



HUTCHINSON®

We make it *possible*

SEALING & SENSING SOLUTIONS  
E-BIKE





# PROVIDING RELIABLE SEALING & SENSING SOLUTIONS FOR SAFER BIKING TRIPS



Thanks to a know-how in material science and engineering, Hutchinson designs and manufactures high performance sealing and sensing solutions. After demonstrating its excellence in the automotive industry, Hutchinson experts develop new solutions adapted to the changing and demanding e-bikes market.

## TAILOR-MADE SOLUTIONS ADAPTED TO YOUR NEEDS

Whether on tours in the mountains or in a daily urban commute, E-bike suits any lifestyle. They are used in all weather conditions and on all types of terrains. The current urge for sustainable mobility has pushed the use of e-bikes and the market is constantly growing.

Hutchinson offers sealing and sensing solutions for manufacturers and equipment suppliers of electric solutions such as batteries, drive systems or electrically-controlled transmissions to support this new way of cycling.

Seals play an essential role for electrical devices by protecting them from water projections, humidity, dust or other external pollutions.

Hutchinson sensing solutions enable to accurately control rotating devices by transmitting a precise angle or speed measurement signal.

Our technical experts work together with customers to design solutions that are fully adapted to specific requirements and environment. To extend the devices lifetime, components are designed to resist low or high temperatures, vibrations and contact with pollutants.

Hutchinson applies the high quality standards of the automotive industry to ensure the safety of e-bike users, and guarantees a production process that complies with the quality requirements and latest regulations.



## MORE THAN 60 YEARS OF EXPERTISE

- > **In-house Manufacturing:** Development of compounds, realization of tools, parts manufacturing
- > **Know-how:** Expert in elastomer formulation, stamping, computer simulation, angle and speed measurement
- > **Wide offer:** Tailor-made sealing & sensing solutions, magnetic and inductive solutions, large dimensional range, all families of elastomers
- > **Supply chain:** From unit to large-scale production

## SEALING SOLUTIONS

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Thanks to decades of expertise in high performance sealing for the demanding automotive industry, Hutchinson offers sealing solutions for e-bikes that contribute to lower the global sealing cost of ownership. Taking into account the environment and constraints of use, our experts use the most suitable materials and define the best design to create reliable solutions.

### DYNAMIC SEALING

- > Designed to seal grease or oil lubricated transmissions, to prevent dust entry and to resist to water spray even with high pressure
- > Materials validated for various lubricants
- > Different solutions from shaft seals to cassette seals

#### Benefits

- > Better autonomy
- > Longer lifetime



### STATIC SEALING

- > Design: full rubber seals or metal to rubber solutions
- > Ensures a perfect sealing function over time
- > Allows deformation of the housing

#### Benefits

- > Easy and safe assembly
- > Robustness of the function



## SENSING SOLUTIONS

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Expert in speed and position measurements, we design and manufacture the parts according to customer requirements. Our magnet rings transmit speed and direction of rotation as well as the angle position to suitable sensors.

### MAGNET RINGS

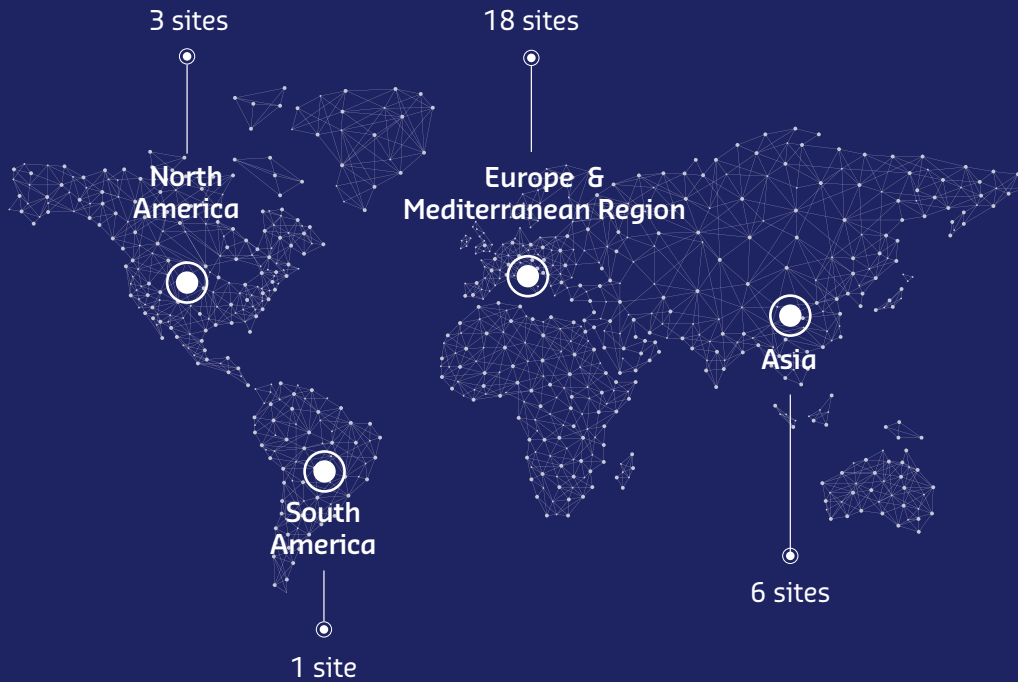
- > Radial or axial designs
- > Through shaft or End of Shaft designs
- > In-house metal inserts design for easy assembly and accurate measurement
- > For all sensor technologies (Hall, AMR, GMR, ...)
- > Accuracy and repeatability of the magnetic signal
- > 100% control of the magnetic signal

#### Benefits

- > Severe environment resistance
- > Compactness



## HUTCHINSON PRECISION SEALING SYSTEMS AROUND THE WORLD



## ABOUT HUTCHINSON PRECISION SEALING SYSTEMS

Leading manufacturer of sealing solutions, Hutchinson Precision Sealing Systems designs and manufactures static and dynamic sealing solutions, magnetic rings, absolute rotary sensors, foams and composites to meet the most demanding requirements.

Our 160 years of expertise has earned us the trust of the major players in the automotive, aerospace, defence, energy, rail and industrial markets.

With 28 sites in 19 countries, Hutchinson PSS employs nearly 7,100 people and has a turnover of more than €591.5M.



[www.hutchinson.com](http://www.hutchinson.com)

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## ABOUT HUTCHINSON



**€3,879M**  
turnover



**25**  
countries



**5% invested**  
each year in  
research &  
innovation



**100 sites**  
around  
the world



**> 38,000**  
employees