

# DEFENCE



Engineered Sealing Solutions  
For Defence Applications







ISO9001:2015, ISO14001:2015 approved and manufacturing IATF16949:2016 and QS9001 certified



Variety of products for all application conditions



Design & quality control systems ensure our products meet your specification



Range of materials developed and accredited for Defence applications

## Product Overview



### O-Rings

Available in all international standard ranges and custom sizes. This includes continuously moulded very large diameter O-Rings, in the complete range of elastomer materials to suit all environments and fluids.



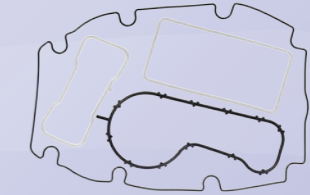
### Moulded Seals & Gaskets

Bespoke fully engineered elastomeric components and gaskets for sealing, exclusion and protection whilst optimising space envelope and reducing component count within assemblies.



### Metal Seals

For very high temperature or pressure applications beyond the capabilities of elastomer and PTFE seals, with standard and custom O, C and E profiles available in a range of base metals and coatings.



### Environmental Seals

Custom mouldings for IP rated sealing of hatches, covers, battery packs, switches and panels, with push-in-place seal retention technology providing assured initial assembly and refitting in-service.



### PTFE Seals

Spring and elastomer energised PTFE seals for linear and rotary dynamic duty, providing low friction, low heat generation, smooth operation and high chemical resistance with wide temperature range.



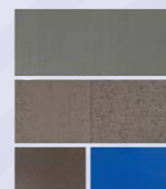
### Bonded Components

Rubber-to-metal and rubber-to-plastic parts providing component integration, hardware size optimisation, easy of assembly and flexibility of design, including full two-shot rubber-plastic mouldings.



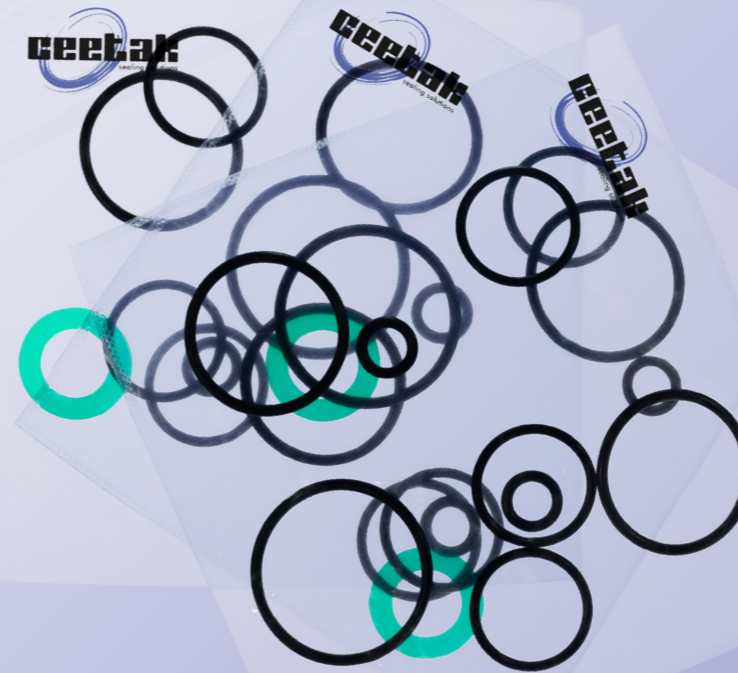
### Rotary Seals

Complete range of standard and custom elastomeric and PTFE shaft seals for oil, grease and fluid sealing and protection against contaminant ingress on gearboxes, drives and other rotary equipment.



### RFI/EMI Shielding Materials

Carbon and metallic loaded elastomers to provide electrical flow paths through sealed interfaces, or for RFI and EMI shielding of sensitive electrical equipment and components.



## Why choose us as your seal supplier?

- ✓ Specialised kitting of products
- ✓ Dedicated logistical support
- ✓ Rapid turnaround on projects
- ✓ Quick lead times
- ✓ Shelf life & product expiration requirements



# DEFENCE



## Gearboxes / Engines

Products: Rotary Seals • O-Rings • Moulded Gaskets

## Swivel Turret Control

Products: PTFE Seals • Moulded Seals • Gaskets

## Suspension / Brakes

Products: PTFE seals • O-Rings • Metal Seals • Bonded Seals

## Enclosures, Switch Covers, Hatches & Access Panels

Products: Moulded Seals • Gasket • O-Rings • Environmental Seals • Conductive Seals

## Equipment



- Tanks and armoured personnel carriers
- Protected patrol vehicles
- Towed guns, missiles & launchers
- Hand-held munitions
- Radar & communications devices

## Typical Application Areas



Engines, gearboxes, steering systems, brakes, suspension, swivel turret control and sealing, recoil systems, launch systems, fuel storage and delivery, hatches, enclosures, switch covers and access panels

## Our Sealing Solutions



O-Rings, Push-In-Place (PIP) gaskets, shaft seals, lip seals, dynamic PTFE seals, metal seals, rotary seals, bonded washers, frame seals and moulded gaskets



# SEA

## Gearboxes / Engines

Products: Rotary Seals • O-Rings • Moulded Gaskets

## Stabilisers

Products: PTFE Seals • O-Rings • Rotary Seals

## Sonar/Radar

Products: Conductive Seals • Environmental Seals • Moulded Seals • Gaskets

## Fuel systems / Fire Suppression

Products: O-Rings • Moulded Seals • Gaskets • PTFE Seals



## Equipment



- Aircraft carriers
- Destroyers and frigates
- Minesweepers and submarines
- Fast patrol boats
- Landing crafts
- Support vessels

## Typical Application Areas



Engines, gearboxes, shaft lines, stabilisers, control surfaces, access hatches and panels, sonar, radar, communications, electronic warfare and countermeasures, weapons systems, fuels systems and fire suppression.

## Our Sealing Solutions



O-Rings, Push-In-Place (PIP) gaskets, shaft seals, lip seals, dynamic PTFE seals, metal seals, rotary seals, bonded washers, frame seals and moulded gaskets



# AIR

## Flight Control Surfaces

Products: Custom Moulded Seals • Gaskets • PTFE Seals

## Propulsion / Fuel Storage

Products: O-Rings • Moulded Seals • Gaskets • Conductive Seals

## Electronic Systems

Products: Conductive Seals • Moulded Seals • Gaskets

## Enclosure, Switch Covers and Access Panels

Products: Moulded Seals • Gasket • O-Rings • Environmental Seals • Conductive Seals



Flight Control Surfaces

Electronic Systems

Propulsion & Fuel Storage

Switch Covers & Access Panels

## Equipment

- Unmanned aerial vehicles and drones
- Surveillance aircraft
- Satellites
- Radar and communications devices



## Typical Application Areas

Flight control surfaces, propulsion, fuel storage and delivery, electronics systems, access panels, enclosures, switch covers



## Our Sealing Solutions

O-Rings, Push-In-Place (PIP) gaskets, lip seals, dynamic PTFE seals, metal seals, rotary seals, bonded washers, frame seals and moulded gaskets.



## Engineering & Design

Unrivalled design and engineering support means you benefit from the best possible sealing solution at optimum cost.

- ✓ Experienced application engineer support every project from concept to approval
- ✓ Complete seal design service
- ✓ Initial seal geometry and profile choice
- ✓ Material selection and development
- ✓ 3D CAD and FEA Simulation
- ✓ 3D printing for concept testing
- ✓ Prototyping through to final production
- ✓ Online Technical Hub and interactive tools

## Quality Assurance & Manufacturing

We maintain strict quality procedures at all stages of our design, development and manufacturing processes.

- ✓ Seals and materials approved to Military Specifications (MIL, MS, AS9100, AN, MOD, ISO14001, ASTM, SAE)
- ✓ ISO9001:2015, ISO13485:2016 and ISO14001:2015 approved
- ✓ Manufacturing approved to IATF16949:2016 & AS9100
- ✓ Worldwide network of global manufacturing facilities
- ✓ We can meet required critical shelf life specifications



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