

# Bearings, Wear Rings & Bushings





High performance Hallite Bearing and Wear Ring products are offered in a wide range of materials, configurations, and styles, that meet the needs of the most demanding applications for reciprocating piston and rod bearings.



#### Type 63 Poly Acetal (POM)

- POM wear rings
- Cost effective wear ring for Hydraulic or pneumatic applications

#### Key Features

- Wear rings perform well in dry non-lubricated conditions
- Resistance to Hydrolysis
- Excellent load bearing capabilities

#### Key Advantages

- Prevents metal-to-metal contact
- Extends seal life
- Suitable for pneumatic applications, no glass content
- Ease of installation

#### Benefits

- High quality material, low cost protection for expensive cylinders
- Improved cylinder life

#### Equipment applications

- Off Highway
- Mobile hydraulics
- Material Handling
- Pneumatic cylinders for industrial and mobile applications

#### Key Technical Information

Compressive Strength: 13,000psi (900bar)  
 Temperature Range: -40°F to 250°F (-40°C to 122°C)



#### Type 87 Bearing Strip

A Special blend of PTFE and Bronze, rectangular strip material

#### Key Features

- Low Friction
- Infinite Length Range
- Ease of Installation
- Extremely Flexible

#### Benefits

- Broad range of applications
- Cut to size, and hence ease of field repair
- Lubricated material w/broad fluid compatibility
- Use in non lubricated applications
- Good for reciprocating, oscillating or rotary movement

#### Applications

- Higher temperature, low friction applications
- Rotary or oscillating

#### Key Technical Information

Compressive Strength: 2,900psi (200 bar) @ 73F (23°C)  
 1,300psi (90 bar) @ 176F (80°C)  
 Temperature Range: -58°F +390°F (-50°C +199°C)

*“We work closely with our customers to create and supply solutions for their most demanding applications.”*



#### Type 506

- Woven fabric reinforced polyester resin
- Hallite 506 is available in three forms, cut rings, spiral lengths and flat coils

#### Key Features

- High compressive strength material
- Internally lubricated
- Offers high bearing load capacity over a broad range of temperatures
- Manufactured to very tight tolerances
- Compatible with wide range of fluids including water based fluids and phosphate esters

#### Benefits

- Extensive size range, either pre cut or coil lengths
- Many sizes can be cut from one coil
- Improved cylinder life

#### Equipment applications

- Mining
- Mobile hydraulics
- Off Highway
- Forestry
- Pneumatic cylinders for industrial and mobile applications

#### Key Technical Information

Compressive Strength: 16,500psi  
(2415 bar)

Temperature Range: -40°F +250°F  
(-40°C +122°C)



#### Type 533 Nylon

- Glass filled Nylon Wear Ring
- Is the most cost effective option for modern hydraulic cylinder wear rings

#### Key Features

- High compressive strength material
- Very Durable and able to work under high cylinder pressures
- Offers high bearing load capacity over a broad range of temperatures
- Manufactured to close tolerances
- Easy to install
- Available in Metric, Inch sizes, multiple widths and thicknesses, as well as T-bearing and other configurations

#### Key Advantages

- Prevents metal-to-metal contact
- Extends seal life
- High abrasion resistance limits flow erosion problems
- Great replacement option for Phenolic wear rings

#### Benefits

- Extensive size range
- High quality material, low cost protection for expensive cylinders
- Improved cylinder life
- Economical

#### Equipment applications

- Off Highway/Construction Equipment
- Mobile hydraulics
- Material Handling
- Agricultural Machinery

#### Base Technical Information

Compressive Strength: 25,500psi  
(1758bar)

Temperature Range: -40°F +275°F  
(-40°C +135°C)



#### Type 540 Nylon Telescopic Bearing

- Preferred Bearings for Telescopic cylinder applications
- Proprietary Plastic Material Formulation

#### Key Features

- High compressive strength material
- Offers high bearing load capacity over a broad range of temperatures
- Manufactured to tight tolerances, can include ID steps, other contours, and extractor holes
- Dimensionally stable material, hydrolysis resistant
- No internal stresses that can sometimes distort geometries of other bearing materials

#### Benefits

- Extensive size, thickness, and configurations
- Much less costly than Bronze Bearings
- Best in class performance life in Telescopic cylinder applications
- Eliminates 'water swell' cylinder binding

#### Equipment applications

- Dump Body cylinders
- Tipping applications
- Industrial Telescopic Applications
- Man Lifts
- Off Highway Telescoping Cylinders

#### Key Technical Information

Compressive Strength: 28,000psi  
(1930bar)

Temperature Range: -40°F +275°F  
(-40°C +135°C)



## Hallite Seals

Hallite produces high performance hydraulic sealing solutions for the world's fluid power industry. The company enjoys an enviable reputation for high quality and reliability within the mobile hydraulics, mining, off-highway, construction, agriculture, mechanical handling and automation markets.

Hallite products, engineered in a wide variety of advanced materials, are chosen by leading manufacturers for their exceptional performance in the most demanding, safety-critical high specification applications.

Hallite operations are located in Australia, Brazil, Canada, China, France, Germany, India, Italy, the UK and the USA. All Hallite locations are committed to providing quality seals in the shortest possible time. Hallite combines carefully chosen and managed stocks in local markets, supported by a fast track moulding capability. All locations can now boast a CNC machining cell, branded Hallite Service, which can provide immediate delivery for non-standard and breakdown situations.

Additionally a worldwide network of service partners completes the global presence and ensures the full range of Hallite products is readily accessible.



### UNITED KINGDOM

**Hallite Seals International Ltd.**  
130 Oldfield Road,  
Hampton  
Middlesex, TW12 2HT  
T: +44 (0)20 8941 2244  
F: +44 (0)20 8783 1669  
E: seals@hallite.com

### AUSTRALIA

**Hallite Seals Australia Pty. Ltd.**  
Unit 4, 1273 The Horsley Drive  
Wetherill Park,  
NSW 2164  
T: +61 (0)29 620 7300  
F: +61 (0)29 620 7400  
E: seals@hallite.com.au

### BRAZIL

**Hallite do Brasil Tecnologia em Vedações Ltda.**  
Avenida 5, 1367 - Jd Claret  
Rio Claro - SP,  
13503-254  
T: +55 (0)19 35231859  
F: +55 (0)19 35324805  
E: info@halliteseals.com.br

### CANADA

**Hallite Seals (Canada) Ltd.**  
5630 Kennedy Road,  
Mississauga,  
Ontario, L4Z 2A9  
T: +1 (905) 361 2350  
F: +1 (905) 361 2342  
E: seals@hallite.ca

### CHINA (Shanghai)

**Hallite (Shanghai) Co. Ltd.**  
785 Xing Rong Road,  
Jiading Industrial Park  
Jiading District,  
Shanghai 201804  
T: +86 (0)21 3351 7272  
F: +86 (0)21 3351 7085  
E: hallite.shanghai@hallite.com

### CHINA (Suzhou)

**Hallite Service (Suzhou) Co. Ltd.**  
Plant 1, 82 Jiangpu Road  
Shengpu  
Suzhou Industrial Park  
Suzhou 215126  
T: +86 (0)512 6295 1601  
F: +86 (0)512 6295 1247  
E: hallite.suzhou@hallite.com

### GERMANY

**Dichtelemente Hallite GmbH**  
Billwerder Ring 17  
21035 Hamburg  
T: +49 (0)40 73 47 48-0  
F: +49 (0)40 73 47 48 49  
E: seals@hallite.de

### INDIA

**Hallite Sealing Solutions India Pvt. Ltd.**  
Special Plot #10, 3rd Main,  
1st Stage,  
Peenya Industrial Estate,  
Bangalore - 560 068  
T: +91 (0)80 2372 6000/1  
F: +91 (0)80 2372 6002  
E: seals@hallite.in

### ITALY

**Hallite Italia srl**  
Via Francia 21,  
Loc. Guasticce  
57017 Collesalvetti - Livorno  
T: +39 (0) 58 642 8287 / 9734  
F: +39 (0) 58 642 9845  
E: seals@hallite.it

### UNITED STATES

**Hallite Seals Americas**  
50777 Varsity Court  
Wixom,  
Michigan 48393  
T: +1 (248) 668 5200  
F: +1 (248) 668 5210  
E: seals@hallite.us