

# Sealing Systems for Off-Highway Equipment





**The demands of machinery used in off-highway applications continue to grow. Equipment is expected to work harder and for longer periods as productivity levels are driven up.**

Pressure, temperature, side loading and shock loads are all major factors that have to be addressed, as is the need to keep the system free from external contamination.

The necessity, therefore, to provide a high performance, quality sealing system capable of meeting the requirements of this demanding sector is absolutely essential.

Hallite Seals offer both the OEM and the end user a range of products specifically designed and manufactured to service this global industry.

## Bearings



**506** A resilient bearing ring manufactured using woven fabric reinforced polyester capable of withstanding extreme side loads.



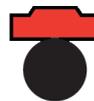
**533** A tough, glass filled nylon bearing ring for piston and rod applications.

## Piston

### Piston Seals



**714** A compact, high pressure, double acting seal, complete with a hard thermoplastic face and square section NBR energiser. The face is split for ease of assembly. This design is becoming more popular in Earthmoving applications and is also ideal for passing over ports.



**754** A compact double acting piston seal for medium duty applications. It has a tough wear resistant thermoplastic elastomer face which is preloaded by an o-ring. A widely used general purpose piston seal for applications where good load holding capability is required.



**735** A high pressure, heavy duty, low friction double acting piston seal with a filled PTFE cap ring, two thermoplastic anti-extrusion rings and rubber energiser. A compact, reliable design commonly used in off-highway and other mobile equipment.

### Piston Rings



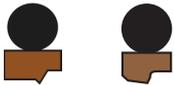
**88** An anti-dieseling piston ring used in general off-highway cylinder applications.



*“Equipment is expected to work harder and for longer periods as productivity levels are driven up.”*

## Gland

### Buffer Seals



**16 / 416** Filled PTFE rod buffer seals; low friction and simple groove design, used to protect the primary rod seal from pressure spikes.



**SRB** A low friction PTFE buffer seal, used to protect the primary rod seal from pressure spikes. The SRB profile incorporates a thermoplastic back up ring for severe applications.



**653** A heavy duty rod buffer seal manufactured in Hythane® 181. This unique patented design protects the primary rod seal from pressure spikes and is designed to prevent inter-seal pressure build up. The seal is interchangeable with popular PTFE designs.

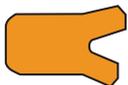
### Rod Seals



**605** A twin lip design giving a superlative dry rod seal, manufactured in Hythane® 181, easy to install and suitable for demanding applications.



**621** This top of the range twin lip rod seal is manufactured in Hythane® 181; with a unique profiled rubber energiser and acetal anti-extrusion ring to withstand high pressures and shock loads, the seal provides complete lip actuation under all pressure conditions.



**663** This single lip rod seal is ideal for applications which require a double lip wiper. Made from Hythane® 181 or Hallite 361, this seal offers superlative dry rod sealing for light and medium duty applications.

### Wipers



**38** A tough, abrasion resistant rod wiper incorporating pressure relief ribs and an outside lip for effective sealing of the housing.



**520** A polyurethane rod wiper incorporating pressure relief ribs, an outside lip for effective sealing of the housing and precision trimmed wiping lip.



**842** This heavy duty wiper is designed for hydraulic cylinders working in heavily contaminated environments. The 'umbrella' flap prevents dirt and contamination accumulating in the crevice between the wiping lip and the housing retaining lip.



**844** This double lipped wiper is designed for use with venting U-rings. The flap on the wiping lip is specially designed to cover the gland housing, thus preventing the common slurry trap evident when using conventional wipers.



**860 / 862** Press fit metal cased rod wipers incorporating precision trimmed polyurethane wiping lips and metal cases treated with a rust inhibitor for longer life.



**864** This press-fit double lipped metal case wiper comprises a textured wiping lip, and two sealing lips accurately produced and proportioned to collect fluid passing the rod seal



## 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.



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