



MECH-SEAL

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COMPANY PROFILE

SPECIALISTS IN FLUID SEALING PRODUCTS

- Mechanical Seals
- Gland Packing
- Gasketing
- Shaft Couplings
- Valves
- Bearings
- Mechanical Seal and Pump Reconditioning
- Design, Manufacturing, Installation and Reconditioning of all mechanical seals and related sealing products
- Design, Manufacturing, Supply and Reconditioning of Swivel Joints
- Reconditioning of Centrifugal Pumps
- Various Shaft Couplings
- CNC Machining





MECH SEAL was established in 2013 to service the mechanical seal needs of the greater Midrand and Centurion areas of Pretoria in Gauteng South Africa and has since expanded to cover virtually the entire South Africa, servicing clients from Limpopo to the Western Cape.

With a combined experience of more than half a century, our manufacturing and engineering team has the necessary expertise to develop mechanical seals to satisfy every customer's unique requirements and specifications.

Vision Statement

As a proudly South African company, MECH SEAL provides a cost effective yet equal quality alternative to the expensive branded imported seals dominating the market at present.

We strive to be the "go-to" guys of the industry, through **hard work** and **dedication** to all our customers; each customer will be treated as if they are the only customer, large or small.

Mission Statement

We strive to reduce downtime and get our customers back up and running in as short a time frame as possible, so that they can get back to doing what they do best.

Values

MECH SEAL applies to the following core values to our operations:

- We conduct business honestly and fairly,
- With a strong stance against corruption
- Dishonesty shall not be tolerated
- There is no substitute for hard work
- We do not negotiate on quality to reduce the price

Business Goals & Objectives

Our main goal is to **serve our loyal customers** and become a brand that customers can rely on. Our objective is to position the MECH SEAL brand in the fluid control industry as the **experts to call** regarding your fluid sealing requirements.

Growth Strategy

MECH SEAL has stepped out of the conventions of past decades and embraced the modern age with a large footprint in the social and online media sector. This has vastly increased our audience from a select few customers that specifically need our services, to tens of thousands of people that see what we do and have the ability to speak to an employer about our services.

We aim to generate growth via word of mouth by delivering an outstanding service to our customers and in that way generate referrals.





Affirmative Action Initiatives

MECH SEAL adheres to the prescribed B-BBEE Legislation and have the following initiatives in place to further improve our Employment Equity status:

- i. The advancement of woman and people of color up to board of director level.
- ii. Equity ownership of woman and people of color.
- iii. Procurement of work and maintenance contracts from Black-owned businesses.

B-BBEE

MECH SEAL is a level 4 B-BBEE rated company with 30% Black ownership

PRODUCTS AND SERVICES



Mechanical Seal

An end face mechanical seal uses both rigid and flexible elements that maintain contact at a sealing interface and slide on each other, allowing a rotating element to pass through a sealed case. The elements are both hydraulically and mechanically loaded with a spring or other device to maintain contact.



Gland Packing

When a pump operates, the liquid could leak out of the pump between the rotating shaft and the stationary pump casing. Since the shaft rotates, preventing this leakage can be difficult. Earlier pump models used [mechanical packing](#) (otherwise known as Gland Packing) to seal the shaft. Since World War II, mechanical seals have replaced packing in many applications.



Gasketing

A **gasket** is a [mechanical seal](#) which fills the space between two or more mating surfaces, generally to prevent leakage from or into the joined objects while under [compression](#).



Shaft Couplings

The primary purpose of couplings is to join two pieces of rotating equipment while permitting some degree of misalignment or end movement or both. By careful selection, installation and maintenance of couplings, substantial savings can be made in reduced maintenance costs and downtime.



Valves

A **valve** is a device that regulates, directs or controls the flow of a fluid (gases, liquids, fluidized solids, or [slurries](#)) by opening, closing, or partially obstructing various passageways. Valves are technically valves [fittings](#), but are usually discussed as a separate category. In an open valve, fluid flows in a direction from higher pressure to lower pressure.



Swivel Joint

A swivel joint for a [pipe](#) is often a threaded connection in between which at least one of the pipes is curved, often at an angle of 45 or 90 degrees. The connection is tightened enough to be water- or air-tight and then tightened further so that it is in the correct position.



Bearings

A **bearing** is a [machine element](#) that constrains relative motion to only the desired motion, and reduces friction between [moving parts](#) . The design of the bearing may, for example, provide for free [linear](#) movement of the moving part or for free [rotation around a fixed axis](#); or, it may *prevent* a motion by controlling the [vectors](#) of [normal forces](#) that bear on the moving parts.



CNC Machining

In modern CNC systems, end-to-end component design is highly automated using [computer-aided design](#) (CAD) and [computer-aided manufacturing](#) (CAM) programs. The programs produce a computer file that is interpreted to extract the commands needed to operate a particular machine via a post processor, and then loaded into the CNC machines for production. Since any particular component might require the use of a number of different tools – drills, saws, etc., modern machines often combine multiple tools into a single "cell". In other installations, a number of different machines are used with an external controller and human or robotic operators that move the component from machine to machine. In either case, the series of steps needed to produce any part is highly automated and produces a part that closely matches the original CAD design