



REPUBLIC TRANSMISSIONS

We are the only
company in
South Africa
that locally Design &
Manufacture
Valves & Gearboxes .

**SINCE
1978**



COMPANY PROFILE

**Locally Designed, Globally Trusted
Industrial Gearbox and Mining Equipment
Solutions**

Table of Contents

Part: 01 Introduction, Mission & Vision

Part: 02 Butterfly Valves

Part: 03 Valve Gearboxes

Part: 04 Engineering Capabilities

Part: 05 Mining Solutions

Part: 06 Project References

Part: 07 Contact Information



Republic Transmissions Pty Ltd



About Us

Founded in 1978 by visionary engineers, Republic Transmissions identified a critical need in the South African market for high-quality, locally designed, and manufactured industrial gearboxes. Our early focus was on robust solutions for valves and dampers within the demanding power generation, water, mining, pulp & paper, petrochemical, and process industries across Southern Africa. The inherent durability and adaptability of our gearboxes quickly earned us a reputation, expanding our reach to process applications worldwide and establishing Republic Transmissions as a leading South African OEM.

In 2008, a new chapter began under fresh ownership. The new director, bringing extensive mining engineering expertise, propelled Republic Transmissions to establish a dedicated division focused on the mining sector. With over four decades of experience, Republic Transmissions has proudly designed, manufactured, supplied, and installed more than 40,000 gearboxes, adaptors, and associated equipment, serving every facet of the flow industry.

Our Vision

To be the undisputed leader in industrial gearbox and associated equipment manufacturing and supply. We aspire to be recognized as the premier gearbox and triple eccentric butterfly valve, metal and rubber seated supplier renowned for custom-engineered designs tailored precisely to our clients' process requirements.

Our Mission

At Republic Transmissions, we are driven by a commitment to deliver unparalleled value and expertise to our customers. We aim to foster sustainable business growth while continuously enhancing our capabilities to meet evolving global demands. Our dedication to quality workmanship, empowering local manufacturing, and setting a benchmark for success in the global market is unwavering. Every Republic Transmissions gearbox is meticulously designed and manufactured to exceed client expectations, a testament to our highly qualified personnel, cutting-edge design, material, and manufacturing technologies. We are also committed to training local artisans, ensuring a legacy of skilled engineering for decades to come.



Series 33

Triple Eccentric Butterfly Valves

Engineered for Performance. Built for Reliability

Republic Transmissions is a leading South African manufacturer of high-performance triple offset, metal seated butterfly valves, serving the water, waste water, mining, gas, industrial oil, and power generation sectors. From design to manufacturing & refurbishment, all operations are carried out at our Lillanton, Boksburg & Roodepoort facility, ensuring strict quality control and rapid turnaround times.

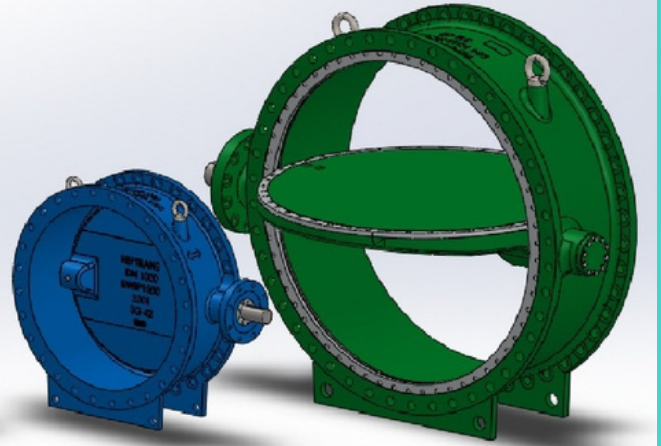
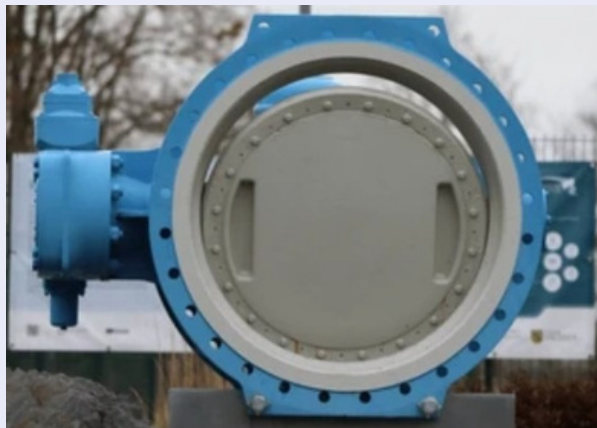
Our Valve Solutions

We specialize in metal-seated triple offset butterfly valves designed to deliver exceptional sealing performance, durability, and operational efficiency.

· **Bubble-tight shut-off** at rated pressures in both directions

· Suitable for **flow regulation and isolation**

Designed for **long service life and minimal maintenance**



Triple Offset Butterfly Valve (TOBV)

Our triple offset butterfly valves are engineered for zero-leakage performance in demanding environments. The unique three-offset geometry eliminates friction between the seat and disc, ensuring reliable operation under extreme conditions.

Key Features

· **Metal-to-Metal Sealing:** Provides durability under extreme temperature and pressure conditions.

· **Zero Leakage:** Precision engineering ensures bubble-tight shut-off.

· **Low Torque Operation:** Reduced friction enables smoother operation.

· **Extended Service Life:** Minimal wear significantly reduces maintenance requirements.

· **Corrosion Resistance:** High-grade materials ensure durability in harsh environments.



Series 33

Triple Eccentric Butterfly Valves

Product Range(Metal)

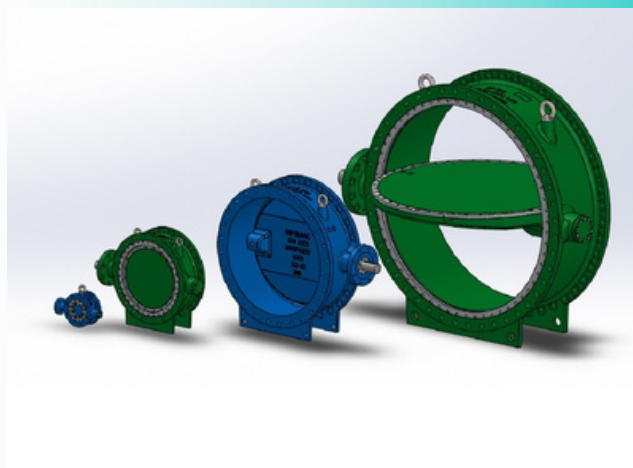
Size Range: DN100 – DN1800

Pressure Ratings:

- PN6 to PN63
- RWTP 1500 KPA to RWTP 8500
- CLASS 125 TO CLASS 600

Design & Construction

- Valve offered in both left- and right-hand closing configurations
- Valves are supplied with integral flanges, which can be cast and drilled to meet specific customer or contractual requirements.
- Common standards include BS 4504, SANS 1123, and BS 10.
- Face to Face in accordance to BS EN SS8
- Internal and external epoxy coatings for corrosion protection



Operation & Installation

Actuation Options:

- Manual (gearbox with handwheel)
- Electric (Actuator or actuator and gearbox combination)
- Pneumatic
- Hydraulic

Additional options include:

- Valve input shaft locking devices
- Extension spindles and pedestals
- Gearbox position indicators

Installation:

Suitable for both horizontal and vertical pipeline configurations.



Series 33

Triple Eccentric Butterfly Valves

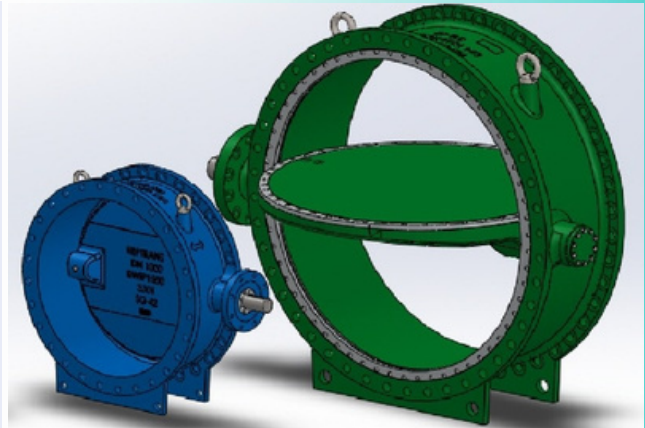
Industries Served

Our valves are trusted across a wide range of industries:

- Power Generation: Steam and cooling systems
- Oil & Gas: Pipelines and processing plants.
- Water & Waste water: Treatment and distribution systems
- Chemical & Petrochemical: Corrosive and high-temperature media.

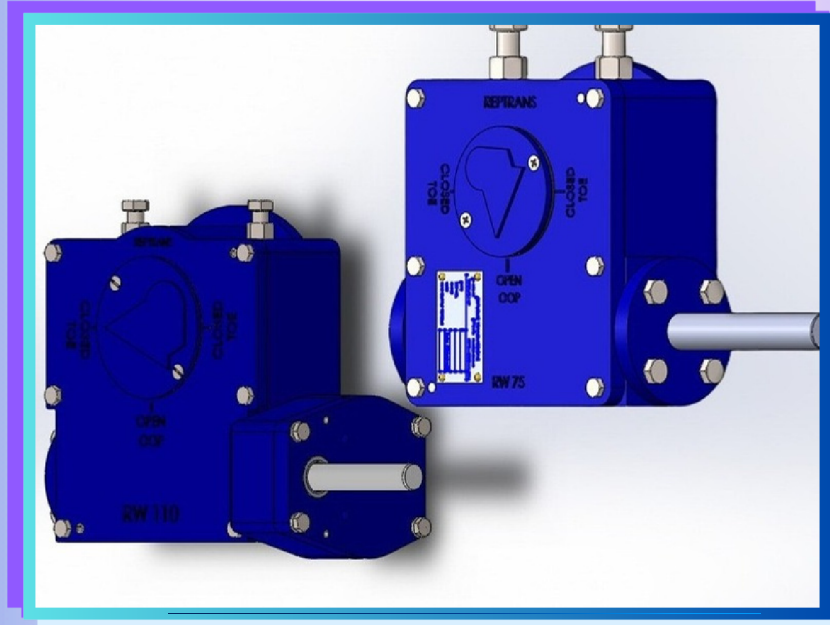
Why Choose Republic Transmissions?

- Local manufacturing and support
- On site support and parts availability
- Proven performance in harsh environments
- Custom-engineered solutions
- Comprehensive refurbishment services



Republic Transmissions

VALVE GEARBOXES



WORM GEARBOXES (FULL OR SEGMENT ARRANGEMENTS) (QW SERIES, RW SERIES & FW SERIES)

- The RW-Series is a range of worm type quarter-turn gearboxes.
- Designed for 90 degree rotational control, primarily used to operate valves such as ball, butterfly and plug valves in industries like power generation, oil & gas & water treatment.
- Available output torque from 300 NM up to 160 000NM.
- Available Ratios from 31;1 up to 2160;1 – As Standard.

OPEN SPUR GEARBOXES (OSSV SERIES, ODSV SERIES, OTSV SERIES & OQSV)

- The OSSV, ODSV, OTSV & OQSV-Series is a range of spur type multi-turn gearboxes.
- Designed for multi turn applications, primarily used on gate valves, globe valves & needle valves in industries like water treatment and municipalities.
- Available output torque from 288 NM up to 62 000NM.
- Available Ratios from 2;1 up to 313;1 – As Standard.

CLOSED SPUR GEARBOXES (SSV SERIES & DSV SERIES)

- The SSV and DSV series, is a range of spur type multi-turn gearboxes. Available in Single or Double stage.
- Designed for multi-turn applications primarily used on gate valves, globe valves and needle valves.
- Used in industries like power generation, oil & gas & water treatment.
- Available output torque from: 200NM - 17000 NM
- Available Ratios from 2;1 up to 36;1 – As Standard.

BEVEL TYPE GEARBOXES (FOR RISING OR NON-RISING SPINDLE APPLICATIONS) (NTB SERIES & TB SERIES)

- The NTB & TB-Series is a range of bevel type multi-turn gearboxes.
- Designed for multi turn applications, primarily used on gate valves, globe valves & needle valves in industries like oil, gas & water treatment and municipalities.
- Available output torque from 200 NM up to 8 300NM.
- Available Ratios from 1;1 up to 10;1 – As Standard.

VALVE GEARBOXES



OUR PRODUCTS ARE CHARACTERIZED BY:

- **Wide torque range and extensive gearbox ratios to suit diverse applications.**
- **Complete in-house capabilities for repairs, machining, and fabrication.**
- **Compliance with ISO 5211 and 5210 standards for gearbox flanges.**
- **Seamless retrofit solutions for existing plant processes.**
- **Readily available spares and a complete product inventory from the OEM.**
- **Custom-built gearboxes for specific project or process qualifications.**
- **Robust designs backed by standard extended warranties.**



Republic Transmissions

ENGINEERING CAPABILITIES:

Advanced Machining Services: The Heart of Our Operations

Our state-of-the-art machining facility underpins our commitment to precision and quality. Republic Transmissions provides a full spectrum of machining services, executed with meticulous attention to OEM guidelines and procedures. Our internal mechanical engineer, registered with ECSA (Engineering Council of South Africa), meticulously approves all machining, repairs, and rebuilds, guaranteeing peace of mind for our clients.

We offer a comprehensive range of general engineering services designed to support diverse manufacturing and fabrication requirements, ensuring precision, reliability, and efficiency across all projects.



Lathe Turning

Precision machining process used to shape cylindrical components by rotating the workpiece against cutting tools to achieve accurate dimensions and finishes.

01

02

Horizontal Boring:

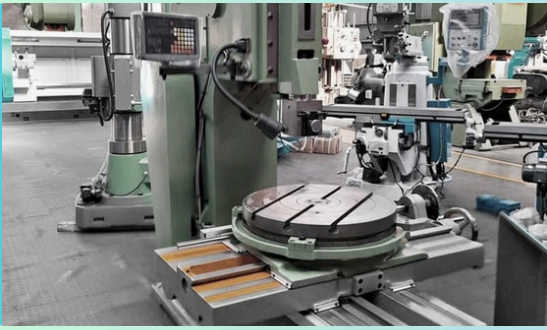
Horizontal boring is a machining process using a horizontally oriented spindle to create high precision, enlarged holes in large or heavy workpieces.



Vertical Boring (up to 5 meters):

A vertical boring machine (or mill) operates by spinning a large, heavy workpiece on a horizontal table about a vertical axis, while fixed, single-point cutting tools travel in straight paths to shape internal and external diameters, tapers, or flat surfaces.

03



Key Cutting (up to 520mm stroke):

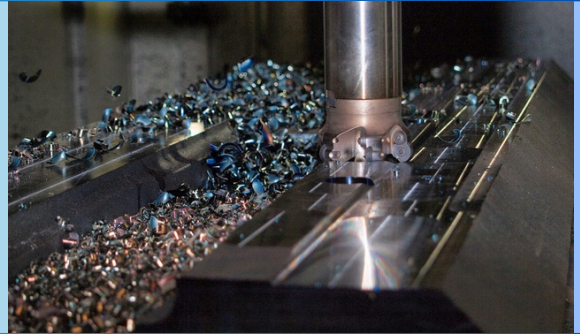
Accurate cutting of keyways in shafts and hubs, supporting secure mechanical connections for components up to 520 mm in length.

04

05

Milling:

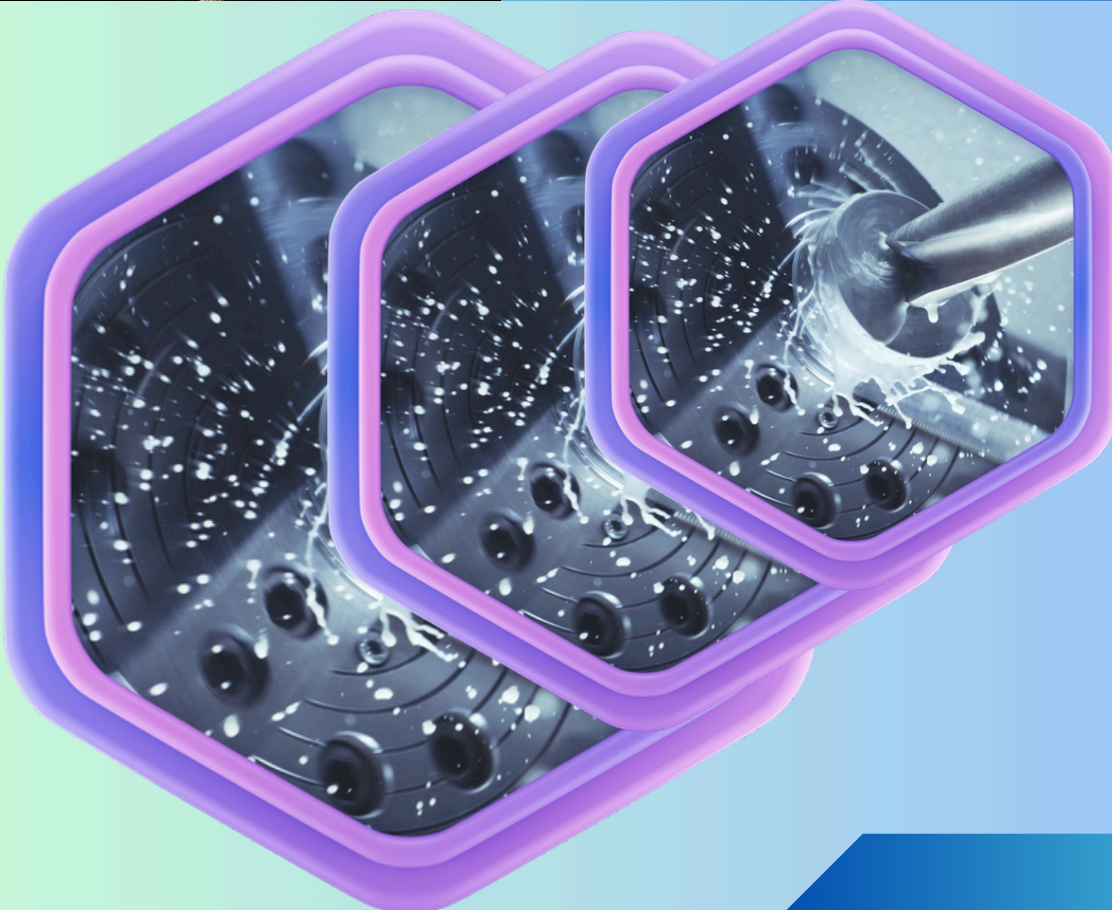
Versatile machining process that removes material using rotating cutters to produce complex shapes, slots, and precision surfaces.



Drilling Operations:

Efficient and accurate creation of holes in a variety of materials, suitable for assembly, fastening, and structural applications.

06



Republic Transmissions



Specialized Gear Cutting

Gear cutting is a critical process within the manufacturing and engineering sectors, playing a fundamental role in producing gears for a wide range of industries like mining, and industrial machinery. We provide advanced gear cutting services tailored to meet the specific requirements of our clients. All gear types can be customised to meet precise operational and performance requirements, whether for high-load, low-speed applications or low load, high-speed systems.

Spur Gears:

Suitable for parallel shafts and straightforward gear systems.



Helical Gears:

Designed for smoother and quieter operation, particularly in high-load environments.



Bevel Gears:

Used where a change in shaft direction is required.



Worm Gears:

Ideal for applications requiring high gear reduction, commonly used in heavy-duty machinery.



Spiral Bevel Gear set:

Employed in heavy-duty gearboxes, speed reducers, conveyors and industrial mixers.



Mining Solutions: Robust Equipment for Demanding Environments

Republic Transmissions delivers a full suite of products and services specifically tailored for the rigorous demands of the mining industry.



Rock Drilling Equipment (RDE):

Our expertise covers complete servicing and maintenance for leading RDE brands like Atlas Copco, Beowolf Sandvik, Tamrock, and Vula Drilling. We offer new, rebuilt, outright purchase, and service exchange options for all main RDE components:

Tapper Equipment, Expansion Equipment (R32, R38, T41, T61, T71)

DTH Equipment, Hammer Splines, Shanks

Axles, Centre Portions, Posi Breaks

Torque Converters, Transmissions, Engines

Hydraulic Cylinders

Extensive replacement parts and service kits (pins & bushes, engine & hydraulic service kits, seal kits, hoses, pumps, valves).

Load Haul Dump (LHD) Equipment:

We provide complete servicing, maintenance, and rebuilding for all major LHD brands, including Clark, EJC, GHH, Toro, Wagner, and Vula Drilling. Our offerings extend to new, rebuilt, outright purchase, and service exchange options for critical components:

Axles, Centre Portions, Posi Breaks

Torque Converters, Transmissions

Engines

Load Buckets

Hydraulic Cylinders

Comprehensive replacement parts and service kits (pins & bushes, engine & hydraulic service kits, seal kits, hoses, pumps, valves).



OUR PROJECTS ESKOM

Duvha

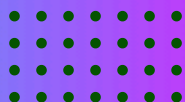
Koeberg

Lethabo

Majuba

Tutuka

Matla

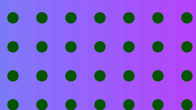


OUR PROJECTS RAND WATER

Vereeniging Pump Station

Eikenhof Pump Station

Zuikerbosch Pump Station





Upcomming Products Development

At Republic Transmissions we are continously expanding our product offerings to ensure that we stay ahead in the industries that we service.

Electric Actuator & Rubber Lined Butterfly Valves to Follow!!!



GET IN TOUCH



Phil Vaz
Director
+ 27 83 484 5444



Nuno Vaz
Engineering Director (M-Ing Mech)
+ 27 82 528 6316



info@rep-trans.co.za



reptrans3@gmail.com



www.rep-trans.co.za