

pioneer WESTON

INTERNATIONAL LIMITED

Technically Focused, Globally Connected

At the forefront of sealing technology



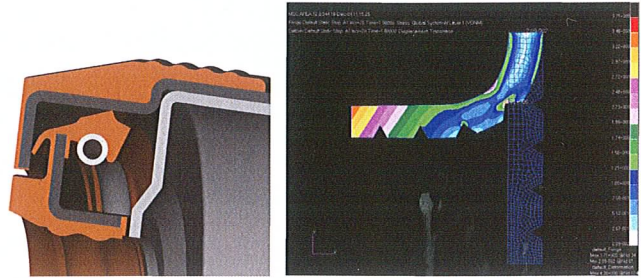
www.pwi-intl.com

Pioneer Weston International Limited has been at the forefront of sealing technology and has enjoyed an enviable reputation with major OEMs for over 50 years.

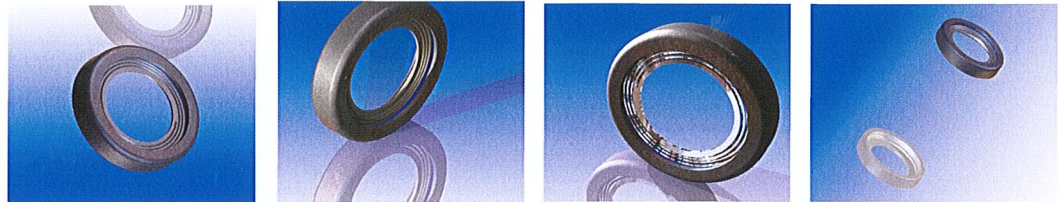
Our products continually evolve to meet the ever-increasing demands of our customers and we endeavour to always provide the best sealing solution - at the most competitive price - no matter how arduous the operating environment.

Design

Our highly experienced design team has extensive material expertise and use the latest 3D CAD Technology, Parametric Modelling and Finite Element Analysis to provide right first time sealing solutions within the shortest possible time.



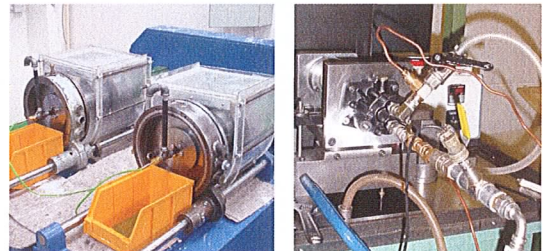
We supply drawing and assembly graphics for integrating into customer drawings and schematics, and 3D rendered visualizations to help our customers “see and feel” the product before investing in tooling or components.



Test and Development

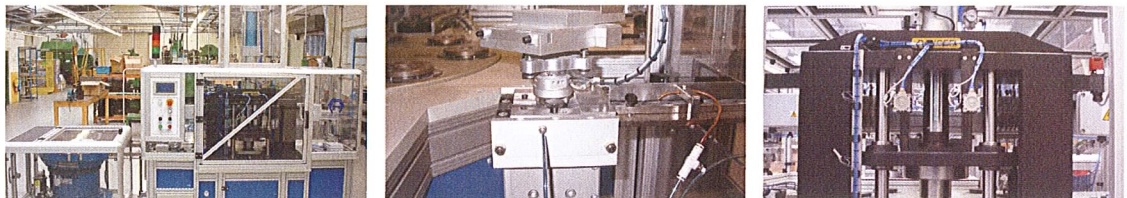
Comprehensive test facilities allow us to perform validation testing to our own and customer specifications, and to replicate real world operating conditions.

Our fully automated test cells provide the following capabilities
Dynamic Torque, Speed and Pressure measurement
Environmental simulation
Programmable test cycles
Video monitoring and analysis of failure modes
Chemical analysis to identify fluid contamination



Manufacturing

In order to meet the demands of our many customers we are able to supply parts manufactured in our own facilities alongside parts made by our approved manufacturing partners. With this flexibility we are able to offer our customers the best value solution be they looking for 100, 10,000, 100,000 or more than 1,000,000 parts.



Quality

Whether the requirement be for small batch samples for test and validation or for large volume production Pioneer Weston International's' quality systems ensure each product meets the highest quality standards.

We are an ISO9000-2001 accredited company and are in the final stages of gaining TS16949 certification (scheduled for Qtr2, 2005). Our approved sub-contract manufacturers have a minimum of ISO9000 with most having QS9000 or TS16949.

Our Products

Elastomer Shaft Seals

Pioneer International supply a wide range of bespoke and standard radial lip seals, as well as an extensive choice of unitised cartridge seals.

We have over 50 years experience of seal design and supply seals in all types of Elastomer- e.g. Nitrile (NBR & HNBR), Viton, Silicon and Poly-acrylic materials.



PTFE Shaft Seals

We are a market leader in PTFE seal technology and have been designing and manufacturing PTFE seals for over 30 years. For many applications PTFE offers significantly better performance and longer service life than elastomer materials.

With the ever-increasing demands from customers for quality and reliability today's designers are increasingly specifying PTFE seals as their first choice sealing solution.



Split Shaft Seals

These unique gas tight radial lip seals have been specifically designed to minimise maintenance downtime. These seals can be removed – and fitted – without the need to break down the rest of machinery.

These seals comprise of an elastomeric sealing element split at one point only, a hook and eye garter spring, split half clamp plates and where required an adaptor plate. Radial compression of the sealing element ensures that the butts at the split interface are fully closed when the seal is assembled. Split Shaft Seals are available in a wide range of material combinations so that we can offer a solution to suit almost any working environment.



Mechanical Face Seals

Mechanical Face Seals are primarily used for sealing fluids under high pressure and/or in environments that involve highly abrasive mediums.

For applications with a high-pressure differential we normally recommend "Balanced" Pressure Seals. These seals are designed so that the net axial pressure on the face seal in the presence of fluid pressure is controlled to provide sufficient force for sealing, but is minimised to prevent accelerated wear.



"Unbalanced" Pressure Seals are also available for applications where there is a low pressure differential. We offer an extensive range of standard and bespoke mechanical seals – with a wide selection of sealing materials so that we can satisfy almost any requirement.

General Sealing Products

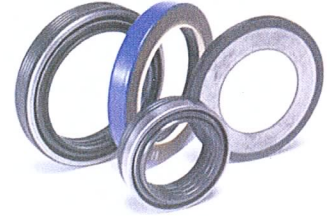
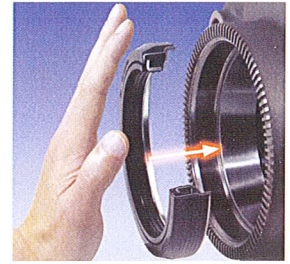
With our wide knowledge of the sealing industry and expertise in sourcing high quality parts Pioneer Weston International also supply a wide range of quality assured general sealing products to both OEM's and distributors.



Typical Applications

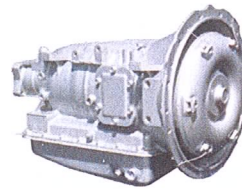
Axle Seals

1. Eighty five percent of truck axle seals fail because of incorrect installation and our Transmotion range of unitised axle seals are designed to be super tough and guarantee against installation damage. These unique seals are also designed to be fitted by hand and to offer long service life.
2. Standard OE tractor axle seals cannot cope with the arduous conditions of operating under water in the Padi fields of SE Asia. PWI design and manufacture OE replacement axle seals specifically to operate in this environment.



Gearbox seals

1. We supply heavy-duty gearbox seals for a wide range of off road and agricultural vehicles. Of unitised construction these seals are designed specifically to operate in conditions of dirt, grit, water and dust.
2. PTFE Gearbox seals are designed for high performance applications. Capable of operating at the extremes of temperature (high and low) and with low friction characteristics our seals can be found anywhere from F1 racing car to heavy-duty truck transmissions.



Engine Seals

We supply PTFE Crankshaft and Valve stem seals to the world's leading Diesel Engine Manufacturing companies. These seals provide years of wear free service operating at the extremes of temperature.



Pump Seals

Our PTFE pump seals are used by many Automotive Industry pump manufacturers to meet the vehicle manufacturers demands for reliability and service life.



Fan Seals for the Nuclear Industry

To minimise service times our Split Shaft Seals are used by the nuclear industry for sealing of extraction fans. These seals can split to be removed and refitted in minutes yet provide a totally gas tight seal in operation.



Bearing Seals for the Steel industry

We supply bespoke mechanical seals to protect bearing in steel mills. These seals operate in extremely high temperature and protect bearings against water, steam and slag ingress, whilst also preventing pressurised lubricant from leaking out and causing contamination.

