



# OZ MILITARY & DEFENCE SOLUTIONS PRODUCT & SERVICE GUIDE



# INNOVATIVE SEALING TECHNOLOGY

## New Generation Packings

Asbestos-free, environmentally friendly

Oz Seals stocks the largest range of packings to support various pressure applications that require demanding operating pressure.

All packings we have been carefully selected to be asbestos-free, environmentally friendly and cover a large pH range of 0 – 14, ideal for acids and alkaline environments. They have the ability to withstand high temperatures, from minimum 200°C up to 650°C.

Our range of packings include:

PV10   pH: 5-11 , Temp: 121°C	VP80   pH: 5-11 , Temp: 260°C
PV20   pH: 2-14 , Temp: 260°C	V90   pH: 0-14 , Temp: 260°C
PV30   pH: 1-13 , Temp: 260°C	V100   pH: 0-14
PV40   pH: 0-14 , Temp: 260°C	V110   Pure graphite tape
VP50   pH: 0-14 , Temp: 650°C	V120   Pre-formed graphite rings
VP60   pH: 0-14 , Temp: 650°C	V130   pH: 0-14 Temp: -240°C + 280°C
VP70   pH: 0-14 , Temp: 450°C	



## Oz Cartridge Seals

The Oz Cart 1 is an exceptional high temperature seal. Its seal design improves film formation between the mechanical seal faces and significantly enhances face lubricity.

The film formation between the faces not only reduces heat generation but also increases its seal life in many high temperature application.

## Spring-energised seals

Helicoils, Meander, Garter and External springs

Oz Seals offers an extensive range of spring energised seals for critical industries.



The design of the seal has the capability of extending the operating limits of polymer-based seals by :

- Having a gas-tight sealing system for end-users
- Achieving fugitive emission reduction goals
- Meeting environmental regulation standards



Helicoils    External spring    Garter spring    Meander spring

## Features

- A high level of wear resistance
- Capable of withstanding considerable temperatures
- Easy to install
- Low levels of friction
- Amazing sealing, both static and dynamic

## O-rings

Oz Seals manufactures the world's greatest range of O-ring sizes and they are available in various different materials for a wide range of applications.

Oz Seals O'Rings are the most commonly used seal worldwide due to the simplicity of the design. It makes for an economical yet very effective sealing solution. The successful design of the o-ring allows it to seal statically, as well as dynamically but within limits.

### Features

- A simple yet versatile seal
- Commonly used in static application
- High temperature range
- Long wear, long life
- Made from high performance polyurethane

### Applications

Suitable for all applications

### Fluids

Mineral based oils, water/glycol and water emulsions



# SEALING CONNECTIONS

## Seal connection designs

Easy seal installation as there is no need for dismantling of the pump (or equipment).

The major advantage of opting for sealing connections is that it allows you to install the seal with no dismantling of the pump (or equipment). Oz Seals split seal connection designs offer leak-free performance. This leads to improved safety and environmental compliance and eliminates sleeve wear, and flush water usage, among many benefits.

Especially for large seal diameters, seal connections are highly recommended as it minimizes assembly and disassembly work. No matter if it is a once piece seal or a seal connection design, there are no limits when it comes to sealing diameters.



# INNOVATIVE CONNECTION DESIGNS

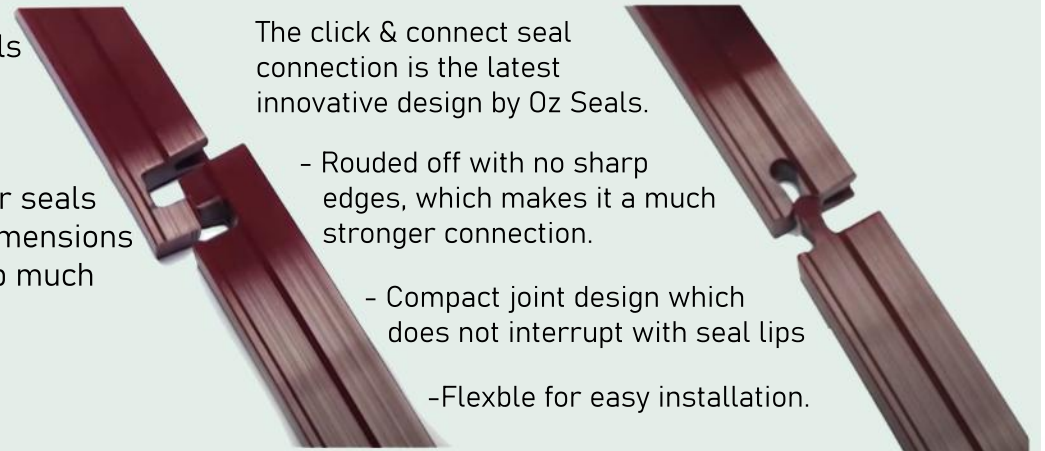
## Split seal design

- Ideally used for seals with large cross sections.
- Not recommended for seals with short height dimensions as the joint takes up much of the seal profile

## Click & connect design

The click & connect seal connection is the latest innovative design by Oz Seals.

- Rounded off with no sharp edges, which makes it a much stronger connection.
- Compact joint design which does not interrupt with seal lips
- Flexible for easy installation.





## High pressure oil seals

Oz Seals uses advance sealing technology to ensure the optimum sealing configuration for military equipments.

The seals that are designed specifically for the defence and military industry are able to perform at higher pressures and temperatures whilst being able to demonstrate low friction characteristics at high velocities in order to provide long seal life.



### Features

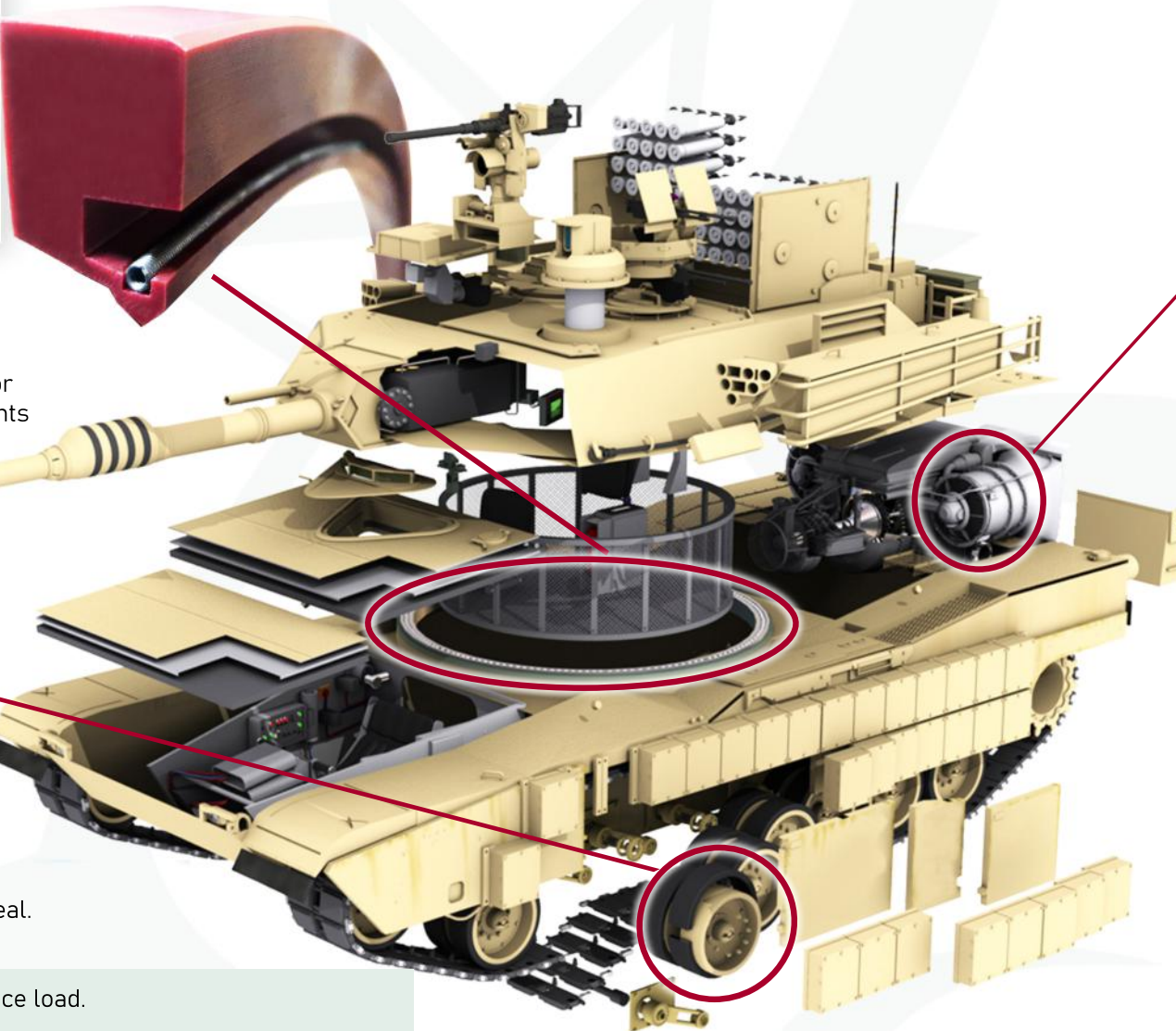
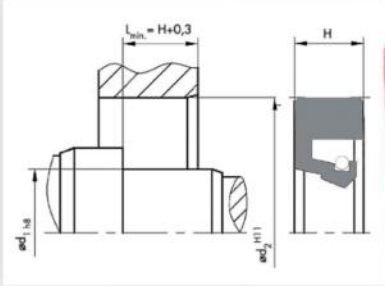
- Flexible for easy installation
- Maximum service life
- High temperature and pressure resistant
- Low friction seal characteristics
- Withstand high and constant shock loads
- Solid or split design
- Improve reliability
- Able to custom-design a seal to any design and material required

### Application

For oil or grease retention

### Fluids

Mineral based oils, water/glycol and water emulsions



**OIL SEAL  
BP3**

Provides sealing functionality for rotating and swiveling movements under low pressure and high velocity.



**DUO CONE  
SEAL  
PADO TYPE**

A special form of mechanical seal. Key functions are to :

1. To generate a uniform axial face load.
2. To act as a static seal at the inside diameter and the outside diameter.
3. To prevent the seal ring from turning with shaft and transmit the torque from the rotating shaft of the housing through the faces to the static half



**HYDRAULIC  
VALVE SEAL**

To increase the life expectancy, Oz Seals has improved on the sealing function of the traditional O ring by changing it to a rectangular ring.

**OZ DEFENCE & MILITARY  
SPECIAL SOLUTIONS  
OZ HYDRAULIC VALVE SEAL**

**Features**

- High resistance to twisting
- High resistance to compression
- High resistance to extrusion
- Improved fit within groove
- Longer sealing life
- Less deformation and internal stress
- Easy installation
- No equipment modification needed