

Welcome to Hallite India

Through building collaborative partnerships, we strive to enhance customer experience, and provide meaningful innovations to drive product performance forward.

Delivering meaningful innovations

Enhancing customer experience

Driving product performance





Welcome to **Hallite India**

The Hallite brand has an **enviable track record in innovation.** Our success has been built on a reputation for safety and reliability.

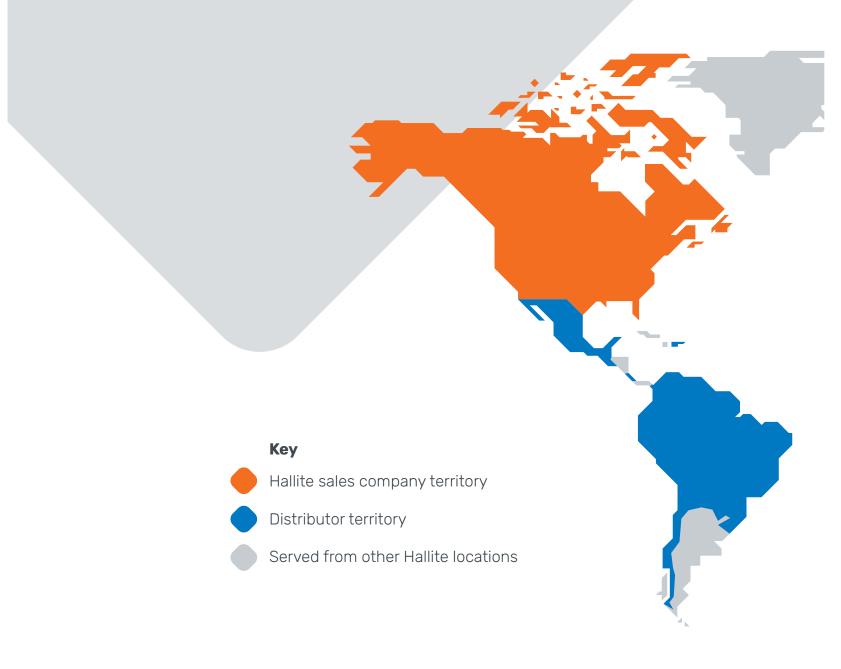
We strive to offer our customers the best of both worlds, a local team here in India, they get to know and trust, together with the support and technical capabilities of our global network.



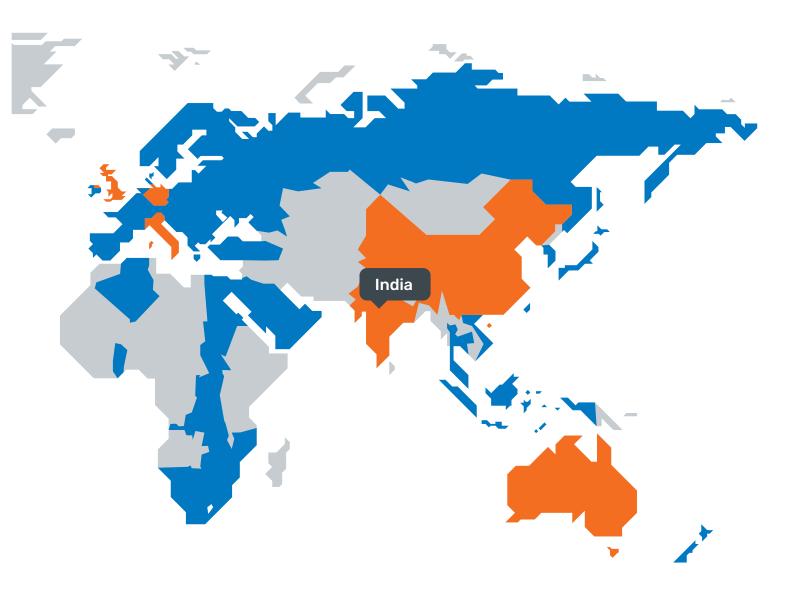
Through building collaborative partnerships, we strive to enhance our customers' experience, and provide meaningful innovations to drive product performance forward.

A global presence with local expertise

Hallite manufacturing centres are located in **strategic geographies** throughout Asia Pacific, Western Europe, and North America.



In addition to our regional locations and manufacturing centres, we have an expansive global footprint with a dense network of strategic service partners. These distributors complete our global presence to ensure Hallite products are readily available anywhere in the world.



Find our full list of distributors here: www.hallite.com/distributors



Hallite India

Our capabilities

- ▶ 20,000 square feet
- Manufacturing and trading of hydraulic and pneumatic seals, associated products in rubber, fabric, plastics and other polymeric materials
- ▶ Manufacturing of PTFE seals
- ▶ Technical sealing solutions provider

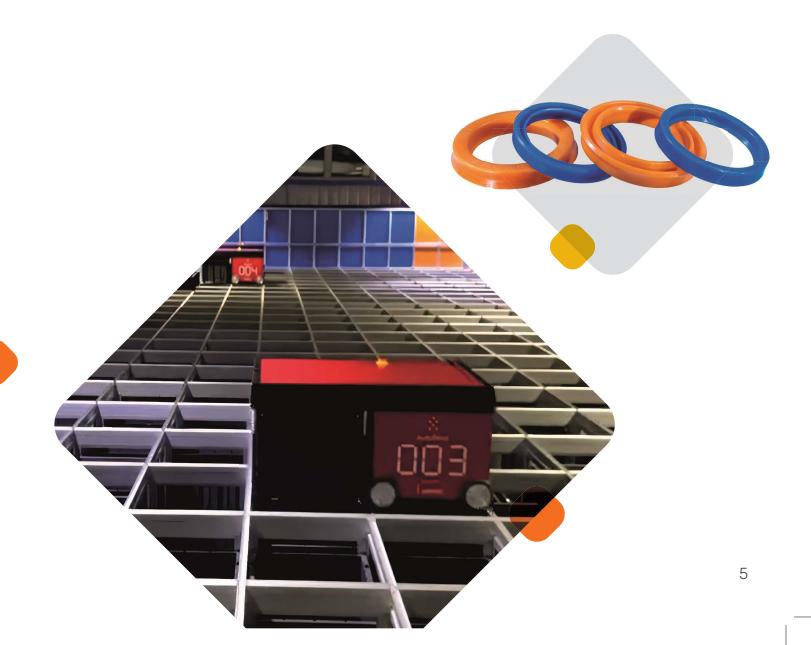






Materials

Premium materials with performance you can rely on. Today the cylinders are expected to work with high speed and high forces without any problems during the application. Operating temperature, sliding speed, media and the operating forces of the system are important factors in choosing the guide element to achieve these expectations.



A sustainable growth for Hallite

To ensure we have a clear measure of the benefits of our efforts to our valued customers, Hallite is adopting the **Life Cycle Assessment** framework.

LCA (Life Cycle Assessment) is a method for measuring the environmental impact of a product through its entire life cycle.

Product use & end of life

Adopting this methodology will allow us to quantify and continuously improve:

- Our choice of materials used, selecting ones that are either renewable or recyclable
- ▶ Efficiency of our energy and water consumed as well as waste management
- ▶ The longevity of the product, thus reducing waste
- ▶ The seal effect, thus reducing oil losses and emissions
- The reduction of energy demands in fluid power systems



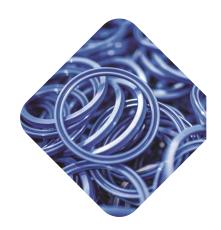


Raw materials

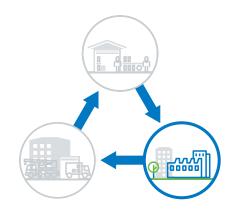
Hallite is working with its partners to develop a **sustainable approach** to sourcing and processing raw materials, using renewable energy, reducing carbon output and reducing chemicals of high concern.

- Our efforts include the testing and qualification of polyurethanes based on bio-sourced polyols, derived from plant based oils.
- ▶ Choosing steel for our unitized pistons and glands which is acknowledged to be as close to 100% recyclable.

In some of the challenging areas on elastomers, the strength and depth of resource at Michelin is enabling us to drive research towards **more sustainable solutions** in these materials.







Processes

Hallite is a network of **eight facilities across the globe**, each established to provide the breadth of manufacturing and services required to serve a dynamic market of seals in fluid power.

Energy and water

The facilities are **constantly compelled to decrease energy and water consumed**. This
has included the use of solar panels on some
facilities, closed loop water chillers, energy
efficient new equipment and installation of
energy efficient lighting systems, to name
just a few. Many of our plants have energy
contracts with renewable providers.

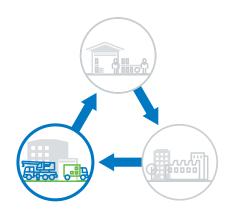
The balance of the facilities are on a path to green energy within the next few years.

Waste management

Waste is managed through the business principles set in our sustainability roadmap: avoid, reduce, reuse, recycle, renew.

Waste reduction is a key measure of the success of our environmental aspirations. Hallite is committed to **improving tooling** and process parameters to minimise waste. Transitioning to hot runners, for example, will help minimise surplus material from the process.





Product Use and End of life

In the full approach of **Life Cycle Assessment**, the use of the product in service can often be a bigger influence in the environmental impact than that of the raw materials or manufacture of the product.

Effective seals in fluid power systems typically rely on the interaction with dynamic surfaces and therefore introduce drag through frictional forces. The drag in the system demands energy and therefore higher drag will require more energy to drive the fluid power component such as a hydraulic cylinder.

Hallite has developed new products in the portfolio that work to minimise the amount of frictional forces, whilst maintaining effective seal function throughout the expected life of the seal.

An extensive and exclusive range of materials in our portfolio have been proven to provide exceptionally low leakage rates, contributing to minimal losses of hydraulic media to the environment.



Improving customer and partner collaboration and driving product performance and innovation forward

Test House

A State-of-the-art facility to improve customer and partner collaboration and drive product performance and innovation forward, the new Hallite facility combines laboratory and product testing space, previously housed in separate buildings. Constructed and equipped for a wide range of material and product characterization, the reimagined facility drives forward the company's capabilities and focuses on innovative growth.

The new Hallite facility also allows customers and trusted partners to observe real-time testing in the laboratory or remotely. Improved testing and analysis equipment, hardware upgrades, and enhanced data capture and backend systems will **accelerate the development** and availability of critical live test data, reports, and white papers that validate a sealing product design, concept, or material.





Testing partnerships

Technical collaboration is a critical focus of Hallite and is a key benefit to our customers. Being able to test our own products we use that performance data to continuously improve and innovate.

Seals are subjected to extensive in-house testing and field trials. Hallite's test facilities reproduce continuous operating conditions and record leakage, and dynamic and breakout friction as well as monitoring pressure, speed, temperature, and other performance factors.

Test and development facilities include:

- Friction and leakage test rigs
- ▶ High pressure pulse test rigs
- Finite element analysis
- ▶ Hydraulic cylinder rig test

Test reports are available for many of our products and material.





Hallite distributor programme

Our mission is to enhance customer experience and provide meaningful innovations to drive product performance through building collaborative partnerships.

Hallite provides a dedicated distributor programme which creates a collaborative partnership with our distributors based on trust, transparency as well as solid technical support to enable mutual growth in the markets.

We work with a wide network of distributors already around the world.

See what they have to say about the programme.

Find out more by asking one of our specialists today about the Hallite Distributor Partnership Programme.

www.hallite.com/distributors







Value Added Services

As your specialist partner in hydraulic cylinder seals we are proud to offer a **wide range of value-added services** in addition to our catalogued products. These are only some of the examples of the value-added services we offer.

CAD service

As part of our commitment to support design engineers, the Hallite CAD Service offers you access to 11,000+ 3D CAD models to download for free in over 150 different file formats – ready to import directly into all of the most popular computer aided design software.

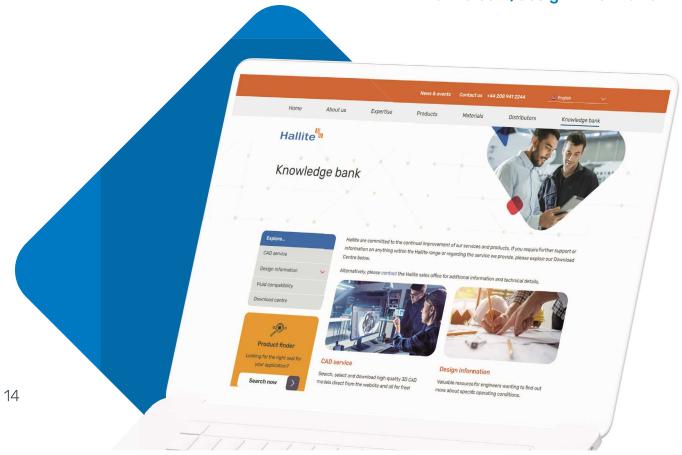
Design information

Our design information section is a key reference area and a valuable resource for engineers wanting to find out more about specific operating conditions, housing options and installation data – covering the entire Hallite product range.



Find out more at

www.hallite.com/design-information





Our product portfolio



See our full portfolio and visit our download centre to learn more.

Excavator

864

Temp range -45°C to 110°C

Max speed 1m/sec

www.hallite.com/864



683

Max pressure 400 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/683



660

Max pressure 700 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/660



506 Rod

Max speed 5m/sec



www.hallite.com/506-rod



CT

Max pressure 500 Bar

Temp range -45°C to 200°C

Max speed 1.5m/sec



www.hallite.com/ct





Backhoe loader

864

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/864



660

Max pressure 700 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/660



621

Max pressure 700 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/621



565

Temp range -40°C to 120°C

Max speed 5m/sec



777 (metric)

Max pressure 400 Bar

Temp range -40°C to 120°C

Max speed 0.5m/sec



www.hallite.com/777



Tractor hydraulic steering

834

Temp range -45°C to 110°C

Max speed 4m/sec



www.hallite.com/834



506 Rod

Max speed 5m/sec



www.hallite.com/506-rod



605

Max pressure 400 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/605



P54

Max pressure 500 Bar

Temp range -45°C to 200°C

Max speed 4m/sec



www.hallite.com/p54





Industrial cylinders

520

Temp range -45°C to 110°C

Max speed 4m/sec

www.hallite.com/520



533

Temp range -40°C to 120°C

Max speed 5m/sec



www.hallite.com/533



605

Max pressure 400 Bar

Temp range -45°C to 110°C

Max speed 1m/sec



www.hallite.com/605



714

Max pressure 500 Bar

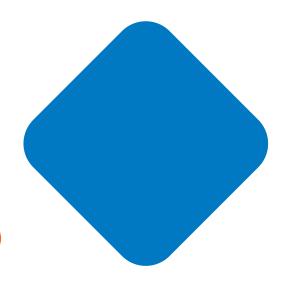
Temp range -40°C to 110°C

Max speed 1m/sec

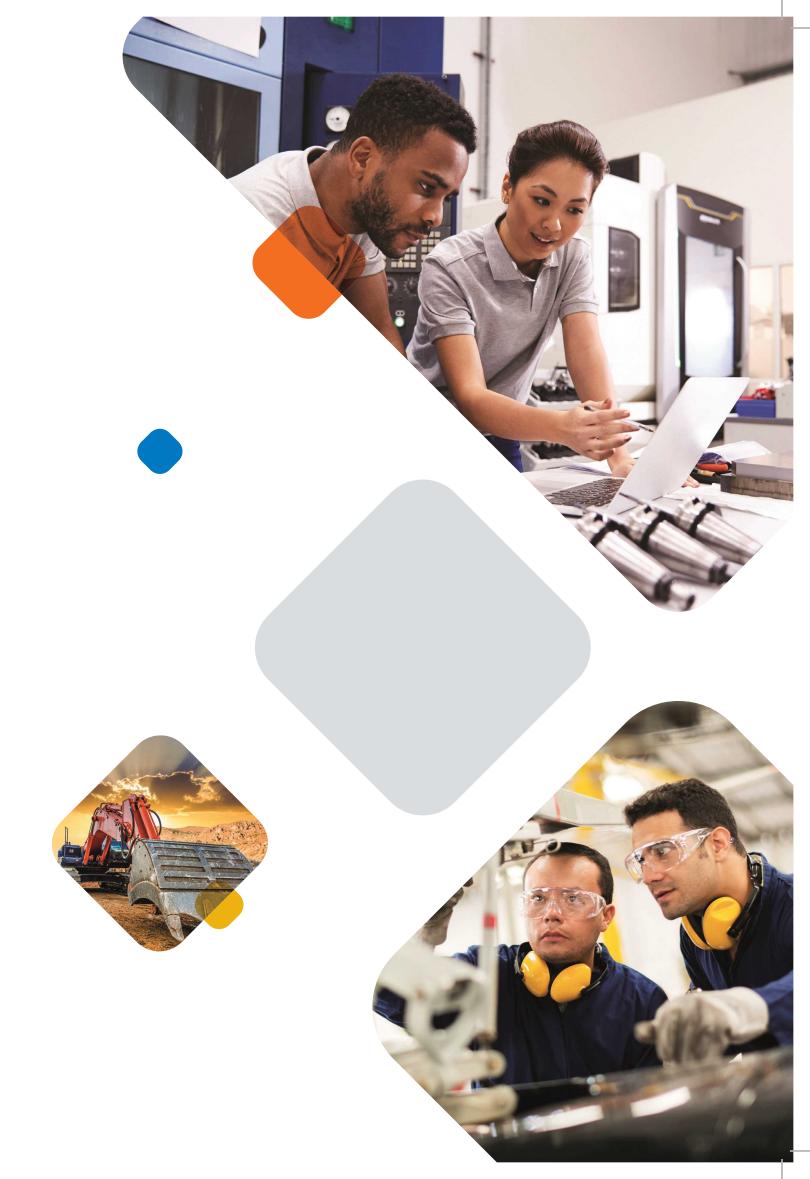


www.hallite.com/714











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