANCE oring.industry@hutchinson.com

Sensing & Dynamic Sealing Segré-en-Anjou Bleu - FRANCE paulstra.seal@hutchinson.com

Foam & Converting Châlette-sur-Loing - FRANCE sales.fcd@hutchinson.com

#### NORTH AMERICA

Auburn Hills - USA pss-salesna@hutchinson.com

# **ABOUT HUTCHINSON**





€4.8 bn turnover

25 countries





5% invested each year in research &

innovation

100 sites around the world



