HUTCHINSON®

5037

We make it **possible**

PRECISION SEALING SYSTEMS RAILWAY

CONTRIBUTING TO SUSTAINABLE RAIL TRANSPORTATION

To improve the comfort of travellers and the durability of rolling stock, such as subways, light rail and trains, we support major public transportation projects. Hutchinson technologies for the rail industry include gangway systems, door and window sealing profiles, inflatable seals, hoses, ducts, static and dynamic sealing solutions.

MEETING THE RAILWAY CHALLENGES

For decades, Hutchinson has been an expert in the design and manufacture of highly engineered sealing solutions for high-speed trains, metros, regional, inter-city trains, LRV, and locomotives.

We offer a wide range of sealing solutions, from standard to custom designed parts such as gangways and bellows, UIC gangways, sealing profiles, aerodynamic profiles, inflatable seals, moulded parts, hoses, ducts, static, dynamic, and smart sealing solutions.

Our solutions are optimised to meet the specific requirements of railway applications in terms of dynamic behaviour, long lifetime, and low life cycle costs.

Hutchinson can create and test products in their environment using the latest equipment.

Our capabilities include laboratory material for chemical analysis and new compounds development, CAD design, Finite Element Analysis simulation, acoustic measurement, dynamic testing facilities and more.

We cooperate closely with OEMs, Tier 1 and Operators in order to provide complete satisfaction through strong technical expertise, product performance, quality, lead time management, and flexibility.

Certified manufacturing plants:



COMPOUNDS FOR THE RAILWAY SECTOR

- > Rubber families : EPDM, CR, VMQ, HNBR/EVA, AEM, NBR/PVC
- > Hardness : from 55 to 75 ShA
- > Compatibility with railway standards NFF 00-071, NFF 00-072, NF 00-79, STM-F-024, STM-F-602024, STM-F-602

Application	NF F 16-101	DIN 5510	EN 45545-2	Standards
Gangways		S4 SR2 ST2	R1 R7 HL2	NFPA 130
High speed train bellows	14 F2 12 F4		R1 HL2 - R7 HL3	
Sealing profiles	1F3 2F1 2F4 4 F2		R22 HL1 - R23 HL2 R22 R23 R24 HL3	
Moulded parts			R9 HL2 - R22 HL1 - R23 HL2 R22 R23 R24 HL3	ACS, KTW*
Hoses and ducts		S4 SR2 ST2	R22 R23 R24 HL3	ACS, KTW*
Elastomeric foams			R22 HL2 R23 R24 HL3	

FIRE & SMOKE STANDARDS COMPLIANCE



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, engine, fuel...



MOULDED PARTS

- Custom designs
- Available with metal, textile or plastic
- Compliant with EN 45545-2
- Applications: bellows, braking systems, reinforced diaphragms



MAGNET RINGS

- Standard and customised
- Provides very precise information on rotational speed and position
- Adapted to heavy duty applications and severe environments
- Applications: safety, speed and position sensors



HOSES & DUCTS

- All sizes: straight, shaped, reinforced or flexible spiral
- Adapted to all kinds of environments
- > Fire & Smoke standards compliant
- Applications: engine, cooling, toilets & water systems



CELLULAR RUBBER

- General range compliant with EN 45545-2
- Cut parts, bonded with or without adhesive tape
- > Applications: watertightness, gaskets (internal or external), sealing strips



GANGWAY & BELLOWS

- Customised for all types of rolling stock
- Seamless product range from selfsupported gangway to modular bellows design
- EN 45545-2, NF F 16-101, DIN 5510-1, NFPA 130 compliant
- Benefits: high level of safety and comfort, lifetime, life cycle costs
- Applications: complete gangways, bellows and flanged UIC gangways



DYNAMIC SEALING

- Low-torque rotary shaft seals, pack seals
- Custom designs
- Long lifetime solutions
- Adapted to heavy duty applications and severe environments
- Compliant with the railway standards
- Applications: motors, gearboxes, bearings, actuators



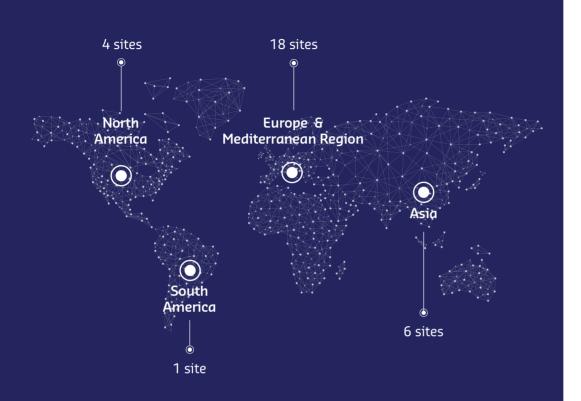
RUBBER SEALING PROFILES

- Sealing profiles and inflatable seals
- Wide range of technical rubber compounds
- > EN 45545-2 compliant
- Applications: windows, doors, cabin, hatch seals





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, magnetic encoders, foams and composites to meet the most demanding requirements.

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

With 29 sites in 15 countries, Hutchinson PSS employs nearly 7,500 people and has a turnover of more than &624M.



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ABOUT HUTCHINSON





€4,314bn turnover **25** countries





5% invested each year in research & innovation **97 sites** around the world



> 44,000 employees