

Robotics Sealing Solutions

to protect vital components from contamination, wear & environmental factors.



O-Rings



Rotary / Lip /
Labyrinth Seals



Bonded Seals



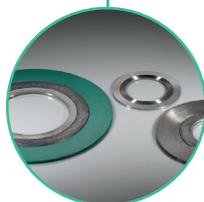
Hydraulic Seals



Bespoke Machined
Seals



Shaft Seals /
Oil Seals



Gaskets



Spring Energised
Seals



Mechanical Seals



Wiper Seals

Protecting vital components from contamination, wear and environmental factors to enhance precision and performance.

Our high-performance sealing solutions for the robotics industry, offer innovative designs that support the complex and dynamic needs of modern robotic systems. Our seals are engineered to withstand the high demands of precision, reliability, and durability required in various robotics applications, from manufacturing robots to autonomous vehicles and industrial automation systems.

Robotic systems are built to operate in a wide range of environments – from industrial floors to cleanrooms and even outdoor conditions. Our sealing solutions are designed to protect crucial components from contamination, wear and factors such as dust, moisture, heat, and extreme mechanical stress. Whether you're developing robotic arms, mobile robots, or precision automation tools, our seals ensure that your systems continue to operate at peak efficiency.



MATERIAL EXAMPLES

Silicone Rubber (VMQ): Excellent temperature resistance (-60°C to +230°C), good flexibility and biocompatible.

Fluorocarbon Rubber (Viton™/FKM): Outstanding chemical resistance, high-temperature performance (up to 250°C).

EPDM: Excellent resistance to weathering, ozone, water, and steam.

Nitrile Rubber (NBR): Good resistance to oils and fuels, affordable.

Polyurethane (PU): High abrasion resistance, good mechanical strength.

PTFE (Teflon™): Chemically inert, high thermal resistance, low friction.

Thermoplastic Elastomers (TPEs): Combines plastic and rubber-like properties, recyclable, good flexibility.

APPLICATIONS

Our sealing solutions are trusted by engineers and manufacturers working in various robotics applications, including:

- **Industrial Robots** - Seals for robotic arms, grippers, actuators, and conveyor systems in factories, assembly lines, and other manufacturing environments.
- **Autonomous Vehicles** - Seals for robotic systems in autonomous vehicles, including seals for sensors, actuators, and electrical compartments, ensuring protection against dirt, water, and environmental contaminants.
- **Medical Robotics** - Seals for surgical robots, diagnostic equipment, and robotic-assisted procedures, where precision and cleanliness are paramount for safety and reliability.
- **Consumer Robotics** - Seals for home robots, such as vacuum cleaners, lawn mowers, and personal assistants, protecting components from dust, moisture, and wear.
- **Drones** - Seals for drones and aerial robots to protect against the elements and ensure smooth operation of motors, sensors, and battery compartments.

HOW SEALS ENHANCE ROBOTICS PERFORMANCE



Protect Critical Components



Enhance Efficiency



Ensure Durability



Increase Precision